Occurrence Details

Occurrence Number: 105M 072
Occurrence Name: Beley
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 2:02:24 PM

General Information

Secondary Commodities: lead, silver, zinc
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 63°54'26" N - -135°41'31" W
NTS Mapsheet(s): 105M13
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as 627 Zap cl (YA38459) in Mar/79 by Canada Tungsten Mining Corporation Ltd, which then optioned the adjoining Sinister claim group (96 Sin, Is and Ter cl (YA39499)) staked by Archer, Cathro and Associates Ltd to the southwest in Apr/79. Canada Tungsten carried out an extensive evaluation of their claim holdings in the area that included mercury geochemical sampling, MaxMin, EM and test hammer seismic surveying in 1979; soil and lake geochemical surveying and overburden percussion drilling of 67 holes (1 889.8 m) in 1980; 3 diamond drill holes (484 m) and 11 overburden holes (614 m) in 1981; ground and airborne magnetometer and EM surveying and 9 overburden holes (1240 m) in 1982; and 3 drill holes (224.3 m) in 1983.
In 1987 the Sinister claim group was returned to Archer, Cathro and the Is and Ter claims were subsequently allowed to lapse. In 1993 the Sin claims were sold to Expatriate Resources Ltd, which carried out magnetic surveying of the northern part of the claims in Oct/98 and staked Nis cl 1-75 (YC01589) contiguously to the south in Nov/98. In Jan/99 Expatriate optioned the adjoining (to the east) Aurex claims (Minfile Occurrence #105M 060) from YKR International Resources Ltd and carried out geological mapping and geochemical sampling later in the year. In Nov/99 after staking Rex cl 1-49 (YC02041) at the eastern end of the Aurex-Sinister claim block, Expatriate optioned the property to Newmont Mining Corporation.
In Apr/2000 Newmont entered an agreement with NovaGold Resources Inc to explore the adjoining (to the north) McQuesten (formerly Wayne) property. Later that year Newmont carried out regional airborne surveying, auger drilling, geological mapping and prospecting of both of the newly acquired properties and machine trenching of the west-central portion ot the Aurex claims.

Capsule Geology

The Zap claims covered the core of the northeast-trending McQuesten Anticline, which follows the overburden-covered McQuesten River valley. The 1980 drilling intersected graphitic schist, bedded quartzite, graphitic phyllite, argillite and schist of the Devonian to Mississippian Earn Group and massive Keno Hill Quartzite of Mississippian age. These units are intruded by gabbroic or dioritic sills and lamprophyre dykes of Triassic age and small Early Late (?) Cretaceous granite to quartz monzonite stocks of the Tombstone Intrusive suite.
The 1979 soil survey located three mercury anomalies and four lead-zinc anomalies. The 1981 core drilling intersected vein faults containing sphalerite which assayed 6.0% Zn, 18.2 g/t Ag and 0.1% Pb. The 1998 program of ground magnetics ended prematurely due to unstable magnetic readings.
To the south, across the Robert Service Thrust which trends easterly through the area, Upper Proterozoic Hyland Group meta-clastic phyllites and psammites of the Yusezyu Formation have been thrust over the younger Devonian and Mississippian rock. Sampling along the Nis and Sin claim lines in 1999 returned weakly and moderately anomalous values for As, Au and Sb within a 4 by 3 km area. Widespread As anomalies up to 1 000 m long and several Au and Sb anomalies up to 400 m long, as well as numerous single station anomalies were outlined. Peak values of 395 ppb Au, 1 750 ppm As and 10 ppm Sb were returned from analysis of these samples.
Newmont¿s assessment of the property in 2000 involved a thorough compilation and review of all known and new geological, geochemical and geophysical data. The company determined;
¿That most of the mapped contacts in the area have been located by considering float boulder trains, detailed structural data and airborne magnetic and EM survey results.
¿That the property hosts a series of pyrrhotite-gold skarn lenses where regional shear foliation clearly controls pyrrhotite mineralization; there are four dominant types of mineralization that include early quartz lenses and boudins, the calc-silicate phyrrhotite-gold horizons, quartz-arsenopyrite-pyrite-gold vein zones and siderite-galena-sphalerite breccia minerlization.
¿That known mineralization, together with pegmatite veins suggests that a granitic mass is proximal to the central portions of the property.
¿There are at least two types of faults that occur within the map area: those that contain major concentrations of ore minerals, called vein faults and those with small amounts of ore minerals, called cross-faults, bedding faults, etc.
¿That the property is overlain by a variety of surficial materials due to multiple phases of glaciation and subsequent weathering and mass wasting and that each geomorphological domain requires a different approach to geochemical sampling.
¿That up to 95% of earlier soil samples reflect transported glacial material rather than true residual soil profiles; that Au, As, Sb and Bi follow each other closely in areas of residual soil and bedrock lithologies.
¿That three main stages of hypogene mineralization are represented on the property; and that the principal hypogene minerals are quartz, pyrite, arsenopyrite and pyrrhotite.

References

CANADA TUNGSTEN MINING CORPORATION LTD, Mar/80. Assessment Report #090564 by R.J. Barclay et al.

CANADA TUNGSTEN MINING CORPORATION LTD, Apr/80. Assessment Report #090546 by M.D. Philpot.

CANADA TUNGSTEN MINING CORPORATION LTD, Apr/81. Assessment Report #090787 by M.D. Philpot.

EXPATRIATE RESOURCES LTD, News Release, 25 Jan/99; 03 Nov/99.

EXPATRIATE RESOURCES LTD, May/99. Assessment Report #094008 by T.C. Becker.

EXPATRIATE RESOURCES LTD, Apr/2000. Assessment Report #094101 by W.A. Wengzynowski.

MURPHY, D.C., HUNT, J.A., ROOTS, C.F., AND POOLE, W.H., 1996. Geological map of Mount Haldane (105M/13), Central Yukon. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Geoscience Map 1996-4.

NEWMONT EXPLORATION OF CANADA LTD, Feb/2001. Assessment Report #094222 by N.M. Caira and M.A. Stammers.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 208-209.

YUKON EXPLORATION AND GEOLOGY 1981, p. 168; 1999, p. 9, 29, 2000, p. 18, 25.

Work History

Date	Work Type	Comment
12/31/2000	Geology	
12/31/2000	Geochemistry	Also rock and silt sampling.
12/31/2000	Drilling	
12/31/2000	Trenching	
12/31/2000	Airborne Geophysics	Also magnetic survey.
12/31/1999	Geology	
12/31/1999	Geochemistry	
12/31/1998	Ground Geophysics	
12/31/1983	Drilling	Three holes, 224.3 m.
12/31/1982	Drilling	Nine holes, 1,240 m. (Overburden drilling).
12/31/1982	Airborne Geophysics	Also magnetics survey.
12/31/1981	Drilling	Three holes, 484 m.
12/31/1981	Drilling	Eleven holes, 614 m. (Overburden drilling).
12/31/1980	Drilling	Sixty-seven holes, 1,889.8 m. (Overburden drilling).
12/31/1980	Geochemistry	
12/31/1980	Geochemistry	
12/31/1979	Geochemistry	Mercury geochemical sampling.
12/31/1979	Ground Geophysics	Also Max-Min and hammer seismic testing.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094943	2006	2006 Geological, Aerial Photography and Orthophoto Assessment Report on the Keno Hill Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Interpretation - Airphotography, Orthophoto - Airphotography, Digitizing Data - Pre-existing Data, Photogrammetry - Remote Sensing		
090564	1979	Geological, Geochemical, and Geophysical Report	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Seismic - Ground Geophysics, Research/Summarize - Pre-existing Data		
060942	1970	Report on Aeromagnetic Survey-Keno Area, Yukon Territory	Magnetic - Airborne Geophysics		