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PE-058-13

THE McGRATH LODE-GOLD PROSPECT, FAIRBANKS QUADRANGLE

The McGrath prospect is in the northeastern part of the Fairbanks quadrangle at 64° 54' N latitude and 147° 38' W longitude. It is in the northeastern part of Section 19, Township 1 north, Range 1 east, Fairbanks Meridian. A trail to the prospect leaves the Steese Highway near its junction with McGrath Road. The trail goes northeasterly, or uphill, from the highway, and some of the trenches on the prospect are within 200 yards of the highway.

The prospect is covered by one lode claim, which is owned by Charles McGrath, 709 Eighth Avenue, Fairbanks. A gold-bearing quartz vein was discovered on the property in 1927, and a shaft was sunk 80 feet on the vein shortly thereafter. Various shafts and trenches have been dug on the vein since then. Two bulldozer trenches were dug in 1963, and these are the only excavations on the claim that are not caved or sloughed.

The first trench dug in 1963 uncovered the vein. The second trench uncovered some quartz, and the owner was uncertain as to whether or not this quartz was part of the vein. The prospect was examined on September 4, 1963, at the request of the owner. The main purpose of the examination was to determine whether or not the quartz in the second trench is part of the vein that has been exposed in the other excavations.

Figure I is a map showing the 1963 trenches and an old trench lying between them. The country rock in both of the 1963 trenches is mica schist - a part of the Birch Creek schist formation; bedrock no longer is exposed in the old trench. The vein is exposed in the eastern trench, and the owner reported that when the old trench was open it also exposed the vein. The vein in the eastern trench strikes N 70° E and dips 30° S.

The owner reported that in deeper excavations he found that the vein dips about 30° near the surface but is steeper in depth.

In the western trench a shear zone is exposed. This zone is 18 feet wide, and it appears to have the same strike and dip as the vein in the eastern trench. Much of the rock within the shear zone is iron-stained. Crushed, iron-stained quartz is abundant in part of the zone, and it was this quartz that the owner thought might be the extension of the vein.

Nine samples were taken during the examination. They were assayed by Donald Stein, assayer at the Fairbanks office of the Division of Mines and Minerals. The locations where the samples were taken are shown in Figure 1, and the results of the assays are shown in Table I. Near some of the old excavations not shown in Figure 1, pieces of quartz containing free gold can be found. The quartz in these pieces is milky-white and not iron-stained like the vein in the eastern trench. This does not necessarily indicate that the old excavations are on a different vein; comparable changes along the apex of a vein have been noted in other parts of the Fairbanks District.

If the strike of the vein is projected westward from the eastern trench, it falls south of the western trench. Because of the dip of the vein and the difference in elevation of the trences, the apex of the vein would lie a few feet south of the projected line of strike. Therefore, if the vein continues westward with no change in strike and dip, the apex of the vein lies about 20 feet south of the western trench.

The quartz now exposed in the western trench is almost certainly not a part of the vein that is exposed in the eastern trench.

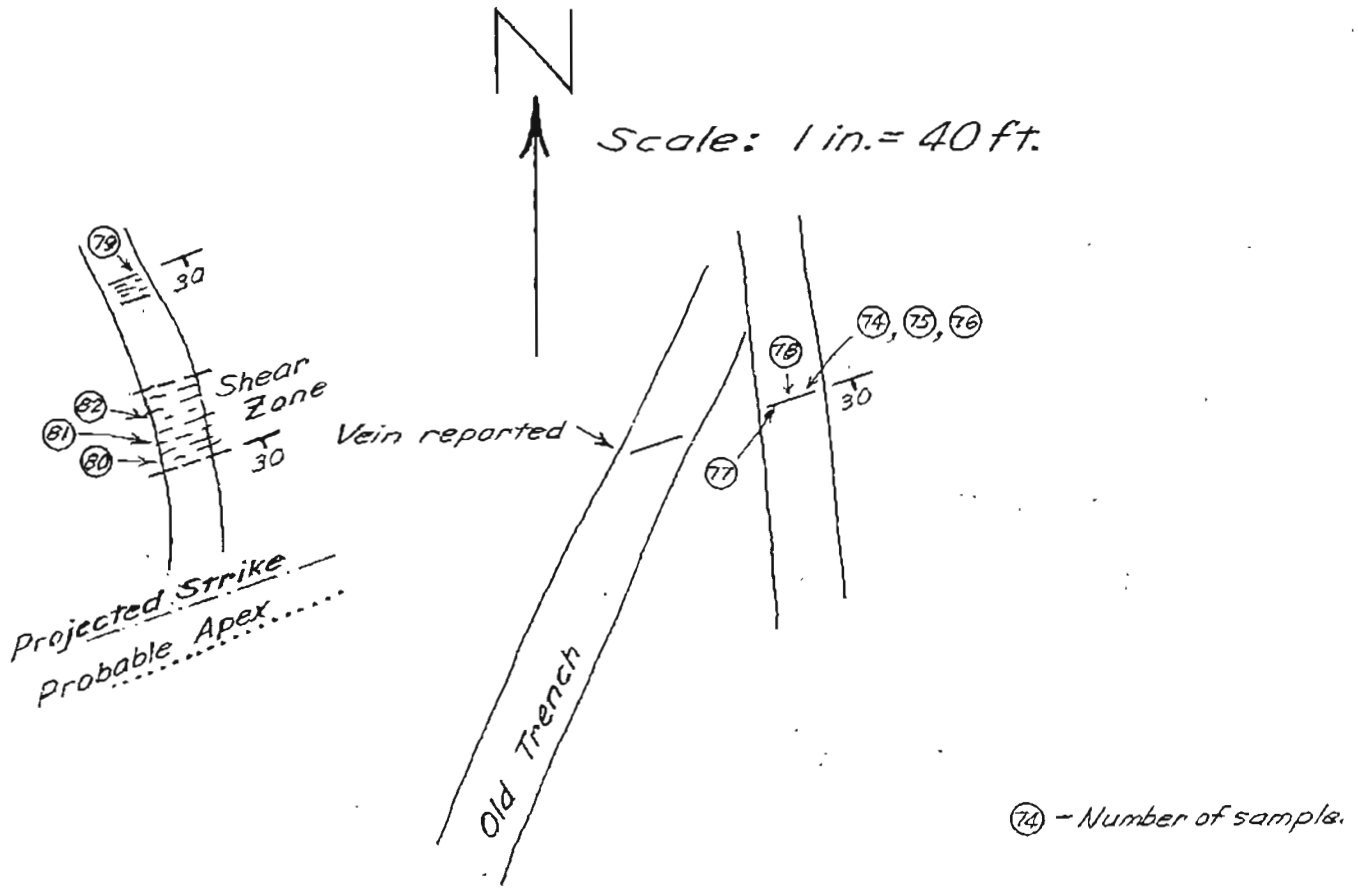
TABLE I

RESULTS OF ASSAYS

Sample Number	Width Sampled	Ounces per Ton Gold	Ounces per Ton Silver	Remarks
74	7 inches	0.02	nil	Iron-stained gouge from footwall of vein.
75	7	0.20	tr	The vein. Hard, iron-stained quartz.
76	5	0.02	nil	Iron-stained gouge and schist from hanging wall.
77	7	nil	nil	The vein.
78	Grab	0.28	tr	Pieces chipped from vein where samples 75 & 77 were cut.
79	72	0.02	nil	Iron-stained gouge containing crushed quartz.
80	18	tr	nil	Iron-stained gouge.
81	20	tr	nil	Iron-stained gouge containing crushed quartz.
82	50	tr	nil	Iron-stained gouge containing crushed quartz.

Fairbanks, Alaska
November, 1963

Robert H. Saunders
State Mining Engineer



STATE OF ALASKA
DIVISION OF MINES & MINERALS

Trenches on the McGrath Prospect

From compass survey.

R. H. Saunders

October 1963