

Batamshinskoye deposit

Aktobe region

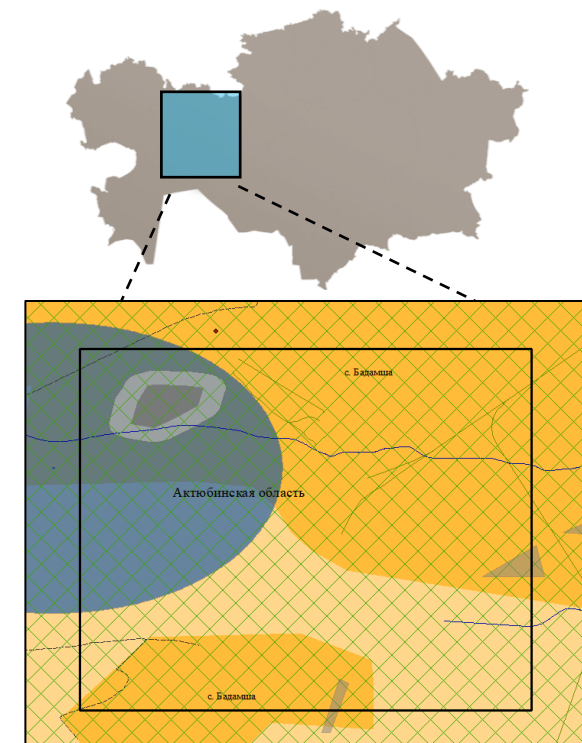
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Location: 2 km south of the urban-type settlement Batamshinsk , Aktobe region. Discovered in 1933 during the search for silicate nickel deposits.

Brief geological description: The deposit is located in the middle part of the Kempirsay massif of hyperbasites in the zone of its eastern contact with the host gabbro-amphibolites, in the area of development of sublatitudinal gabbro-diabase dikes. Mineralization is localized in the weathering crust of serpentinites that make up the watershed upland. The weathering crust consists of three zones (from bottom to top): leached nontronitized serpentinites, nontronite clays, ochers and ochristo- nontronite rocks. The total thickness of the eluvium is on average 50 m. Industrial cobalt-nickel mineralization is noted within all zones. Two deposits have been identified at the deposit, combining 7 ore bodies, 6 of which have been developed by the Yuzhuralnickel plant to date. The horizontally occurring ore bodies have a sheet-like shape with a wavy roof and uneven base, complicated by pocket-like depressions. The length of the ore bodies is 225-1900 m, the width is 15-150 m, the thickness is 1-29.6 m, on average 4.8 m. The depth of the roof of the ore bodies varies from 0.3 to 45 m. From the surface they are covered by a cover of Neogene-Quaternary deposits. The ratio of lithological types of ores is as follows: ocher and ochre-bearing nontronites - 10.9%, nontronite clays - 38.8%, nontronitized serpentinites - 36.6%, leached serpentinites - 13.7%.

The main ore minerals are nontronite and garnierite, the secondary ones are kerolite , nickel-containing chlorite and asbolane . Nontronite is present in all types of ores in quantities of up to 80% in the form of lumpy, wax-like, yellow-green clusters with a greasy luster. Garnierite occurs in the form of dense, matte, green crusts and thin, branching veins.

The content of the main useful components in the ores: nickel - 0.87%; cobalt - 0.037%. Harmful impurities: copper - 0.038%; chromium oxide - 3.5%. According to the content of the main slag-forming components, the ores belong to the magnesite-ferrous type.



- territory included in the State Natural Resources and Natural Resources Act for solid mineral extraction (Batamshinskoye field), for further auction
- licenses for GIN
- TMO polygon
- settlement and buffer zone of the village of Badamsha
- buffer zone of the cattle burial ground
- cemetery and buffer zone
- river

Extract from the state inventory records as of 01.01.2024.

Useful component	Balance reserves	Off-balance sheet reserves
nickel	A+B+C1 – 2.2 thousand tons	0.6 thousand tons
cobalt	A+B+C1 – 104 tons	27 tons