

Summarised description

Unit name

Saint-Hubert Formation

Code

STH

Status

Formal Formation

Parent unit

none

Child units

none

Characteristic description

Light to dark bottle-green colour micaceous sandy shales with quartzitic sandstone intercalations.

Age

Late Lochkovian to early Pragian.

Thickness

400-600 metres

Area of occurrence

Southern and southeastern limbs of the Dinant Synclinorium, north of the Vencimont Fault, and on the northern margin of the Neufchâteau – Eifel Synclinorium.

Type locality

Composite type section along the Namur–Arlon railway at the Poix-Saint-Hubert station and along the Lomme River south of Mirwart.

Alternative names

none

Authors

Gosselet (1880)

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 Saint-Hubert Formation, 23/09/2025. National Commission for Stratigraphy Belgium. <https://ncs.naturalsciences.be/lithostratigraphy/Saint-Hubert-Formation>

Full description

Unit name

Saint-Hubert Formation

Code

STH

Status

Formal Formation

Parent unit

none

Child units

none

Origin of the name

After the town of Saint-Hubert in the Ardenne.

Alternative names

none

Authors

Gosselet (1880, p. 63): *Schistes et quartzites de Saint-Hubert*

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 Saint-Hubert Formation mostly consists of micaceous sandy shales with quartzitic sandstone intercalations, all of light to dark bottle-green colour. In the lower part, reddish and variegated shale and sandstone, similar to those of the underlying Oignies Formation, still occur but in a smaller proportion than in the former. The boundary between both formations is therefore difficult to establish but is more conveniently defined above the last thick occurrence of red shale. Bundles, 10–12 m thick, of grey and bluish-grey sandstone beds, are scattered within the succession. They are continuous or lenticular and display commonly oblique stratifications and ripple-marks (Asselberghs, 1946; Boulvain & Ludet, 2024). Dissolved calcareous nodules filled up with pulverulent limonite commonly give a cellular aspect to the green shale. Upwards, the proportion of sandstone and quartzitic sandstone beds and lenses tends to increase, announcing the overlying, sandier Mirwart Formation. Where weathered, the sandstones are either rubified or whitened.

Area of occurrence

Southern and southeastern limbs of the Dinant Synclinorium, north of the Vencimont Fault, and on the northern margin of the Neufchâteau – Eifel Synclinorium.

Type locality

The composite type section is located both along the Namur–Arlon railway at the Poix-Saint-Hubert station and along the Lomme River south of Mirwart (Stainier, 1994).

Age

The green shale of the lower part of the Formation yielded an assemblage of miospores typical of the upper Lochkovian Siß Zone in the Lomme River valley (Godefroid et al., 1982). In the Eau Noire River valley, the base is dated of the Z Zone whereas the upper part of the Formation yielded an assemblage indicating the upper Lochkovian to lower Pragian E Zone. The base of the Saint-Hubert Formation is therefore diachronous, being younger towards the north and the west (Steemans, 1989).

Thickness

The Formation displays a relatively constant thickness varying from c. 400 m in the Couvin area (Marion & Barchy, 1999) to c. 600 m in the Lomme River and Ourthe River valleys (Dejonghe, 2012; Blockmans et al., 2019).

Lower boundary

First green sandstone bed overlying the reddish shale and siltstone of the Oignies Formation or Fooz Formation.

Upper boundary

First thick bed of greenish or bluish quartzitic sandstone or siltstone with parallel or oblique stratification of the overlying Mirwart Formation.

Regional correlations

South of the Vencimont Fault, the Formation passes in the Ardenne Anticlinorium to the Laforêt Formation (in the Semois River valley) and to the Sainte-Marie Formation (east of Paliseul) in which a metamorphic facies enriched in ilmenite, magnetite, biotite and amphibole is locally developed. North-eastwards, along the southern margin of the Stavelot–Venn Inlier, the Saint-Hubert Formation progressively passes to the sandstone of the upper part of the Fooz Formation. Lenticular beds of green sandstone still exist between Bihain and Salmchâteau.

References

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Marion, J.-M. & Barchy, L., 1999. Carte géologique de Wallonie : Chimay – Couvin 57/7-8. 1/25 000. Ministère de la Région wallonne, Direction générale des Ressources naturelles et de l'Environnement, Namur, and its explanatory booklet, 89 p.

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Steemans, P., 1989. Étude palynostratigraphique du Dévonien inférieur dans l'Ouest de l'Europe. Mémoires pour servir à l'Explication des Cartes géologiques et minières de Belgique, 27, 1–453.