



Occurrence Details

Occurrence Number: 105D 214

Occurrence Name: Gem

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 6/15/2025 9:13:58 AM

General Information

Primary Commodities: copper

Secondary Commodities: gold, molybdenum, silver

Aliases: Whitehorse Copper

Deposit Type(s): Skarn

Location(s): 60°34'50.61" N - -134°57'18.78" W

NTS Mapsheet(s): 105D10

Hand Samples Available: No

Last Reviewed:

Capsule

The Whitehorse Copper Belt is located west of Whitehorse and contains 30+ mines, deposits and showings. By 1900, most of the important deposits had been discovered and the first small ore shipment was made that year. Many of the occurrences in the Copper Belt are skarns. The skarns form on or near the contact between the Whitehorse batholith and the Lewes River group. The Whitehorse batholith is commonly a grey coarse-grained hornblende granite and ranges from quartz monzonite to granodiorite to diorite. The Lewes River group contains numerous different rock types, most importantly of which is the limestone group, which is essential in the formation of skarns in the area. A small number of occurrences within the Copper Belt are vein and/or replacement and occur within the Whitehorse batholith granite.

The Gem deposit is a skarn located at the contact between the diorite of the Whitehorse batholith and the limestone of the Lewes group. In 1971 reserves calculated totalled 625 044 tonnes at 1.01% Cu.

Work History

Date	Work Type	Comment
12/13/1968	Drilling	
12/13/1968	Geology	
12/13/1968	Ground Geophysics	
12/13/1968	Ground Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096680	2014	Summary Report Documenting the Cowley, Keewenaw and Gem Copper Deposits on the Lobo Property	Research/Summarize - Pre-existing Data		
095193	2008	Drilling and Geophysical Assessment Report on the Whitehorse Copper Belt Project	Diamond - Drilling, Drill Core - Geochemistry, IP - Ground Geophysics	21	2134.10
094024	1998	[Geological Report on the Sue,Jim,Ace,Dennis,Gem and Lobo Claims]	Rock - Geochemistry, Soil - Geochemistry		
062018	1973	Preliminary Report on Geological Control to Ore Distribution in the Whitehorse Copper Belt	Reverse Circulation - Drilling, Bedrock Mapping - Geology, Petrographic - Lab Work/Physical Studies	665	5555
090945	1970	[Drilling, Stripping and Road Construction on the Whitehorse Copper Belt Project]	All Weather Road - Development, Surface, Drifting/Raising - Development, Underground, Diamond - Drilling	5	206.96
091116	1968	[Diamond Drilling on the Gem 1 Claims]	Diamond - Drilling	10	950.21

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC004838	Longitudinal section map - Gem and Brown Cub		Property File Collection	Geoscience Map (General)
ARMC004836	Map of Gem claims		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004841	Geology and geophysics map - Chargeability milliseconds - Gem and Keewenaw		Property File Collection	Geophysical Map
ARMC004839	Geology map - Gem-Keewenaw		Property File Collection	Geoscience Map (Geological - Bedrock)

ARMC004840	Map showing chargeability contours - 4 m/sec, 20 ppm contour - Gem and Keewenaw		Property File Collection	Geophysical Map
1984-1	The Whitehorse Copper Belt - A Compilation		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)