

Occurrence Details

Occurrence Number: 105C 009 Occurrence Name: Red Mountain Occurrence Type: Hard-rock Status: Deposit Date printed: 8/6/2025 1:45:57 AM

General Information

Primary Commodities: molybdenum disulfide Secondary Commodities: copper, silver, tungsten Aliases: Boswell River, Fox Deposit Type(s): Porphyry Cu-Mo-Au Location(s): 60°59'21" N - -133°44'58" W NTS Mapsheet(s): 105C13 Location Comments: .5 Kilometres Hand Samples Available: Yes Last Reviewed:

Capsule

Work History

Staked in Feb/67 as the Fox cl (YII8I4) by Boswell River ML, which performed an airborne mag, EM and radiometric survey in 1967, a geochem survey in 1968, and built a tote trail and drilled 16 holes (3126 m) in 1969. Boswell's property was fringe staked in 1969 by Northwest Explorers L (NW cl) & McGregor Telephone & Power Construction CL (Mac cl), both of which performed geochemical surveys that year. The NW group was further investigated during 1971 by Hudson's Bay O & G CL. The Fox group was restaked in Nov/71 by J.B. O'Neill as Habitant cl (Y63891).

Restaked in Jun/75 by R.G. Hilker as Bug cl (Y99583). Tintina Silver ML optioned the property in 1975 and performed mapping and hand trenching in 1976, before entering a joint venture in late 1977 with Amoco Can Pet CL. Amoco enlarged the property and explored with an IP survey in 1978 and 32 holes (21,391 m) in 1978-1982 to earn a 50% interest. Tintina Silver's 50% interest was transferred to Tintina Mines Ltd in Jun/91. Several Bug, SM and Gub cl were transferred to Tintina Mines Ltd in Nov/93. In Aug/93, Amoco Canada Petroleum's 50% interest was purchased by Tintina Mines Ltd. In the summer of 1995 Tintina Silver resampled selected sections of diamond drill core.

In response to a renewed industry focus on molybdenum, Tintina Mines Ltd announced in Apr/2005 that the company intended to proceed with preparation of an application to conduct advanced underground exploration of the deposit.

Capsule Geology

Molybdenite occurs in a quartz stockwork cutting an oval-shaped 1450 x 650 m quartz-monzonite porphyry stock of Late Cretaceous age, which intrudes Paleozoic argillite of the Kootenay terrane (Yukon Tanana terrane, Mortensen 1992). Inferred mineral resources consist of 187,270,000 tonnes grading 0.167% MoS2, at a cut-off grade of 0.10% MoS2.

The initial claims were staked to cover a zone of strong geochemical anomalies in molybdenum, copper, silver and tungsten associated with a prominent pyritic gossan. Background Mo values in the area are 4 ppm Mo. Silts downstream from the gossan contained up to 330 ppm Mo, and anomalous values between 20 and 40 ppm Mo were obtained as far as 1.6 km downstream. Soil sampling outlined concentric haloes of anomalous geochemical values, with a central molybdenum anomaly and peripheral tungsten, fluorine, lead, silver, copper and zinc anomalies.

The 1969 drillholes returned assays of up to 0.1% MoS2 with traces of galena, chalcopyrite and scheelite, but were not deep enough to intersect the main zone of mineralization.

The porphyry stock is complex and multi-stage with a classical concentric alteration pattern and an easterly orientation. It is cut by a barren, post-mineral, quartz-eye diorite stock which also trends east and dips to the south. The mineralized zone is at least 1500 m by 425 m in area, extends to a depth of more than 1125 m and is badly segmented by barren sills and/or dykes associated with the diorite stock. Mo grades are zoned outward around a richer core. Some mineralization extends into the metasedimentary wallrock.

Most of the Amoco drill holes bottomed in mineralization. The best published intersections include Hole 81-24, in which a length of 72.5 m from 849 m to the hole bottom averaged 0.41% MoS2 and Hole 82-29, which averaged 0.16% MoS2 over 339 m (from 33 to 393 m), 0.23% MoS2 over 384 m (435 to 861 m), and 0.32% MoS2 over 96 m (1002 to 1116 m)(all averages excluding barren dykes). Reserves as of Nov/92, as calculated by S.F. Sabag, range between 187.3 million tonnes grading 0.167% MoS2 (using a 0.10% MoS2 cutoff), and 21.3 million tonnes grading 0.29% MoS2 (using a 0.25% cutoff).

Tintina Silver resampled 417 intervals of drill core to investigate whether Red Mountain ore might yield coproduct gold in concentrate and assess the gold distribution within the periphery of the porphyry system, in the Cu enriched zones and in the oxidized cap with a view to directing future underground development into mineralized rather than barren ground.

The results indicate that gold content is inversely related to Mo grade, and does not have preferential distribution related to depth as previously anticipated. Gold concentrations from the copper bearing upper sections of the deposit are equally low as those from its Mo-richer deeper core precluding a gold bearing Cu cap or a Au enriched supergene zone.

Gold does, appear to have an affinity for the periphery of the deposit, particularly its northeast portions near the Quartz Eye Diorite dike and surrounding hornfels wherefrom nearly all of the higher grading data have to date been obtained. Higher grade silver sections (typically in the 5-20 ppm range) also come from holes in the northeast and eastern portions of the deposit, and may be genetically associated with the Quartz Eye Diorite.

Since the northeast portion of the deposit has been designated as the principal entry point for a 3200 m exploration tunnel into the deposit, it was recommended that future work be directed to optimize exploitation of any incidental reserves that might be encountered in this area.

Work History

Date	Work Type	Comment
2/1/2006	Trenching	
2/1/2006	Geology	
2/1/2006	Geochemistry	

2/1/2006	Studies	Hand-dug test pits to characterize surface material, planned route for road using aerial photographs.
12/31/1995	Lab Work/Physical Studies	Tintina Silver resampled selected sections of diamond drill core
12/31/1978	Drilling	Thirty two holes, 21,391 m
12/31/1978	Ground Geophysics	
12/31/1976	Geology	
12/31/1976	Trenching	
12/31/1969	Drilling	Sixteen holes, 3,126 m
12/31/1969	Development, Surface	
12/31/1969	Ground Geophysics	
12/31/1967	Airborne Geophysics	Also EM and radiometric surveys.
12/13/1969	Geochemistry	Grid based.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>094623</u>	2006	Report on Geotechnical Site Investigation, Red Mountian Project	Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
<u>091392</u>	1982	[Drill Logs for 3 Drill Holes]	Diamond - Drilling	3	2988.20
<u>090887</u>	1981	[Drill Logs for 4 Drill Holes]	Diamond - Drilling	4	2754.20
<u>061963</u>	1979	Progress Report on Red Mountain Molybdenum Property	Diamond - Drilling, Research/Summarize - Pre-existing Data	11	6172.50
<u>061858</u>	1979	Report on Red Mountain Molybdenum Property	Data Compilation - Pre-existing Data		
<u>093354</u>	1979	A Preliminary Evaluation of Gold Potential, Red Mountain Molybdenum Deposit	Rock - Geochemistry, Data Compilation - Pre-existing Data		
<u>061962</u>	1979	Report on Red Mountain Molybdenum Property	Data Compilation - Pre-existing Data		
<u>091109</u>	1978	[Diamond Drill Logs on the BUB and GUB Caims]	Diamond - Drilling	2	1257.30
<u>091108</u>	1978	[Drill Logs for 2 Holes]	Diamond - Drilling	3	1006.40
<u>060003</u>	1969	Geochemical Survey, Assessment Work Report on theNW Claim group	Silt - Geochemistry, Soil - Geochemistry		
<u>018619</u>	1968	Geochemical Report; Fox and Star Claim Group	Silt - Geochemistry, Soil - Geochemistry		
<u>018620</u>	1967	Report on Airborne Geophysical Survey, Fox Group of Mineral Claims	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Radiometric - Airborne Geophysics		

Related References

Number	Title	Page(s)	Reference Type	Document Type
<u>ARMC01</u> <u>3457</u>	Report on 1968 geochemical reconnaisance - Fox & Star group of claims - 105C/13, 105 F/A - Boswell River Mines Ltd.		Property File Collection	Report
ARMC01 3460	Property submission report: SM		Property File Collection	Report
<u>MIR1978</u>	Mineral Industry Report 1978	33	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
<u>ARMC00</u> 5251	Correspondence Re: Boswell Creek silver deposit		Property File Collection	Miscellaneous Company Documents
<u>MIR1975</u>	Mineral Industry Report 1975	96-98	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
MIR1969 _70	Mineral Industry Report 1969 - 70	121-123	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
<u>YEG1983</u>	Yukon Exploration and Geology 1983	28	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<u>ARMC01</u> <u>3459</u>	Correspondence Re: Lapsed Foxx claims in Red Mtn. area		Property File Collection	Miscellaneous Company Documents
<u>ARMC01</u> <u>3458</u>	Summary of 1969 exploration - Fox group - 105C/13 - Boswell River Mines Ltd.		Property File Collection	Report

Re	source/Reserve								
Year	Zone	Туре	Commodity	Grade	Tonnage	A mount	Reported A mount	43-101 Compliant	Cut-off

1992	RED MOUNTAIN - HIGH GRADE CORE (UNDERGROUND)	Historical Estimate	molybdenum disulfide	.293 %	21,296,000		No	No	0.25% MoS2	
Turner	Turner and Sabag, 1995, Assessment Report #093354. This reserve figure is based on additional drill holes and metallurgical testing performed on bulk samples created from drill core intersections.									
1992	1992 RED MOUNTAIN (UNDERGROUND) Historical Estimate molybdenum disulfide .167 % 187,270,000 No No 0.1% MoS2									
Turner	Turner and Sabag, 1995, Assessment Report #093354. This reserve figure is based on additional drill holes and metallurgical testing performed on bulk samples created from drill core intersections.									
1982	1982 RED MOUNTAIN (UNDERGROUND) Historical Estimate molybdenum disulfide .167 % 187,270,000 No No Unknown									
This re	This reserve calculation was based on surface diamond drilling only. No supporting work, i.e. bulk sampling was performed. Using cut-off grade of 0.10% MoS2.; Brown, P. and Kahlert, B. 1986. (using									

data provided by Amoco Canada Petroleum Company Ltd).

Drill core at YGS core library

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Number	Property	Year Drilled	Core Size	Photos	Data
<u>HF-10-69</u>	Red Mountain	1969	BQ	12	2
<u>HF-11A-69</u>	Red Mountain	1969	BQ	20	2
<u>HF-11B-69</u>	Red Mountain	1969	BQ	0	0
<u>HF-11B-69?</u>	Red Mountain	1969	NQ	0	2
<u>HF-13-69</u>	Red Mountain	1969	NQ	0	2
<u>HF-14-69</u>	Red Mountain	1969	NQ	26	2
<u>HF-1-69</u>	Red Mountain	1969	BQ	2	3
<u>HF-5-69</u>	Red Mountain	1969	BQ	10	2
<u>HF-6-69</u>	Red Mountain	1969	BQ	10	2
<u>HF-7-69</u>	Red Mountain	1969	BQ	14	2
<u>HF-8-69</u>	Red Mountain	1969	BQ	16	2
<u>HF-9-69</u>	Red Mountain	1969	BQ	4	2