Gold deposits in Jurassic gold-bearing conglomerates of Western and Central Tajikistan

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1. In the valley of Shing river, in the south-eastern part of Taror ore field, investigated 120 m on the part of the Lower Jurassic deposits, represented by conglomerate. 120 samples have been selected from these sediments. Gold was present in all samples. 51 had a gold content of 0.4 g/t, 10 contained 0.5-0.9 g/t, in 12 samples 1-2 g/t was found, 6 samples had 2-3 g/t and in 41 samples, the gold content was more than 3 g/t. One sample was selected in grits at the bottom of a 10 m horizon of brown clay, which showed the maximum content of 120 g/t. This high content is probably due to a nugget effect.

2. On the southern slope of the Hissar range, the highest concentrations of gold are confined to sandstones and conglomerates of the Gurud Formation belonging to the lower-middle Jurassic coal deposits in the area Tashkutan. The area was tested in 1995. They collected at 9 locations channel samples. In three of them the gold content was higher than 0.5 g/t reaching maximum of 2.8 and respectively 4.4 g/t. Based on these observations the idea appeared that the gold is very likely confined to the lower Jurassic epoch consisting of clastic sediments such as sandstones and conglomerates reaching a maximum thickness of 175 m. Some detailed investigation showed that the gold is contained in sulfides respectively their weathering products such limonite of ironstone, which might indicate the former presence of gossans.

From the Shing area similar occurrences have been discovered. These are presently recommended targets for small scale artisanal mining.

The same is the case for the Tashkutana area, but there the occurrences are even smaller.

In a fine-clastic section at the transition to the Upper Jurassic carbonate section, some scattered sulfides have been found, which are similar to the gold-bearing formation.

Further research is necessary especially in regard to find the source of the primary gold mineralization, but due to limited laboratory and research facilities in Tajikistan, this is difficult and presently not possible.

However a first rough calculation of resources of the gold mineralization at Tashkutan resulted in 357 kg of gold corresponding to category P1 and 5,238 kg of category P2 following the Russian scheme of resource/reserve calculations.
Research of gold occurrences focusing on Jurassic conglomerates of Tajikistan is of interest. The results encourage continuing exploration work.