Occurrence Details

Occurrence Number: 115I 080
Occurrence Name: Rico
Occurrence Type: Hard-rock
Status: Anomaly
Date printed: 12/15/2025 1:05:56 PM

General Information

Secondary Commodities: copper, gold, lead, zinc
Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation
Location(s): 62°8'30.82" N - -137°20'4.78" W
NTS Mapsheet(s): 115I03
Location Comments: Location marks approximate centre of magnetic low.
Hand Samples Available: No
Last Reviewed: May 12, 0015

Capsule

Work History

G.J Muff staked Anna cl 1-2 (Y67236) 0.5 km to the east in September 1972. The claims were transferred to R.A. Savage in April 1974.

Staked as Rico cl 1-108 (Y75639) in June 1973 by AEX 73 Syndicate, which changed its name to AEX Minerals Corporation Ltd. in early 1974. AEX Minerals carried out regional and grid soil sampling, reconnaissance geological mapping and minor silt sampling programs in 1973. In May 1974, the company staked "A" cl 1-8 (Y79006) on the northwest boundary of the Rico claims. AEX Minerals also carried out a grid based magnetometer survey over the Rico and "A" claims at the same time. Between June and September 1974, the company collected silt and grid based soil samples over selected portions of the Rico and "A" claim blocks. In September 1974, AEX Minerals staked Ax cl 1-12 (Y80601) along the south-central boundary of the Rico claims.

Re-staked within Gerald cl 1-38 (YB57855) by BYG Natural Resources Inc. in June 1995. The company staked Jules cl 1-12 (YB57893) southeast of the Gerald claims at the same time. In September 1995, BYG Natural Resources staked KR claims 1-238 (YB58184) on the western boundary of the Gerald and Jules claim block.

In 1996, BYG carried out a large grid based, ground magnetic and low frequency electromagnetic (VLF-EM) survey over parts of the Gerald, Jules and KR claims. The company followed up the geophysics program with several small focused soil sampling grids.

In March 1999, BYG Natural Resources was placed into receivership due to environmental and financing problems at their neighboring Mount Nansen Mine (MINFILE occurrence 115I 064 and 065). All of the company's mineral claims were placed into receivership. On June 29, 2002, the Gerald and Jules claims lapsed. The majority of KR claims lapsed on September 8, 1999. KR claims 171-174, located north of the occurrence lapsed on September 8, 2000.

Re-staked within Klaza cl 68-129 (YD07149) in July 2010 by Rockhaven Resources Ltd. The claims were merged with Klaza cl 1-66 (YC37984) staked previously by the company and incorporated into Rockhaven Resource's Klaza property (MINFILE occurrence 115I 067) located approximately 5 km to the east.

During the 2010 exploration season, Rockhaven Resources carried out an extensive exploration program on the Klaza property, with the majority of work centered on the Klaza occurrence. In August 2010, the company flew a helicopter-borne magnetic and gamma-ray spectrometric geophysical survey over Klaza claims 1-129. The western boundary of the survey covered this occurrence.

In September 2010, Rockhaven Resources staked Klaza cl 133-166 (YD072214) on the west side of this occurrence and in December 2010 staked Klaza cl 167-308 (YD119737) and cl 309 (YD110502).

In 2011, Rockhaven Resources grid soil sampled the northwest-central portion of their large claim block including the area surrounding this occurrence. In July 2011, the company flew a helicopter-borne magnetic and gamma-ray spectrometric geophysical program over claims located northwest of the previous survey flown in 2010. In September 2011, Rockhaven Resources collared 21 percussion drill holes (2,940 m) to test for mineralization situated north-west of known mineralization found at the Klaza occurrence and southeast of this occurrence.

Between 2012 to the end of 2019, Rockhaven Resources focused their exploration efforts on confirming the size and grade of mineral resources hosted in and around the Klaza occurrence. The company also carried out numerous preliminary metallurgical and recovery studies associated with the resource estimate. No significant work was carried out around this occurrence during this time.

Regional & Property Geology

The occurrence is located in the Dawson Range within Yukon-Tanana Terrane (YTT). The rocks of the YTT in this region consist of Early Mississipian metamorphic rocks separated into meta-sedimentary and meta-igneous suites (Stroshein, 1998). The meta-sedimentary suite consists of micaceous quartz-feldspar gneiss, schist and quartzite of the Nasina Assemblage. The meta-igneous package is comprised of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolite. These basement rocks are cut by numerous plutonic and volcanic events from the Cretaceous and Tertiary.

The oldest exposed unit within the boundaries of the Klaza property is a pluton of the Early Jurassic Long Lake Suite (EJL), which outcrops in the northeast corner. The majority of the property is underlain by coarse-grained, non-foliated Mid-Cretaceous Whitehorse Suite granodiorite (mKW) comprised of 30% hornblende and biotite. A moderate size, quartz-rich granite to quartz monzonite Casino Suite stock (LKq) intrudes the granodiorite in the southeast corner of the property and is thought to be the main heat source for hydrothermal cells responsible for mineralization on the property. A series of northwesterly trending feldspar porphyry dykes (LKfp) emanating from the stock in the southeastern part of the property cut the Whitehorse suite granodiorite in the Klaza occurrence area. These dykes are up to 30 m wide and consist of buff aphanitic groundmass containing up to 15% orthoclase phenocrysts (1 to 2 mm) with minor biotite and rare quartz phenocrysts. The dykes commonly occupy the same structural zones as the mineralized veins and are often strongly fractured. Some veins cross-cut dykes.

Sub-aerial volcanic and volcaniclastic rocks belonging to the Mount Nansen (mKN) and Carmacks (uKC) volcanics are found on the periphery of the property. These rocks are believed to be extrusive equivalents of the mid and Late Cretaceous intrusions, respectively.

There are two main fault trends present on the property. The first set strikes northwesterly and dips 60° to 80° to the southwest. These faults host veins and breccia zones and appear to control distribution of the porphyry dykes. The second set of faults strike northeasterly, almost perpendicular to the primary set and dip sub-vertically. They form prominent topographic linears and offset the mineralized zones in a number of places, creating apparent left lateral displacements of up to 80 m in magnitude. Smaller, westerly striking Riedel shears occur slightly oblique to the main mineralized faults. High-grade mineralization is sometimes localized at junctions between these shears and the northwesterly trending structures.

Mineralization & Results

The Rico occurrence lies approximately 5 km northwest of the Klaza occurrence (MINFILE occurrence 115I 067). Based on prospecting, geophysics and percussion drilling the occurrence area is underlain by mid-Cretaceous Whitehorse Suite granodiorite. Several 2011 percussion holes centered approximately 1.5 km southeast of the occurrence intersected phyllic altered granodiorite with galena, arsenopyrite and sphalerite. The primary northwest trending fault trends through the occurrence location and small felsic dykes likely occur throughout the area.

The occurrence site marks a circular magnetic low originally located during a mid-1960's airborne magnetic survey conducted by the Canadian Department of Mines and Technical Surveys (now Natural Resources Canada – Geophysics Paper 3312, Victoria Mountain, 115I 03).

Soil sampling performed by AEX Minerals outlined numerous spot anomalies defined by one or several anomalous stations, but no anomalies of any considerable size. The strongest identified soil anomaly was a copper-lead-zinc anomaly located in a manganese and iron oxide-stained swamp locate approximately 1.25 km north of the occurrence.

BYG Natural Resources' geophysical and geochemical surveys did not cover the immediate area around the occurrence. Grid 3 was centred to the northeast and Grid 5 to the southeast. Extrapolating the geophysical data suggests the occurrence area lies within a regional magnetic low. The geochemical surveys did not detect any significant anomalies in the general vicinity of the occurrence. BYG Natural Resources did not conduct any further work at or around the occurrence before being placed into receivership in March 1999.

In 2010, Rockhaven Resources grid soil sampled the manganese and iron stained swampy area (centered 1.25 km north of the occurrence) previously sampled by AEX Minerals Corporation. Anomaly "G" returned strong gold and copper values and moderate lead and zinc values.

In 2011, Rockhaven Resources carried out grid soil sampling over the northwest central portion of its Klaza claim block including the area surrounding the Rico occurrence. Nothing of significance was detected on or around the occurrence and airborne geophysics carried out in 2010 and 2011 did not outline any anomalies in the vicinity of the occurrence.

The 2011 percussion drill program tested geophysical and geochemical anomalies located 750 m to 3.5 km to the southeast of the occurrence. Galena, arsenopyrite and sphalerite were recognized in cuttings from several percussion holes, where they appeared to be disseminated through zones of phyllic altered granodiorite up to 20 m in width. No significant gold or silver values were obtained from samples taken over these intervals.

Work History

Date	Work Type	Comment
12/31/1996	Geochemistry	Grid based over portion of claims.
12/31/1996	Ground Geophysics	Also Magnetic and VLF surveys, grid based over portions of claims.
12/31/1974	Geochemistry	Grid based over selected parts of claims.
12/31/1974	Ground Geophysics	Grid based over Rico and "A" claims.
12/31/1973	Geochemistry	Regional and grid sampling.
12/31/1973	Geochemistry	
12/13/2011	Drilling	Twenty one holes located 750 m to 3.5 km to southeast.
12/13/2011	Geochemistry	Grid based over northwest-central portion of claims including this occurrence.
12/13/2011	Airborne Geophysics	Also gamma-ray spectrometer survey over newly staked claims located west of occurrence.
12/13/2010	Airborne Geophysics	Also gamma-ray spectrometer survey flown over existing claim block.
12/13/1974	Geochemistry	Over selected drainages.
12/13/1973	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
097000	2016	Assessment Report describing geology, mineralization, soil geochemistry, rock geochemistry, geophysical surveys, excavator and hand trenching, diamond drilling, metallurgical testing and preliminary economics at the Klaza property	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies, Process/Interpret - Pre-existing Data, Preliminary Economic Assessment - Studies	44	78873.13
096848	2015	Assessment Report Describing Geology, Mineralization, Geophysical Surveys, Excavator Trenching, Diamond Drilling, Metallurgical Testing and Mineral Resources	Diamond - Drilling, Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Backhoe - Trenching	104	13774
096036	2011	Assessment Report Describing Diamond and Reverse Circulation Percussion Drilling, Excavator Trenching, Soil Sampling, and Geophysical and Airphoto Surveys at the Klaza Property	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Orthophoto - Airphotography, Diamond - Drilling, Reverse Circulation - Drilling, Soil - Geochemistry, Backhoe - Trenching	73	16570
093543	1996	1996 Assessment Report Magnetometer, VLF-EM, and Geochemistry Surveys Buffalo Grid, Nisling Grid and Klaza Grids	Soil - Geochemistry, EM - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other		
093516	1996	1996 Assessment Report Magnetometer, VLF-EM,and Geochemical Survey on the Kr 1-238 Claims Klaza Grids	Soil - Geochemistry, EM - Ground Geophysics, Magnetics - Ground Geophysics		
060855	1974	Magnetometer Survey Rico Claim Group	Magnetics - Ground Geophysics, Line Cutting - Other		

061238	1974	Mt. Nansen - Project Geology of Rico Claim Group	Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics		
060854	1973	Geochemical Survey on Parts of Rico Claim Group	Silt - Geochemistry, Soil - Geochemistry, Magnetics - Ground Geophysics, Cursory Property Visit - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1997_14	Geology and mineral deposits of the Mount Nansen camp, Yukon	129-138.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1997_Andersen	Geology of the Flex gold-silver vein system, Mount Nansen area, Yukon	139-143	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
MIR1974	Mineral Industry Report 1974	126-127.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
YEG1999_OV	Yukon Mining & Exploration Overview 1999	p. 6.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2010_OV	Yukon Exploration and Geology Overview 2010	p. 36-37, 60, 64.	Yukon Geological Survey	Annual Report
YEG2011_OV	Yukon Exploration and Geology Overview 2011	p. 49, 65, 72, 73.	Yukon Geological Survey	Annual Report
YEG1998_20	A summary report on the geology of the Brown-McDade gold-silver deposit, Mount Nansen mine area, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
1987-2(G)	Geology of Mt. Nansen (115I/3) and Stoddart Creek (115I/6), Dawson Range, Central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
YEG2012_OV	Yukon Exploration and Geology Overview 2012	54, 62, 65.	Yukon Geological Survey	Annual Report
YEG2013_OV	Yukon Exploration and Geology Overview 2013	35, 42.	Yukon Geological Survey	Annual Report
YEG2014_OV	Yukon Exploration and Geology Overview 2014	30, 39, 42.	Yukon Geological Survey	Annual Report