

REPORT ON THE PROSPECTS OF THE FLORENTINE
MINING CO., MT. MUELLER DISTRICT.

Mt. Mueller Prospect

This prospect is situated on the eastern fall of the saddle between Tim Shea and Mount Mueller, (or the Needles) about ten miles west of Fitzgerald.

It was last held as an extended prospecting claim of 160 acres by the Florentine Mining Company.

The country in the vicinity of the prospect consists of dark slates and quartzites. The strike of these beds varies greatly but the average appears to be 315 degrees while the dip is to the north east at high angles.

The workings are small in extent and are located in the angle between two small gullies forming the headwaters of the northern branch of Russel Falls River. On the more southern of these gullies a tunnel has been driven 20 feet in a southerly direction. Only black slates are exposed in the tunnel and the object of the tunnel cannot now be understood. About 40 feet to the east some more recent work has been carried out on both banks of the gully. This work consisted only of breaking the low cliffs on the banks. The face on the north western bank shows an area of greyish quartzite between walls of black slate. It is about ten feet wide at the top but is much narrower at the bottom and has the appearance of being underlain by black slates at, and below the creek level. The quartzite contains iron pyrite which has probably led to the work being done.

The quartzite extends irregularly along the ridge between the creeks in a general westerly direction. At one point it contains a little quartz iron pyrite and copper pyrites. Still further westerly along the ridge an inch vein of quartz occurs but is not necessarily connected with the above.

The face on the south eastern side of the creek has exposed a very irregular area of black slates and quartzites. The irregularity is due either to very intense faulting or, as appears likely, the quartzite represents an irregular alteration of the slates. The quartzite at this face does not contain as much iron pyrites as at the north western face. The southern portion of the face consists of a smooth wall striking to the south west and dipping north west. To the south of the wall a vein of quartz occurs in the upper portion of the face and has a bearing of 200 degrees. It occurs at the western junction of a small body of slates with quartzites. The vein has a maximum width of 2 inches and clearly represents replaced slates. At the foot of the north eastern end of the wall referred to above a vein of quartz is stated to have been found but this could not be verified as it has been covered over by debris.

About 50 yards up the creek from the tunnel, narrow veins of quartz were reported to have been cut. From the shape of the excavation they would have a strike of 315 degrees but could not be seen. The broken quartz lying on the surface contained copper pyrite.

On the northern bank of the more northern gully a trench has been exposed a vein of quartz from 1 to 4 inches in width. The strata here strike nearly east and west and the quartz vein crosses them with a bearing of 315 degrees. The quartz contains iron and copper pyrites.

The quartz veins described above, containing the pyrite minerals provide definite evidence of mineralisation. They are, however, of such narrow width and can generally be traced to their natural end, and are of no economic importance. If a wider and more persistent vein could be found in the vicinity it would be of course, more worthy of having some development work performed on it.

The pyrite quartzites are of uncertain origin but may possibly represent alterations of the black slates. Even if this be so, however, the only work that is warranted on them is the small amount involved in systematically sampling them where they are exposed. Any future work should depend upon the results of the assays of the samples.

With regard to the quartz alleged to be exposed underfoot in the south western face, it might be worth while removing the debris to examine the occurrence. The size and assay values of the samples taken from it would determine any further work on it.

Prospect at Razorback

This prospect is situated on the northern branch of the Russell Falls River about 5½ miles west of Fitzgerald. The river here runs through a small gorge through the hills known as the Razorback, and the prospect is located on the southern bank. It was last held as an extended prospecting claim of 120 acres in the name of A.E. Raynor.

The workings consist of a tunnel 12 feet long driven at a bearing of 167 degrees and a face along the tow of the hill which has been exposed for a length of 30 feet or more.

The rocks consist of a wide belt of thinly bedded and well jointed cherts of a light grey colour. These rocks are intensely folded and faulted, the folds being small and the general dip is to the east at angles of 70 degrees to 80 degrees. Some of the faults have the same bearing as the cherts (N & S) and cut off the short folds. Others have a general east and west direction and dip both to the north and south. One such fault occurs at the entrance to the tunnel. Another occurs several feet to the north of the cliff face and has a southerly dip and it is stated that a narrow vein of one to two inches occurred along the fault plane.

The cherts contain a small amount of iron pyrite distributed throughout them and are said to carry gold values. It is also stated that the quartz carried gold. An assay of 7 dwts. of gold and 2% copper, was quoted, but whether from the cherts or the quartz was not stated.

The quartz vein would appear to give evidence of mineralisation, but whether the cherts have been formed by silification accompanying mineralisation or not cannot be definitely stated. The presence of pyrites supports this to some extent but is often found in rocks in which it has not been formed by mineralisation. Generally too, cherts occur as normal rock types and as metamorphic

rocks in cases where the silification has not been accompanied by introduction of metals of economic value.

In any case the only work which should be carried out on the prospect is the small amount involved in thoroughly sampling it, and having the samples assayed. The samples should be taken in short lengths then whole making a continuous sample across the face. The assays would then determine if gold is present in the cherts and if so to what extent it may be more concentrated in some of the bands. Further work would depend upon the result of these assays.

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