

REPORT.

I.—INTRODUCTION.

THE Strawberry Hill Gold Mine, in the district of Tangier, is distinguished by some geological features which have not yet been recognized in other districts in Nova Scotia.

It is divided into two unequal parts by an extensive belt of Dioritic Trap, about forty feet in width.

At its western boundary there is a belt of Brecciated Conglomerate, in some places thirty feet broad, which marks the line of a great dislocation; the throw on the Strawberry Hill side being to the north.

Between the belt of Trap and the Brecciated Conglomerate, a distance of two thousand feet, a series of small faults, eighteen being already known and their positions fixed, have thrown the lodes, by successive steps, through an aggregate distance of 158 feet to the north.

East of the trap belt the lodes are not affected by faults as far as the boundary of the property, a distance of six hundred feet.

The known and worked lodes occur in an Auriferous Zone, 200 feet broad, throughout the entire length of the property (2,600 feet.) Beyond and north of these limits lodes have recently been discovered, but nothing is known of their gold producing character.

In the Auriferous Zone, the Forest lode has been worked for a horizontal distance of about 1,500 feet, and to a vertical depth not exceeding 140 feet. The mean depth of the entire work on the Forest lode does not exceed 33 feet.

The quartz crushed in the mill since February, 1869, and taken almost exclusively from the Forest lode, has amounted to 1,350 tons, yielding 1,515 oz., being an average of 1 oz. 2 dwt. 10 gr. per ton. Other lodes have been worked and prospected to a small extent, as will be described in the sequel.

Little or nothing is known of the areas to the north or south of the Auriferous Zone.

From these introductory observations it will be seen that the Strawberry Hill property, is, in fact, a new mine, and as yet but imperfectly opened and explored.