

metals along the lead. The fissured zone is concealed above the short tunnel and its length is not known.

The Bear River greenstones, near their contact with the Nass argillites, are heavily impregnated with iron pyrites in places, but so far no workable deposit of valuable minerals has been found.

PLACER DEPOSITS.

From Porter creek a ridge rising about 2,000 feet above the valley bottom was crossed to Willoughby creek, on which a number of placer claims have been staked.

Willoughby creek issues from a broken, branching glacier, terminating at an elevation of approximately 2,300 feet, and is a large, rapid stream usually from 30 to 60 feet across, with an average grade of 225 feet per mile. A large branch from the south joins it $3\frac{1}{2}$ miles from the glacier. The valley for $1\frac{1}{2}$ miles below the glacier is wide and bottomed with gravel flats. Below that it narrows in, and in places is confined in rock canyons often bordered by narrow benches.

Willoughby camp is situated about 4 miles from the foot of the glacier. The creek here has cut a shallow box canyon through the shales and tuffs of the Nass formation. A rock terrace on the left bank, about 200 feet wide and 20 feet above the water-level, is covered by 25 feet of coarse gravel.

Some coarse gold is reported to have been found in a bar in the canyon. No work had been done on the bar up to the time of my visit, owing to the continual high water, and it will evidently be difficult to work at any time, as the stream is large, rapid, and its channel filled with boulders. A tunnel has been driven part way across the terrace in the hope of finding a pay channel at that level, but so far without success.

A number of claims have been staked on Willoughby creek above and below Willoughby's camp, on Little White river, and on Little Pat creek, a small foothill stream, but no effective work has been done on any of them.

Some gold occurs on all the streams issuing from the mountains along this portion of the Coast range. Moderately fine, flaky, but still rough gold in small quantities was panned out on Nelson creek, close to the foot of the glacier, and at other points. It is quite possible, although not yet proved, that concentrations may occur in the lower reaches of some of the streams, but unless these prove to be very rich the cost of working them, unless situated above the water-level, would be prohibitive. The streams are all large, are practically continuous rapids throughout, and, as they head in glaciers, high water lasts until late in the season.