82F/6E
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GEOCHENICAL REPORT
LAST CHANCE #1 GROUP OF MINERAL CLAIMS
4 miles east of Ymir, B. C. $49^{\circ N} - 117^{\circ C}$ (S.E. quadrant)
by E. Livingston, B.A.Sc. in Geol Engr. Supervised by R. C. Macdonald - P. Eng.
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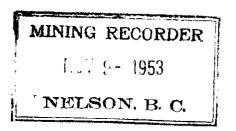
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MAP IN POCKET

Last Chance - Soil sample Assays - No. AXL-BC-9-7 scale 1" - 100*



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LAST CHANCE #1 GROUP - YMIR. B. C.

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INTRODUCTION

The Last Chance Group of claims is located about 4 miles east of Ymir, in a small straight valley trending east of north between Bear (Oscar) Creek and Wren Creek, a tributary of Wildhorse (Ymir) Creek. Previous geological mapping has shown that the valley follows the contact between quartzites on the west and dark argillites on the east. This contact is believed to be a fault contact, the fault being located along the east side of the valley.

There is very little outcrop along the valley except where the slope is very steep. The overburden is mostly glacial debris and appears to be of a fairly porous nature. It was decided to run a soil sampling survey to determine if any high zinc values might be found that could be used as a guide to further exploration of this property.

LAYOUT OF SAMPLING

Previous work on the Last Chance has indicated that the most promising area for mineral deposits lies on the eastern side of the valley. Some zinc mineralization has already been found in tunnels driven in 1949. This mineralization is thought to be localised along the "Oxide" fault described by McAllister # along the east side of the valley.

X Ymir Map-Area, Geol.Surv. Canada, Paper 51-4, by A.L. McAllister.

The soil samples were taken at 50' intervals along lines running more or less easterly from the bottom of the slope on the east side of the valley. The lines were spaced at 100' intervals along the valley and were accurately located by theing in old survey and plane table stations. The 50' intervals were paced out on gentle slopes and estimated in places where the slope was very steep. In most cases five samples were taken 'on each line with six samples being taken in a few places. In addition some samples were taken at intervals along a road on the Last Chance 3 and 4 claims as shown on the accompanying map.

When this work was started in August of this year it was not known whether soil from surface would carry zinc values corresponding to soil from below the surface. To check this, samples were taken on surface and from 2 ft. below surface in an area on Last Chance #7 claim (which area is not included in this report) where good zinc values had been found in a short adit. The subsurface samples were taken by using a piece of in pipe beveled at one end. A hole about 2° deep was made with a steel bar, and the pipe was driven into the bottom of the hole for several inches thus procuring a small sample. This test showed a definite anomaly near the area where the zinc had been found in the adit and the anomaly showed in both the surface and subsurface samples. The anomaly is accentuated in the subsurface samples as compared to samples from surface.

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It was concluded that surface soil sampling would disclose sufficiently high anomalies (if any other sub-surface anomalies should exist) to attract our attention. Therefore, all samples taken in the area dovered by this report were taken from surface since the time required for this is much less than that for sub-surface. The loose vegetable material was scraped away from the surface before the grab sample of soil was taken. Extreme caution was exercised to ensure that no contamination occurred, and the soil was collected in clean, new paper bags. Some 140 samples were taken on the Last Chance No's. 3, 4, 5, and 6 claims during eight days.

ASSAYING

The soil samples were all assayed for zinc at the Biogeochemistry laboratory at the Dept. of Geology of the University of B. C. under the direction of Dr. De Levault. The assays were run using a dithizone method for zinc. All rejects were kept so that check assays may be run where results are questionable. A charge of \$1.50 per assay was made by the laboratory.

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RESULTS

The assays have been plotted on the accompanying map #XL-BC-9-7. The numbers represent parts per million (abbreviated ppm) of zinc in dry soil. It may be seen that there is considerable variation from sample to sample. It is therefore difficult to define an anomaly. One method is to set an arbitrary value above which results are considered to be anomalous. However a single high value can scarcely be called an anomaly so that is better to define an anomaly as an area where two or more adjoining samples assay over an arbitrary value. An arbitrary level of 450 ppm has been chosen as the minimum level for an anomaly. Areas of two or more assays over 450 ppm have been outlined in red on the map.

There are five small anomalies near the south end of Last Chance No. 5 mineral claim. Three of these areas are left open because an insufficient number of samples was taken to outline the limits of the anomalies. There was not sufficient time to take the necessary samples to include them in this report. These anomalies were not particularly high, the highest value being 920 ppm near the No. 5 bulldozer cut on Last Chance No. 5 claim. Some rather large bulldozed trenches in this area indicated heavy overburden. The thickness of the overburden may explain why the anomalies are low

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compared to those further north where the overburden is much thinner.

At the north end of Last Chance No. 5 claim values are high and continue to be generally over 450 ppm for about 600 ft. to the north. These high zinc vlaues coincide with known zinc values reported by the original owners in the B-1 adit.

No significance has been attached to individual erractic high values, although there are very few of these. In general the assays appear to be either consistently low or high in any given area, a phenomenon that lends weight to the value of the method as applied to exploration on the Last Chance property.

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