

002602

WISCONSIN MINE

MIDGE CREEK, NELSON M. D., B. C.

SUMMARY AND COMPARISON OF REPORTS BY FREDERICK KEFFER, HENRY
JOHNS, CHAS. A. BANKS, R. H. M'CLOUGHLIN & CHAS. C. STARR.

TRAIL & TRANSPORTATION:

KEFFER: A road from a plant on the Creek would have a very good grade to the Lake. The mine is reached by a poor trail. There is but little rock and a good road could easily be made.

JOHNS: There is a poor trail for ten miles, then a good trail for five miles to the mine. Cannot say offhand what it would cost to get a road to the mine.

BANKS: (Not mentioned)

M'CLOUGHLIN: The property is reached by nine miles of very poor trail with badly broken grade, then five miles of better trail but badly in need of repairs. A road might possibly be built for \$2500 per mile.

STARR: The trail is poor, with fair but undulating grade for ten miles, then up a continuous though not steep grade for five miles to the mine. The trail needs cleaning, and in places rebuilding, which will cost considerable. I cannot estimate the cost of the road offhand; there would be little rock work, but considerable side-hill cutting.

WATER & POWER:

KEFFER: There is an abundance of water and fall for power in Midge or Hughes Creeks.

JOHNS: Ditto

BANKS: (Not mentioned)

M'CLOUGHLIN: There is sufficient water at all times in Midge Creek to develop power for mining. At the mine there is no permanent supply and water would have to be pumped from Hughes Creek for domestic use.

STARR: Water has been piped from a small spring and well to the camp which is a quarter of a mile distant and much lower, but the quantity is very limited. At (say) 2000 feet distant and 500 feet lower than the camp there is sufficient for domestic use and diamond drilling. (This is much closer than Hughes Creek. There is ample water and fall for power purposes within four miles.

GEOLOGY & VEIN:

KEFFER: The vein is in granite and about 30 feet wide, of which fifteen or twenty feet is pay ore.

The vein is exposed on the surface by cuts for 650 feet, and the end cuts show good values.

JOHNS: The ore-body is in granite, the hanging wall being slightly altered near the vein. Several hundred feet beyond the hanging wall there is mica-schist. The cuts show a probable pay-shoot over 600 feet long.

BANKS: (Not mentioned)

McLOUGHLIN: The country rock is Nelson granite with areas of mica-schist to the west and northeast. The vein is a quartz filled fissure with fairly defined walls, and 30 feet wide at the crosscut in No. 1 tunnel; at other points the full width is not determined. Oxidation is strong in many places.

STARR: Granite is the principal rock, but limestone appears at several points underground, and schist float at various places on the surface.

The vein is generally in granite on and near the contact with metamorphosed sedimentaries, and is formed chiefly by replacement along minor fractures. The sedimentaries are probably "roof pendants". The vein is 20 to 30 feet wide, of which 18 feet is ore where cut by the crosscut in No. 1 tunnel. Limestone adjoining the vein has been well mineralized in places and, later, completely leached. The footwall is fair, the hanging wall indefinite.

The vein is exposed 400 feet on the surface; other cuts indicate other veins or faulting.

SAMPLING:

KEFFER: (Apparently took no samples)

JOHNS: Samples from open cuts are from dumps and are probably high.

No. 1. Tunnel, 20 feet of ore, average	\$9.32
Open cuts	16.84
No. 2 tunnel, 10 ft. of ore	5.26

(Silver probably at 57 cents - CCS)

Analysis of composite of all No. 1 tunnel samples --			
Silica	26.8%	Iron	26.5%
Lime	0.6	Sulphur	14.5
Alumina	10.7	Arsenic	11.1

BANKS:

Tunnel No. 1, across vein	\$12.04
" " in 2nd crosscut	12.62
" " beyond 2nd crosscut	18.60
" " near end	8.00
" No. 2	1.74
(Silver at 60¢; no widths given)	

Analysis of composite of pay-streak across vein in crosscut in No. 1 tunnel ---

Silica	27.0%	Iron	27.0%
Alumina	5.0%	Lime	.8
Magnesia	.4	Sulphur	8.8%
Arsenic	10.2	Copper	.26
Zinc	.5	Antimony	3.50

McLOUGHLIN & STARR (combined):

Tunnel No. 1, end to end, 9.3 ft. sampled, full width not exposed	\$9.00
" No. 1, three cuts across full width of ore, average 17.8 ft,	10.95
Open Cuts, 7.2 feet sampled; full width not exposed	12.55
Tunnel No. 2, 3½ feet sampled, remainder of vein leached	8.00
Composite of all samples composed of unoxidised ore	12.06
also lead 0.6%, zinc 0.65%, copper 1.2% and arsenic 13.25%.	
(Silver at 60@)	

The oxidised vein matter is decidedly lower grade than the sulphide ore, indicating that some of the values have been leached out.

CONCLUSION:

KEFFER: The property should turn out to be a valuable mine; the chief drawback is the complexity of the ore. The vein impresses one as being very strong, and likely to be persistent with depth.

JOHNS: The work done shows this to be a very promising vein and worthy of further development. A comparatively small amount of money should show its worth.

BANKS: Conclusions not at hand, but according to Keffer he made a favorable report.

McLOUGHLIN: Further development is justified. The vein is strong and wide with fairly good values. The principal drawbacks are the trails and poor transportation facilities, and the lack of adequate water, which however could be overcome without much expense.

STARR: The property has an attractive showing of fair grade ore and has a reasonable chance of developing into a large mine. The present important factors are the extent of the orebody, the values in the unaltered sulphides, and their amenability to cheap treatment. Diamond drilling is recommended. The cost of preliminary development will be high, but fair working costs should be obtained later.

Compiled from data furnished by Mr. Keffer, and from McLoughlin & Starr reports, by *Chas. C. Starr*