



COMUNI DI GORNO, OLTRE IL COLLE, ONETA  
(PROVINCIA DI BERGAMO)  
MINIERE DEL COMPLESSO RISO/PARINA

ISTANZA DI RINNOVO DELLA CONCESSIONE  
MINERARIA DENOMINATA "MONICA"



TAVOLA:

PROGETTO GENERALE  
COLONNA STRATIGRAFICA A RIFERIMENTO  
PROGETTUALE

REVISIONE:	SCALA:	DATA:	CODICE TAVOLA:
Rev_00	1 : 500	20/12/2019	DG10

COLONNA ZORZONE EAST BLOCK PIAN BRACCA LEVEL	STRATIGRAPHIC COLUMN	GEOLOGICAL DESCRIPTION	MINERALISATION	
			TYPE	STYLE
1ST ALLOCTH. AUTOCTH.		BLACK SHALES (see below)		
		METALLIFERO LIMESTONE (see below)	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag);</li> <li>Oxides (ZnO; PbO)</li> </ul>	(Fractures/cracks filling) • Veins; • Pervasive.
		BRENO FORMATION (see below)	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag);</li> <li>Oxides (ZnO; PbO)</li> </ul>	(Karst, fractures/cracks filling). • Veins; • Pervasive; • Massive
		BLACK SHALES (see below)		
		METALLIFERO LIMESTONE (see below)	NOT MINERALISED	NOT MINERALISED
		BRENO FORMATION (see below)	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag);</li> <li>Oxides (ZnO; PbO)</li> </ul>	(Karst, fractures/cracks filling). • Veins; • Pervasive; • Massive
2ND ALLOCTH. AUTOCTH.		BLACK SHALES (see below)	Sulphide (ZnS; PbS; Ag)	(Strata) Diss; Veins; Perv; Mas.
		VAL SABBIA FORMATION: Siltstone and volcanoclastic sandstone with slightly calcareous cement, gray-greenish colored, thick bedded. Litharenites made of volcanic lithoclasts, feldspar and minor quartz. At the boundary with the Gorno formation, always gradual, there are arenaceous and marly calcareous levels alternating; locally nodular calcite concretions. Fan delta environment. Maximum thickness 200 m.	NOT MINERALISED	NOT MINERALISED
		GORNO FORMATION: Limestone, marly limestone and marls which colour is blackish grey on fracture and yellowish grey on weathered surface, in centimetres to tens of metres layers; marly beds are rich in lamellibranches. In the lower part light grey, greenish sandstone, pyrite bearing, with parallel lamination and diffused calcareous cement.	NOT MINERALISED	NOT MINERALISED
		BLACK SHALES : Marly and shaly laminated layers, at the top of the sequence typical occurrence of chert in beds. Sometime absent and replaced by an heterogeneous breccia of Breno and Metallifero limestones slightly to well cemented by calcite.	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag)</li> </ul>	Stratabound. • Disseminated; • Veins; • Pervasive; • Massive.
		METALLIFERO LIMESTONE: Grey to dark grey limestone and dolomitic limestone, in layers from less than one metre up to tens of metres thickness, sometimes amalgamated, with common algal stromatolites. Coastal lagoon and tidal flat is considered to be the depositional environment. Thickness from 0 to 70 m.	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag)</li> <li>Oxides (ZnO; PbO)</li> </ul>	(Fractures/cracks filling) • Veins; • Pervasive.
		BRENO FORMATION: Grey to light grey limestone and dolomitic limestone, in layers from metres to many tens of metres thickness, with frequent algal laminae, oncoliths, fossil bivalves, gastropods and algae. At the top, local mineralisation includes quartz, calcite and iron ores. Maximum thickness 170 m.	<ul style="list-style-type: none"> <li>Sulphide (ZnS; PbS; Ag)</li> <li>Oxides (ZnO; PbO)</li> </ul>	(Karst, fractures/cracks filling). • Veins; • Pervasive; • Massive
AUTOCTHONOUS		TUFITIC LAYER: tufe layer interbedded in Breno Formation	NOT MINERALISED	NOT MINERALISED
		BRENO FORMATION	NOT MINERALISED	NOT MINERALISED

HANGING WALL	MINERALISED LAYER	FOOT WALL
VAL SABBIA FORMATION	METALLIFERO FORMATION (Black Shales)	BRENO FORMATION (Mineralised)
GORNO FORMATION	METALLIFERO FORMATION (Limestone)	BRENO FORMATION
	MINERALISATION (Sulphides ZnS, PbS; Oxides ZnO, PbO)	TUFITIC LAYER

