

Karakamys ore-bearing area (base metals)

Location

Karakamys ore-bearing area is situated in the Western part of Balkhash region. Astana-Almaty highway and Petropavlovsk-Chu railway are in the vicinity of the works area, 20 km eastwards.



Components of value

There are several deposits and ore occurrences are found Within the ore deposit. The components of value: copper, tungsten, molybdenum, tin and fluorite.

Subsoil Use Contract

Current Subsoil Use Contract for Geological Prospecting is concluded for 6 years. The Signature Bonus has been paid.

The Work Program is being executed in full within 2 years.

Area of geological allotment is 734 km².

Purpose of investment

Search for a potential joint venture partner to develop Karakamys Ore-Bearing Area Project.

Investment attractiveness of the Karakamys Area

The area has a huge potential for the increase of various metals resources.

Geological and geophysical prerequisites have been singled out in the framework of geological exploration at the Karakamys Area indicating the prospects of the area for discovery of copper vein high angle features of the Shatyrkul type, small rich features for heap leaching of copper.

Assessment of deep horizons of the Karakamys scheelite deposit will significantly increase the resource base of tungsten in Kazakhstan.

Deposits and ore occurrences of minerals

The Karakamys deposit. 17 saddle veins of quartz, intersecting alaskites, syenites and diorites were found at the deposit. A total of 15 ore bodies of complex morphology are located at the deposit, which occupy an area of about 75 square meters each and are strewn over an area of about 0.2 square kilometres.



The grade of tungsten trioxide taken for the calculation of reserves, is 0.6%. The molybdenum grade is also 0.1% and the copper grade is 1.7%. The explored reserves of tungsten trioxide are 723.1 tons, including by categories: B - 154.6 tons, C1 - 418.5 tons, C₂ - 150 tons.

The deposit was developed in 1948-1952. In connection with the development of rich pockets and a sharp decrease in the concentrations of scheelite, the thickness of the quartz lens and stockwork body, the deposit is developed only to a depth of 25 m. Below, two wells are crossed with greisen syenites with impregnation of molybdenum and increased grades of tungsten and copper. During operation, 191.7 tons of tungsten reserves of category B were acquired. The remaining reserves of category B + C₁ were moved off the books.

Oktyabrskoye deposit is located in the northeast exocontact of the Karakamys Massif and represents a tungsten skarn-greisen geological-industrial type of deposits. Skarnification at the ore field of the deposit is uneven and can be traced along the contact with granites for 8 km, the width of the skarn zone reaches 700 m, and on the southeastern flank - 2 km.

The deposit is preliminary evaluated. Reserves not approved by the State Reserves Commission are as follows: tungsten of C_2 category - 535 tons, associated molybdenum - 25 tons. Forecasted resources of tungsten (P_1) - 2700 tons.

Severo-Oktyabrsloye tin occurrence is located in the north-eastern exocontact of the Karakamys granite massif in the horizon of limestones of the Kyzylzhol suite. The main ore minerals are cassiterite, scheelite, molybdenite, bismuthin, chalcopyrite, pyrite and pyrrhotite. Forecast resources P_1 to a depth of 50 m: tin - 1200 tons, tungsten - 300 tons.

Karakamys South-East deposit is located in the southeastern exocontact of the Karakamys granite massif among the gneissic bundle of the metamorphic complex of the same name. The grade of tungsten is 0.002-3.6% (the average grade in ore bodies is 0.24%, 0.8%, 0.12%), tin up to 0.05%, bismuth – up 0.075%, lead – up to 1.4%, zinc – up to 0.36%, silver – up to 67 g/t, gold to 3-4 g/t.

The reserves of tungsten trioxide in two ore bodies of category C_2 are estimated at 943 tons. The grade of tungsten reaches 0.5-1.6%.

Zhilnoye occurrence is located in the endocontact of the Karakamys massif in leucogranites of the Zhalgyz complex, where for 1 km quartz veins and zones of veinlets with lateral mica greisens are developed. There are 5 ore bodies with a length of up to 200 m and thickness of 1 - 2 m. Grade (%): W - 0.18-0.6, Mo - up to 0.1.

Mednyi Kyzymchek occurrence is located in the western part of the Karakamys granitoid massif among the diorites of the Karakamys complex in the zone of their contact with the granites of the Zhalgyz complex.

Resources and reserves

	Au kg	Ag kg	Sn, t	W, t	Cu thousand	Mo, t
					t	
C ₂				1478		25
P ₁	1000	10000	1200	3000	150	5000
P ₂	10000	100000	20000	40000	1000	25000
Total:	11000	110000	21200	44478	1150	30025

Overview table of resources and reserves:



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