

REPORT ON A TUNGSTEN SHOWINGNEAR USK, B. C.

103I/9W

Ridge
103I182Introduction

This report presents the results of an examination of a tungsten showing near Usk, Omineca Mining Division, B. C. The examination was made on July 22, 1942, for the purpose of evaluating the tungsten potentialities of the showing and the surrounding area.

Summary and Conclusions.

1. The tungsten occurs as the mineral scheelite in a number of narrow (0.5 feet), quartz veins that intersect igneous rocks of the Coast Range Batholith. The veins have an average strike of N. 30 W. and a vertical dip. They occupy a set of strong fractures that appear to be connected with a large fault zone that strikes N. 10 W., and outcrops in the bed of a small creek some 300 feet Northwest of the last showing.

2. Three veins have been exposed in seven unevenly spaced trenches along a zone 800 feet long and 100 feet wide. A fourth vein outcrops 500 feet Northwest of the last trench.

3. By the use of ultra-violet light, scheelite was observed in all the veins, and, occasionally, in the wall-rock immediately adjacent to the veins. However, the highest assay value obtained from the samples was only 0.06 WO₃.

4. The low tungsten content of the veins makes the present showings of no economic value and the expense of any further work on them is not warranted.

Property, Location and Means of Access.

The property consists of four mineral claims recently staked by Joe Bell and Jim Gall who reside at Usk.

The showings are located at an elevation of 3000 feet, on the East side and near the crest of the ridge which forms the height of land between Hardscrabble and Nicholson Creeks, Southeasterly-flowing tributaries of the Skeena River. This would place the position of the claims approximately four miles due North of Usk - a small village on the Prince Rupert Branch to Jasper Branch of the C. N. R.

The property is reached by a trail that starts from the railroad at a point four miles Northeast

of Usk, and follows the ridge between Hardscrabble and Nicholson Creeks.

Geology

Shannon

There are no outcrops in the immediate vicinity of the showings and the only information concerning the local geology was obtained from the exposures in the trenches.

The bedrock consists of igneous intrusives belonging to the Coast Range Batholith. There are three distinct types:

1. a medium to coarse grained, biotite-hornblende diorite containing as much as 40 per cent biotite and hornblende.

2. cutting the diorite and hence definitely younger, is a fine to medium grained feldspar porphyry that contains 1 to 5 per cent biotite.

3. a fine to medium grained, biotite granite consisting of buff-colored orthoclase, 1 to 5 per cent biotite, and 10 per cent quartz. The relationship of this intrusive to the other two is unknown.

Mineralization consists of a number of quartz veins that occupy a set of fractures cutting the above igneous rocks and having an average strike of N. 30 W. and a dip of 90°. The veins vary in widths from 0.15 to 1.25 feet. The fractures appear to be related to a strong fault that strikes N. 10 W. This fault consists of two 4 inch mud seams separated by 10 feet of high shear.

The vein filling is fine grained, white quartz containing 3 to 5 per cent pyrite. Stibnite was noted at one place. Scheelite occurs in all the veins as disseminated grains along fractures in the quartz.

The igneous rocks, immediately adjacent to the veins, are sheared and altered over narrow widths. Alteration consists of carbonatization with fine grained disseminated pyrite. A very small amount of scheelite was noted at a number of places.

Development and Description of the Showings.

The development consists of a number of trenches put down through the shallow overburden which

averages 2 feet deep.

#1 Trench

The wallrock is granite. A vein, 1.5 feet wide, strikes N. 30 W. and dips 90°. A slip or small fault forms the southwest wall of the vein, while, on the north side, the vein material is frozen to the granite. The vein contains fine grained, white quartz with medium to coarse grained pyrite and fine grained scheelite.

#2 Trench

The wallrock is granite. Two veins are exposed in the trench. The larger of the two, averaging 0.6 feet in width, strikes N. 40 W. and dips 90 degrees, 1.6 feet Southwest of this vein lies a stringer., 0.15 ft. wide, having the same strike and dip as the larger vein. Between the veins the granite is sheared and oxidized. On the northeast side of the large vein the rock is sheared and oxidized over 3 to 4 inches.

The veins contain very fine to fine grained quartz, a small amount of pyrite and scheelite. A little scheelite was also observed in the altered rock between the two veins.

#3 Trench

The wallrock is granite. Two veins are exposed. They strike N. 30 W. and dip 90 degrees. The larger averages 0.4 feet wide and the smaller, laying 1.5 feet to the Southwest is 0.15 feet wide. The granite is sheared and oxidized between the veins, for a width of 0.5 feet on the Southwest side of the small vein, and for a width of 3 feet on the Northeast side of the large vein.

Mineralization is similar to that in #2 trench.

#4 Trench

This trench was badly caved and only a small outcrop of granite was visible. Mr. Gall stated that a vein was exposed in the bottom of the trench.

#5 Trench

Wallrock is feldspar porphyry. A vein, 0.7 feet wide, strikes N. 46 W. and dips 90 degrees. A small fault forms the Southwest contact of the vein, and a 6 to

18 inch shear the Northeast contact. The vein contains fine grained white quartz, pyrite, and fine grained disseminated scheelite.

#5-A Trench

Wallrock is granite. A quartz vein, 0.5 feet wide, strikes N.30W. and dips vertically. The quartz contains a small amount of pyrite, a little stibnite, and fine grained scheelite. Two feet South west of the vein is a small fault having the same strike and dip. Striations on the fault surface plunge 52 degrees Southeast and indicate that the Northeast side moved up and to the Northwest relative to the Southwest side. Between the fault and the vein the granite is sheared and oxidized.

#6 Trench

A quartz vein, 0.75 feet wide, strikes N. 30 W. and dips vertically. The quartz contains a high percentage of pyrite and a small amount of fine grained scheelite. The wallrock on the Southwest side of the vein consists of feldspar porphyry which is highly altered over a width of 12 to 18 inches. A very small amount of scheelite occurs in the altered rock. On the Northeast side of the vein, the wallrock is highly faulted and altered diorite. This altered zone contained very fine grained pyrite and a little scheelite.

3.6 feet Northeast of the vein the diorite is in contact with fine grained feldspar porphyry.

#7 Trench

The bedrock consists of diorite intruded by feldspar porphyry. Four quartz veins are exposed. Near the Southwest end of the trench a quartz vein, 0.2 feet wide, strikes N. 25 W. Three feet to the Northeast is a vein, 0.5 to 0.9 feet wide, that strikes N. 55 W. on the Southeast side of the trench and N. 30 W. on the Northwest side. Both veins contain pyrite and a little scheelite. The wallrock is fractured and altered diorite.

Nine feet northeast of the second vein, a fault, striking N. 30 W. and dipping vertically, cuts the diorite and displaces a small dike of feldspar porphyry, which is an offshoot from the main body of porphyry lying 14 feet Northeast of the second vein.

The third vein lies 40 feet Northeast of the second vein. It strikes N. 22 W. dips 90 degrees and has an average width of 0.5 feet. 1.4 feet Southwest of this vein, is a parallel stringer of quartz 0.10 feet wide. Both the stringer and vein contain pyrite and scheelite. The wallrock is altered porphyry on the Southwest side and diorite on the Northeast side of the large vein.

A fourth vein lying 10 feet Northeast of number 3 vein, strikes N. 45 W. and dips 65 degrees S. W. It has an average width of 0.25 feet. Pyrite and scheelite occur in the quartz. The wallrock is altered feldspar Porphyry.

Creek Exposure.

500 feet Northwest of #7 trench a quartz vein outcrops in the bed of a small creek. It strikes N. 25 W., dips 90 degrees, and has an average width of 0.5 feet. The quartz contains coarse grained pyrite and a small amount of scheelite.

Assay Results

<u>Sample No.</u>	<u>Location</u>	<u>Value - % WO₃</u>
1.	Second vein in #7 trench.	Trace
5.	Wallrock, Northeast side of vein in #6 trench.	Trace
6.	Vein, #6 trench.	Trace
7.	Vein, #5 trench.	0.03
8.	Vein, #5-A trench.	0.06
9.	Vein in trench 1.2. & 3.	0.06

(Signed) R. A. BYERS.