

FILE

LC Claim Description and Summary Geology  
by Graeme Evans

827026  
Last chance  
92I

In February 1987 C. Burge compiled a series of reports and discovered the area around the Last Chance showings was available for acquisition. He recognized the favourable epithermal - Au environment and recommended staking.

On February 27th the following claims were recorded:

<u>Claim</u>	<u>Record #</u>	<u># of Units</u>	<u>Location</u>
LC #1	6940	20	50°56' Lat. 120°54' Long.
LC #2	6941	16	50°57' Lat. 120°54' Long.
LC #3	6942	20	50°57' Lat. 120°56' Long.
LC #4	6943	15	50°56' Lat. 120°56' Long.
LC #5	6944	20	50°54' Lat. 120°57' Long.

These are located on NTS 92I/16W and cover an area to the East of the Deadman River and to the north of Criss Creek.

The area has several major Tertiary faults crosscutting and with extensional forces, producing many Horst-Grabens. According to Monger (O.P. 980) the basement rocks are dominantly Triassic Nicola group intermediate volcanics with Paleozoic augite-porphyry schists in the area of LC #3. On LC #1 and LC #2 there is a large area of Jurassic conglomerates which host the Last Chance showings, in the NE corner of LC #4. These are all overlain by Eocene Kamloops Group volcanics with minor Eocene sediments.

W. E. Cockfields (GSC Memoir 249, pp. 103-104) describes the Last Chance showing as a shear zone with Cinnibar veinlets. This shear zone ranges from 6 to 17 inches with at least 5 feet of surrounding carbonate alteration. Dolomite veinlets are common with cinnibar on fractures grading up to .04% Hg. Tetrahedrite was noted with malachite and azurite present.

Placer recently held claims over the present LC 1-4 claim group. A NW trending grid (Jan 1 Grid) was established on the Jan claims (Assess. Rept 9681) over a creek just to the west of the Last Chance showing. A magnetometer survey indicates a dyke like body underlies the creek. A soil

survey found several anomalies trenching along the creek. They found a correlation with Au and Cu with gold anomalies to 124 ppb from a background of <20 ppb. Another correlation was Hg with Sb and As. The Hg anomalies ranged up to 160 ppb from a background of >10 ppb.

Another property recently worked on is the DM group of which LC #5 covers the southern portion. These claims cover very conspicuous gossans up the Deadman River. Assess. Rept 9729 deals with the Hoodoo grid which covers a gossan very similar to those on LC #5. The alteration consists of Chalcedony, epidote and calcite veinlets in clay altered rocks with a strong hematite presence.

The rocks consist of a basement of Nicola volcanics which are overlain by several types of Eocene rocks. These consist of subaerial dacites and rhyolites cut by felsic intrusive dykes all of the Kamloops group. There are also conglomerates, sandstones and shales of the Tranquille beds. These are all overlain by Kamloops Group basalts.

A soil survey was conducted with several zones of 70 to 80 ppb Au (maximum 435 ppb Au) anomalies outlined. Hg anomalies are striking with some anomalies +10,000 ppb. Thresholds were considered Hg -80 ppb, As - 300 ppm, and Au - 50 ppb. Lithochemical samples also provided anomalous samples. Anomalous values are 20+ ppb Au, 500+ ppb Hg, 300+ ppm As, Cu as high as 1000 ppm and Mo as high as 96 ppm.

Assess. Report #10215 (D. Gamble B.P.-Selco) details one diamond drill hole in the middle of the Hoodoo grid. Au values were discouraging with a maximum value of 103 ppb Au over several 2m. sections. Sb was anomalous in the upper portion of the 272m. hole, while Hg was anomalous 10,000+ ppb over much of the hole. Assess. Report #8191 (D. Gamble - Selco) covers the geology of DM 1-3 (including LC #5) and outlines several anomalous shear zones and mentions that split rock is a Tertiary breccia pipe.

Asarco has worked on claims to the NE of LC 1-4 covering a fault zone in Criss Creek with strong Hg anomalies. Their recommendation was to drill the main fault. They also believe Mongers Jurassic conglomerate to be Tertiary.

The Cayuse claims between LC 1-4 and LC 5 are optioned by Packard resources who established a grid and sampled a N-S trending gully believed to be a fault. Old reports mention an assay collected out of the gully to run 8.22 oz/T Ag but the location was not found.

The soil survey (A.R. #11477) found elements ranged as follows: Au 1-47 ppb, Ag 0.1-0.6 ppm, As 5-478 ppm and Hg 50-43,000 ppb.

Assess. Report #13624 describes 3 old adits south of Criss Creek on the Cayuse claims. These adits expose E-W trending veins in a shear zone which assay 4 gm/T Au, 290 gm/T Ag, 1% Cu and .27% Pb.

The difficulty with surveys on LC 1-4 is the lack of exposure (2-5%) while LC #5 has at least 50% and is amenable to air photo assisted mapping. The systems are in an ideal Au-epithermal environment and cover large areas that warrant detailed work. Lithogeochemical sampling could include Au, Ag, Hg, Sb, Cu, (Mo?), As.