PE-085-19

TERRITORY OF ALASKA
DEPARTMENT OF MINES
BOX 1391
JUNEAU, ALASKA

PE 85-19

PROPERTY EXAMINATION REPORT

FOUR-IN-ONE COPPER PROSPECT, ANCHORAGE QUADRANGLE - KX 85-114

James A. Williams
March 1955

On September 11 to 13, 1954, Phil R. Holdsworth and the undersigned travelled to and made a brief examination of the Four-in-One copper prospect near the head of Miners River in the Prince William Sound District. Miners River is a tributary to Miners Lake which in turn empties into Unakwik Inlet from the east. The location of the prospect is in the southeast corner of the Anchorage Quadrangle at geographical coordinates of approximately 147°17' W longitude and 61°06' N latitude. The walking distance from the upper (east) end of Miners Lake is about 5-1/2 miles, but the climbing is steep and difficult in places and the trip up requires nearly a full day. No trail was found, though one is reported to exist. The lake is quite adequate as a landing place for float planes.

The prospect was examined by Earl Pilgrim in 1930 and though no samples were taken by him, he reported verbally to the writer and others that it was promising. His written report is in the TDM files. Harry Townsend visited the property in 1946 and took one sample. The prospect has been held by various Valdez residents through the years, and is currently being claimed by David Vietti of that town. He filed an assessment work affidavit in Valdez for the assessment year ending

July 1, 1953 covering three claims, David Copper Nos. 1, 2, and 3, but apparently no affidavit for the succeeding year has been filed. In the portal of the adit hereinafter described, two location certificates were found for claims Copper King Nos. 3 and 4. These were dated July 3, 1947, and were signed by Dominic Vietti, father of David. No other location certificates could be found.

The property consists of two deposits, located as shown on the accompanying sketch map. The so-called Red Vein is more of a mineralized shear zone, is rather irregular in shape, and contains enclosures of barren country rock. It is located in a steep bluff that partly divides Munson Glacier at that point. A 60-foot adit was driven S45W at an elevation of about 2065 feet which intersects the vein at the face. At this point, the Red Vein strikes N25W and dips 65° to the east. An 8-foot width is exposed but the zone may be wider as the footwall was not conclusively located at the face. An 8-foot channel sample was cut (PRH-54-39) which assayed 0.79% copper and a trace each of gold and silver. The portal of this adit was once reportedly inaccessible because of receding ice, but it can now be reached by climbing up a talus slope which has accumulated in later years. Mineralized showings presumably of the same deposit can be seen on the face of the bluff below and to the west of the portal.

The East Vein outcrops for a distance of about 1000 feet on a smooth bare rock surface of a ridge which is part of the divide between the Unakwik Inlet and Columbia Glacier drainages. The elevation varies from about 1850 feet at the lower end of the outcrop to 1950 at the upper end. A point toward the lower end of the vein bears N55E from the Red Vein portal and is about 2300 feet distant from there. The strike

is N10W and the dip 60° to the east. The width varies from 5 to 15 feet and is quite well defined. An unusual feature of the outcrop is that it has not weathered to the customary red or brown of copper sulfides, but was scoured clean and smooth by the glacial action and no appreciable surface alteration has taken place, so that the color and appearance does not vary much from that of the country rock. Where the surface of the outcrop has been broken, however, the sulfides have weathered to the characteristic reddish brown of oxidized pyrites, and freshly broken surfaces reveal the unaltered sulfides. No work has been done on this vein other than the blasting loose of a few hundred pounds of material. Sample FRH-54-40 was cut across 9 feet of the vein material at an elevation of 1870 feet where the surface had not been previously disturbed. It assayed only 0.22% copper, no gold, and a trace of silver. Townsend's sample was taken in a cut across 12 feet and assayed 1.26% copper, 0.02 oz gold, and 2.0 oz silver. A selected sample of material from the East Vein was forwarded to the Department by David Vietti through Ralph Browne of Anchorage in August 1954 that assayed 2.33% copper, 0.06 oz gold, and a trace of silver.

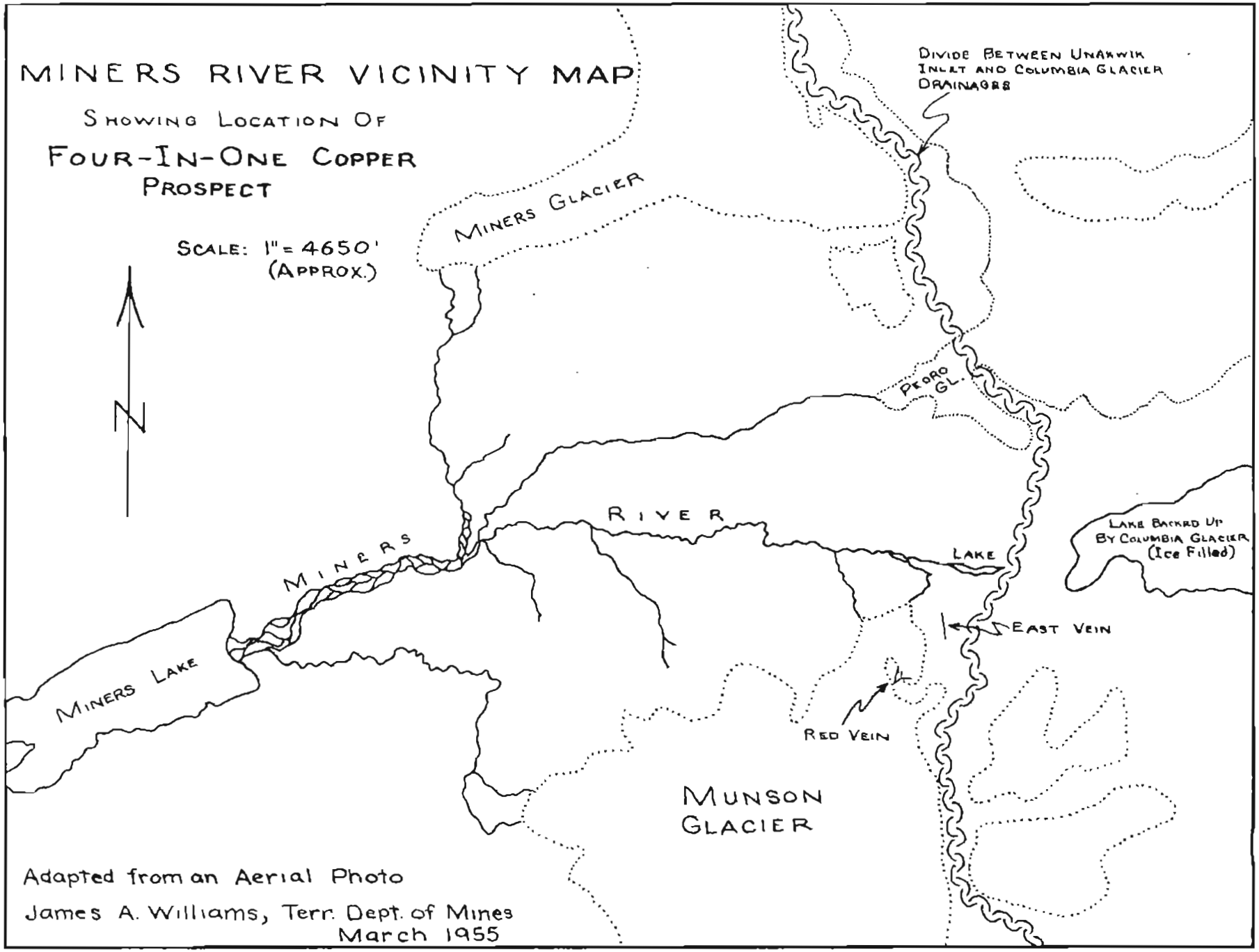
The chief mineral of both veins is chalcopyrite. In the East Vein, the material is silicified and extremely hard. Two tungsten carbide-tipped sampling moil bits were ruined in the cutting of the above mentioned 9-foot sample. The wallrock in both cases is also very hard and appears to be a silicified graywacke.

Although the two deposits are fairly large, and the East Vein shows particularly good structure, the sampling results and the indicated

size do not show very great possibilities of commercially important deposits. Admittedly though, the few samples taken should not be considered as positive proof of the lack of promise of the prospect. It is suggested that the present or future holders of this property do more development work on the veins and perhaps they may be able to show evidence of higher values.

James A. Williams

James A. Williams
Associate Mining Engineer


MINERS RIVER VICINITY MAP
SHOWING LOCATION OF
FOUR-IN-ONE COPPER
PROSPECT
SCALE: 1" = 4650'
(APPROX.)
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DIVIDE BETWEEN UNAKWIK
INLET AND COLUMBIA GLACIER
DRAINAGES
MINERS GLACIER
PEORO GL.
RIVER
MINERS
LAKE BACKED UP
BY COLUMBIA GLACIER
(Ice Filled)
LAKE
EAST VEIN
MINERS LAKE
RED VEIN
MUNSON
GLACIER
Adapted from an Aerial Photo
James A. Williams, Terr. Dept. of Mines
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