



Mineralogical considerations on the topstratum of some mine tailings from the Fundu Moldovei area, Romania

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Abstract

The present study was conducted on a number of 14 tailings samples collected from the topstratum (0–20 cm depth) of three mine tailings deposits located within the Fundu Moldovei mining perimeter, Romania, namely Dealu Negru, Prașca I and Prașca II. The main objective of the study was to determine the mineralogy of these tailings by means of XRD, as well as to establish a link between the mineralogical composition and the conditions in which the tailings have been deposited. The Powder XRD analyses showed that the main minerals are quartz and Fe-rich chlorite, while the accessory minerals are muscovite-illite, sometimes pyrite or albite. The trace minerals identified were the following: albite, pyrite, jarosite (resulting from the weathering of pyrite), talc, gypsum and stilpnomelane.

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