# **North Balusty Project**

The North Balusty Project Area ("North Balusty") is situated in the Valikhanovsk district of the Northern Kazakhstan province of the Kazakhstan Republic (Figure 1). North Balusty is located in the eastern part of the Alhambra Resources Ltd. ("Alhambra") Northern Kazakhstan license block, and is approximately 90 kilometres ("kms") from Alhambra's operating Uzboy open-pit mine (Figure 2). A 15 km dirt road and a 57 km tarmac road connect the area to Stepnogorsk (pop. 60,000), the site of the corporation's gold extraction plant and operating subsidiary headquarters. The Dombraly Project is located just 7 kms south of North Balusty.



Figure 1 - Location of Alhambra's license area (orange) and the main gold deposits in Northern Kazakhstan



Figure 2 - Location of North Balusty within the license area held by Alhambra

## **Geological Setting**

A Middle Ordovician volcano-sediment sequence forming about 100 kms long and 7-15 kms wide generally N-S trending regional syncline structure, underlies the prospect (Figure 3).



Figure 3 - Geological map of North Balusty with rock sampling results (red)

The Aksu orogenic gold deposit (15.0 million ounce gold) mined by the KazakhGold Group, the geologically similar Dombraly deposit held by Alhambra and the small Severnoye gold deposit also belonging to the KazakhGold Group are all located along this structure. It seems that the same volcano-sediment hosted Orogenic style mineralization could be expected in the project area.

The volcano-sediment sequence, mostly andesite and andesite-basalt tuff interbedded with tuffaceous sandstone and siltstone, rarely andesite, is intruded by Late Ordovician subvolcanic porphyritic andesite bodies and small stocks of diorite.

The supracrustals are gently folded and cut by generally N-S shear zones as well as by NW and NE striking brittle faults. Long zones of up to several kilometres of eruptive breccia have been also described there but their morphology shows more probably tectonic than magmatic or hydrothermal origin. Thin quartz veins and up to 500 metres ("m") long and 200 m wide zones of disseminated mineralization are known in the area.



Figure 4 - North Balusty Target Area 1 RAB drilling results (with a N-S grid orientation)

# **Exploration History**

Quartz veins in the area were subject of mining by small prospector cooperatives in 1952-1970. In the 1970's a state owned exploration company carried out a scout drilling program to evaluate the vein size and consistency along the strike and dip, establishing that they are mostly erratic and not suitable for mining.



Figure 5 - North Balusty Target Areas 2 and 3 RAB drilling results (with a N-S grid orientation)

Exploration of North Balusty by Alhambra started in 2005 with 47 trenches, channel sampled at 1 m intervals. Three target anomalous areas, Area 1, 2 and 3 (Figure 3) were outlined and in 2006 rotary air-blast ("RAB") drilling was conducted there. 739 shallow holes (totaling 8,880 m) were drilled and 4,440 chip samples taken. More trenching was carried out in 2007. It included digging of 50 trenches with the total length of 11,712 m. They were sampled with 12,210 1 m long channel samples.



Figure 6 - North Balusty Target Area 1 Trenching results (with a N-S grid orientation)

#### Results

As a result of the exploration conducted, a 12.8 km long and up to 2.5 km wide zone of gold anomalism in alluvium and saprolitic rocks was established. It consists of numerous wide individual anomalies ranging from several metres to tens of metres where the gold grades exceed 0.1 grams per tonne gold ("g/t Au"). In three potential target areas the concentration of anomalies is higher and the gold grades reach 0.5 g/t in RAB samples (Figures 4 and 5). Trenching in the same areas have returned the best intercepts of 30 m @ 0.4 g/t Au, 9 m @ 0.76 g/t Au and 6 m @ 0.36 g/t Au (Figures 6 and 7). It is still unclear whether it is a very large zone of low grade mineralization, broad low grade aureole of a significant deposit or just a set of transported anomalies in reworked saprolite and alluvium.



Figure 7 - North Balusty Target Areas 2 and 3 Trenching results (with a N-S grid orientation)

## **2010 Exploration Program**

The objective of the 2010 exploration program at North Balusty is to check the origin of the gold anomalies established by trenching in 2005 and 2007 and to estimate the width of the mineralized zone.

The 2010 exploration program will include one 2.5 km long line crossing the highest grade anomalous zones with hydro-core lift ("KGK") holes 50 m apart. Depth of the holes is approximately 40 m. The total amount of KGK drilling will be approximately 2,000 m.

Contingent on drill results, approximately 900 m of deep reverse circulation ("RC") holes are planned for 2011 with the objective to check possible mineralized zones established by KGK drilling.