

REPORT ON ARROWHEAD PASS
COPPER SHOWING

By: Kyosti Heinanen
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REPORT ON ARROWHEAD PASS COPPER SHOWING
FOR ATLAS EXPLORATIONS
June, 1968

Kyosti Heinanen - Geologist

LOCATION

The showing concerned is located in the SW end of Arrowhead Pass, about 3/4 mi. from Old Cabin Creek, in the SE wall of a canyon.

PREVIOUS WORK DONE

The showing was previously examined by M. O. Hampton of Dynasty Syndicate in September, 1963.

The writer was accompanied to the area by T. Skonseng, prospector. In all, 10 days (June 21 to June 30) were spent in the area.

TOPOGRAPHY

Topographic relief in the area is approximately 3000 feet. The canyon has a width of 30 feet, and the height of the SW wall is 20 feet.

GEOLOGY

The most common rocks in the area are black and grey chert, and cherty argillite. The rocks are folded with about southeast trending axes. General strike is NE-SW dipping northerly. In the bottom of the canyon dip is 60-70, but higher up in the NW wall it is 20-30. About 1/2 mi. from the showing there is a gossan above which there are granodiorite outcrops. Mineralization is in light coloured, fine grained quartzite which is a narrow (6 feet) sheet in black chert. Foliation in the quartzite is at right angles to the general strike. Similar rusty quartzite is also about 1000 feet SW from the showing.

MINERALIZATION

Pyrite is very common in the quartzite and also at some places in the chert. Copper mineralization is confined to four veins about 1 foot in width and 50 feet in length. The veins are composed of about 25% quartz and 75% sulfides. Sulfides present are chalcopyrite and bornite with minor arsenopyrite. All copper samples are taken from one vein. The other three veins, which occur higher up the rock wall, were not accessible without mountain-climbing equipment and consequently were not examined.

REPORT ON ARROWHEAD PASS COPPER SHOWINGLocation

Esiintymä sijaitsee Arrowhead Pass'in SW-paassa. Noin 1 km Old Cabin Creek'istä. Paikka on kanjoni ja esiintymä on sen SE-seinämässä.

Topography

Alueen korkeuserot ovat noin 3000'. Esiintymän kohdalla Arrowhead Pass on noin 30' leveä kanjoni, jonka SE-seinä on 20' korkea ja hyvin jyrkka. NW-seinä on loivempi ja kallio on osittain maakerrosten peitossa.

Geology

Paakivilajina esiintyy black and grey chert ja cherty argellite kivet ovat pienoispeimuttuneet. Yleinen kulku (strike) NE-SW eli kanjonin suunta. Kaade (dip) on pohjoiseen. Kanjonin pohjalla se on jyrkka 60-70, mutta ylempänä NW-rinteellä se on noin 30. Noin 800m esiintymästä suuntaan SE tavataan granodiorite. Mineralisaatio on vaaleassa hienorakeisessa quartzitessa, joka näyttää olevan noin 2 m paksuna laattana black chert valissa. Laatan leveys on n. 30 m ja korkeus n. 15 m. Sen foliation leikkaa melkein kohtisuorasti yleistä kulkua. Samanlaista ruosteista vaaleaa quartzite on myös creek'in alajuoksulla samalla puolella kanjonia.

Mineralization

Quartzite'ssa esiintyy yleisesti pirotteena, pieninä kapeina juonina ja kalvoina pyrite. Kaikki kuparimineraalipitoiset näytteet on otettu juonesta; jonka leveys on 1'. Samanlaisia juonia, jotka näkyvät kallioseinämässä ruosteisempina vyohykkeina, on kaikkiaan neljä. Näytteet ovat alimmasta juonesta, sillä seinämä on niin jyrkka, ettei sitä voi kii-veta ilman koytta. Kuparimineraaleina esiintyy chalcopyrite ja bornite. Li saksi tavataan arsenopyrite. Juonessa kuparipitoisuus on korkea, mutta muualla quartzite'ssa kuparimineraaleja ei ole tavattu.

Swan Lake

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