

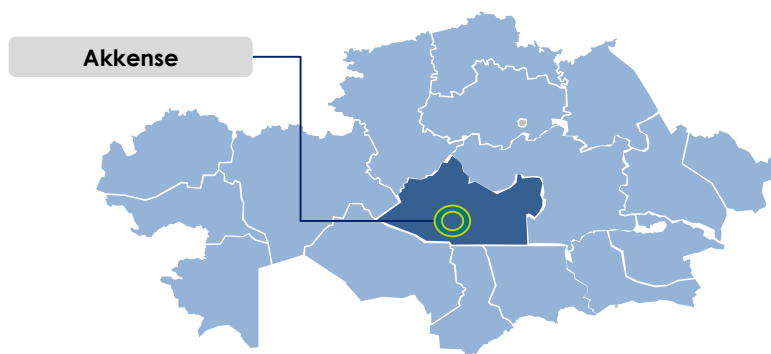
## EXPLORATION OF RARE EARTH ELEMENTS AT THE AKKENSE DEPOSIT



### FORECAST RESERVES

	Forecast reserves	Average content
Rare Earths	P1 – 86,7 thousand tons	0,04 g/t
	P3 – 4,7 thousand tons	0,113 g/t

### LOCATION



## VALUATION METRICS

REQUIRED INVESTMENT

**US\$ 1,4 million for exploration work under the contract,  
from US\$ 1 million for the first year of pilot production**

Project  
implementation period

**3 years**



### THE PROJECT

The project involves exploration and pilot production at Akkense deposit. Yttrium rare earth ore occurrence Akkense is located in Ulytau district of Karagandy region, to South East of Zhezkazgan city.



### THE COMPANY

National geological company Qazgeology JSC holds contract for the development of Akbulak site. The contract for subsoil use of the site was concluded in March 2019.



### GEOLOGICAL EXPLORATION AND STRUCTURE

The area is fully covered with aerial photography done by State design and survey Institute of land cadastral surveys in 1977.

In 1988-90 B.Slobodchikov and others carried out underground geological, geological exploration of the surface and prospecting for minerals on the areas covering the ore field Zhaman Aibat copper Deposit and the immediate area.

The geological structure of the region includes shales of the Proterozoic lower Paleozoic, siltstones, sandstones, limestones of the devonian and carbon and perm, overlain by a powerful cover of meso-kainazoic deposits of continental and marine (facies, mudstones, Sands).

In addition to the natural association of rare earths with yttrium, they are most often present together with cobalt, whose content varies between 0.01-0.08% and Nickel (approximately the same concentration limits).



### REASONS FOR ENGAGEMENT

The REE site was discovered during the search for uranium in the 90 s, after testing the core of the mapping well 17541, at a depth of 55-80 m from the surface in permeable Sands, REE were found.

Preliminary assessment of rare earth mineralization by drilling core wells in a network of 800 x 800 m allowed us to identify a promising site.



### INVESTMENT OPPORTUNITY

The project owner is looking for an investor and ready to consider various options of cooperation.