

## Summarised description

**Unit name**

Petites Tailles Formation

**Code**

PET

**Status**

Formal Formation

**Parent unit**

none

**Child units**

none

**Characteristic description**

Massive greenish to whitish quartzitic sandstone, conglomeratic and coarse-grained sandstone passing upwards to greenish to dark grey slaty shale and quartzophyllade.

**Age**

Pridoli or Lochkovian

**Thickness**

Unknown, probably a few tens of metres

**Area of occurrence**

The Formation is only known from small outliers on the southern margin of the Stavelot – Venn Inlier (Baraque Fraiture area).

**Type locality**

Scattered outcrops around the Petites Tailles village.

**Alternative names**

none

**Authors**

Geukens (1966)

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

## Full description

### Unit name

Petites Tailles Formation

### Code

PET

### Status

Formal Formation

### Parent unit

none

### Child units

none

### Origin of the name

After the village of Petites-Tailles (Houffalize),

### Alternative names

none

### Authors

Geukens (1966, p. 216): *Quartzites des Petites-Tailles*

### 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 lower part of the Formation includes massive greenish to whitish quartzitic sandstone, conglomeratic and coarse-grained sandstone with small white quartz pebbles and greenish slaty shale beds. The quartzitic sandstone commonly displays a brecciated facies due to the abundance of tectonic quartz veins. In the upper part, the greenish to dark grey slaty shale and quartzophyllade are proportionally more abundant than the quartzitic sandstone, though the latter is still present. Shaly sandstone with clasts of dark shale occur in the upper part.

### Area of occurrence

The Formation is only known from small outliers on the southern margin of the Stavelot – Venn Inlier (Baraque Fraiture area).

### **Type locality**

No continuous section exposes the Formation and the composition is mostly known from spot outcrops and isolated blocks scattered in the area situated between Tailles, Fraiture, Bihain and les Petites Tailles.

### **Age**

The Petites Tailles Formation yielded no dating on element other than reworked Cambrian and Ordovician acritarchs and its age is supposedly post-Ordovician and 'pre-Gedinnian' after Geukens (1984). However, the occurrence of the basal conglomerate and the similarity of the quartzitic sandstone and slaty shale with some facies of the Waimes Member suggest an age similar or equivalent to the base of the Fooz Formation, i.e. late Pridoli to earliest Lochkovian.

### **Thickness**

Unknown, probably a few tens of metres.

### **Lower boundary**

Conglomeratic sandstone resting on the Lower Paleozoic rocks of the Stavelot – Venn Inlier.

### **Upper boundary**

Unknown, the Formation existing only as outliers.

### **Regional correlations**

South of les Petites Tailles, the Formation seems to pass to the Waimes Member of the Fooz Formation, either laterally or vertically, even if the lack of outcrops does not allow to demonstrate the transition.

### **References**

Geukens, F., 1966. Problème stratigraphique relatif aux planchettes Odeigne-Bihain. Bulletin de la Société belge de Géologie, de Paléontologie et d'Hydrologie, 74/2-3 (pro 1965), 214–219.

Geukens, F., 1984. Problèmes tectoniques dans la partie sud-ouest du Massif de Stavelot. Bulletin de la Société belge de Géologie, 93/1-2, 27–31.