

Telemagmatic gold deposits

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The telemagmatic deposits have the following typical features:

- absence or reduced development of potentially ore-bearing magmatic formations;
- ore bodies are presented by zones and deposits of metasomatites mainly of argillizate or listvenite formations with low share of quartz;
- fine dispersive in ores gold with micron size, of high fineness and considerable concentration of mercury;
- geochemical spectrum of ores consists of gold-mercury-arsenic-antimony-thallium with the most stable positive correlation between gold and mercury and high gold-silver ratio;
- ores were formed at small depths (from 1500-500 m to near-surface conditions) from middle and low-temperature fluids (250-150°C).

According to the conditions of ore location four geological types of gold-ore deposits of telemagmatic class were distinguished: ultrabasite, carbonate, metamorphic and terrigenous. Within each geological type geochemical (gold-mercury, gold-arsenic, gold-antimony, gold-thallium, gold-arsenic-mercury et al.) or mineral (gold-cinnabar, gold-antimony et al.) types can be distinguished.

Definition of new telemagmatic class of gold-ore deposits of hydrothermal group will allow not only to make more exact the classification of gold-ore deposits and to attract attention of researchers to the new type of deposits but also to valuate the gold contents potential of some regions.