

The higher contents in silver has been found in argento- and plumbojarosite and are 4,600 g/t. The size of the silver and silverbearing minerals are 2 μ m to 0,8mm and this minerals are: native silver, argentite, jalpaite, proustite, pyrrargirite, fahlore and freibergite. The higher contents in gold of jarosite are 8,5 g/t and the size of the gold grains ranges from 2 μ m to 100 μ m.

This systematic investigation revealed that jarosite is precious metal carrier and for this reasons it can be considered as "indicator" for gold and silver concentrations of economically importance in Greece.

CHANGES OF THE GOLD GRAINS MORPHOLOGY DURING THEIR DOWNSTREAM TRANSPORT: THE GALLIKOS PLACER EXAMPLE (NORTHERN GREECE)

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This study of gold grains sampled in the Gallikos area shows how gold grains evolved in a fluvial placer. The morphology of the grains changes progressively during their downstream transport and is influenced by various including character of the original lode grains, distance of transport, chemistry of water, streams energetics and time spent in the stream. In the present work 355 gold particles (26% gold grains and 74% gold flakes) from the Gallikos area have been investigated to indentify the morphological features of the gold grains and the relationships between grain morphologies and surface textures.

STRUCTURE PETROPHYSICAL CHARACTERISTICS OF ZVEZDEL - PCHELOJAD ORE FIELD (EASTERN RHODOPE)

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The Zvezdel - Pchelohjad ore field is situated at the southern margin of the Momchilgrad graben - syncline, a part of the Eastern Rhodopean paleogene sink. The ore field is hydrothermal, polymetal and vein type. The conducted investigation aimed at acquiring of information about the petrophysical properties of rocks and their influence upon ore formation.