

823644

EL PASO M+M Co Farm-out Aug/75

MAP LOCATION NO. 14FILE "DONA"
82L-Misc. Prop.
CAB 3
DR. BPROPERTY: DONACOMMODITY: GoldLOCATION: 50° 08'N 118° 24'W, Vernon Mining Division. The property is located in southcentral British Columbia approximately 41 miles east of Vernon and 2 miles west of Keefer Lake, which is at the headwaters of the Kettle River.
82L-1^{SW}ACCESS: By good highway and secondary roads from Vernon, B.C.TOPOGRAPHY: The property is at the east end of Monashee Mountain which in this area forms an easterly trending ridge sloping gently to the east. The claims partly cover the east end of this ridge, so that slopes vary from gentle on the ridge top to steep on the side slopes to gentle at the base. Elevations range from 4500 feet in the valley bottom to 5500 feet at the ridge top.PROPERTY: 17 claims in good standing until 1984.HISTORY: Placer gold was discovered in the late 1800's in some of the streams draining out of the Monashee Mountain Range. While gold is common in the area, no commercial deposits were found. Small gold bearing veins are also known in the area.

A geochemical prospecting program was planned for the summer of 1972 to examine a favorable part of the Monashee area which was readily accessible by a highway and numerous logging roads. Some gold is known to occur with arsenopyrite in this district arsenic was used as a trace element. All samples were assayed for gold, silver and arsenic.

The results of this program lead to the locating of the Dona Claims. A detailed geochemical soil program in 1973 over the claims, outlined a zone 2500 feet long which was anomalous in arsenic and had a coincident gold anomaly 2000 feet long. In 1974 detailed bulldozer and backhoe trenching and percussion drilling tested the anomaly.

GEOLOGY: Sediments and volcanics of the Carboniferous and Permian aged Cache Creek Group underlie the claims area. These rocks form an irregular block approximately 17 miles long by 5 to 10 miles wide which is in fault contact to the north, east and west with Archean or later metamorphic rocks of the Monashee Group. To the south, they are in contact with Jurassic and/or Cretaceous granitic rocks of the Coast Intrusives.

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GEOLOGY (CONTINUED) Within the claims area a sequence of northwest striking argillite and tuffs were intruded by a diorite dyke or sill which is up to 1000 feet wide and at least 2000 feet long.

Numerous flat lying to gently dipping quartz veins occur within the diorite. These are commonly 1/16" to 3" wide with several 6" to 12" wide. One vein was discovered which attained a width of 36". The veins commonly strike northerly and dip at low angles to the west.

Small pods of massive sulfide were in places found within a few of the veins. These were composed of arsenopyrite, stibnite, and pyrite (+) jamesonite, galena and sphalerite.

TRENCHING: Due to the lack of outcrop, considerable trenching had to be done to expose the geology. A total 6285 feet of excavating was completed in 12 trenches.

SAMPLING: Extensive sampling was done in all trenches to locate the source of the gold values found in the soil. Since most of the veins were dipping a low angles, a great number of vertical channel samples were taken from the trench walls at regular intervals. In addition, a total of 3216 feet of percussion drilling was completed in 19 holes. These holes were sampled at 2-foot intervals.

Assay results of sampling show that the gold values are confined to the narrow quartz veins. The better mineralized sections are as follows:

<u>GOLD</u>	<u>SILVER</u>	<u>DESCRIPTION</u>
0.085*oz/ton	1.155 oz/ton	30" vertical sample across quartz vein.
0.047*	0.255	48" vertical sample across flat lying quartz ve
0.205	1.000	77" vertical sample across 30 ^o dipping shear zone.
0.035	0.118	69" vertical sample across 35 ^o dipping shear zone.

* SAME VEIN

Percussion drill hole assays show very low values in gold. Sections 4 feet to 12 feet wide were encountered averaging 0.02 to 0.04 oz/ton Au.

GEOPHYSICS: Strong self potential anomalies occur over the argillite which flanks the intrusive. This is due to the abundant pyrite coating the bedding planes.

COMMENTS:

The 1974 exploration program failed to locate either a minable high grade gold vein or a large area of low grade gold-silver mineralization. It did locate narrow veins which were very locally well mineralized. The depth possibilities were not tested.

RECOMMENDATION:

Four drill holes totalling approximately 4000 feet to test for possible coalescence of quartz veins at depth. These holes would be collared in the argillites to the west of the diorite and drilled to the north east.