

same river, at the south end of Obalski lake, there is a 2 inch vein of the same material, which is exposed in a submerged rock for 25 feet.

Molybdenite.

An examination was made of the area in Kewagama lake where molybdenite was found by Mr. J. F. E. Johnston in 1901.¹ The granite in which the molybdenite occurs occupies most of the peninsula which divides the lake into two parts. It outcrops at intervals for over three miles on the east side. Mr. Johnston also found it a mile and a half north of the narrows on the west side; and it forms hills almost up to the north end of the peninsula. It, therefore, has an area of approximately seven square miles. It is a biotite granite, composed of orthoclase, microcline, plagioclase, feldspar, and quartz, with a relatively small amount of biotite, and associated muscovite. The rock is in part at least deformed, the quartz is usually fractured and in places granulated, and to a lesser degree this is true of the feldspars.

The molybdenite is best seen at a narrow point which projects about 15 chains, near the middle of the east shore. Here the granite is cut by vitreous and reddish-rusty quartz veins, from half an inch to 4 feet in thickness. Many of these veins run northwest and southeast and are cut by others running in different directions. Some of them have clear-cut walls and are very distinct. They all contain molybdenite, usually in thin crystals, the largest seen being an inch in diameter. Bismuthenite in small quantity was found associated with the molybdenite. Along the shore, to the south, the granite is seen in occasional outcrops for a mile and a half, and contains quartz veins with small molybdenite crystals. Some of the hills back from the lake were examined, and the same conditions were found to prevail as at the shore, except that there were fewer veins and less molybdenite, but the latter could be found in all the veins.

In the middle expansion of Seals Home lake there is a small island composed of grey granite, which is traversed by quartz veins, some of large size. In one a few crystals of molybdenite were found, but the amount, as far as seen on the surface, was too small to be of commercial value.

¹ Geological Survey of Canada, Summary Report, 1901, p. 138.