



Occurrence Details

Occurrence Number: 105F 013

Occurrence Name: Cpa

Occurrence Type: Hard-rock

Status: Showing

Date printed: 4/29/2025 7:09:57 AM

General Information

Secondary Commodities: copper, lead, zinc

Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn

Location(s): 61°28'26" N - -132°27'44" W

NTS Mapsheet(s): 105F08

Location Comments: 1 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

The first claims in this area were CPA cl 1-12 (Y41569) staked in Oct/69 by R.G. Hilker, 1.6 km east of the occurrence. They were optioned in 1970 by Charta Mining Ltd, who explored with geological mapping and soil sampling in 1970. The following year, the company carried out a ground magnetic survey and in Aug/71 added CPA cl 13-24 (?). Hilker hand trenched in 1976 and briefly optioned the claims in 1977 to United Keno Hill Mining Limited, which added Gag cl 1-24 (YA21537) to the west in Aug/77 and explored with mapping, hand trenching and a large soil sampling program.

Staked as Am cl 1-8 (YA70312) in Aug/83 by A. Mercier, and as Mathew cl 1-146 (YBI271) in Sep/87 by Pacific Cascade Resources Limited, which performed prospecting, mapping and geochemical sampling in 1988 and prepared a compilation report in 1989. Granges Inc optioned the property in 1990 and carried out an airborne VLF-EM-mag survey and limited mapping and geochemical sampling later in the year. In Aug/91 the company constructed an access road to the property and carried out further trenching, geological mapping, geochemistry and geophysical programs. In 1992 the company completed additional trenching, and a small rock sampling and geological mapping program.

In March/94, after the Mathew claims began to lapse, B. Hall staked Mamu cl 1-24 (YB47318) 1 km northwest of showing. In early 1995 Oro Bravo Resources Ltd optioned the Mamu claims and in Mar/95 added Bravo cl 25-44 (YB58933). In Feb/96 Oro Bravo surrounded the Mamu and Bravo claims with Kulan cl 1-109 (YB79729).

Aurum Geological Consultants Inc carried out the 1995 and 1996 field programs for Oro Bravo which included extensive soil sampling, and ground magnetics and VLF surveys. In 1997 Oro Bravo drilled 3 diamond drill holes (415.45 m) on the Mamu claims.

Capsule Geology

The occurrence is located southwest of the Tintina Fault Zone in the Cassiar Terrane (Platform). The Cassiar Terrane is a curvilinear shelf which formed, between mid-Cambrian to Silurian time, roughly parallel to the western edge of the North American craton, but separated from it by the Selwyn Basin. Shallow water deposition on the platform continued until Late Devonian time. Block faulting and local uplift during the Late Devonian and Mississippian resulted in deposition of carbonaceous shale and chert pebble conglomerate in the Selwyn Basin and across the Cassiar Terrane. Local explosive volcanism produced thick tuffs and flows whose extremities intertongue with surrounding black shale. Some of these volcanic centres contain base metal mineralization. Calcareous argillite of Upper Paleozoic to Triassic age was deposited above the shale and volcanic sequence (Hunt, 1999).

The occurrence area covers a package of Mississippian volcanic and sedimentary rocks intruded by a Mississippian intrusive complex of syenite, monzonite, quartz monzonite, diorite and gabbro (Gordey and Makepeace, 1999). The volcanic-sedimentary package is comprised of: intermediate volcanics (tuff, breccia, flows and minor felsic volcanics); felsic volcanics (rhyolite, limonite, pitted rhyolite, rhyolite-trachyte) and; argillite and phyllite. Pyritic chert or pyritic cherty rhyolite is thought to represent exhalite horizons. A large Mississippian syenite intrusion lies on the north side of the occurrence area.

The volcanic and sedimentary rocks are variably altered. Most alteration consists of a phyllic assemblage of quartz-sericite-carbonate-pyrite. Locally secondary biotite or chlorite are present in significant amounts. Ankerite, fluorite and tremolite-actinolite are reported from mapping and petrographic reports. Most sulphides have been oxidized to limonite and other iron oxides (Doherty, Mar/96).

Mineralization located to date consists of: 1) disseminated pyrite in exhalite horizons, 2) massive bedded pyrite, and 3) quartz veins and quartz breccias containing pyrite +/- sphalerite, tetrahedrite, galena and chalcopyrite.

The CPA claims were staked to cover three gossans which overlie strongly foliated felsic tuff of Mississippian age, and Middle Devonian phyllite and limestone. The Charta work outlined two coincident copper-lead anomalies, each about 610 m by 183 m, oriented parallel to the strike of the foliation, and a magnetic anomaly at the east end which could reflect a buried intrusion. Molybdenum and zinc occurrences were rumoured to occur 1.6 km to the north and 3.2 km to the east respectively.

United Keno Hill located several lead-zinc soil anomalies on the Gag claims, and follow-up hand trenching showed they were caused by minor sphalerite and galena and trace chalcopyrite in narrow siderite-quartz veins. They also noted felsic fragmental clasts up to 30 cm in size and several small syenite bodies intruding the volcanic sequence as well as the large syenite body on the north side of the occurrence area.

Cascade Pacific Resources noted that the property covered 2 Kuroko type volcanogenic massive sulphide (VMS) showings as well as a series of lead-silver veins adjacent to the syenite contact. The company also identified a 600 m by 275 m coincident Cu, Pb, Zn soil anomaly over felsic metavolcanics and cherts which contain broken up massive pyrite beds.

During Aurum's 1995 program, a total of 1 178 soil samples were collected and analysed. Two strong Pb-Cu multi-element anomalies were identified. Doherty (Jan/96) noted a strong correlation between Pb, Zn, Cd, Cu, Mn and Ba and also noted that these elements correlate loosely to a second group consisting of Ag, Fe, La, As and Mo. Aurum also conducted total field magnetic and a VLF-EM surveys. The magnetic survey identified a prominent magnetic high coincident with the larger of the two soil anomalies while the VLF-EM survey located several conductors coincident with the magnetic high.

Oro Bravo's 1997 diamond drill program tested coincident Cu-Pb-Zn soil geochemical anomalies overlying felsic volcanic rocks. Economic mineralization was not intersected although several sections yielded elevated zinc values in the 2 000-5 000 ppm range and sericite and chlorite was noted on foliation planes (Doherty, Nov/97). All three holes intersected clay gouge in fault zones.

References

CASCADE PACIFIC RESOURCES LTD, Jan/89. Assessment Report #092685 by M.J. Burson.

CHARTA MINES LTD, Sep/70. Assessment Report #060950 by R.G. Hilker.

GORDEY, S.P., AND MAKEPEACE, A.J., 1999. Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada, Open File D3826, and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1 (D)

GRANGES INC, Sep/90. Assessment Report #092879 by A.J. O'Donnell.

HILKER, R.G., Nov/70. Assessment Report #060015 by R.G. Hilker.

HUNT, J.A., 1999. Preliminary stratigraphy and distribution of Devono-Mississippian massive sulphide-bearing volcanic rocks in the Mount Vermillion (Wolf) area, Pelly Mountains (105G/5 and G/6 southeast Yukon. In: Yukon Exploration and Geology 1998, C.F. Roots and D.S. Emond (eds.), Exploration and Geological Services division, Yukon, Indian and Northern Affairs Canada, p. 73-89.

MINERAL INDUSTRY REPORT, 1971-72, p. 115-116; 1977, p. 80-81, 83.

ORO BRAVO RESOURCES LTD, Jan/96 Assessment Report #093411 by R.A. Doherty.

ORO BRAVO RESOURCES LTD, Mar/97 Assessment Report #093645 by R.A. Doherty.

ORO BRAVO RESOURCES LTD, Nov/97 Assessment Report #093756 by R.A. Doherty.

UNITED KENO HILL MINES LTD, Dec/77. Assessment Report #090260 by B. Baird.

YUKON EXPLORATION 1991, p. 6.

YUKON EXPLORATION AND GEOLOGY 1992, p. 2, 3. 1996, p. 20-21, 31. 1997, p. 18, 36, 38.

Work History

Date	Work Type	Comment
12/31/1997	Drilling	Three holes, 351 m.
12/31/1996	Geology	
12/31/1996	Geochemistry	
12/31/1996	Ground Geophysics	Also VLF-EM survey.
12/31/1995	Geochemistry	
12/31/1995	Ground Geophysics	Total magnetics and VLF-EM surveys.
12/31/1992	Geochemistry	
12/31/1992	Geology	
12/31/1992	Trenching	
12/31/1991	Geology	
12/31/1991	Geochemistry	
12/31/1991	Ground Geophysics	
12/31/1991	Development, Surface	
12/31/1991	Trenching	
12/31/1990	Geology	
12/31/1990	Airborne Geophysics	Also VLF-EM survey.
12/31/1988	Geology	
12/31/1988	Geochemistry	Also rock sampling.
12/31/1988	Other	
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/31/1977	Trenching	
12/31/1976	Trenching	
12/31/1971	Geology	
12/31/1971	Geochemistry	
12/31/1971	Ground Geophysics	
12/31/1970	Geology	
12/31/1970	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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095343	2010	Geological Report on the True Blue Project Describing the Geology, Geochemistry and REE Mineralization of the Shark Property	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
093756	1997	1997 Report on the Diamond Drilling Program on the Mamu 11, 12, 30 and 32 Claims, Mamu-Bravo-Kulan Property	Diamond - Drilling	3	415.45
092879	1990	Geophysical Report Mathew Claims	Electromagnetic - Airborne Geophysics, Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
092685	1988	1988 Program of geological Mapping, Geochemistry and Prospecting on the Mathew Claim Group	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
090260	1977	1977 Geological and Geochemical Report on the CPA 1-12 and Gag 1-24 Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetism - Ground Geophysics		
060950	1971	Geological, Geochemical and Geophysical; report on the CPA 1-12 Yukon Quartz Mineral Claims	Soil - Geochemistry, Magnetism - Ground Geophysics		
060015	1970	Geological Report on the CPA 1-12 Mineral Claims	Rock - Geochemistry, Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC008793	1992 program report on the Mathew claims - McConnell River area		Property File Collection	Report
ARMC008794	Geological & geochemical assessment report of the Mathew claims		Property File Collection	Report
ARMC008795	Report - Mathew claims		Property File Collection	Report
ARMC020312	Notes on visit to the Mathew claims with Brian Hall		Property File Collection	Miscellaneous Company Documents
ARMC020313	Correspondence Re: Mathew claims		Property File Collection	Miscellaneous Company Documents
ARMC020314	Assay results - Mathew claims - Report no. V88-07951.4		Property File Collection	Assays
ARMC020315	Assay results - Mathew claims - Report no. V88-07951.5		Property File Collection	Assays