

1. Fine-grained purplish-green diabase with numerous amygdulæ of chlorite and at times calcite. Penetrated by veins and large patches of reddish diabase (95).....	409
2. Light-colored medium-grained green and pink arkose.....	85
3. Fine-grained decomposed diabase.....	28
4. Light-gray and pink baggy arkose.....	30
5. Dark-green diabase.....	10
6. Light-greenish fine-grained arkose.....	40
Concealed.....	104
7. Dark-green diabase.....	60
8. Light-greenish fine-grained arkose.....	330
To contact with coarse biotite granite (90).	

1,083

The contact of the arkose with the granite is a vertical fault from two to five feet wide and there is no appearance of alteration in either rocks near the contact. Contact of arkose with granite.

To the southward an upward continuation of the above section is as follows:—

1. Dark-green diabase.....	200
2. Dark-red argillite.....	2
3. Dark grayish-pink sandrock.....	25
Concealed.....	40
4. Lean red jaspilite.....	55
Concealed.....	15
5. Impure red jaspilite.....	10
Concealed.....	15
6. Slatey impure jaspilite.....	35
7. Diabase full of jasper veins.....	15
8. Slatey iron jaspilite.....	10
9. Cherty dark gray limestone.....	10
Impure jaspilite.....	50
Diabase.....	100

852

This diabase is the top member of the preceding section.

To the eastward of Cairn island the arkose rocks occupy a strip from 50 to 500 yards wide along the south shore of Richmond gulf, except for about a mile where the granite comes out to the shore. The islands in the south-eastern part are composed of interbedded diabase and arkose.

The granite comes out to the eastern shore at the foot of Whale bay, at the south point of Wiachewan bay, about three miles north of the mouth of Clearwater river; again to the northward of the mouth of Deer river and at the northern end of the gulf. Everywhere else along this shore and on the islands lying off it, the rocks are bedded arkose, greywacke and argillite, associated with flows of dark green diabase. The only other section of the rocks on Richmond gulf