

# Vostochno-Shandashinskoye deposit

## Aktobe region

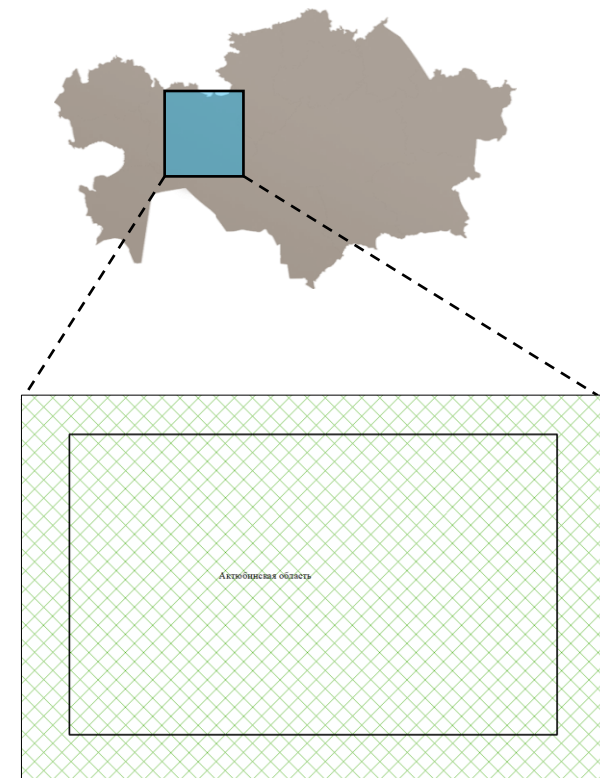
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**Location:** 5 km south of the Nikel-Tau railway station in the Aktobe region. The Vostochno- Shandashinskoye deposit was discovered in 1957 during specialized searches for silicate nickel deposits.


**Brief geological characteristics:** Nickel-cobalt industrial mineralization is confined to the weathering crust of apodunite and apoperidotite serpentinites at their contact with the body of gabbroids within the South-West anticlinal uplift of the Kempirsay hyperbasite massif. The ancient ore-bearing weathering crust has been preserved from erosion on the slopes of a gentle watershed elevation. Three mineral zones are distinguished in the eluvium section (from bottom to top): leached weakly nontronitized serpentinites, nontronite clays, ocher weathering products. Rocks of all three zones contain industrial concentrations of nickel and cobalt. The deposit is a single horizontally lying ore body with a north-eastern strike, 520 m long, 130 m wide and a thickness of 1 to 21.6 m, averaging 6.1 m. The depth of the ore body varies from 0.8 to 35 m. Three small bodies of substandard ores with low contents of useful components have been identified on the periphery of the deposit.

The main ore mineral - nontronite is contained in the ore in the amount of 40-90% of the rock volume in the form of homogeneous clay masses and nest-shaped finely scaly clusters of green color. Asbolan is present in the form of veins and dense black drip crusts. Its amount does not exceed 1-1.5%. Kerolite , nickel-containing chlorite and garnierite are present in insignificant amounts.

According to the chemical and mineral composition of the ore, the deposits are divided into three technological types: ferrous - 68% (ocher, nontronite ), magnesian - 24.7% (leached and weakly nontronitized serpentinite) and siliceous - 7.3% (siliceous-ocher formations and opalized serpentinite). The average nickel content is 1.41%, cobalt - 0.05%, copper - 0.019%, chromium oxide - 1.85%.



 - the outline of the Vostochno -Shandashinskoye deposit , included in the PUGFN for solid mineral extraction, for auction

 - license for GIN

Extract from the state inventory records as of 01.01.2024.		
Useful component	Balance reserves	Off-balance sheet reserves
nickel	A+B+C1 – 1.0 thousand tons	3.2 thousand tons
cobalt	A+B+C1 – 27.0 tons	241.0 tons