## REPORT

ON

## EXPLORATIONS OF THE IRON ORE DEPOSITS OF PICTOU COUNTY,

NOVA SCOTIA.

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The following Statements relate to exploratory works conducted in October last on the iron deposits of Pictou County. The object of these explorations was more fully to open up the deposits and to ascertain their precise extent and value. I shall confine myself in the main to results of these examinations, referring for other facts to previous reports on the properties.

Spathic Iron Ore, near Sutherland's River, Merigomish. This very pure ore occurs as a bed in Lower Carboniferous rocks. The surface of the country is very deeply and uniformly covered by drift material, and explorations on the area have been attended with considerable difficulty, it having been necessary to sink and cross cut in the enclosing rocks. The ore is very well exposed in the bank of a brook. At this point, and near the level of the brook, a shaft 14 ft. deep has been made, and the ore proven to that depth, and its general character more clearly defined. It is evidently somewhat nodular in structure, being softer and harder in some places, and its junction with the overlying and underlying rocks having an undulating character.

At the brook level the bed has a thickness of 10 ft. 6 in. At the bottom of the shaft this has decreased to 6 ft. 6 in., and it is probable that the ore, as followed, will continue thinning and thickening alternately.

The dip of the ore and surrounding rocks is about S. 25 E., at an angle of 60°, and underlying the main bed of ore about 4 ft, was a small ore bed 6 in. in thickness. A small shaft was sunk both East and W st of t e brook exposure, and at distances from it of 941 and 215 ft. respectively. The measures have been crosscut several feet North and South in each, but as yet without discovering the ore bed. Small strings and layers of carbonate of