

William Logan to occupy the same strategical position as the copper-bearing dolomite of Acton.

The copper ores occur disseminated throughout the chloritic slates chiefly at or near the junction between the bands of different colors and between the slate and limestone. Veins of quartz, calcspar, and chlorite traverse the slate rocks irregularly; and where these occur they are usually marked by the presence of vitreous, variegated and pyritous sulphurets of copper in considerable masses. Such is the general character of this cupriferous region.

On the property in question, the ores of copper are found both in the slates and in the limestone, two bands of which are traceable throughout the entire length of the lot at the distance of about 40 rods apart across the strike, which is N. 35° E., the dip being to the N.W. at an angle of about 55°. Both bands of limestone are highly cupriferous; that to the northwest, which is about 15 feet thick, constituting a vein of yellow copper ore of such productiveness as to give excellent promise of a paying mine. Openings have been made by blasting in this limestone band in several places, and have not only proved the extent of the vein as before specified, but its productiveness and value to improve rapidly in sinking on it. A shaft has been sunk at one place to the depth of 21 feet on the foot wall of the vein or junction between the limestone and the slate, and the results of working here are highly encouraging, shewing a rapid increase in the quantity of copper, and on the whole a much greater production of ore than I have seen anywhere else in the Eastern townships with such a small expenditure of labor. Here the ore is mostly the yellow sulphuret, which is well known to be the most persistent and reliable, as well as the most valuable for its fluxing qualities. Near the surface the rock is highly siliceous, and the copper ore was much mixed with iron pyrites, large solid blocks of which, containing (by my assay) from five to ten per cent. of metallic copper, were obtained in abundance, but on sinking to the moderate depth named, the rock became softer and more free from quartz; the iron was observed rapidly to diminish in quantity, and to give place to copper ore, the amount of which now in sight would probably be sufficient to pay for stopping, while there can be no doubt that on sinking a little further, this amount will continue to increase. Besides