



Occurrence Details

Occurrence Number: 105D 209

Occurrence Name: Arctic Chief

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 12/16/2025 9:46:07 PM

General Information

Primary Commodities: copper, gold, silver

Secondary Commodities: gallium

Aliases: Whitehorse Copper

Deposit Type(s): Skarn

Location(s): 60°39'41" N - -135°7'1.18" 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 Arctic Chief pendent is characterized by copper rich skarn mineralization along the contact of the Lewes River limestone and the Laberge group greywacke/quartzite. The skarn mineralization consists of born mineralization, chalcopyrite, magnetite, valleriite, chalcocite, tetrahedrite, cuprite and pyrite. The calc-silicate minerals include serpentinite, phlogopite, red garnet, and rare wollastonite.

Production from both the East and West pits totals 230 000 tonnes of ore grading 1.44% copper, 1.03 g/t gold and 17.14 g/t silver. The Arctic Chief deposit contained the highest grades in the Whitehorse Copper Belt.

Work History

Date	Work Type	Comment
12/13/2010	Drilling	1 hole completed
12/13/2010	Geochemistry	
12/13/1977	Drilling	7 holes completed
12/13/1976	Drilling	1 hole completed
12/13/1976	Geochemistry	
12/13/1973	Geology	
12/13/1973	Lab Work/Physical Studies	
12/13/1967	Drilling	
12/13/1966	Studies	
12/13/1964	Drilling	
12/13/1963	Drilling	
12/13/1963	Ground Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
091229	1976	[Diamond Drilling on the Arctic Chief Property]	Diamond - Drilling, Drill Core - Geochemistry	1	212.44
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
062227	1966	An Evaluation of the New Imperial Mines Ltd.	Feasibility - Studies		
091123	1964	Summary of assessment work for 316 claims	Diamond - Drilling	46	3652.57

Related References

Number	Title	Page(s)	Reference Type	Document Type
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)
ARMC004831	Map sections - 9850 N looking north and 9250 looking north of Arctic Chief and Little Chief		Property File Collection	Geoscience Map (General)
ARMC004828	Map sections - 9850 and 9250 - Arctic Chief and Little Chief		Property File Collection	Geoscience Map (General)
ARMC004829	Map of mineral claims - Arctic Chief		Property File Collection	Geoscience Map (General)
ARMC004825	Correspondence Re: Arctic Chief exploration		Property File Collection	Miscellaneous Company Documents
ARMC004827	General geology map - Arctic Chief and Best Chance		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004869	Correspondence Re: Sulphur isotope analyses on the Arctic Chief samples		Property File Collection	Miscellaneous Company Documents
ARMC004805	Map of Valerie, Arctic Chief, and War Eagle		Property File Collection	Geoscience Map (General)
ARMC014221	Claim map - North Star-Arctic Chief		Property File Collection	Geoscience Map (General)
ARMC004830	General geology map - Arctic Chief and Best Chance		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004826	Properties in the central part of the belt - Arctic Chief		Property File Collection	Report
ARMC004833	Outcrop geology map - Arctic Chief		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004832	Vertical longitudinal section map - looking east - Arctic Chief		Property File Collection	Geoscience Map (General)

Drill core at YGS core library					
Number	Property	Year Drilled	Core Size	Photos	Data
AC-10	Arctic Chief	1976	BQ	6	0
AC-11	Arctic Chief	1976	BQ	6	0
AC-12	Arctic Chief	1976	BQ	10	0
AC-13	Arctic Chief	1976	BQ	6	0
AC-14	Arctic Chief	1976	BQ	6	0
AC-15	Arctic Chief	1976	BQ	4	0
AC-16	Arctic Chief	1976	BQ	6	0
AC-17	Arctic Chief	1976	BQ	6	0
AC-18	Arctic Chief	1976	BQ	10	0
AC-19	Arctic Chief	1976	BQ	6	0
AC-2	Arctic Chief	1976	BQ	6	0
AC-20	Arctic Chief	1976	BQ	6	0
AC-21	Arctic Chief	1976	BQ	12	0
AC-22	Arctic Chief	1976	BQ	6	0
AC-23	Arctic Chief	1976	BQ	8	0
AC-24	Arctic Chief	1976	BQ	6	0
AC-25	Arctic Chief	1976	BQ	8	0
AC-26	Arctic Chief	1976	BQ	6	0
AC-27	Arctic Chief	1976	BQ	6	0
AC-28	Arctic Chief	1976	BQ	6	0
AC-29	Arctic Chief	1976	BQ	10	0
AC-3	Arctic Chief	1976	BQ	6	0
AC-30	Arctic Chief	1976	BQ	6	0
AC-31	Arctic Chief	1976	BQ	6	0

AC-32	Arctic Chief	1976	BQ	6	0
AC-33	Arctic Chief	1976	BQ	12	0
AC-34	Arctic Chief	1976	BQ	12	0
AC-35	Arctic Chief	1976	BQ	6	0
AC-36	Arctic Chief	1976	BQ	6	0
AC-37	Arctic Chief	1976	BQ	6	0
AC-39	Arctic Chief	1976	BQ	18	0
AC-4	Arctic Chief	1976	BQ	6	0
AC-40	Arctic Chief	1976	BQ	12	0
AC-5	Arctic Chief	1976	BQ	10	0
AC-6	Arctic Chief	1976	BQ	4	0
AC-7	Arctic Chief	1976	BQ	10	0
AC-8	Arctic Chief	1976	BQ	4	0
AC-9	Arctic Chief	1976	BQ	6	0
AC-IH1	Arctic Chief	1976	BQ	8	0