

Mr. W. R. Jewell, the oil geologist employed by the Spartan Oil Company, drilling at Burnaby, has recommended the suspension of diamond drilling and substituting a standard rig. Acting on his advice the Company has let a contract to drill a standard hole 3,000 feet deep. The geologist is confident that oil in commercial quantity will be encountered on the Spartan property.

We heard recently of efforts toward lode mining in the Barkerville district and that a deal had been completed looking to this class of mining with immediate development getting under way. Mr. J. P. McConnell, writing from that town to the Vancouver Province under date of September 10th says in this connection:

After 10 years of expectancy and more or less desultory prospecting, actual mining is about to be commenced on what is believed to be the "mother lode," which fed the gold placers of the Cariboo. The first deal to be made with outside capitalists for the development of Cariboo's first lode mining operation has just been completed and work will be commenced forthwith. A crew of 20 men is now being engaged and this will be increased during the winter as underground work is developed.

The story of the discovery of the lode and the prospecting of it for the yellow metal is one of the romances of mining, although the actual process was one of hard and systematic labor.

To Elmer E. Armstrong more than to any other man is due the credit for the discovery and demonstration of the lode. Mr. Armstrong conceived the idea that the gold of the placers was of local origin. His theory was based upon the fact that much of the gold recovered in washing is sharp, very little worn and often associated with the original quartz. True, a good deal of the gold is worn smooth and sometimes flattened, but it must be remembered that virgin gold is a very soft metal and not much grinding among gravel and pounding over the bedrock of a stream is required to wear it smooth and flat.

Working on his theory, Mr. Armstrong prospected with a pan toward the summits of some of the richest creeks of the old placer days. He panned the gravels of the upper reaches and when he found colors he prospected further

until the gravel failed to yield. By marking these zero spots he soon found, but below which such rich small streams as Grouse Creek, which yielded \$3,500,000 in placers; William Creek, with a \$25,000,000 yield; McCallum's Gulch, \$300,000; Conklin's Gulch, \$2,500,000, and others, debouched.

This zone formed the summit of those placer creeks, or was cut through by them. Mr. Armstrong noted, too, that no creek which did not originate in that zone, ever yielded any gold. But in most cases the ledge was hidden under an overburden of drift and debris, but his faithful gold pan infallibly directed him where to dig.

During the 10 years he pursued his quest, he uncovered two quartz ledges and traced the zone for a distance of nearly 20 miles, the strike being northwest by southeast. The ledges prospected by him and his associates. Messrs. F. J. Tregillus, J. H. Blair and Pat Carey, are respectively 17 feet and 42 feet in width. Assays run from \$17.50 to \$19, while as high as \$500 to the ton has been obtained.

For a depth of 20 to 30 feet the ledge matter is much decomposed and the gold is free. By grinding a piece of the rock in a mortar and panning the powder fine gold is readily recovered in the decomposed stuff. Below that depth the ore turns base and will have to be either concentrated and smelted or cyanided.

No great depth has yet been achieved on the ledge, about 30 feet in one shaft being the greatest, but the ledge will be prospected at depth and cross cut and tunnelled during the coming months on a large scale.

In the present deal eight claims are included and the price is approximately \$250,000. Mr. Robert A. Bryce, M.E., of Toronto, representing himself and associates, has made the deal and is now here with Mr. A. W. Newberry, making preparations to begin work.

In addition to the claims involved in the present deal, probably 20 others have been staged along the zone. Should the present operation prove successful, Cariboo will undoubtedly soon become a busy lode gold camp with an assured future.

Mr. Bryce has already located water and mill sites and a stamp mill will be installed next spring for treating the free-milling ore.

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