

Type area: ÖK50-UTM, map sheet 4215 Eisenerz (ÖK50-BMN, map sheets 101 Eisenerz, 131 Kalwang and 132 Trofaiach).

Type section: Not defined; typical outcrops are mentioned from the Sauerbrunn- and Weiritzgraben area (HERITSCH, 1931b; HABERFELNER & HERITSCH, 1932a).

Reference section(s): -

Derivation of name: Derived from the color and lithology.

Synonyms: -

Lithology: Black siliceous schists, alaun schists, lydites and rare intercalations of black limestones.

Fossils: Conodonts in limestone intercalations (FLAJS, 1964, 1967).

Origin, facies: Sapropelitic basal sediments (SCHÖNLAUB, 1982a).

Chronostratigraphic age: Silurian (Llandovery–Ludlow).

Biostratigraphy: *amorphognathoides*, *sagitta* and *ploeckensis* conodont zones.

Thickness: 50–80 m (SCHÖNLAUB, 1982a).

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Crinoidal Limestone, Lydites, Arkoses, Schists (SCHÖNLAUB, 1982a).

Overlying unit(s): Cavernous Banded Limestone.

Lateral unit(s): Intercalations of Black Lydites, Alaun Schists with the Orthoceratid Limestone are named “Mischfazies” (SCHÖNLAUB, 1992).

Geographic distribution: E-GWZ; Styria, Eisenerzer Alpen.

Remarks: The graptolites described by HERITSCH (1931 b) and HABERFELNER & HERITSCH (1932a) from the Black Lydites, Alaun Schists were recognized as anorganic remains (GRÄF, 1966).

Complementary references: TOLLMANN (1977), SCHÖNLAUB (1979, 1980a), EBNER et al. (1989), SCHÖNLAUB & HEINISCH (1993).

„Löchrige Bänderkalke“ / Cavernous Banded Limestone

FRITZ EBNER

Validity: Invalid; not formalized working term (SCHÖNLAUB, 1977b, 1982a).

Type area: ÖK50-UTM, map sheet 4215 Eisenerz (ÖK50-BMN, map sheet 101 Eisenerz).

Type section: Not defined.

Reference section(s): -

Derivation of name: According to holes at the surface of the limestones due the weathering of pyrite.

Synonyms: Partim “Bunter Kalk” (SCHÖNLAUB, 1982a).

Lithology: Well bedded and platy, grey sometimes reddish, spotted limestone with characteristic, cm-sized holes at the surface.

Fossils: Conodonts, rare orthoceratids.

Origin, facies: Pelagic facies.

Chronostratigraphic age: Upper Silurian (Pridoli).

Biostratigraphy: -

Thickness: ~ 20 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Black Lydites, Alaun Schists.

Overlying unit(s): Flaser Limestone.

Lateral unit(s): Lower Polster Limestones.

Geographic distribution: E-GWZ; Styria: Eisenerzer Alpen.

Remarks: The lithology resembles the upper Silurian “Alticola/Megaerella Limestones” of the Carnic Alps (SCHÖNLAUB, 1977b, 1982a). However, the Cavernous Banded Limestone was also compared with upper Devonian flaser limestones of the Carnic Alps (HABERFELNER, 1935).

Complementary references: TOLLMANN (1977), SCHÖNLAUB (1980a), EBNER et al. (1989), SCHÖNLAUB & HEINISCH (1993).

Flaserkalk / Flaser Limestones

FRITZ EBNER

Validity: Invalid; informal working term (SCHÖNLAUB, 1982a).

Type area: ÖK50-UTM, map sheet 4215 Eisenerz (ÖK50-BMN, map sheets 101 Eisenerz and 131 Kalwang).

Type section: -

Reference section(s): -

Derivation of name: According to the lithology.

Synonyms: “Erzführender Kalk” (CZERMAK, 1931); “Bunter Flaser-Bänderkalk und geschieferter Kalk” (SCHÖNLAUB, 1982a).

Lithology: a) in basal parts subordinate thin platy black limestones; b) variegated flaser- and banded limestones and reddish calcareous schists; c) within (b) occasionally layers of grey organodetritic limestones; d) stocks of meta-somatic siderite-ankerite mineralization.

Fossils: Conodonts, *dacryoconarides* (in b); c) crinoids and stromatoporoids.

Origin, facies: Pelagic environment; c) allodapic deposits.

Chronostratigraphic age: Lower Devonian: a) Lochkovian; b) Pragian–upper Emsian (middle Dalejeum).

Biostratigraphy: Based on conodonts.

Thickness: a) ~ 30 m; b) 200–250 m; c) 40 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Cavernous Banded Limestone, Orthoceratid Limestone.

Overlying unit(s): -

Lateral unit(s): Lower and Upper Polster Limestone, Sauerberg Limestone, ? Massive Limestone.

Geographic distribution: E-GWZ; Styria, Eisenerzer Alpen.

Remarks: -

Complementary references: TOLLMANN (1977), SCHÖNLAUB (1980a), EBNER et al. (1989), SCHÖNLAUB & HEINISCH (1993).

Untere Polsterkalke / Lower Polster Limestone

FRITZ EBNER

Validity: Invalid; informal working term (FLAJS & SCHÖNLAUB, 1976).

Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA	SYSTEM / PERIOD / SERIES / EPOCH	STAGE / AGE	DURATION Ma	Global Classification					
				ERATHM / ERA	SYSTEM / PERIOD / SERIES / EPOCH				
PALEOZOIC	PERMIAN	CHANGHSINGIAN / Dorashanian	251	PERMIAN	MID PERMIAN / GUADALUPIAN / LOPINGIAN				
		WUCHIAPINGIAN / Dzhulfian	255						
		CAPITANIAN	260						
		WORDIAN	265						
		ROADIAN	270						
		PERMIAN	LOWER PERMIAN / CISURALIAN			KUNGURIAN	275		
						ARTINSKIAN	280		
						SAKMARIAN	285		
						ASSELIAN	290		
		PERMIAN	TRIAS			GZHELIAN	295	TRIAS	U. CARBONIFEROUS / PENNSYLVANIAN
KASIMOVIAN	300								
MOSKOVIAN	305								
BASHKIRIAN	310								
TRIAS	LOWER CARBONIFEROUS / MISSISSIPPIAN			SERPUKHOVIAN	315				
				VISEAN	320				
				TOURNAISIAN	325				
PERMIAN	DEVONIAN			FAMENNIAN	350	DEVONIAN	UPPER DEVONIAN		
				FRASNIAN	355				
				GIVETIAN	360				
		EIFELIAN	365						
		DEVONIAN	LOWER DEVONIAN	EMSIAN	370				
				LOCHKOVIAN	375				
		PERMIAN	DEVONIAN	LUDFORDIAN / GORSTIAN	380			DEVONIAN	MIDDLE DEVONIAN
				HOMERIAN / SHEINWOOD	385				
				TELYCHIAN	390				
				AERONIAN	395				
RHUDDANIAN	400								
DEVONIAN	LOWER DEVONIAN			PRAGIAN	405				
				LOCHKOVIAN	410				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	415	DEVONIAN	LOWER DEVONIAN		
				HIRNANTIAN	420				
				LLANDOVERY	425				
		AERONIAN	430						
		RHUDDANIAN	435						
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	440				
				LOCHKOVIAN	445				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	450			DEVONIAN	UPPER ORDOVICIAN
				LLANDOVERY	455				
				AERONIAN	460				
RHUDDANIAN	465								
DEVONIAN	LOWER DEVONIAN			PRAGIAN	470				
				LOCHKOVIAN	475				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	480	DEVONIAN	MIDDLE ORDOVICIAN		
				LLANDOVERY	485				
				AERONIAN	490				
				RHUDDANIAN	495				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	500				
				LOCHKOVIAN	505				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	510			DEVONIAN	LOWER ORDOVICIAN
				LLANDOVERY	515				
				AERONIAN	520				
				RHUDDANIAN	525				
DEVONIAN	LOWER DEVONIAN			PRAGIAN	530				
				LOCHKOVIAN	535				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	540	DEVONIAN	UPPER CAMBRIAN		
				LLANDOVERY	545				
				AERONIAN	550				
				RHUDDANIAN	555				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	560				
				LOCHKOVIAN	565				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	570			DEVONIAN	MIDDLE CAMBRIAN
				LLANDOVERY	575				
				AERONIAN	580				
				RHUDDANIAN	585				
DEVONIAN	LOWER DEVONIAN			PRAGIAN	590				
				LOCHKOVIAN	595				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	600	DEVONIAN	LOWER CAMBRIAN		
				LLANDOVERY	605				
				AERONIAN	610				
				RHUDDANIAN	615				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	620				
				LOCHKOVIAN	625				



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

© Commission for the Palaeontological and Stratigraphical Research of Austria (CPSA) of the Austrian Academy of Sciences and Austrian Stratigraphic Commission

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:
 Hubmann, B., Ebner, F., Ferretti, A., Kido, E., Krainer, K., Neubauer, F., Schönlaub, H.-P. & Suttner, T.J. (2014): The Paleozoic Era (them), 2nd edition. - In: Pillner, W.E. (Ed.): The lithostratigraphic units of the Austrian Stratigraphic Chart 2004 (sedimentary successions) - Vol. 1 - Abhandlungen der Geologischen Bundesanstalt, 66, 9-133, Wien.

Printing: Grasl Druck & Neue Medien GmbH, Bad Vöslau 2014

Landesmuseum Joanneum

OAW

Geologische Bundesanstalt

UNI GRAZ

OGG

Universität Wien

Naturhistorisches Museum Wien