

NAME OF PROPERTY GOLDEN QUEEN, ST. ELMO

NOM DE LA PROPRIÉTÉ LOCALISÉ

Golden Queen mineralized zone Lat. 49°05'20" Long. 117°48'20"
St. Elmo mineralized zone Lat. 49°05'27" Long. 117°49'10"

UNCERTAINTY 200 m
FACTEUR D'INCERTITUDE

Mining Division Division minière	Trail Creek	District District	Kootenay
County Comté		Township or Parish Canton ou paroisse	
Lot Lot		Concession or Range Concession ou rang	
Sec. Sect.	Tp. Ct.	R. R.	

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The oldest rocks are Palaeozoic argillites or siltites of the Mount Roberts Formation. They have been extensively metamorphosed to various types of hornfels. Contacts along the siltites and hornfels are gradational. A thick sill-like mass of augite and hornblende porphyry, called the Rossland sill, lies beneath the hornfels and siltite. The hornfels contain a mass of breccia, throughout which are irregular masses of aphanitic and porphyritic rock variously described as diorite, andesite, or hornblende porphyry. The adits explored weak shear zones dipping about 70° north. They are mineralized with pyrrhotite, pyrite, and chalcopyrite; there is some calcite and some local silicification, but no true vein quartz. Scheelite occurs in these shear-zones in shoots of which the longest is 70 feet. The maximum width is 5 feet, and most shoots are 1½ to 2½ feet wide. The scheelite occurs as fine disseminations and clusters of grains and locally forms tiny stringers in the rock. The molybdenum zone exposed in later work consists of molybdenite, pyrrhotite, and minor chalcopyrite in mixed breccia.

Associated minerals or products - Gold, silver, copper, tungsten.
Minéraux ou produits associés

HISTORY OF EXPLORATION AND DEVELOPMENT

HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

The Golden Queen claim is located at about the 4,750 foot elevation on the southerly slope of Red Mountain about 1 mile northwest of Rossland. The St. Elmo claim adjoins to the north, near the summit of the mountain, and the Novelty claim (Lot 958) adjoins to the south. The Coxey claim (see 82 F/4, Mo 1) adjoins to the west.

The Golden Queen claim (Lot 994) was Crown-granted in 1896 to J. Garrison but there is no record of early work on the claim. The St. Elmo claim (Lot 923) was Crown-granted in 1896 to F.C. Loring. Development work continued until 1901 and included about 2,300 feet of drifts and crosscuts in 2 adits.

Further activity was reported in 1908 when a small amount of ore was shipped under the name J.P. Johnson.

No further activity was reported until 1941 when the St. Elmo workings were reopened by A. Grubsic and Ike Glover. Scheelite was discovered in the old workings in 1942 and the Consolidated Mining, Smelting and Power Company Limited examined the property under an option agreement.

Northwood Mining Limited optioned the Golden Queen, St. Elmo, and Surprise (Lot 693) claims from Messrs. Grubsic and Glover in August 1964 and the Gertrude claim (Lot 690) from William Keane. By an agreement of September 1964 Northwood assigned the above 4 Crown-granted claims to McKinney Gold Mines Limited. Geophysical and geochemical surveys were started late in 1964. The geochemical survey of the Golden Queen and St. Elmo claims was continued in 1965. Some bulldozer stripping was done and numerous showings sampled. In addition, 47 vertical diamond drill holes totalling 4,826 feet were drilled in the northwestern part of the Golden Queen and western part of the St. Elmo claim. Surface stripping and diamond drilling between elevations of 4,830 and 4,970 feet on the northwest corner of the Golden Queen claim, and about 500 feet east of the "A" ore-body on the Coxey claim, delimited a Y-shaped body of mineralization (designated the NGQ Zone) containing an indicated 68,000 tons averaging 0.24% molybdenite. Near the western boundary of the St. Elmo claim a mineralized zone (designated the NSE Zone) was outlined, which to a depth of 75 feet contains about 73,000 tons averaging 0.33% molybdenite.

Scurry-Rainbow Oil Limited optioned the property in December 1966, the option included the Novelty claim (Lot 958). Drilling by Scurry in 1967 tested the eastern part of the breccia complex see Card 2

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

In 1908, 77 tons of ore were shipped from the St. Elmo claim. From this ore 3 ounces of gold, 221 ounces of silver, and 3,188 pounds of copper were recovered.

REFERENCES/BIBLIOGRAPHIE

Fyles, James T.; The Geology of Red Mountain; Report of Minister of Mines, British Columbia, 1967, pp. 236-238.

Reports of Minister of Mines, British Columbia:
1896, pp. 23, 558, 560; 1899, p. 716; 1901, p. 1049;
1908, p. 247; 1941, p. 73; 1942, p. 81; 1964, p. 114;
1965, p. 177; 1967, p. 239; 1968, p. 237.

Mineral Policy Sector; Corporation Files: "Chandalar Resources Limited"; "David Minerals Ltd."

Stevenson, J.S.; Tungsten Deposits of B.C.; Bulletin No. 10 (Revised), p. 154, Dept. of Mines, B.C., 1943.

Vokes, F.M.; Molybdenum Deposits of Canada; Economic Geology Report No. 20, p. 288, Geol. Surv. of Canada, 1963.

Little, H.W.; Tungsten Deposits of Canada; Economic Geology Series No. 17, p. 99, Geol. Surv. of Canada, 1959.

Brock, R.W.; Preliminary Report on the Rossland, B.C., Mining District; Report No. 939, pp. 18, 26, Geol. Surv. of Canada, 1906.

Drysdale, C.W.; Geology & Ore Deposits of Rossland, B.C.; Memoir 77, pp. 78, 134, Geol. Surv. of Canada, 1915.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1973, p. 62.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Geology of Red Mountain, Sc. 1":1,000 ft., Fig. 29, Report of Minister of Mines, British Columbia, 1967, p. 237.

Map 941, Rossland and Vicinity, (Geol. and claim map), Sc. 1":1,600 ft., Geol. Surv. of Canada, 1906.

Map 1090 A, Nelson, (West Half, (Geol.)), Sc. 1":4 miles - accomp. Mem. 308.

Map 1091 A, Nelson, West Half, (Mining Properties), Sc. 1":4 miles - accomp. Mem. 308.

Map 82 F/4 W, Rossland-Trail, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	JL	DMacR				
Date Date	08-73	09-82	08-85				

PRODUCT MOLYBDENUM
PRODUIT

PROVINCE OR PROVINCE OU
TERRITORY TERRITOIRE

British Columbia

N.T.S. AREA 82 F/4
RÉGION DU S.N.R.C.

REF. MO 2
RÉF.

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

GOLDEN QUEEN, ST. ELMO

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

on the Golden Queen and St. Elmo claims and the full width of the breccia complex on the Novelty claim. Of the 46,000 feet of diamond drilling in 174 holes, most was done on the adjacent Giant claim (see 82 F/4, Mo 3). Further diamond drilling was done by Scurry in 1968. Under the terms of the agreement Scurry earned a 50% interest in the property. The company name (McKinney) was changed in March 1967 to Continental McKinney Mines Limited. Based on the drilling on this property, and on the adjacent Giant property, independent consultants in 1967 calculated the indicated reserves available for open pit operations in 5 separate orebodies at 810,540 tons averaging 0.39% molybdenite. In addition, some 88,000 tons of possible ore of various grades are indicated below open pit limits.

Continental McKinney in May 1973 amalgamated with Trinat Resources Ltd., Gundex Holdings Ltd., and Modoc Holdings Ltd., under the name Chandalar Resources Limited. A geochemical soil survey was carried out by Mine Finders, Inc., of Lakewood Colorado in 1973. Chandler Resources abandoned its interest in the property prior to 1975; Scutty-Rainbow sold its interest in 1975.

David Minerals Ltd. optioned the Golden Queen, St. Elmo, Surprise, and Novelty claims from J.D. Turcotte of Christina Lake, subject to a prior agreement between Turcotte and M. Delich of Rossland. From the exploration work done by Scurry-Rainbow on the Golden Queen and St. Elmo (1971) there were outlined 237,000 tons grading 0.273% MoS₂ (Geol. Rept. for David Minerals in SMF 268/80, 24/12/80).

In 1981, David Minerals diamond drilled 22 holes here and in the Giant, California, Novelty, Gold King areas. (See 82 F/4, Mo 3).

Reserves were re-calculated by J.M. Stitt (1980) as follows:

Golden Queen - 19,500 tons at 0.30% MoS₂.

St. Elmo - 65,100 tons at 0.28% MoS₂.

(Report by J.L. Deleen (1983) - in David Minerals Statement of Material Facts, 11/07/85).