

Property File  
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SUMMARY REPORT

on

WISCONSIN MINE

Nelson Mining Division, B. C.

E. P. Crawford  
and  
F. R. Weekes

August 26, 1936

## WISCONSIN MINE

KIND OF MINE: Gold and silver.

LOCATION: Nelson Mining Division, B.C., 12 miles from Midge Creek, a station on the Canadian Pacific Railway. Midge Creek is 43 miles by rail from Nelson, B.C.

PROPERTY: (See map.) 18 claims, all in one group along the strike of the vein system. The Wisconsin and Lucky Strike claims, which contain the present workings, are Crown Granted. The balance are held by location. The holdings amply protect the veins on their dip.

TRANSPORTATION: Two and one half miles of road are completed from Midge Creek station. The balance of nine and one half miles to the mine is a good pack trail which can be converted into a truck or tractor road at reasonable cost. It is understood that the further building of the road is under way, and that a total of six miles from Midge Creek station will be completed this fall.

TOPOGRAPHY: Elevation 6,000 feet at the mine. Slopes are fairly steep, but quite easy in the immediate vicinity of the present mine workings.

WATER, TIMBER, ETC.: Domestic water supply from springs on the property. Ample water for power and milling in Midge Creek two miles from the mine. The proposed mill-site is about eight miles from Midge Creek station. There is standing timber on all claims for mining and construction purposes, and fuel.

OPERATING CONDITIONS: The annual snow-fall is fairly heavy but will not interfere with all-year operations. Operating costs should be reasonably low.

GEOLOGY: The main Wisconsin vein is a quartz vein in a zone of highly sheared and altered sedimentary rocks and granite with indefinite walls of schist and granite. The ore consists of gold and silver bearing pyrite, arsenopyrite, chalcopyrite, galena and sphalerite. The higher gold values occur in almost solid sulphides associated with a little quartz. Considerable oxidation occurs near the surface, but the present workings on the 150 foot level are in primary sulphides. The vein strikes W. 10 E. to N. 40 E. and dips about 67 degrees to the west. The present known length as indicated by open cuts is approximately 900 feet. There is a possible further extension to the south where the overburden is heavy, but where an electric survey indicates mineralization for a length of 350 feet beyond the extreme southerly open cut. The survey also shows mineralization extending to the north for about 150 feet beyond the present northerly cut.

The maximum width of mineralization as exposed, is 25 feet. The average width of commercial grade ore as opened to date by crosscuts on the two levels, is about 15 feet. Geological conditions are considered favorable for the extension of the vein and mineralization to depth.

DEVELOPMENT: (See maps.) Wisconsin Vein: Surface open cuts across the vein at more or less 50 foot intervals, for a length of 1000 feet. No. 1 Tunnel drifts, crosscuts and winze, 500 feet. No. 2 Tunnel crosscut, 150 feet. No. 3 Tunnel, drifts and crosscuts, 1045 feet. No. 4 Tunnel crosscut, 26 feet. Shaft and crosscut, 145 feet. Total underground workings, 1866 feet.

The present development is from No. 1 Tunnel on the 150 foot level, and the program for the immediate future is to continue drifting on this level, north and south, with frequent crosscuts to both walls of the zone of mineralization.

ORE VALUES: The Wisconsin vein is opened for a length of 150 feet in No. 1 Tunnel, with three crosscuts to both walls. The average of these crosscuts is 0.43 oz. gold and 4.0 oz. silver per ton over a width of 15 feet. The drift along the vein (exclusive of crosscuts) with full vein width not exposed, averages 0.40 oz. gold per ton. Both drift faces are in ore.

The 150 foot level of No. 1 Tunnel is now 300 feet long with two crosscuts. The crosscuts average 0.31 oz. gold and 2.7 oz. silver per ton over a width of 13 feet. The drift samples (not full width of vein) where the drift is driven in ore and exclusive of crosscuts, average 0.375 oz. gold and 2.7 oz. silver per ton. Ore in both faces.

EQUIPMENT: The present equipment consists of small Diesel engine, air compressor, drill-sharpener, air drills, pumps, hoist, cars and tools, etc. sufficient for development on a limited scale. Three log buildings for compressor and blacksmith shop, bunk and cook-house for 20 men, and office. Storehouse at the railroad at Widge Creek station.

MILLING: The ore is complex in character but from past tests on mixed oxide and sulphide ore from the upper level (of which records are incomplete) it has been reported that the ore can be successfully cyanided. Further thorough tests are now under way on unaltered ore from the 150 foot level to determine the proper method of treatment. There are suitable mill-sites on the adjoining creeks where connection can be made with the mine with gravity aerial tram about two miles in length.

CONCLUSIONS: The mineralized zone of the Wisconsin vein is known to extend for a continuous length of 900 feet. Electric survey results show a total length of 1400 feet.

Development to date has exposed an orebody 15 feet wide to a length of 300 feet and a depth of 200 feet below the surface. On both underground levels the ore shows continuing in drift faces on north and south ends.

Assuming that further development in the mineralized zone both laterally and in depth gives results that correspond to those already achieved, the tonnage to be expected would be from 1000 to 1500 tons per foot of depth. This would amount to 1,000,000 or 1,500,000 tons for 1000 feet in depth.

The average ore values of 0.40 oz. gold and 3.0 oz. silver, as shown by development to date, are ample to provide a good operating profit when the mine is sufficiently developed and equipped for ore treatment.

The results from development to date fully justify continuation of the development program.

RECOMMENDATIONS: It is recommended that a development fund be provided at once to complete development of the 150 level and to sink to the 300 level and develop it with drifts and crosscuts.

This will require about a year's time and \$75,000 expenditure, including the cost of additional equipment and property payments.

"E. P. Crawford"

"F. R. Weekes"

San Francisco, Calif.  
August 26th, 1936.