Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Murau Group.

Overlying unit(s): -

Lateral unit(s): -

Geographic distribution: Surroundings of Murau; ÖK50-BMN, map sheets 159 Murau, 160 Neumarkt.

Remarks: -

Complementary references: SCHÖNLAUB & HEINISCH (1993).

Oberer Auen-Dolomit / Upper Auen Dolomite

THOMAS J. SUTTNER

Validity: Invalid; the name Oberer Auen-Dolomit for this unit was first used by NEUBAUER (1979: p. 467), who mapped and revised the low metamorphic Lower Paleozoic succession in the surroundings of Murau.

Type area: ÖK50-UTM, map sheets 3230 Tamsweg, 4225 Murau (ÖK50-BMN, map sheets 158 Stadl, 159 Murau).

Type section: -

Reference section(s): Section in the vicinity of Haider farmstead located south of Murau in the Auen area (N 47°02'26" / E 14°09'19").

Derivation of name: After Auen area (compare locality map of NEUBAUER, 1979: Fig. 1).

Synonyms: Dolomitkeile von Laßnitzau [partim] (THURNER, 1956: p. 164).

Lithology: Bedded and massive grey limonitic dolomites; dark grey unbedded, brecciated dolomite.

Fossils: Conodonts.

Origin, facies: Shallow marine limestone, neritic unit.

Chronostratigraphic age: Frasnian–Famennian.

Biostratigraphy: *asymmetricus* and *gigas* conodont zones.

Thickness: 10 m.

Lithostratigraphically higher rank unit: Auen Group (see remarks at Golzeck Formation).

Lithostratigraphic subdivision: -

Underlying unit(s): Haider Marble (Adelsberg Limestone) (unconformable contact).

Overlying unit(s): Upper Althofen Formation; Shale, Lydite Breccia (unconformable contact).

Lateral unit(s): Althofen Limestone Breccia.

Geographic distribution: Styria and Carinthia, in the surrounding of Murau, especially south of it near the Styrian/Carinthian states border in the area of Auen (NEUBAUER, 1979: Fig. 1).

Remarks: -

Complementary references: THURNER (1958), NEUBAUER (1984), NEUBAUER & PISTOTNIK (1984), SCHÖNLAUB (1992).

Althofener Kalkbrekzie / Althofen Limestone Breccia

THOMAS J. SUTTNER

Validity: Invalid; first observations within the limestone deposits near Althofen were made by REDLICH (1905) and later described in more detail by HABERFELNER (1936). A description including all criteria necessary for a formal lithostratigraphic characterization is provided by SCHÖNLAUB (1971c: Figs. 1, 2, p. 299).

Type area: ÖK50-UTM, map sheet 4102 Althofen (ÖK50-BMN, map sheet 186 Sankt Veit an der Glan).

Type section: Ancient quarry of Aich (SCHÖNLAUB, 1971c: Fig. 1, 2; p. 289) some hundred meters NNW of Treibach-Althofen (N 46°52'46" / E 14°28'03").

Reference section(s): -

Derivation of name: After the town Althofen.

Synonyms: Knotenkalk (SCHÖNLAUB, 1971c).

Lithology: Limestone breccia (consisting of reworked pebbles of the Lower Althofen Limestone and the Reef-debris limestone of Althofen).

Fossils: Calcispheres, conodonts, crinoids, ostracods?, radiolarians.

Origin, facies: Shallow marine limestone, neritic unit.

Chronostratigraphic age: Generally, the unit is assigned to the Famennian by SCHÖNLAUB (1971c); Lower and Middle Devonian is indicated by reworked conodonts from underlying units.

Biostratigraphy: *asymmetricus, gigas* and *triangularis* conodont zones.

Thickness: Approx. 6 m.

Lithostratigraphically higher rank unit: Althofen Group (see remarks at Lower Althofen Limestone).

Lithostratigraphic subdivision: -

Underlying unit(s): Reef-debris limestone of Althofen (unconformable contact).

Overlying unit(s): Upper Althofen Formation (conformable contact).

Lateral unit(s): Upper Auen Dolomite.

Geographic distribution: Carinthia, in the area between Althofen and Töscheldorf.

Remarks: -

Complementary references: SCHÖNLAUB (1979, 1992), NEUBAUER & PISTOTNIK (1984), KREUTZER et al. (1997).

Obere Althofen-Formation / Upper Althofen Formation

THOMAS J. SUTTNER

Validity: Invalid; first observations within the limestone deposits near Althofen were made by REDLICH (1905) and later described more in detail by HABERFELNER (1936). A description including all criteria necessary for a formal lithostratigraphic characterization is provided by SCHÖNLAUB (1971c: Figs. 1, 2, p. 300).

Type area: ÖK50-UTM, map sheet 4102 Althofen (ÖK50-BMN, map sheet 186 Sankt Veit an der Glan).

Type section: Ancient quarry of Aich (SCHÖNLAUB, 1971c: Fig. 1, 2; p. 289) some hundred meters NNW of Treibach-Althofen (N 46°52'46" / E 14°28'03").

Reference section(s): -

Derivation of name: After the town Althofen.

Synonyms: -

Lithology: Thin, platy grey to reddish limestone.

Fossils: Conodonts.

Origin, facies: Marine limestone, pelagic unit.

Chronostratigraphic age: Famennian.

Biostratigraphy: Conodonts restrict the unit to Upper Famennian (SCHÖNLAUB, 1971c), but a distinct zone is not mentioned.

Thickness: Approx. 2 m.

Lithostratigraphically higher rank unit: Althofen Group (see remarks at Lower Althofen Limestone).

Lithostratigraphic subdivision: -

Underlying unit(s): Upper Auen Dolomite (conformable contact), Althofen Limestone Breccia (conformable contact).

Overlying unit(s): Shale, Lydite Breccia (unconformable contact).

Lateral unit(s): -

Geographic distribution: Carinthia, in the area between Althofen and Töscheldorf.

Remarks: -

Complementary references: SCHÖNLAUB (1979, 1992), NEUBAUER & PISTOTNIK (1984), KREUTZER et al. (1997).

Tonschiefer, Lyditbrekzien / Shale, Lydite Breccias

THOMAS J. SUTTNER

Validity: Invalid; first observations within the deposits near Althofen were made by REDLICH (1905) and later described more in detail by HABERFELNER (1936) and SCHÖNLAUB (1971c: Figs. 1, 2, p. 301).

Type area: ÖK50-UTM, map sheet 4102 Althofen (ÖK50-BMN, map sheet 186 Sankt Veit an der Glan).

Type section: Ancient quarry of Aich (SCHÖNLAUB, 1971c: Figs. 1, 2, p. 289) some hundred meters NNW of Treibach-Althofen (N 46°52'46" / E 14°28'03").

Reference section(s): -

Derivation of name: After lithological features.

Synonyms: Schiefer-Lyditbreccien-Komplex (SCHÖNLAUB, 1971c); Pelite-Chert-Formation (SCHÖNLAUB, 1992).

Lithology: Grey siliceous shale, lydites and lydite breccias.

Fossils: Radiolarians.

Origin, facies: Marine siliciclastics, pelagic unit.

Chronostratigraphic age: Tournaisian–Serpukhovian (see remarks).

Biostratigraphy: -

Thickness: Approx. 15 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Upper Althofen Formation (unconformable contact).

Overlying unit(s): -

Lateral unit(s): -

Geographic distribution: Carinthia, in the area between Althofen and Töscheldorf.

Remarks: Due to the lack of stratigraphically relevant fossils, the age assignment follows the suggestions of CLAR et al. (1963) and SCHÖNLAUB (1971c: p. 301), who considered the Shale and Lydite Breccias being deposited above the Upper Althofen Formation. Since the contact between these two units is unconformable, the Shale and Lydite breccias are probably restricted to lower Carboniferous deposits.

Complementary references: HABERFELNER (1936), SCHÖNLAUB (1979), NEUBAUER & PISTOTNIK (1984).

„Gurktaler Quarzphyllit-Komplex" / Gurktal Quartzphyllite Complex

BERNHARD HUBMANN

Validity: Invalid; description by BECK-MANNAGETTA (1959: "(Quarz-) Phyllitserie").

Type area: ÖK50-UTM, map sheet 4101 Gurk (ÖK50-BMN, map sheet 185 Straßburg).

Type section: No type section published; BECK-MANNAGETTA (1964) mentioned a typical occurrence of the Gurktal quartzphyllite at Weitensfeld (N 46°50'54" / E 14°11'30"), approximately 50 km north of Klagenfurt.

Reference section(s): -

Derivation of name: After the valley Gurktal, north of Feldkirchen in Carinthia.

Synonyms: Gurktaler Phyllit (SCHWINNER, 1932, 1936); (Quarz-) Phyllitserie (BECK-MANNAGETTA, 1959); Gurktaler Quarzphyllit (BECK-MANNAGETTA, 1964; KERNER, 1988; KERNER & LOESCHKE, 1991); Gurktaler Quarkphyllit-Komplex [sic!] (SCHÖNLAUB, 1979); Gurktal Quartzphyllite Complex (SCHÖNLAUB & HEINISCH, 1993); partly: Gurktaler Komplex (ZADORLAKY-STETTNER, 1961); Gurktaler und Mittelkärntner Quarzphyllitareal (SCHÖNLAUB, 1979); Altpaläozoischer Phyllit i.a. (FLÜGEL & NEUBAUER, 1984).

Lithology: Various epimetamorphic rocks; mostly dark-grey phyllites; in the upper parts dolomitic lenses up to 20 m in thickness may occur.

Fossils: Unknown.

Origin, facies: ?

Chronostratigraphic age: Presumably Ordovician–Carboniferous.

Biostratigraphy: -

Thickness: About 250 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): ?

Overlying unit(s): ?

Lateral unit(s): ?Murau Group.

Geographic distribution: Gurktal range; ÖK50-BMN, map sheets 184 Ebene Reichenau, 186 Stankt Veit an der Glan.

Remarks: -

Complementary references: NEUBAUER & SASSI (1993).

Stangnock-Formation / Stangnock Formation

HANS P. SCHÖNLAUB

Validity: Valid; the term was introduced and formalized by KRAINER (1989: p. 568) at the northwestern margin of the Gurktal Nappe System of Carinthia.

Type area: ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 183 Radenthein) (PISTOTNIK, 1996), Carinthia. Area of Stangnock and mountain Königsstuhl

Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission

Legend

pelagic, offshore, siliciclastic	coal (may include several seams)
pelagic, nearshore, calcareous	? position/age doubtful/controversial
shallow marin, neritic	| equal units
terrestrial-continental, coarse clastic	\ older unit left \ younger unit right
terrestrial-continental, fine clastic	hiatus
evaporite (chloride, sulphate)	unconformity
rhyolite, dacite	GSSP
(basaltic) andesite, trachyandesite	
basalt	Fm. Formation
phyllite	Ls. Limestone
mixed-facies (in corresponding colors)	

Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

The Austrian Stratigraphic Chart 2004 - Paleozoic is a supplement of:
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