

Occurrence Details

Occurrence Number: 105D 233 Occurrence Name: Keewenaw Occurrence Type: Hard-rock

Status: Deposit

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General Information

Primary Commodities: copper, gold, molybdenum, silver

Aliases: Whitehorse Copper Deposit Type(s): Skarn

Location(s): 60°34'40.8" N - -134°57'36" W

NTS Mapsheet(s): 105D11 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 Keewenaw deposit is an oval-shaped zone about 500 feet (152 m) long and 250 feet (76 m) wide. The zone trends southeasterly and there are numerous dark, fine-grained diorite dykes (< 10 - 30 ft. wide, < 3 - 9 m wide) which cut the granite at a southeast trend. The granite is cut by felsite dykes and by feldspar porphyry dykes that also strike southeasterly. The oval shaped zone contains bornite and malachite and the fine-grained granite is strongly altered to epidote and chlorite with numerous fine-grained veinlets and fractures. The silicate chrysocolla is present in some rock cuts. Sheared granite zones contain bornite and occasional malachite.

Production during 1971 totalled 151 770 tonnes of ore at 1.02% and produced 1 596 tonnes of refined metal at 99% Cu. Calculated reserves at the end of 1971 totalled 202 653 tonnes of ore at 1.06 Cu.

Work History

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Date	Work Type	Comment			
12/13/2014	Pre-existing Data				
12/13/1998	Geochemistry				
12/13/1998	Geochemistry				
12/13/1970	Drilling				
12/13/1970	Development, Surface				
12/13/1970	Development, Underground				
12/13/1966	Studies				
12/13/1964	Drilling				
12/13/1964	Ground Geophysics				

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>097154</u>	2017	Preliminary Geological Mapping on the Dennis 3, Lobo 1, and Gem 1 Claims	Bedrock Mapping - Geology, Prospecting - Other		
<u>096680</u>	2014	Summary Report Documenting the Cowley, Keewenaw and Gem Copper Deposits on the Lobo Property	Research/Summarize - Pre-existing Data		
<u>095193</u>	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		
<u>092025</u>	1974	[Proposed 1974 Exploration of the Cowley Park and War Eagle Properties]	Property Evaluation - Other		
<u>061172</u>	1974	[Proposed 1974 Exploration of the Cowley Park and War Eagle Properties]	Property Evaluation - Other		

061173	1974	Report on Exploratory Work on Whitehorse Copper Belt	Diamond - Drilling, Drill Core - Geochemistry, IP - Ground Geophysics	10	2222.29
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
062227	1966	An Evaluation of the New imperial Mines Ltd.	Feasibility - Studies		

Rela	Related References						
Number	Title	Page(s)	Reference Type	Document Type			
ARMC00 4841	Geology and geophysics map - Chargeability milliseconds - Gem and Keewenaw		Property File Collection	Geophysical Map			
ARMC00 4840	Map showing chargeability contours - 4 m/sec, 20 ppm contour - Gem and Keewenaw		Property File Collection	Geophysical Map			
ARMC00 4844	Exploration composite map - Keewenaw and Cowley Park - Figure 7		Property File Collection	Geoscience Map (General)			
ARMC00 4839	Geology map - Gem-Keewenaw		Property File Collection	Geoscience Map (Geological - Bedrock)			
ARMC00 4834	Exploration composite map - Keewenaw and Cowley Park		Property File Collection	Geoscience Map (Geological - Bedrock)			
ARMC00 4842	Map showing Tavern Lake		Property File Collection	Geoscience Map (General)			
<u>1984-1</u>	The Whitehorse Copper Belt - A Compilation		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)			