

dump) from a surface exposure located approximately 55 metres south of the portal. Another 45 to 91 tonnes of ore exists in a number of small dumps along the surface expression of the vein system which has been traced by trenches and shafts over a length of over 180 metres.

The property is underlain by altered andesitic rocks of the Hazelton Group which have been intruded in the vicinity of the showings by an irregular mass of quartz porphyry. The showings consist of a series of several quartz veins and quartzose shear zones, ranging in width from a few centimetres to 0.75 metre. These are exposed in a section about 180 metres long and 137 metres wide. The veins strike generally northwest and dip steeply northeast. The veins are irregular in both strike and dip, and pinch and swell and locally split into stringers. Mineralization consists of pyrite, sphalerite, galena, tetrahedrite, chalcopyrite, and native gold within the quartz veins.

The following samples were collected by the writer.

Sample No.	Description and Location	Au <i>ppm</i>	Ag <i>ppm</i>	Zn <i>per cent</i>	Cu <i>per cent</i>	Pb <i>per cent</i>
LG- 3	ZnS+py+tetrahedrite in 15-cm quartz vein, main dump	116.4	248	>5	0.4	0.5 - 1
LG- 6	Py-ZnS+tetrahedrite in 7.6-cm quartz vein, main dump	71	187	2 - 3	0.6	.25
LG- 9	Py-PbS+ZnS+tetrahedrite in 10-cm quartz vein, main dump	41	263	>10	0.6	>5
LG-12	Py-ZnS+PbS in 10-cm quartz vein, main dump	48	212	>10	0.6	.25
LG-15	Py-PbS-cpy in 15-cm quartz vein, 'new' dump	57	126	>10	0.4	>2
LG-16	Py in 13-cm quartz vein, surface dump near shaft 3	11	>10	0.3	0.05	0.2
LG-18	Fine-grained PbS+ZnS in 8-cm quartz vein, surface dump near shaft 3	105	235	>15	0.2	>5

## REFERENCE

*Minister of Mines, B.C., Ann. Rept., 1938, pp. 15-20.*

## BOYA (94M/3W, 4E, 5E, 6W)

The Boya molybdenum-tungsten prospect, being explored by Texasgulf Inc., is located 125 kilometres southeast of Watson Lake, approximately 10 kilometres northeast of the confluence of the Kechika and Turnagain Rivers. During 1979, a 15-person camp was set up on the north shore of Graveyard Lake. Geochemical, geophysical, and geological surveys were conducted, and six diamond-drill holes totalling approximately 1 380 metres were completed.

Several zones of mineralization are exposed over a northwesterly trending ridge for a length of over 2 500 metres. Molybdenite is best observed in the Main Face showing. Other (dominantly tungsten) showings include West Hill, Nighthawk Hill, and Paint Can Hill.

A complex stock of quartz-biotite-feldspar porphyry has intruded a sequence of probable Lower Paleozoic metasedimentary rocks which include in apparent stratigraphic sequence (oldest to youngest) porcellanite (thinly banded skarnified siltstones), skarn (diopside-quartz-garnet-pyrrhotite-scheelite-molybdenite), volcanic tuffs, and massive limestone. An intense quartz stockwork has developed both within the intrusive rock and the hornfels. Alteration includes intense sericitization and biotitization. Mineralization occurs as two distinct types:

- (1) ribbon-banded molybdenite-bearing quartz veins (no rosettes) with minor scheelite and chalcopyrite and trace bismuthinite, galena, and sphalerite in quartz-biotite-feldspar porphyry and adjacent hornfels, and
- (2) stratigraphically controlled skarn with disseminated and semi-massive pyrrhotite and lesser chalcopyrite in pods. Scheelite and minor amounts of molybdenite also occur within the skarnified beds.

### STAR 9 (103P/1W)

The Star 9 (Morning Star) molybdenum prospect is located north of the Skeena River approximately 3.5 kilometres northeast of Woodcock. The property was explored during 1927 and 1931 for its vein lead-zinc-silver potential. Several old trenches and test pits and a couple of old adits were located between 450 and 570 metres elevation. A granodiorite stock contains disseminated and fracture-filling molybdenite and intrudes sandstone, argillites, and conglomerates.

Geochemical, geophysical, and geological surveys were to be carried out in the fall by Newmont Exploration of Canada Limited under an option agreement with Earl Sargent.

The following samples were taken by the writer.

Sample No.	Description Location	Au	Ag	Cu	Pb	Zn	Mo	Sn
		ppm	ppm	per cent				
M-S- 1	high grade, 1490 adit	1.7	45	0.073	5.0	4.07	*	-----
M-S- 3	high grade, 1490 adit	1.4	120	0.12	9.4	6.37	*	0.01
M-S- 9	west trench, 1740 level	<1	150	0.11	3.6	9.41	*	0.015
M-S- 7	west trench, 1740 level	-----	-----	-----	-----	-----	0.54	-----
M-S-12	west trench, 1740 level	-----	-----	-----	-----	-----	0.07	-----
M-S-15	east pit, 1880 level						trace	

\*No determination.

### REFERENCES

*Minister of Mines, B.C.*, 1927, p. 127; 1929, pp. 154, 155; 1930, p. 138; 1931, p. 72.

### SURPRISE CREEK (104A/4E, 5E)

The Surprise Creek molybdenum prospect is located approximately 25 kilometres northwest of Meziadin Lake, immediately to the east of Mount Patullo. In 1979 Falconbridge Nickel Mines Limited set up a base