

CHUTINE CLAIMS Ag-Au-Pb-Zn-Cu PROSPECTNTS 104 G 12E

The Chutine property ( 3 claims, 30 units) lies along Conover Creek and the Chutine River, approximately 3km (2 miles) above the latter's junction with the Stikine River. It is located approximately 36 km (22 miles) below the town of Telegraph Creek and west of the Stikine River, along the south side of the Chutine River Valley. Latitude and longitude are 57° 42' N and 131° 42' W.

This prospect was staked by C. Graf and recorded on August 12, 1982. The original mineral discovery was made in 1929 by a local Stikine River prospector named Frank Jackson. Dr. Kerr visited in 1929 during his Stikine River geological mapping survey and discusses it in GSC memoir 246 on pages 76-77.

Dr. Kerr was impressed within an extensive alteration zone within which the veins and mineralization were located. He describes the altered zone as follows:

"From a point on the ridge at an elevation of about 1,750 feet, a rusty zone can be traced southwesterly 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.

He also reports a representative assay of the better material to contain: .01 oz./T Au, 1.74 OZ/T Ag., 1.03% Cu, 5.5% Pb, 7.76% Zn.

The prospect was examined by J.D. Mandy of the B.C. Department of Mines and is described by him in the 1929 Annual Report, p.115 as follows:

"Three well-defined shear-zones occur in a light-coloured pyritized volcanic associated with gabbro. Two of the zones, 3 to 4 feet in width and several hundred feet apart, strike northwesterly and dip steeply south. What appears to be the main zone, in which undelimited widths up to 10 feet are exposed, strikes approximately northeast along the crest of the ridge for a distance of about 700 feet. The outcrops are intensely oxidized, but in the solid places show encouraging mineralization of zinc-blende, some galena, chalcopyrite, malachite, and azurite, with a little grey copper. A sample across 3.5 feet of quartz vein mineralized with pyrite, chalcopyrite, specularite, and some galena assayed: Gold, 0.02 oz. to the ton; silver, 2.4 oz. to the ton; copper, 0.4 per cent; lead, trace. A sample of the solid material on the dump from an oxidized outcrop 5 feet wide at 3,650 feet altitude assayed: Gold, trace; silver, 4.8 oz. to the ton; copper, 1.6 per cent; lead, 1 per cent; zinc, 5 per cent. A sample of the solid material from the dump of an oxidized outcrop 7.5 feet wide assayed: Gold, trace; silver, 3 oz. to the ton; lead, 1 per cent; zinc, 6 per cent. A sample from 4 feet of solid vein-matter from a heavily oxidized outcrop totalling 10.2 feet in width assayed: Gold, trace; silver, 3 oz. to the ton; copper, 0.4 per cent; lead, 0.8 per cent; zinc, 6 per cent. The showing warrants systematic exploration and the area, particularly the lower elevations, should be further prospected."

In 1964, during the Stikine porphyry copper rush, the property was restaked and prospected by Silver Standard Company and Asarco Ltd. (BCDM Assessment Report #591). Their geologists also recognized the alteration zones, one of which is described as a,

"conspicuous zone of silicification and pyritization at least 1000' wide which trends northeasterly and outcrops along the north ridge. This zone includes both flows and pyroclastics. Alteration and pyritization vary widely. There is no obvious structural control, for example, extensive or intensive shearing and/or shattering and brecciation. Alteration, etc., may be due to proximity to underlying hidden intrusives which have

selectively altered and pyritized certain horizons in the general area of the axial plane of the assumed tight syncline. The alteration also seems to be locally controlled by transverse fault structures. Sulphide mineralization is confined to pyrite which occurs as disseminations and on joint planes. Minor barren or pyritized quartz gashes and bunches are scattered throughout these zones of alteration. Grains of accessory magnetite occur in the loss altered tuffs and flows but progressively decrease with the degree of alteration. Weathering and forest fires have accentuated the pyritized zones into rather conspicuous, rusty outcrops."

The assessment report also describes the mineralization and workings in detail:

**"Lady Jane** - vein has been explored by a series of open cuts for a strike distance of 110' and vertical range of just under 300'. Main open cut is at 3600' elevation. There is evidence that a tunnel was started 50' southeast of this to crosscut this showing at about 25' depth but the tunnel is caved and probably was short of its objective. Some cuts on the southern projection of the vein apparently failed to pick up any strong extension in this direction, although these cuts are now partially covered. To the north the various workings, some in poor shape, show the irregular nature of the quartz-carbonate and sulphide mineralization. Although irregular in detail the trace of this vein is amazingly straight and hence it is felt that it follows a minor transverse fault structure. Maximum average width of vein would be less than 5' and average value not more than 0.005 oz. Au, 0.50 oz. Ag, and 2% combined Pb, Zn, Cu. Both extensions are drift covered but there is no reason to expect anything better than already exposed. Average strike of vein is northerly and dip about 60° westerly. The only other fracture material in the Lady Jane area are some inconsequential occurrences which seem to go nowhere. The silicified and pyritized replacement alteration hereabouts is of no economic importance.

For the sake of description, the Jackson Showings are considered to include all those east of the crest of the ridge around 3800' elevation, that is, those in the eastern half of the map. Three unimportant veins, under 0.5' in width at best as exposed, occur in the western 900' and show typical gangue and sulphide mineralization. Several veins occur 500' to 1300' further east and have been explored by open cuts which are now partly sloughed. The strongest of these (Sample No. 87) has not been traced beyond the single open cut on it. In this several lenses and stringers of typical vein filling occur in twisted fashion with no assurance that these extend any distance. On a bluff 500' east of the above series of fractures, there is a vague zone up to 100' wide made up of a discontinuous main vein up to 5' wide (Samples 91, 92, and 93) and some minor, likewise discontinuous fractures. About 500'

northeast of this there is a bunchy occurrence of typical vein material. The majority of the Jackson veins strike northwest to northerly in contrast to the Lady Jane where the strikes are generally northerly to north northeast."

The alteration zones are significant features of the property and should be further explored because similar zones are common around both epithermal vein systems and volcanogenic massive sulphide deposits. The property should be stream silt sampled as well as soil sampled on a relatively detailed grid, particularly along the easily recognizable alteration zones. The samples should be analyzed for Au, Ag, Cu, Pb, and Zn.



---

Chris Graf, P. Eng