

## The Clues of Iron in the Border Algerian-Tunisian: Geology, Geochemistry, Mineralogy and Structural Aspects

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### Abstract

The great potential mining in the region of the Algerian-Tunisian border lies in the area between the Medjerda (El Tarf), Mellegue (Souk Ahras) and Tebessa, and stripped belongs structurally in a large extent, to the Eastern Saharan Atlas.

Metallogenically, the Algerian-Tunisian border is interesting for scientists and industrialists, which contain a large numbers of indices and polymetallic and / or ferriferous deposits. The mineralization is manifested in several morphological aspects dictated by the nature of the host formations. The stratigraphic levels carrying the mineralization are: Albian-Aptian, Cenomanian-Turonian, Maastrichtian-Campanian, Upper Eocene and Lower and Middle Miocene. The age of the mineralization varies according to the Upper Cretaceous Authors to the Pliocene-Me with three main metallogenic periods: Laramian (Upper Cretaceous - Paleocene), Pyrenean (Lutetian) and Atlasic (Burdigalian).

The most important iron deposits are in the Boukhadra, Ouenza and Chaabet El Ballout areas. Many indications of iron ore are identified in the regions of El Taref, Souk Ahras and Tebessa. These identified indices of iron deserve to be developed in order to see their degrees of exploitability. In all these indices the original ore appears to be hematite and siderite, accompanied, in smaller quantities of gray copper, by chalcopyrite, and in places small clusters of pyrites. Mixtures of magnetite and hematite are also found in the form of veins proper and / or vein-like. It is noted that incidentally a little sedimentary iron ore.

The present work aims to contribute to the development of the iron ore indices known in this region, to situate them within their geological, structural and geological framework and finally to decide on their scientific and / or economic interests.