

## **Gold-Silver Kyplatap Ore Knot within the Okhotsk-Chukotka Volcanogenic Belt, Eastern Russia**

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Kyplatap is a gold ore knot in the west Chukotka, arranged to the MZ Okhotsk-Chukotka volcanogenic belt (OCVB). Within the volcanic complexes of the OCVB the deposits of silver-gold adular-quartz type were formed, displaying clear correlation with Cretaceous granitoid intrusions [1]. A summary geochemical mapping within the OCVB allowed to distinguish geochemical zones associated with ore-forming processes of a global rank by the Au\*Ag\*As index. Thus, the Kyplatap area, with a contrasting index anomaly, was selected for detailed study. Large deposits Kupol, Sopka Rudnaya, Dvoynoe are the closest analogues of Kyplatap [2].

After the recent field works within the area 2000 samples of the bedrocks were analysed with the portable X-ray, Au-spectrochemical, semi-quantitative spectrochemical and fire assay methods. Polished sections were researched by optic and scanning electron microscopy. Ore occurs in highly altered felsic rocks (metasomatic zoning: mudstones – quartzites - propylites) and is characterized by the structural position in the frame of the annular volcanic-tectonic depression, with the deep granite batholith under it (geophysical data), the presence of electrum, acanthite, Ag sulfosalts. Within the mineralized zones an average content of Au 3.2 ppm (up to 15 ppm) and Ag - 850 ppm (up to 2974 ppm). Predicted resources of P<sub>2</sub> category are calculated: Au - 20 t, Ag - 5000 t.

Thus, the Kytlatap knot confirms the link of the ore mineralization with the areas of OCVB Cretaceous intrusive granitoid magmatism, reflected in negative gravitational anomalies [1], together with the Au\*Ag\*As index.

[1] Volkov et al. (2017), Prospects of gold mining development in the Chukotka AD, The Arctic: ecology and economy. no 4 (28), pp. 83 - 97. [2] Strujkov et al. (2005), The Metallogeny of Gold and Silver in the OCVB, Scientific World.