

Valentin Formation

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Österreichische Karte 1:50.000
Blatt BMN 197 Kötschach
Blatt BMN 199 Hermagor

Carta Topografica d'Italia 1:50.000
Foglio 018 Passo di Monte Croce Carnico
Foglio 031 Ampezzo
Foglio 033 Tarvisio

Blatt UTM 3109 Oberdrauburg
Blatt UTM 3117 Nötsch im Gailtal

Definition

Strongly bioturbated grayish wackestone, and packstone, with a phosphorite horizon in the uppermost part.

Description

Bioclastic wackestone represents the major part of the formation. In the lower part of the formation also iron-coated bioclasts and micritic oncolites occur abundantly. The bedding is mostly obliterated by bioturbation (SCHÖNLAUB et al., 2004; HÜNEKE, 2006, 2007).

Fossil content

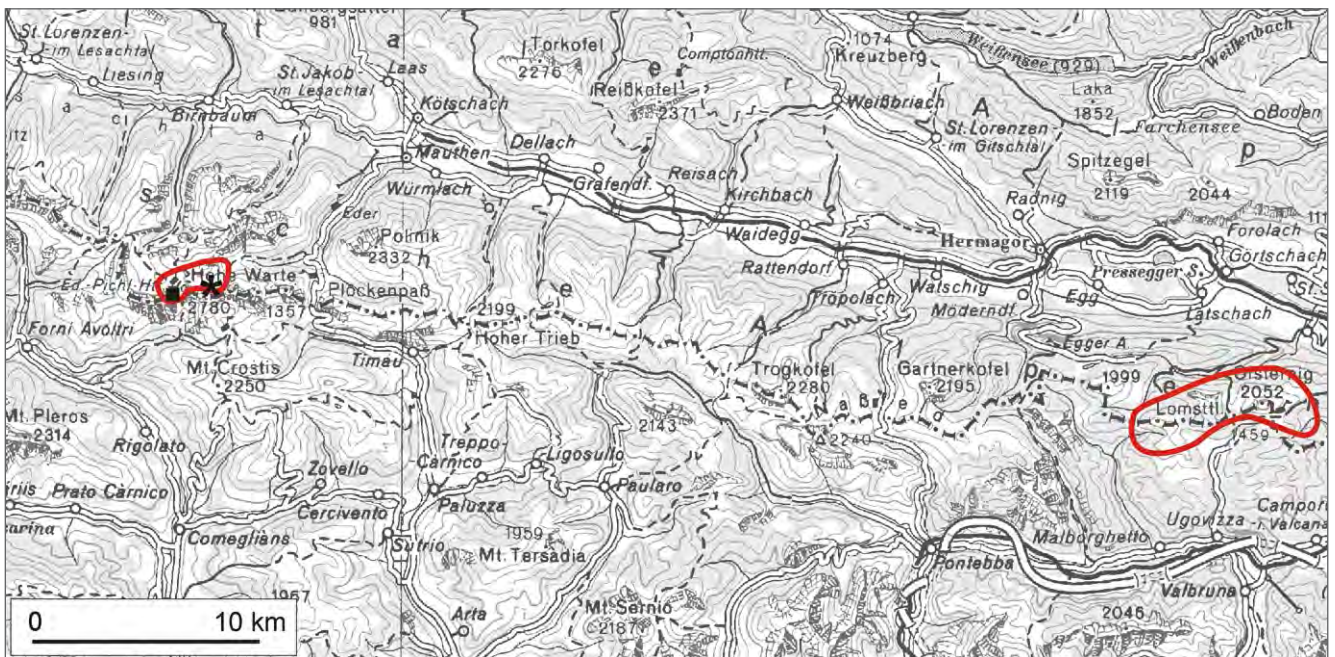
Bivalves, brachiopods, calcispheres, cephalopods, conodonts, crinoids, fish remains, foraminifers, ostracods, rugose corals, styliolinites.

Depositional environment

Pelagic, with very low sedimentation rate and erosion/re-deposition controlled by bottom currents.

Stratotype

Wolayer "Glacier" Section (SCHÖNLAUB, 1980), located along the northern side of Wolayer Valley, at coordinates N 46°36'49.0", E 12°52'34.7".



Areas of outcrop of the Valentin Formation with indication of the stratotype (asterisk) and reference section (square).



The Wolayer "Glacier" Section. a) log of the section (modified after SCHÖNLAUB, 1980); b) view of the section on the field (photo T.J. SUTTNER).

Reference sections

Costone Lambertenghi/Seekopf Sockel Section (SCHÖNLAUB, 1980), west of Lake Wolayer at coordinates N 46°36'33.0", E 12°51'58.5", where the lower part of the formation and the boundary with the Findenig Formation is well exposed.

Type area

Carnic Alps.

Main outcrop areas

Wolayer Valley (west of Valentintörl), vicinity of Lake Wolayer/Volaia, and Mt. Oisternig area.

Thickness

About 15 m.

Boundaries

Underlying units – Findenig Formation (conformable, gradual).

Overlying units – Pal Grande Formation (unconformable, paraconformity).

Lateral units – Hohe Trieb Formation in the proximal part; Zollner Formation in the distal part.

Derivation of name

After Valentintörl.

Synonymy

Valentinkalk: SCHÖNLAUB (1971–1973).

Calcarei nodulari a tentaculiti [partim]: VAI in BRAGA et al. (1971).

Grauer Styliolinen-Flaserkalk: BANDEL (1974).

Calcarei pelagici a tentaculiti [partim]: SPALLETTA et al. (1982).

Valentin-Kalk: SCHÖNLAUB (1985).

Tentaculite pelagic limestone [partim]: SPALLETTA & VENTURINI (1990).

Valentin Limestone: KREUTZER (1992).

Calcarei di Cuestalta [partim]: SPALLETTA & PONDRELLI (2009).

Valentin-Formation/Valentin Formation: SUTTNER & KIDO (2014).



Views of the Valentin Formation on the field. a-c) the Valentin Formation at Costone Lambertenghi Section (photos C. CORRADINI); d) upper part of the Valentin Formation at Wolayer "Glacier" Section, with the level of the phosphatic nodules (photo T.J. SUTTNER).

Chronostratigraphic age

Devonian: Emsian to Frasnian.

Biostratigraphy

Conodonts. – From the upper part of the *serotinus* Zone (GÖDDERTZ, 1982) to the Lower *hassi* Zone (Frasnian Zone 7 and 8) (JOACHIMSKI et al., 1994).

Complementary references

Carbon isotopes. – JOACHIMSKI et al. (1994).

Remarks -

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