

Occurrence Details

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

Status: Deposit

Date printed: 12/16/2025 7:36:03 AM

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 $\mbox{Gem} 1$ 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 | | |
| 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 | | |
| <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) | | | |