

talls of Rock Creek on the property and should considerably lessen the cost of crushing.

The vein has a north and south strike and dips about 45 degrees near the surface, but has now straightened to about 80 degrees east. The ore is a chalky looking quartz well mineralized with pyrites. It occurs in a talc ledge matter which also contains cubes of pyrites, and is found mostly near the hanging wall. Assays of from \$12 to \$72 have been obtained from the pay streak.

Across the creek and a little lower down are the workings of the Victoria mine, owned by the Rock Creek Gold Mines Company, Ltd. The Victoria and the Old England, as I have mentioned before, are the oldest locations in Camp McKinney.

In 1896 and 1897 about 1,000 feet of development work was done. An incline shaft 110 feet down ran into base ore. No. 1 tunnel, run in 198 feet from the side of the Rock Creek gulch, struck the vein which was drifted on for 200 feet. In No. 2 tunnel the vein was found 205 feet in and a winze sunk for 106 feet. Thirty tons were stoped out and shipped, giving returns of \$50 gold, \$2.00 silver and two per cent. lead.

There are two undeveloped veins of which little is known, but the main one has been opened up sufficiently to demonstrate that if the ore is found in place it will pay well to mine. The ledge is from five to six feet between walls and contains a bluish quartz with pyrites, blende and a little galena. This quartz is from a few inches up to 20 inches wide, and is badly broken. Work has been suspended a number of years, but it is nevertheless unfortunate that in view of the circumstances development was discontinued at so early a stage.

Last November some excitement was created by the report that free gold had been struck on the Dayton, a claim lying on the "hog's back," which runs southward about two miles due east of the camp. The gold occurred in "gossen" and was found in large quantities where the vein was opened up. "Colours" could be obtained by "panning" any of the rock. The claim was located a year ago and shortly after the "strike" of free gold, was bonded and sinking was commenced. The ore proving refractory the bond was allowed to lapse, but the owners of the claim continued the shaft down to a depth of 50 feet and cross-cut twelve feet east to the vein. Surface cross-cuts were also made, in all of which rock was found that would "pan." The strike of the vein is north 40 degrees west and it dips about 70 degrees east. Assays of \$72, \$96 and \$812 have been secured from the surface, but, of course "specimen" assays are hardly satisfactory evidence as testifying to the value of a prospect or mine.

On this "hog's back" there are many other properties with good showings of base ore, but on these so far very little development work has been done, and but little can be accomplished without the aid of outside capital. The Dayton, Le Roi, War Eagle and many other claims offer good inducements to the capitalist prepared to expend an adequate sum for their proper exploitation and development.

Camp McKinney in the past has not received that attention which in view of the many excellent surface showings to be found in the neighbourhood it merits. The only mine, the Cariboo, which has been extensively developed, has rendered an excellent account of itself, as all who have been fortunate enough to be shareholders have every reason to know. The Water-

loo, Fontenoy and other mines, on the development of which the expenditure has been very much less considerable, will ere long prove profitably productive, while there are unquestionably many good claims elsewhere in the camp which would well repay investigation. It, however, can only be a question of a short time ere these facts are more widely recognized.

#### DEVELOPMENT ON TEXADA ISLAND.

(By Wm. M. Brewer, M.A.I.M.E.)

WHILE the geological formations on the northern end of Texada Island are very similar in some respects to those on the western coast of Vancouver Island, yet there is one very marked difference with regard to the values carried by the ores on Texada as compared with those on Vancouver Island. The difference is in the gold values carried by the Texada gold-copper ores.

So far as work has demonstrated to the present time, the copper gold ores of Vancouver Island rarely carry more than \$2.00 per ton in gold, but these ores on Texada Island usually average \$8.00 or \$9.00 per ton in gold, and very often carry more than one ounce per ton in gold. Of the southern portion of Texada Island hardly anything is known with regard to its mineral resources or geological formation. So far as one can judge while travelling up the Straits, the mountains on this portion of the Island are not only very much higher than on the northern portion, but the timber and underbrush are very much more dense. These conditions account for the fact that this portion of the Island has not been prospected.

It would appear as though the geology in the Southern portion differs considerably from that in the northern portion. The writer's reason for stating this theory is that the ore deposits which have already been discovered southerly from an imaginary line drawn across the Island from Van Anda to Davies Bay, carry very much heavier iron contents than those north of this line. In fact the ore in the Raven prospect near North East Point is principally iron, while on the west coast are located the very extensive deposits of magnetite which carry practically no copper values and which have been prospected to a depth exceeding 200 feet at which depth the writer is reliably informed, the ore is to all intents and purposes a Bessemer iron ore. Northerly from this imaginary line the principal ore deposits are copper carbonates and bornite, the latter even to a depth of 450 feet; actual work having demonstrated this fact in the Copper Queen mine. The ores from this northern portion are very much more silicious than those which have been so far discovered south from the Copper Queen.

A change in the geology occurs about 2,500 feet southerly from the Copper Queen shaft, and on the mineral claim known as the Little Billy. At that point a quartz syenite flanks the metamorphosed lime stone, which is apparently the oldest rock, at least on the northern portion of Texada Island. As one proceeds towards the extreme north end of the Island at Blubber Bay, he finds this lime stone is the predominating rock with intrusions of felsite and diorite dikes. The latter appear to belong to a more recent period than the former, as it is found in the underground workings that the diorite dikes usually cut through the ore bodies which occur on the contact between the lime stone and felsite.

There has apparently been a still later movement,