

Felsites of
the Upper
Nipisiguit.

or head of the Little Tobique River. On the south side of this lake a huge mountain rises to a height of about 2,500 feet, flanked on its north side along the shore of the lake, by green talcose and chloritic schists, of Pre-Cambrian aspect. This high mountain is composed of hard, dark red crystalline felsite, porphyritic, with crystals of red felspar, and stretches off in a long ridge towards the south-west, or to the right-hand branch of the Tobique. It probably forms a continuous ridge to the Forks of that stream, as rocks somewhat similar in character appear at that point. The hills fall abruptly towards the east, or across the portage between the Tobique and Nipisiguit waters, but rise again to the eastward, and continue towards the south-east branch of the Upsalquitch River. This portage shews no ledges, but large blocks of the crystalline felsite lie scattered about, along with pieces of the schist. The Upper Lake or head of the Nipisiguit is enclosed by lofty hills, which are broken at the outlet. Descending the stream, ledges are not very numerous for several miles, but where seen consist of dark, red or purple tinted felsite often brecciated, and large angular blocks of the same are frequent. Just below the Little South Branch is a high mountain, composed apparently of dense banded, light red felsite, with abundance of iron pyrites along the joints. These are cut by dykes of fine, very hard, diorite, greyish in color, the felsites being porphyritic, like that of the Nictor Lake, and generally breaking into sharp, square blocks. Three miles below the Little South Branch, or at the 68-mile tree, ledges of the same banded rock occur, which seem from the banding to dip S. E. $< 20^\circ$. Two miles lower down a huge dome of felsite, with bald sides and top, forms a conspicuous object, its bright, red color being distinguishable for a long distance. Thence down, to within a short distance of the Portage Brook, where the portage to the Upsalquitch River strikes across, these rocks continue till they are met by the schistose or gneissic rocks already described under the heading Pre-Cambrian.

Character and
probable age.

The scenery along this portion of the Nipisiguit is very fine. The felsite hills occur in a succession of peaks often rounded or dome-shaped, which stretch along both sides of the river, and the view from any of them shows the surface of the country to be a sea of mountains in all directions. In character, the rock resembles much of the old Pre-Cambrian felsites of the southern portion of King's and St. John counties both in the occurrence of breccias, petrosilex and its general porphyritic and highly crystalline nature. It would appear, from comparison with other rocks elsewhere, to be the equivalent of the felsite series of the southern portion of the province, and therefore to be a part of the mica schist and gneiss series, probably a lower portion of it.

Below the Portage Brook, on the Nipisiguit, but few pure felsites are