

MEMOIR 296 (1940's)  
Ass Rpt 591

Chutine 1,2,3 claims

JACKSON AND LADY JANE CLAIMS

On the mountain between Chutine River and Conover Creek, a discovery of copper, lead, and zinc sulphides was made in 1929 by Frank A. Jackson. Seventeen claims were staked by him along the mineralized zone, and subsequently the Lady Jane group of five claims was staked farther along the zone. Access is by a trail that begins about  $\frac{1}{4}$  mile above the mouth of Chutine River and continues up Chutine Valley 4 or 5 miles to the northeastern end of the staked zone; thence it extends another 4 miles or so along the centre of the staked ground to end approximately in the centre of the Lady Jane group.

The rocks are Triassic flows, breccias, and tuffs of a general andesitic composition, striking a little north of east, with steep dips. From a point on the

ridge at an elevation of about 1,750 feet, a rusty zone can be traced south-westerly for about 3 miles, mainly just south of the crest of the ridge, but on the southwest end it falls considerably below the crest and is lost beneath the drift filling the wide valley of Conover Creek. Near the head of the creek, however, a zone of somewhat similar nature, with about the same strike, appears; so that the zone may be continuous for several miles beneath the valley, and, in fact, may have determined the position of the valley, as the most altered sections are highly fissile and more easily eroded than the adjacent rocks.

The width of the zone is not definitely known at any place, but appears to have a maximum width of 1,500 feet. The rock materials of the zone have been partly replaced by carbonates, quartz, white mica, and chlorite, and are locally impregnated with pyrite and other sulphides. In places replacement has been most intense near the centre of the zone, and becomes gradually less toward the edges. In other places intense alteration may be confined to bands of varying size, separated by bands or horses of relatively unaltered rock. The addition of pyrite is not dependent on the extent of alteration; the pyrite-rich parts may or may not be extensively altered.

Within this great zone there are irregular, quartzose masses carrying much chalcopyrite, galena, and sphalerite. These, by reason of their quartz content, are resistant to erosion and hence stand high. Many of them resemble boulders in a matrix of the fissile, rusty, volcanic rocks. Others, larger, are more or less lenticular. In places, similar material occurs as a cement for breccia, or in irregular veins that may extend beyond the zone into apparently unaltered rock. There is no apparent system to their distribution.

It would appear that the altered zone was formed first, and that at some later date it was broken by further movements that permitted access of the sulphide-bearing solutions. These movements, however, do not seem to have formed any well-defined channel in which a body of commercial size might be deposited.

The bodies formed have been explored by many small open-cuts, which, however, are large enough to demonstrate the small size, irregularity, and discontinuity of the masses of ore. By 1930 no single mass had been found that promised to be part of a commercial body. Nor are the masses numerous enough to suggest that any part of the zone can be mined as a whole. A fairly representative sample of the better material found in the small masses assayed: gold, 0.01 ounce a ton; silver, 1.74 ounces a ton; copper, 1.03 per cent; lead, 5.50 per cent; and zinc, 7.76 per cent. Other samples reported by J. D. Mandy in the Annual Report of the Minister of Mines for British Columbia, 1929, page 115, gave very similar results.