



Occurrence Details

Occurrence Number: 115H 006
Occurrence Name: Mack's Copper
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 7:48:33 AM

General Information

Secondary Commodities: copper, gold, iron, silver
Aliases: Bear, Eaglenest, Ranch
Deposit Type(s): Skarn Cu
Location(s): 61°37'22" N - -136°11'25" W
NTS Mapsheet(s): 115H09
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as the Ranch, Eaglenest, Bear etc cl by H.J. Kline in Sep/04. Restaked by Mack brothers who drove a 11.6 m adit prior to 1908. Six of their claims are still held under lease by Mrs I. Goulter of Carmacks. The earliest modern claim records found are for adjoining Coppermine cl (56300) by J.A. Smith in Sep/46, and Sturday cl (6884) by Rod MacRae in Jun/54. The leased claims were optioned Newmont Mg Corp. in 1960 along with Macs, Extension, Rust cl (74966) staked Jun/60 by G. Dickson. The leased claims were optioned again in 1964 by Arctic Mg and EL, which staked Saan cl (90499) in September and conducted a ground mag survey in October. In early 1965, Arctic staked Grace, Emily, Joyce etc. cl (91679), built a winter road and drilled 4 holes (261.8 m). The area around the leased claims was restaked as Joe and HG cl (Y3135) in Feb/66, by Alice Lake ML, which conducted geochem survey and bulldozer trenching later that year, and later restaked as Saan cl (Y38271) in Sep/69 by D. McLean, and again as Alp cl (Y61109) in Jul/71 by A. Arsenault and Associates. From May to Aug/72 the property was explored under option by South Yukon Joint Venture (Chevron Standard Oil CL, Straus E Incorp., Union Oil Co. of Canada L, Marietta Resources International L, and L.T. Clay and Harris Clay) using grid soil sampling and geological mapping. In 1973, the claims were transferred to a new company, B.A. Copper ML, which drilled one hole (305.1 m) in August.

Capsule Geology

The original showing, on the Bonanza claim (Lease I5), consists of a magnetite skarn which contains minor amounts of chalcopyrite, garnet and diopside. It trends northwest, dips east and has been traced for a length of about 150 m. The skarn is developed in a narrow limy band associated with highly altered Lower Cretaceous Mt Nansen volcanics. The 11.6 m adit in the main zone assayed 1.8% Cu and trace Au and Ag across 1.2 m at the face and 1.9% Cu, 61.7 g/t, trace Au and 47.2% Fe over a length of 6.7 m on the north wall. The drilling indicated that the skarn could be up to 46 m thick and dips about 35° east. Only scattered low copper values were obtained. Alice Lake reported the existence of a 122 m wide zone nearby with copper mineralization. An open-cut in a separate zone 213 m southwest of the adit on the Le Roi claim assayed 5.6% Cu, 116.6 g/t Ag and 1.0 g/t Au across 1.2 m. A syenite stock outcrops about 300 m west of the showings. A 366 by 488 m copper soil geochemical anomaly was outlined on the Alp claims in 1972. Mapping indicated that the source is weakly disseminated chalcopyrite associated with bleached and pyritized zones up to 15 m wide in Mt Nansen volcanics. The 1973 hole, angled into the anomaly, confirmed surface geological information.

References

ALICE LAKE MINES LTD, 31 Mar/70. Progress Report.
ARCTIC MINING AND EXPLORATION LTD, Sep/64. Assessment Report by A.C. Skerl.
ARCTIC MINING AND EXPLORATION LTD, 1965. Assessment Report *#092076 by J. Small.
B.A. COPPER MINES LTD, 1973. Assessment Report *#061042 by A.R. Archer and M.P. Phillips.
B.A. COPPER MINES LTD, Jun/74. Assessment Report #019810 by A.R. Archer.
CANADIAN SHAREHOLDER, 19 Jun/73.
FAIRBANK, B., Apr/73. Geology of the Macks Copper Deposit, Y.T. Unpublished B.A.Sc. thesis, University of British Columbia.
GEOLOGICAL SURVEY OF CANADA Paper 66-31, p. 44-46.
GEOLOGICAL SURVEY OF CANADA Summary Report 1908, p. 29-30.
SOUTH YUKON JOINT VENTURE, 1972. Assessment Report *#061960 by R.J. Cathro.

Work History

| Date | Work Type | Comment |
|------------|----------------------|--------------------|
| 12/31/1965 | Drilling | Four holes, 262 m. |
| 12/31/1965 | Development, Surface | Winter road. |
| 12/31/1964 | Ground Geophysics | |

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|------------|-----------------------------|----------------------------------|
| 12/31/1908 | Development, Underground | Drove adit approximately 11.6 m. |
| 12/13/1973 | Drilling | One hole, 305.1 m. |
| 12/13/1972 | Geology | |
| 12/13/1972 | Geochemistry | |
| 12/13/1966 | Geochemistry | |
| 12/13/1966 | Trenching | |

| Assessment Reports that overlap occurrence | | | | | |
|--|------|--|---|---------------|----------------|
| Report Number | Year | Title | Worktypes | Holes Drilled | Meters Drilled |
| 096048 | 2011 | Assessment Report on the Ice Property | Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other | | |
| 019810 | 1973 | Geological and Geochemical Report on Alp 3-73 Claims | Research/Summarize - Pre-existing Data | | |
| 061960 | 1972 | Geology and Geochemistry Alp 3-73 Claims | Soil - Geochemistry, Bedrock Mapping - Geology | | |

| Related References | | | | |
|----------------------------|--|---------|--------------------------|--------------------------|
| Number | Title | Page(s) | Reference Type | Document Type |
| ARMC013155 | Report for Arctic Exploration and Mining Co. Ltd. on Macks copper property, Nordenskiold River area, Yukon | | Property File Collection | Report |
| ARMC013157 | Preliminary geophysical survey (magnetometer) on part of Macks copper claim group in Kirkland Creek area - Oct 7-16, 1964 | | Property File Collection | Report |
| ARMC016653 | Geochemical map - 115H/9 - Kirkland Creek | | Property File Collection | Geochemical Map |
| ARMC013165 | Map of Kirkland Creek area showing mining activity | | Property File Collection | Geoscience Map (General) |
| ARMC013164 | Map of Kirkland Creek area with field notations - Aeromagnetic series map 3346G | | Property File Collection | Geophysical Map |
| ARMC013166 | Map of Kirkland Creek area with handwritten notations | | Property File Collection | Geoscience Map (General) |
| ARMC013153 | Geology & geochemistry in the vicinity of A.C. claims & Mack copper prospect - with additional hanwritten notations - Atlas-Hossie project | | Property File Collection | Geochemical Map |
| ARMC013156 | Mack copper prospect - Nordenskiold River | | Property File Collection | Report |

| Drill core at YGS core library | | | | | |
|--------------------------------|---------------|--------------|-----------|--------|------|
| Number | Property | Year Drilled | Core Size | Photos | Data |
| Hole-1 | Mack's Copper | 1972 | BQ | 0 | 2 |