

## 19. North end of Hottah lake.

A dark-greenish gray, massive, eruptive rock with a reddish tint owing to the abundance of disseminated deep-reddish crystals of feldspar.

The thin section shows a diorite made up chiefly of greenish, strongly pleochroic hornblende in irregular individuals and feldspar, most of which at least is presumably plagioclase much decomposed and stained by iron hydroxide. A little orthoclase is present, and quartz for the most part in association with feldspar forming areas of granophyre which fill up irregular interspaces between the other constituents. Magnetite is abundant and pyrite is also present.

## 20. Middle of Hottah lake, Great Bear lake.

A dark-greenish, somewhat coarse, basic eruptive rock, in which a rude ophitic structure is plainly discernible.

The thin section shows an association of tabular crystals of decomposed plagioclase, penetrating allotromorphic masses of green strongly trichroic green hornblende. A large amount of ilmenite almost completely altered to leucoxene occurs, as well as long acicular prisms of apatite. The rock is a uraltic diabase.

## 21. Five miles south of Big point, Great Bear lake.

A dark-gray porphyritic rock.

The rock is evidently a hypabassal form of the porphyrite approaching the so-called propylite of Hungary and Western America. Some portions of the rock present a distinct and decided although comparatively coarse ground-mass with phenocrysts chiefly of plagioclase and areas of chlorite. In other places no sharp line exists between the phenocrysts and ground-mass and the rock shows a disposition to assume the holocrystalline structure. The magnetite is abundant in irregular grains, while occasional plates of biotite occur. The rock is much decomposed and traversed by veins of chlorite and calcite. (Occasional irregular plates of altered biotite).

## 22. Middle of Lake Manai.

A pale reddish-grey compact arkose.

The thin section shows irregularly often angular, subangular, or rounded grains of orthoclase, plagioclase, microcline and quartz, together with small scales and plates of biotite, most of which has undergone more or less complete chloritization. These are