

The Afton group - Report to Northwestern Explor^{no.} by G.A. Noel, November 1952.

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Conclusions

1. The Afton mineralization occurs along narrow shear and fracture offsets, 50 to 100 feet wide, which stem from a major N70°W fault zone. The offsets in general trend N45°E and dip steeply SE. This structural pattern is very similar to that found at the Iron Horse mine.
2. From drilling, about 7 mill. tons of mineralized material with an average grade of 0.4% Cu, have been outlined over an area roughly 1100 feet long by 400 feet wide and 160 feet in depth.
3. Possibly three mineralized areas similar to that outlined by drilling could be found on the property along the established strike of the mineral zone, with a maximum of 30 mill. tons of material averaging 0.3 to 0.4% Cu.
4. The complexity of cross fracturing and faulting of the syenite is prerequisite to the mineralization.
5. This structural pattern can be detected by the E.M. geophysical method, even though the mineralization cannot.
6. The geophysical survey indicated that the area covered by drilling lay in the heart of a shattered zone produced by the N45°E & N45°W faulting across the main N70°W faulting.
7. The boundaries of copper mineralization in the shaft area as indicated by drilling & surface trenches correspond quite well with the area over which the auger test showed anomalous copper content.



[See black notebook: 1956 JMC56-B.C.1. for details of this report]

N.B. I agree with the above conclusions in regard to dependence of the mineralization on the cross-fractures. However, these may be "folds" from the main N70°W faults.