

No. 3.—Still in the direction of northeast, in close proximity to No. 2, following the ridge, the needle showed an attraction verging on 90 degrees for a length of 50 feet by a breadth of 15 feet. Nos. 1, 2 and 3 cover a length of 250 feet, and being so contiguous, and with more or less of indications between, lead to the belief of a continuous deposit.

No. 4.—This is an outcrop towards the south boundary of Lot 25, upon which some little work had been done, proving the existence of magnetite, more or less mixed with gangue. It is apparently in the nature of a chimney or blow off, the enclosing rocks showing signs of local disturbance.

No. 5.—This point is of particular interest, as being the site of former prospecting. At that time the rock was pierced to a considerable depth by the diamond drill, the holes being still intact.

It was stated that the cores extracted showed that the drill had passed through sixty feet of solid ore of very excellent quality. The needle attraction here was very strong, 90 degrees, extending over an area over 40 by 20 feet. The ore as seen in the surface working was a good appearance, being finely granular but not excessively dense, and is free from any trace of sulphur.

Diamond  
drilling.

No. 6.—This is a pit sunk about 14 feet in rotten diorite. The attraction extends over a breadth of 25 feet, being practically a continuation of No. 5, making the total length 300 feet, the needle indicating 90 degrees throughout. There is undoubtedly a fine body of ore at this point.

No. 7.—This is one of the most important discoveries on Lot 25. The needle attractions were apparent over the whole of the large irregular area shown on the plan, being some 240 feet in diameter, the attraction being from 40 to 90 degrees. The ore outcrops in places, and is here associated with diorite, with a capping of gneiss and diorite. The extension of No. 6 runs into No. 7, and the diamond drill test referred to therefore gives reasonable assurance of the value of this large ore deposit.

No. 8.—At this point a considerable amount of work has been done, a shaft being sunk on a fine body of ore found outcropping on the surface. A shipment was made from this point of some 200 tons, the quality proving to be eminently satisfactory, the ore being almost absolutely free from sulphur, and according to the analysis of the chemist at the furnace, the phosphorus was 0.01.

No. 9.—On lot 26 the only point to which prospecting or mining operations have been directed, is that known as the Howland Mine. The writer examined these workings previously in the interest of the owner, at which time they consisted of an inclined excavation or drift and a main vertical shaft, the latter sunk to a depth of 85 feet.

Lot 26, Howland  
mine.

The vein or ore bed was found outcropping at the surface where the present workings are located, and subsequently a second outcrop was said to have been discovered by means of a "dip" needle, at a distance of about 200 yards northeast.

The deposit as seen in the underground workings, follows the trend of the limestone ridges and the country rock northeast and southwest.

The ore body, which here also is associated with diorite, has an underlay south 15 degrees from the vertical. The shaft was sunk on the foot wall, but the opposite or hanging wall was not reached, although the vein was crosscut a distance of 30 feet, some 40 feet below the surface. For the whole depth of 85 feet the shaft is through a mass of ore ground.

The quality of the ore in the Howland Mine chemically is of great excellence, but the extension of bands or layers of ore impregnated with pyrites necessitates great care in selecting it for shipping purposes. Judging, however, by the indications and the lessening proportions of the pyrites in the lower workings, it is probable that this will prove to be merely a local defect, which with increased depth will be entirely eliminated. As a matter of fact the pyritous ore is not disseminated but is in distinct bands, so that even now there is a considerable proportion of excellent quality available for shipment.