

Extract from report on the Stormont and Black Bluff
district by E. Broadhurst. 1934

BLACK'S MINE.

This is situated in the western portion of the surveyed area, about a quarter of a mile up the Lea River from its junction with the Falls River. A plan of the workings has been prepared. Mr. Twelvetrees reported on the mine in 1913, and since his information was obtained when the mine was working, the following particulars are given in an extract from his report.

"The original workings at this mine were marked out by the well known prospector B.L.F.J. Thomas, 17 or 18 years ago. An underlay shaft was sunk in pipestem rock to about 25 feet. The occurrence was that of a seam of gossan passing down into pyrite, but specimen gold is said to have been found on the rock-walls.

Six or 7 chains south of the above is Todd's shaft, (This is the most easterly of the three shafts which are seen on the west of the plan), sunk vertically 60 feet in red quartzite of the conglomerate series. A cross-cut from it was driven west-south-west for 50 feet, but no lode or mineral was met with. Mr. Black unwatered it, but was unable to do anything owing to the presence of foul air.

Twenty feet west of this is another shaft, which connects with a costean running north-west and then running south-west. These workings expose an irregular formation of quartz in veined and silicified pink quartzite. With this is associated pyrite and slickensided specular iron ore. On the hanging wall of this formation is a main underlay shaft, in which solid veins of specular iron ore were followed. Twenty feet south of this is the most westerly shaft, sunk 55 feet on the formation, with a cross-cut driven 26 feet north-north-west. The limits of the ore formation are not well defined. At the surface the silicified portion of the outcrop seems to be about 7 feet, but mineralisation extends to a greater width. The ore-bearing portion will probably be found to be irregular in size.

The assay records vary a great deal, as might be expected in a formation in which free gold is liberated by the decomposition of specularite and pyrite. Mr. Black informed me that the samples from the dumps assayed 14 dwt. 13gr. gold per ton. Other samples assayed at the Mt. Bischoff works yielded 5 dwt. 7 dwt., and 8 dwt.

Mr. Hartwell Conder, M.A., who examined the mine in 1903, reported the following assay returns from his samples:-

- From 120 tons around shallow shaft, 3 dwt. gold per ton.
- From 100 tons around deeper shaft, 6 dwt. gold per ton.
- From drive, across face, trace only.
- From drive, along north side, 12 feet to the shaft,
6 dwt. 10 gr. per ton.
- From drive, south-east end, practically in shaft,
3 dwt. 2 gr. per ton.
- From specimen of iron oxide, trace only.

A hundred feet lower down is a tunnel which was driven by Osborn and Hancock for 55 feet across the conglomerate, but without reaching the lode. (This tunnel could not be found on the present survey). One hundred and forty feet lower than this, and 60 feet above the river (170 feet below the surface at the shafts according to my survey), Mr. Black has driven a tunnel 160 feet into the face of the cliff overlooking the Lea. (This length is now 190 feet, which was the length when Mr. Black left the mine to go to the War.)

The rock passed through is pink quartzite of the conglomerate series, and the direction of the adit is north 55 degrees east. A flat seam of pug accompanies the drive, and the country intersected carries veins of pyrites".

It is seen from this description that the lode is running almost north and south through the two shafts on the west of the plan. It is, however, very irregular, and may not exist as a definite lode.

The other shafts have been sunk principally on alluvial material, and a little fine gold has been found in them. The wash has been cemented by iron-bearing solutions and is now a solid mass of pebbles cemented together by limonitic material. The gold bearing wash occurs on top of this limonitic material, which occurs in a band about two feet wide. The patch which has been shown as worked on the plan contained the only coarse gold which has been found around here, the gold being rough and did not show signs of having travelled far from its source.

The most easterly shaft shown on the plan was sunk in white sandy material in which pyritic nodules occurred. These nodules consisted entirely of pyritic material, and assayed about 5 dwt. of gold per ton. They may represent pieces of the original lode material, since the gossanous material found near the surface would pass into pyrite in depth.

It is seen from the plan that the reefs are near the contact of conglomerates and tubicoliar sandstones, and the high dip of the beds observed in the cliffs below the shafts suggest that the reefs may have formed in a shear zone due to a fault which brought these two series into contact at this point.
