

Montreal July 2, 1873



James Primrose, Esq.

Sir,

Having been desired to give you my opinion of the value of certain properties and rights of search held by you and associates in the vicinity of the great Iron properties recently acquired by the "Pictou Iron Company" of London, England, I beg to make the following statements.

The properties in question are as follows:—

- (1.) Certain lots of land on the Wentworth grant near Sutherland's River, on which there is no reservation of minerals by the crown and the mineral rights of which have been purchased from the ~~properties~~<sup>victors</sup> along with a portion of land. These may be designated the Wentworth Lots.
- (2.) A right of search of five square miles on the East side of the East Branch of the East River, and numbered 137 on the Government plan.
- (3.) A right of search of five square miles on the West side of the East Branch of the East River, marked No. 113, with an adjoining triangular area of about one square mile;
- (4.) A right of search of five square miles on the West Branch of the East River <sup>numbered 131,</sup> mark-

marked on the Government Plan as No. 121. These I shall notice in order as mentioned above.

1. Lots on Wentworth Grant.

<sup>+</sup>Two These lots are traversed for about a mile by the great bed of Red Hematite which has been exposed on the property of the Victoria Mining Company; and may be stated to be a conformable bed from 10 to 20 feet in thickness and containing an ore capable of yielding from 43 to 54 per cent of metallic Iron.

On the farm of J. Fraser, west of Sutherland's river, this great bed occurs in full force, presenting surface exposures several yards in width, and showing a great quantity of loose masses of ore at the surface. After passing the Sutherland's River on <sup>+</sup>the Farm of Angus Fraser, its continuation is still observed, but toward its eastern end where it appears to be cut off by a fault, or by coming in contact with an older geological formation, it is much penetrated with veins of quartz, which somewhat impair its value. This applies, however, only to its eastern extremity, and some of the benches into which the bed is divided seem to retain their purity. The bed has not been opened on these properties by any mining operations, but it shows itself by surface

mentioned on the Government Plan as No. 121. There  
I shall notice in order as mentioned above.

1. Lots on Westward Point.

The above lots are traversed for about a mile by the  
great bed of Red Hematite which has been exposed on  
the property of the Boston Mining Company, and  
may be stated to be a comparatively bed from 10 to 20

+ The several lots which have been secured  
as containing the extension of the red bed  
amount to 600 acres in all ranging  
along the line of the ascertained  
outcrop

+ The Mass of Argon however, its continuation is still  
observed, but toward its eastern end where it appears  
to be cut off by a fault, or by coming in contact  
with an older geological formation, it is much more  
fractured with veins of quartz, which somewhat in-  
crease its value. This applies, however, only to its  
eastern extremity, and some of the benches into  
which the bed is divided seem to retain their purity.  
The bed has not been opened on these properties by  
any mining operations, but it shows itself by surface

exposures on high and accessible ground, where the ore could be quarried at the rate of 80c to \$1 per ton.

\* The distance of these lots in a straight line from the Provincial railway at Hopewell is about ten miles, and from the valley of the East River six miles. Any road made for the extraction of the ore on the property of the Pictou Iron Company would be equally available for this.

### 2. Right of Search No. 137.

This has been taken up to cover the continuation of the same bed of ore, where it extends toward the East River, on another line of outcrop. It has been traced to the boundary of the area, but has not yet been followed across the line, where, however, there is every probability of its occurrence. If found in this area, it will be close to the valley of the East River, and consequently more accessible than at the Wentworth lots, and the quality of the ore is probably quite as good. An analysis of a surface sample gives 42.44 of Metallic Iron.

### 3. Right of Search No. 113 on the West side of the East Branch

of the East River & triangular area 131.

This area contains the Extension to the Eastward  
of

of the great Specular Iron vein now opened by the Pictou Company. It extends, with a course of about  $S 60^{\circ} E$ , lengthwise of the area, and may be expected to be of great magnitude on the higher ground, where it contains, so far as can be judged from the small exposures which have been made, <sup>a similar development</sup> ~~from 10 to 20 feet~~ in thickness of ore; <sup>with that on the Mining areas further to the NW.</sup> Its extent longitudinally has not been traced. At the western end of the property it seems to diminish, being apparently represented in a deep ravine crossing this part of the area only by slender veins of ferruginous dolomite. To the eastward indications of it appear for half a mile or more.

The ore at this place differs from that of other localities in Pictou county in containing magnetic Iron associated with the specular variety. This adds to its value. Its percentage of metallic Iron will certainly rise considerably above 60 per cent. A specimen analyzed gives as much as 66.74 of metallic Iron, but contains some Iron Pyrite which is, however, probably confined to the vicinity of the wall of the vein. The deposit is very favourably situated for extraction, owing to its proximity to the valley of the East River, and the elevated ground in which it occurs. On the N.W. side of this area and on the triangular space already mentioned there are many large

large loose masses of Limonite which seem to indicate a deposit of that ore near the junction of the Silurian slates holding the specular ore with the Lower Carboniferous beds in the valley of the river.

Exploration showed in  
March with the view  
of discovering the ore  
in situ.

4. Right of Search No. 121.

A right of search on the West Branch of the East River of Pictou (No. 121 on the <sup>Government</sup> Geological plan) on the course of a band of quartzite holding Limonite which is exposed on a brook at the boundary of the property (Ogg Brook). This band or bed is about 30 feet thick, inclined at a high angle, and holds a network of veins and large masses of Limonite sufficiently important to pay for the quarrying and extraction of the whole mass of material. This deposit passes through the North East Corner of the area, but its precise course <sup>and extent</sup> thereon has not yet been marked out. There are also indications of ore to the southward on this area, and it is not improbable that the great specular vein of the district, referred to under the last head, may be found to cross it.

A specimen of the ore from the surface affords 51.88 of metallic Iron.

The first, third and fourth of the above properties I consider to be of great

and ascertained value. The second I  
upheld as promising.

I would advise that No 2  
should be explored with the view of  
tracing the great hematite bed upon it;  
that the outcrop of the vein on  
No #3 should be more extensively  
and that search should be made for the deposit where the masses of hematite have  
been picked up by washing; and that <sup>been</sup> ~~detected~~  
the deposit on No 4 should be traced  
across the area and search made  
for other Companion deposits. I have  
no doubt that such exploration  
would in a short time much  
enhance the value of these properties.

In the mean time, should it  
be deemed to dispose of them without  
such explorations, the above facts may  
be relied on as indicating their probable  
value and importance.

Truly yours  
W. Dawson