



MINFILE Detail Report
BC Geological Survey
Ministry of Energy, Mines and Petroleum Resources

Location/Identification

MINFILE Number: 082FSW140 **National Mineral Inventory Number:** 082F4 Mo1

Name(s): MOUNTAIN VIEW (L.682)
RED MOUNTAIN, COXEY

Status: Past Producer **Mining Division:** Trail Creek

Mining Method: Open Pit **Electoral District:** West Kootenay-Boundary

Regions: British Columbia **Resource District:** Arrow Boundary Forest District

BCGS Map: 082F001

NTS Map: 082F04W **UTM Zone:** 11 (NAD 83)

Latitude: 49 05 27 N **Northing:** 5437880

Longitude: 117 49 25 W **Easting:** 439869

Elevation: 1524 metres

Location Accuracy: Within 500M

Comments: Open pits E and F are located just southwest of the peak of Red Mountain in the southeast corner of the Mountain View Crown Grant (Lot 682), approximately 2.5 kilometres northwest of Rossland.

Mineral Occurrence

Commodities: Molybdenum, Tungsten, Copper, Gold, Silver, Lead

Minerals

Significant: Molybdenite, Scheelite, Pyrrhotite, Chalcopyrite, Arsenopyrite, Pyrite, Galena

Associated: Silica, Quartz, Calcite

Alteration: Garnet, Magnetite, Epidote

Alteration Type: Silicific'n, Skarn

Mineralization Age: Unknown

Deposit

Character: Breccia, Disseminated, Vein

Classification: Porphyry, Skarn, Hydrothermal, Epigenetic

Type: L05: Porphyry Mo (Low F- type), L07: Porphyry W, K05: W skarn, L01: Subvolcanic Cu-Ag-Au (As-Sb)

Strike/Dip: 120/75N

Comments: Vein in F pit

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Pennsylvan.-Permian	Undefined Group	Mount Roberts	-----
Jurassic	-----	-----	Trail Pluton

Isotopic Age	Dating Method	Material Dated
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Lithology: Breccia, Quartz Diorite, Hornfels, Siltstone, Hornfels Siltstone, Magnetite Hornfels, Quartz Diorite Breccia, Granodiorite, Andesite, Basic Dike

Geological Setting

Tectonic Belt: Omineca **Physiographic Area:** Selkirk Mountains

Terrane: Slide Mountain, Quesnel

Metamorphic Type: Contact **Relationship:** Syn-mineralization, Post-mineralization

Grade: Hornfels

Inventory

No inventory data

Capsule Geology

The Mountain View Crown Grant hosts open pits E and F of the Coxey Group. The area is underlain by the Pennsylvanian and possibly Permian Mount Roberts Formation siltstone, hornfelsed siltstone, hornfels and a breccia complex. The siltstone is rusty, sooty and massive or thinly bedded with minor disseminated pyrrhotite and pyrite. The hornfels and hornfelsic siltstones are thinly laminated and massive cherty rocks which locally contain brown garnet and epidote.

The succession is thought to have been thrust over augite porphyry of the underlying Rossland sill of the Elise Formation (Rossland Group) prior to the intrusion of the Middle to Late Jurassic Trail pluton (Nelson Intrusions). The siltstone is intruded by lenticular masses of andesite, irregular bodies of quartz diorite and quartz diorite breccia, and late steeply dipping dykes which trend northward. The quartz diorite is assumed to be part of the Trail pluton.

A green, magnetite-bearing hornfels occurs in and around E and F pits. This magnetite-hornfels is similar to the rock that occurs on surface and just above the Rossland sill. Steeply dipping regional faults trending 160 degrees offset the orebodies A, B, and C of the Coxey Mine (082FSW110) with orebodies E and F on the Mountain View claim. One interpretation suggests that all the orebodies are within 100 metres of stratigraphic section; according to another they may be at two horizons covering a stratigraphic interval of 200 metres.

The molybdenum mineralization occurs essentially within the Rossland Group breccia complex and the quartz-diorite breccia. In the breccia complex, the rocks are angular with a matrix comprised of fine silicates, quartz, calcite, garnet or scheelite. Molybdenite, usually without other sulphides, occurs in randomly oriented fractures in all types of hornfels breccia and quartz-diorite breccia. Commonly it lies along the margins of breccia blocks and locally is concentrated at junctions between the blocks. Pyrrhotite, and locally pyrite, are disseminated in the hornfels and also occur in fractures and as massive lenses between the breccia fragments. Some silver values are reported as well as minor galena and arsenopyrite mineralization. In the southeast corner of the F pit a narrow chalcopyrite-pyrrhotite vein trending 120 degrees and dipping 75 degrees to the north cuts molybdenum-bearing hornfels. The vein is typical of Rossland-type mineralization in the main camp, and this exposure is taken as evidence that the copper-gold mineralization of the Rossland camp is later than the molybdenum mineralization.

Scheelite, occurring as medium to coarse grains, is scattered throughout the breccia complex; rarely, it forms spectacular clusters of grains between fragments. Its occurrence is erratic but company records indicate that the highest grades were found in the E and F orebodies, where the average grade was about 0.10 per cent WO₃ (tungsten trioxide).

The characteristics of the molybdenite and scheelite mineralization and its association with the Middle to Late Jurassic Trail pluton, especially its upper and western margins, point to its classification as a porphyry-type deposit (Bulletin 74).

It was reported in 1893 that on the Mountain View claim there was a vein 9 metres wide and 60 metres long, the ore of which was reported to average about 41 grams per tonne gold (Geological Survey of Canada Memoir 77, page 135).

The property is located on the west slope of Red Mountain about 17.6 kilometres northwest of Rossland. It consists of 10 claims, the Coxey, Nevada, Mountain View, Ontario, Good Friday, Peak, High Ore, Ophir, Jumbo, and Sam Hayes. Most of these claims were Crown-granted during the period 1895-97 and were well known in the early days of the Rossland camp.

Development work on the Coxey was begun in 1897 by Messrs. Cook & Johnson. In 1899 Montreal Goldfields Ltd prospected the property for gold and copper. Development work consisted of two tunnels, a shaft, and several open cuts. The Coxey claim was reportedly worked by lessees Williams and Ruffner during the first World War but it is not known what development work was done at that time.

Late in 1963 Torwest Resources acquired the group of 10 claim. During 1964, 59 diamond drill holes were put down on the Coxey claim, 53 on the A or east zone and 6 on the B or west zone. Stripping on the B zone traced the mineralization for over 213 metres.

Metal Mines Limited optioned the property in September 1964 and early in 1965 they assigned one half of their interest in the project to Canadian Nickel Company Limited, the exploration arm of The International Nickel Company of Canada Limited.

At the end of 1964 ore reserves were estimated at 400,000 tons grading 0.5 per cent molybdenite.

Thirty-four drill-holes put down by Metal Mines Limited late in 1964 reportedly confirmed the results of the Torwest drilling. Red Mountain Mines Limited was formed in April 1965 to operate the property. The new company was owned by Torwest Resources (60 per cent), Metal Mines (20 per cent), and Canadian Nickel (20 per cent). Mining was by open pit. A 400 ton per day mill began operating April 24, 1966. Reserves at that time were

estimated at 800,000 tons averaging 0.45 per cent molybdenite.

The property was financed to production jointly by Canadian Nickel Company and Consolidated Canadian Faraday Limited.

Mining was done initially in the A zone. Mill capacity was increased to 600 tons per day by 1969 and 750 tons per day by 1970. The mine closed in December 1970 due to lack of ore. The discovery of the E zone late in 1970 permitted the resumption of milling in February 1971. The mine closed in January 1972. After closing, The International Nickel Company engaged Min Finders Inc., of Lakewood Colorado to carry out an extensive exploration program based on a porphyry model of mineralization. Geochemistry, geophysics and deep drilling were carried out in the mine area between 1972 and 1974.

In 1980-81 David Minerals Ltd acquired the property from AJM Explorations Ltd. and AJM Mill Ltd. and also acquiring the interests of Hunstone Ventures Ltd. and those of Inco Limited, Consolidated Canadian Faraday and Teck Corporation. The 1980 agreement included purchase of the 600 tpd mill. In 1981 the company drilled 9 short holes just south of the mine area. Reserves were reported as drill indicated 270,000 tons at 0.37 per cent MOS2 on the Coxey and Nevada claims (David Minerals Ltd., FS 139/82, p. 3, 1982).

Bibliography

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EMPR GEM 1973-62; 1974-70

EMPR OF 1988-1; 1989-11; 1990-8; 1990-9; 1991-2; 1991-17

EMR MP CORPFILE (Torwest Resources (1962) Ltd.; Metal Mines Ltd.; Red Mountain Mines Ltd.; Consolidated Faraday Ltd.; David Minerals Ltd.)

GSC MAP 1090A; 1504A; 1518

GSC MEM 77, p. 135; 308

GSC P 79-26

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EMPR PFD 750101, 812389, 822488, 822566, 822930, 822957, 800193, 502135, 502137

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Coded By: BC Geological Survey (BCGS)

Field Check: N

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Revised By: Garry J. Payie (GJP)

Field Check: N