

924 - Kelly Creek

811752

KELLY CREEK PROPERTY

EXAMINATION REPORT

October 11, 1967

by

Robert J. Darney

ATLAS EXPLORATIONS LIMITED

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Introduction

The Kelly Creek property is located on the west side of Kelly Creek in the Similkameen Mining District, about 4 miles upstream from the junction of Kelly Creek and the Tulameen River. This junction lies approximately 15 miles above the town of Tulameen.

The property is easily accessible by 4-wheel drive vehicle during the summer months. The road, which is packed dirt, is in fair condition but becomes extremely muddy during wet periods and is almost impassable.

In September, 1965, Bethex Exploration Limited optioned the David 1 - 4 mineral claims from Messrs. K. Armstrong, W. Armstrong, and L. Ashley. For protection measures, the PR 1 - 41 and Skidoo 1 - 22 mineral claims were staked.

During the 1966 field season, Bethex Explorations carried out an exploration program which consisted of geologic mapping, 11.4 line miles of geophysical surveying, 35 bulldozer trenches, surface sampling, and 2,832 feet of diamond drilling. During the same period, a 4.5 mile access road was reconstructed.



LEGEND

- TRENCHES
- - - - - ROAD
- ~ ~ ~ ~ ~ CREEK
- PR CLAIM

TRUE NORTH

TULAMEEN

Geology

The Kelly Creek property was examined by T. Sadlier-Brown and R. Darney on October 11, 1967. The examination consisted mainly of sampling of known areas of mineralization within bulldozer trenches. A total of nine mineral localities were sampled.

The mineralization consists of pyrite and chalcopyrite occurring both as disseminations and minute stringers in a heavily chloritized diorite. The degree of chloritization varies from one locality to another, and the diorite also appears to verge upon a hornblendite. However, the heavy chloritization may cause some confusion in an accurate description of the original rock type.

The nine mineral localities sampled were spaced over an area approximately 700 feet long by 150 feet wide. Sampling was carried out by taking representative grabs in each locality. The following is a list of assay results obtained:

<u>Sample No.</u>	<u>Cu(%)</u>	<u>Ni(%)</u>	
0138	0.57	0.10	
0139	0.45	0.24	
0140	0.07	0.06	
0141	0.77	0.18	
0142	0.36	0.10	
0143	0.06	0.05	Chip over 100 feet.
0144	0.03	0.06	
0145	0.69	0.11	
0146	0.05	0.05	

A comparison between these results and those obtained by Bethex Explorations is shown on the accompanying map.

Discussion and Conclusions

Although the mineralization on the property is quite widespread, it consists mainly of pyrite with only minor chalcopyrite. No pentlandite was observed to account for the Nickel values. The assay results obtained from our sampling proved interesting, but marginal. The average grade of grab samples from mineralized areas were Cu 0.34, Ni 0.10. One high grade sample was run for Pt and Pd, but none was detected.

An IP survey performed by Bethex located an MF anomaly to the northwest of the examined area and another faint one in the general vicinity of the showings. The fact that this latter anomaly is faint, although sulphide content in the rocks seen at the nearby showing was high (1 to 2%), suggests that the mineralization may be rather limited in extent. The sulphides may be accruing in a number of pockets or zones for which the control has yet to be established.

For this reason, the likelihood of finding ore in the volume that the low assays would warrant for economic exploration seems remote, at least in the part of the claim group under discussion.

The area of the stronger IP anomaly near the N.W. corner of the property was not examined.

SIMILKAMEEN MINING DIVISION

BRENDA LAKE

Part of the Maria group (T. C. Explorations Ltd.) and some claims held by BrenMac Mines Ltd. lie in the Similkameen Mining Division. These properties are reported under Osoyoos Mining Division, pages 187 and 185.

Copper-Molybdenum

Pinta, Copco, May (49° 120' N.E.) Company office, 302, 550 Burrard Street, Vancouver 1. The Pinta, Copco, and May groups, comprising 133 recorded mineral claims, are about 4 miles southwest of Brenda Mines Ltd. Access is by 20 miles of road from Peachland. In 1966 work consisted of a reconnaissance magnetometer survey and soil-sampling and some bulldozer trenching. For two months a crew of five men was employed under the direction of A. D. Wilmot.

Fort Reliance Minerals Limited
By David Smith

TROUT CREEK

Part of the X and D groups (Lodestar Mines Ltd.) lie in the Similkameen Mining Division. This property is reported under Osoyoos Mining Division, page 187.

Copper

TULAMEEN

PR, David, Skidoo (49° 121' S.E., N.E. and 49° 120' S.W.) Company office, 1821, 355 Burrard Street, Vancouver 1. The property, comprising 78 recorded claims, lies along Jim Kelly Creek, a southeasterly flowing tributary of the Tulameen River, 13 miles southwest of the village of Tulameen. From the Tulameen River road a jeep-road leads about 5 miles to the Bethex camp at elevation of about 4,150 feet. Jim Kelly Creek is on the southeastward slope of Coquihalla Mountain, in the Hozameen Range of the Cascade Mountains.

Bethex Explorations Ltd.
By N. D. McKechnie

Work done on the claims during 1966 was 4½ miles of access road built; topographical, geological, and geophysical (induced polarization) surveys made; 35 trenches totalling 18,060 feet excavated; and five diamond-drill holes totalling 2,832 feet drilled.

The general geology of the area is shown on Geological Survey of Canada Map 737A, Hope. Eagle granodiorite underlies the Jim Kelly Creek basin; southwest of the creek the granodiorite is overlain by the younger Lower Cretaceous Pasayten sediments.

The mineralization occurs only in the igneous rocks. The principal showings are on the northeastward side of and from 300 to 1,000 feet from the creek, on the David Nos. 1, 2, 3, and 4 mineral claims.

The rock in which mineralization occurs differs markedly from the Eagle granodiorite as described (*Geol. Surv., Canada, Mem. 26, pp. 76-82*) in that it is extensively altered and contains hematite rather than magnetite as a minor constituent. In hand specimen the rock is medium to coarse grained, crystalline, and unevenly porphyritic, with a dark-green matrix. In thin-section it is seen to be composed largely of secondary minerals, urallite, chlorite, calcite, garnet, saussurite, secondary orthoclase, and an optically positive hornblende, possibly cummingtonite. It is an altered rock which may represent either a structurally controlled zone of alteration within the Eagle granodiorite or an inclusion of an older igneous rock.

Near the creek, and only a few tens of feet from an outcrop of Pasayten sandstone and shale, there is a small exposure of recognizable granite, but its contact with the altered rock was not seen.

Pyrrhotite and chalcopyrite occur erratically in the metamorphic rock. Higher concentrations of the two sulphides seem to favour those parts of the host rock having higher proportions of ferromagnesian minerals.