

NAME OF PROPERTY

MINNIEHAHA

OBJECT LOCATED - original workings.

UNCERTAINTY IN METRES 300. Lat. 49°58'17" Long. 117°15'10"

Mining Division Slocan District Kootenay

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

The property is underlain by massive Triassic argillaceous to quartzitic Slocan sediments which, in the principal workings, have a general northwesterly strike and a varying dip to the southwest. Farther down the hill, in the vicinity of the old workings, the strata curve to the northeast with very low dips. They are intersected by a few quartz porphyry dykes.

The Minniehaha lode is a broad and rather complex zone of faulting, including several subparallel elements. The displacement along it, in the vicinity of the workings and about 1,000 feet to the west, shows the fault to be a large one in the Sandon scale of values. It passes through the Carnation 5480 levels and approaches the Carnation lode in the vicinity of the 6300 level. To the east it passes through the Dorothy claim, possibly as more than one zone of fissuring.

Structurally, the lode crosses quartzite and strong argillite in the zone of repeated folding immediately beneath the main overturned panel. The lode zone has produced a marked offset of the strata, and correlation across it is not certain, particu-

see Card 2

Associated minerals or products - Lead, zinc.

HISTORY OF EXPLORATION AND DEVELOPMENT

The Minniehaha claim (Lot 3171) is located at the 5,000 foot elevation on the ridge between the West and East forks of Tributary Creek, approximately 5 miles southeast of New Denver. The Carnation property (82 F/14, PB 13) adjoins to the southwest.

Underground work during, and possibly prior to 1898 totalled 300 feet of adit. The claim was Crown-granted in 1902 to Patrick Burns. By 1926 the claim had been acquired by the Alex Mann interests of Vancouver, owners of the adjacent Carnation property. Exploration and development work during 1923-24, under the direction of George Clark, included trenching, crosscutting and drifting. The adjacent Minniehaha Fr. (Lot 13006), Western Fr. (Lot 13033) and Western Fr. No. 2 (Lot 13027) were Crown-granted in 1926 to W.G. Clark.

In 1925 the claims were optioned by The Victoria Syndicate, Limited, of London, in conjunction with the Carnation and other claims in a large group. Work continued in 1927 when 99 tons of ore were shipped from the Minniehaha. The option was dropped in 1928. The claim reverted to A.R. Mann & associates who had incorporated Carnation Silver Lead Mines, Limited, however, no further work was reported. The workings comprised 4 or 5 adits and considerable surface work over a vertical range of about 500 feet. The main adit has an aggregate length of about 800 feet and is very irregular. A second adit, 330 feet to the northeast, is 112 feet in length.

Kelowna Exploration Company, Limited held the property as part of a large group of claims during the period 1939-1951. Extensive geological investigations were carried out. The company name was changed in 1951 to Kelowna Mines Hedley Limited. In 1958 the company was dissolved and the claims transferred to Oil Participations Incorporated. Silver Standard Mines Limited in 1961 acquired an option on 59 claims, which were transferred to Silmonac Mines Limited on its incorporation in November 1963. Subsequent exploration located a mineralized zone several thousand feet south of the Minniehaha claim. In 1968-69 a new crosscut adit at the 4,625 foot elevation was driven south from the north edge of the Minniehaha claim to explore the new zone (see 82 F/14, AG 2). The adit served as a production adit for the adjacent property during the period 1970-1979. The

see Card 2

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

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HISTORY OF PRODUCTION

A shipment of 99 tons of ore was reported in 1927.
(Report of Minister of Mines, B.C., 1927, p. 276).

REFERENCES

Reports of Minister of Mines, British Columbia:

1898, p. 1074; 1902, p. 300; 1919, p. 154;
1924, p. 196 + ; 1925, p. 241; 1926, pp. 250,
449; 1927, p. 276; 1967, p. 252; 1968, p. 253.

++Cairnes, C.E.; Descriptions of Properties, Slocan Mining
Camp, British Columbia; Memoir 184, pp. 28, 84, Geol.
Surv. of Canada, 1935.

+++Hedley, M.S.; Geology and Ore Deposits of the Sandon Area,
Slocan Mining Camp, British Columbia; Bulletin No. 29,
p. 90, British Columbia Dept. of Mines, 1952.

Geology, Exploration, and Mining; British Columbia Dept.
of Mines: 1969, p. 328.

MAP REFERENCES

#Areal Geology of the Sandon Area, Sc. 1":800 ft. - accomp.
Bull. 29, British Columbia Dept. of Mines.

Map 273 A, Sandon, (Geol.), Sc. 1":4,000' - accomp. Memoir
173, Geol. Surv. of Canada, 1934.

Map 1090 A, Nelson, (Geol.), Sc. 1":4 miles - accomp. Memoir
308, Geol. Surv. of Canada.

Map 8482 G, Slocan, (Aeromag.), Sc. 1":1 mile.

*Map 82 F/14, Slocan, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	10-79						

NAME OF PROPERTY

MINNIEHAHA

DESCRIPTION OF DEPOSIT (continued)

larly because there is more than one plane of movement in an area of complex folding. Silicification to a degree that is hard to assess makes recognition of original rock types difficult.

The surface workings show one dominant mineralized zone and two subsidiary fissures, all part of the same lode which is explored at a depth of about 70 feet by the main adit. A second adit, 330 feet to the northeast, follows a subparallel fissure in the footwall of the main zone. The main showing as exposed by trenching is part of a shear or crushed zone from 15 to 20 feet wide striking north 35 degrees east and dipping 60 degrees southeast. It carried considerable quartz and calcite and, near the footwall, from 2 to 8 feet of oxidized matter containing bunches and disseminations of galena. Where intersected by the crosscut the lode carried about 2 feet of calcite with some siderite and a little galena. Subsequent work consisted of attempts to follow this lode, which proved most elusive as a result of both pre-mineral and post-mineral movements.

The northeastern adit is driven 112 feet along a lode striking north 60 degrees east and dipping at about 30 degrees to the southeast, in quartzites. The lode in the face contains 20 inches of siderite, and in the outer part of the adit is about 3 feet wide, containing strands of quartz and carbonate and a little sphalerite.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

company name (Silmonac) was changed in 1977 to Silvana Mines Inc.