

Summarised description

Unit name

Grand Ri Member

Code

GRI

Status

Formal Member

Parent unit

Wépion Formation

Child units

None

Characteristic description

Green quartzite beds with a conglomeratic base, blue-grey, greenish or reddish sandstone and quartzite alternating with thickly bedded, grey, green or red shale and siltstone.

Age

Emsian

Thickness

260 metres in the type locality

Area of occurrence

North and eastern margins of the Dinant Synclinorium, up to the Mormont Fault.

Type locality

After Grand Ri locality in Wépion, in the Meuse River valley.

Alternative names

Grès de Wépion

Authors

Stainier (1994)

Modified after

Denayer, J. & Mottequin, B., 2024. Lower Devonian lithostratigraphy of Belgium. *Geologica Belgica*, 27/3-4, 115–154.

Date

23/09/2025

Cite As

Denayer, J. & Mottequin, B., 2025. The Grand Ri Member, 23/09/2025. National Commission for Stratigraphy Belgium. <https://ncs.naturalsciences.be/lithostratigraphy/Grand-Ri-Member>

Full description

Unit name

Grand Ri Member

Code

GRI

Status

Formal Member

Parent unit

Wépion Formation

Child units

None

Origin of the name

After Grand Ri locality in Wépion, in the Meuse River valley.

Alternative names

Grès de Wépion

Authors

Stainier (1994, 128) : *Membre du Grand Ri*

Modified after

Denayer, J. & Mottequin, B., 2024. Lower Devonian lithostratigraphy of Belgium. *Geologica Belgica*, 27/3-4, 115–154.

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Characteristic description

The Grand Ri Member begins with a thick bed of green quartzite with a conglomeratic base (white quartz, green or red sandstone and tourmalinite pebbles, Stainier, 1994). It then passes to thick units of blue-grey, greenish or reddish sandstone and quartzite that alternate with thickly bedded, grey, green or red shale and siltstone beds that include some thin sandstone beds. Then come quartzites and blue or greenish argillaceous sandstones of which beds are frequently lenticular. They form thick bundles that are separated by thick units of grey, black or mottled shales and siltstones. These finer lithologies comprises decimetre- to pluridecimetre-thick beds of green and red sandstone beds, generally well-stratified. Desiccation cracks and raindrop impressions occur in the pelitic horizons, which often contain plant debris (e.g. Gerrienne, 1994).

Area of occurrence

North and eastern margins of the Dinant Synclinorium, up to the Mormont Fault (van Tuijn, 1927).

Type locality

On both sides of the Meuse River valley, at Dave and Wépion. The disused Dave quarry exposes the contact between the Acoz and Wépion formations whereas the abandoned Bois des Collets quarry at Wépion displays the upper part of the Formation.

Age

Emsian AB Zone (Steemans, 1989).

Thickness

The Member is 260 metres in the type locality (Stainier, 1994).

Lower boundary

First thick sandstone bed overlying the red shale and siltstone of the underlying Acoz Formation.

Upper boundary

Below the first bed of coarse-grained sandstone and conglomerate of the overlying Bois des Collets.

Regional correlations

In the Aisne River valley, the Wépion Formation passes laterally to the Vireux Formation (Marion & Barchy, in press).

References

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