



A) Total alkali versus SiO_2 diagram for volcanic rocks of the MacQuoid Homocline. The majority of the rocks are mafic and have low K_2O content.

B) AFM diagram (after Irvine and Barager, 1971) demonstrating that most volcanic rocks are tholeiitic whereas the granitoid rocks are calc-alkaline.

C) Normative Ab-An-Or diagram showing the predominantly gabbroic-tonalitic-granodioritic compositions of the granitoid rocks of the MacQuoid Homocline including the Cross Bay complex. Granitic rocks are subordinate to the intermediate rocks.

D) Extended trace-element concentrations (values from Sun and McDonough, (1989)) of selected mafic, intermediate, and silicic volcanic rocks. Note the subtle differences in the two basaltic rocks (red dots) one having mild light rare-earth element depletion and the other characterized by a minor negative Nb anomaly.

E) Extended trace-element concentrations of selected mafic, intermediate and silicic plutonic rocks. Note the differences in the magnitude of the negative Nb, P, and Ti anomalies with increasing SiO_2 .

F) Extended trace-element concentrations of selected mafic, intermediate, and silicic granitoid rocks of the Cross Bay complex. Note the variable but ubiquitous negative Nb, P, and Ti anomalies, characteristic of volcanic arc magmas.

Figure 3. Geochemistry of the Archean volcanic and granitoid rocks.