



Occurrence Details

Occurrence Number: 105D 208

Occurrence Name: North Star

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 4/29/2025 12:03:30 AM

General Information

Secondary Commodities: copper, gold, silver

Aliases: Whitehorse Copper

Deposit Type(s): Skarn

Location(s): 60°37'30.06" N - -135°2'34.67" 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. 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 North Star pendent is located just south of the Little Chief mine, and is located within the Lewes River limestone formation. It is located within a pendent which is contained on three sides by the diorite of the Whitehorse batholith. The mineralization at the pendent is erratic which is partly controlled by the proximity to the irregular and variably gradational intrusive contact. The copper minerals occur as grains, blebs, pods, and stringers that seem to postdate skarn minerals, and silver concentration is proportional to copper grade while gold is more erratic. These copper minerals include bornite, chalcopyrite, and minor magnetite and the calc-silicate minerals include serpentine, phlogopite, red garnet and tremolite.

In estimates from 2010, the North Star Foot Wall Zone contains 750 000 tons grading 1.5% copper. This deposit is open in all directions and total tonnage is unavailable.

Work History

Date	Work Type	Comment
12/13/2012	Drilling	11 holes completed
12/13/2012	Geochemistry	
12/13/2010	Drilling	2 holes drilled
12/13/2010	Ground Geophysics	
12/13/2010	Geochemistry	
12/13/1982	Drilling	23 drill holes completed
12/13/1979	Drilling	3 holes completed
12/13/1973	Geology	
12/13/1973	Lab Work/Physical Studies	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095383	2010	[2010 Exploration Program on the YT Claims]	Magnetics - Ground Geophysics		
091394	1982	[Diamond Drill Logs on the Bob and Emidell Claims]	Diamond - Drilling, Drill Core - Geochemistry	5	2321.96
092763	1982	[1982 Diamond Drill Logs on the North Star Copper Skarn of Whitehorse Copper Belt]	Diamond - Drilling	23	8848.30
091126	1979	[Drilling on the Bill 1, Emidell 15 and Snell 3 Claims]	Diamond - Drilling	3	535.83
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

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC004808	Geology geology map - North Star and Little Chief		Property File Collection	Geoscience Map (Geological - Bedrock)

ARMC004876	Magnetic survey map - I.P. chargeability - North Star grid		Property File Collection	Geophysical Map
ARMC004906	Re: Data on War Eagle to the North Star occurrences		Property File Collection	Miscellaneous Company Documents
ARMC004807	Geology and DDH plan map - North Star		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004809	Cross section maps - North Star - Figure 7		Property File Collection	Geoscience Map (General)
ARMC004812	Report - Possible reserves - North Star		Property File Collection	Report
ARMC004806	General geology map - North Star and Little Chief		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC014222	Claim map with grid - Valerie-North Star		Property File Collection	Geoscience Map (General)
ARMC004801	General geology map - North Star and Little Chief		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004804	Map - Diagram to illustrate North Star drill program		Property File Collection	Geoscience Map (General)
ARMC004800	Geology map - North Star		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004877	Magnetic survey map - I.P. chargeability - North Star grid		Property File Collection	Geophysical Map
ARMC004813	Correspondence Re: The North Star mineralized skarn zone		Property File Collection	Miscellaneous Company Documents
ARMC004811	Summary report - North Star		Property File Collection	Report
ARMC004799	Correspondence Re: North Star drilling		Property File Collection	Miscellaneous Company Documents
ARMC004878	Magnetic survey map - I.P. mag & geology - Line 128N - War Eagle and North Star		Property File Collection	Geophysical Map
ARMC004810	Plan map - North Star		Property File Collection	Geoscience Map (General)
ARMC014221	Claim map - North Star-Arctic Chief		Property File Collection	Geoscience Map (General)
ARMC004802	Summary report and recommendations - North Star area		Property File Collection	Report

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
NS-11	North Star	1981	NQ	6	2
NS-13	North Star	1981	NQ	6	1
NS-14	North Star	1981	NQ	18	2
NS-15	North Star	1981	NQ	12	2
NS-15-W1	North Star	1981	NQ	2	2
NS-15-W2	North Star	1981	NQ-BQ	8	2
NS-9	North Star	1981	NQ	16	2
NS-6	North Star	1980	NQ	74	1
NS-7	North Star	1980	NQ	54	1
NS-8	North Star	1980	NQ	70	2
NS-5	North Star	1979	NQ	4	1
NS-5A	North Star	1979	NQ-BQ	6	2
NS-3	North Star	1976	BQ	10	1