

Summarised description

Unit name

Anloy Formation

Code

ANL

Status

Formal Formation

Parent unit

none

Child units

Braux Member, Joigny Member, Paliseul Facies

Characteristic description

Light blue-grey quartzite and siltstone in decimetre-thick regular beds with shaly laminae. Plurimetric bundles of lenticular, coarse-grained arkosic sandstone beds are locally developed in the lower part.

Age

Lochkovian

Thickness

900-1100 m

Area of occurrence

Northern limb of the Neufchâteau-Eifel Synclinorium, south of the Vencimont Fault.

Type locality

Disused vicinal railway along the Lesse River, north of Anloy.

Alternative names

Schistes (bigarrés) d'Anloy

Authors

Gosselet (1888)

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 Anloy Formation, 23/09/2025. National Commission for Stratigraphy Belgium. https://ncs.naturalsciences.be/lithostratigraphy/Anloy-Formation



Full description

Unit name

Anloy

Code

ANL

Status

Formal Formation

Parent unit

none

Child units

Braux Member, Joigny Member, Paliseul Facies

Origin of the name

After the village of Anloy, near Libin in the Lesse River valley.

Alternative names

Schistes (bigarrés) d'Acoz

Authors

Schistes bigarrés d'Anloy in Gosselet (1888, p. 233)

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

In the Semois (Semoy) River valley, the Anloy Formation can be divided into two members. The lower one, the dominantly sandy **Braux Member**, starts with 50–100 cm thick beds of argillaceous to quartzitic (or carbonate), fine-grained sandstone overlying the slate of the Mondrepuis Formation. Some shaly and silty intercalations occur. The dominant colour is grey at the base, becoming greenish grey to reddish in the upper part of the member. The upper Member, the **Joigny Member** that is essentially slaty. The transition between both members is progressive as the thickness and the frequency of the sandy facies decrease. Homogeneous shale and siltstone with a silky touch and variegated colours dominate. Lenses and beds of argillaceous, occasionally carbonate and micaceous sandstone are intercalated in the shale. They pass to dark grey shales with silty laminae, then to dark blueish slates with lighter-coloured lenses. Several horizons display decalcified nodules, commonly filled with limonitic material. Greenish shaly horizons with small argillaceous flat pebbles and plant debris occur occasionally. The greenish-grey and blueish-grey dominant colour changes to reddish and variegated near the boundary with the overlying Sainte-Marie Formation. A metamorphic facies



locally occurs in the lower part of the formation and is known in the literature as a *cornéite* (Stainier, 1907), i.e. millimetric magnetite, biotite and tourmaline porphyroblasts included in a silt-sized quartzite matrix rich in chlorite and ilmenite. South of Paliseul and Carlsbourg, this yellowish, greenish or variegated rock is usually de-cemented, and corresponds to the **Paliseul Facies** (*Schistes aimantifères de Paliseul* in Gosselet, 1888, p. 232) sensu Asselberghs (1946).

Area of occurrence

The Anloy Formation can be traced south of the Vencimont Fault all along the northern limb of the Neufchâteau—Eifel Synclinorium. Around the Givonne Inlier, the Oignies Formation, though hardly distinguishable from the Saint-Hubert Formation, re-appears. The Braux Member is a lenticular body that can be traced only south-west of Petit-Fays and up to Arreux (France) where it disappears below the Jurassic cover. The Joigny Member is only developed between Bohan and Carlsbourg. Eastwards, it cannot be distinguished from the rest of the Anloy Formation.

Type locality

The historical outcrops along the disused vicinal railway along the Lesse River, north of Anloy, can be completed by the railway section, immediately south of the Poix-Saint-Hubert station. The type sections of the *Quartzophyllades de Braux* and *Schistes de Joigny* are situated on the western bank of the Meuse River valley between Joigny and Braux (France). In Belgium, the Braux Member is exposed in the disused quarries along the road N973, north-west of Bohan. The Joigny Member crops out along the road parallel to the Semois River north of Membre.

Age

The Anloy Formation has not yielded any biostratigraphic elements, so its Lochkovian age is extrapolated from the lateral equivalent Oignies Formation.

Thickness

The Anloy Formation reaches 1100 m in thickness in the Semois River valley (Belanger & Ghysel, 2017a) and decreases eastwards to c. 900 m near the Serpont Inlier (Beugnies, 1983). In their type area, the Braux and Joigny members are respectively 80 m and 400 m thick (Belanger & Ghysel, 2017a, b).

Lower boundary

First thick beds of argillaceous to quartzitic (or carbonate), fine-grained sandstone overlying the slate of the Mondrepuis Formation.

Upper boundary

First dark blue or green slaty beds of the overlying Sainte-Marie Formation.

Regional correlations

Between the Rocroi and Serpont inliers, in the vicinity of Gedinne, the red colour typical of the Oignies Formation disappears and the rock displays greenish, bluish or purplish-grey colours, together with the appearance of chlorite, ilmenite and biotite due to the local increase of metamorphism imprint.

References

Asselberghs, E., 1946. L'Éodévonien de l'Ardenne et des régions voisines. Mémoires de l'Institut géologique de l'Université de Louvain, 14, 1–598.

Belanger, I. & Ghysel, P., 2017a. Carte géologique de Wallonie : Vivy — Paliseul 64/5-6. 1/25 000. Service public de Wallonie, Agriculture, Ressources naturelles et Environnement, Namur and its explanatory booklet, 48 p.



Belanger, I. & Ghysel, P., 2017b. Carte géologique de Wallonie: Bouillon – Dohan et Muno 67/1-2 et 6. 1/25 000. Service public de Wallonie, Agriculture, Ressources naturelles et Environnement, Namur and its explanatory booklet, 60 p.

Beugnies, A., 1983. Structure de l'aire anticlinale de l'Ardenne à l'ouest du méridien de Libramont. Annales de la Société géologique du Nord, 102/3, 165–173.

Hatrival, J.N. & Beugnies, A., 1973. Carte géologique de la France à 1/50 000, feuille 69, Charleville—Mézières. BRGM, Orléans, and its explanatory booklet, 23 p.

Gosselet J., 1888. L'Ardenne. Ministère des travaux publics, Mémoires pour Servir à l'Explication de la Carte géologique détaillée de la France. Baudry & Cie, Paris, 881 p.

Stainier, X., 1907. Sur le mode de gisement et l'origine des roches métamorphiques de la région de Bastogne (Belgique). Académie royale de Belgique, Classe des Sciences, Mémoires in-4°, 2e série, 1/4, 1–162.