Geochemistry and petrology of the Owl Lake intrusion

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The Owl Lake intrusion is located in Northwest Ontario, ~25km north of Terrace Bay, within the Wawa subprovince (Fig.1). The intrusion hosts Ni-Cu-PGE mineralization and is thought to be associated with the ~1.1 Ga Midcontinent Rift. The aims of the study are to determine the age of the intrusion and characterize its petrology, geochemistry, and mineralization.

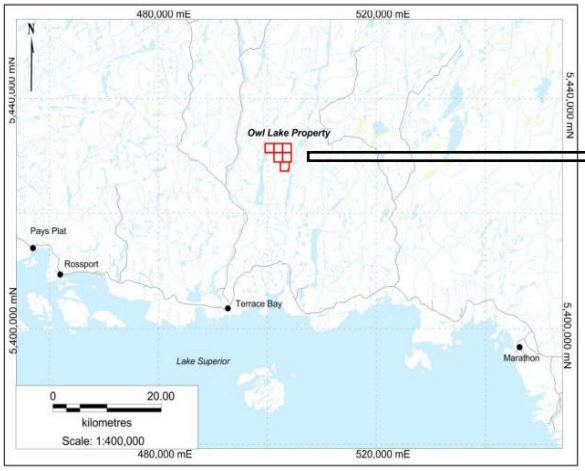
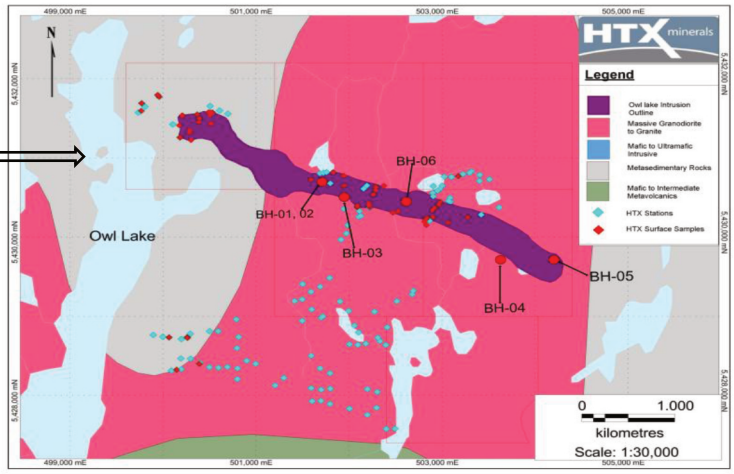
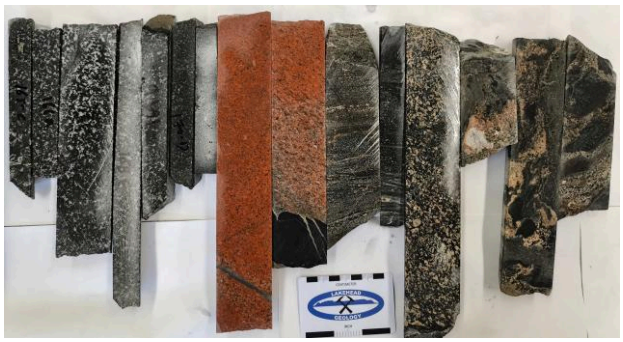


Fig.1 Owl Lake location (map courtesy of HTX)



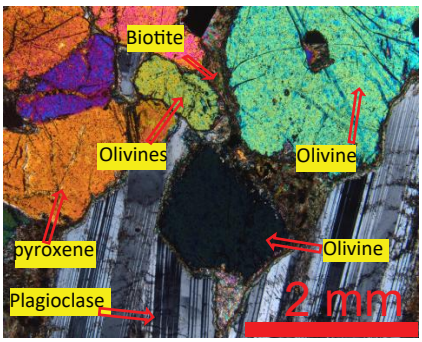
Geological map of the Owl Lake intrusion (map courtesy of HTX)



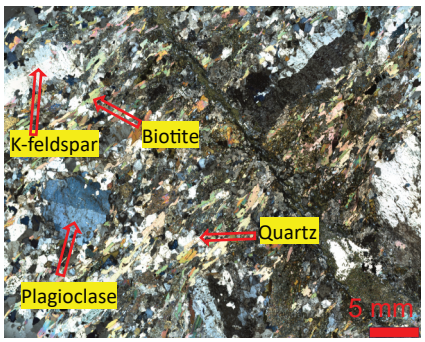
Drill core from BH-06, showing gabbronorite, alkali granite, and igneous breccia



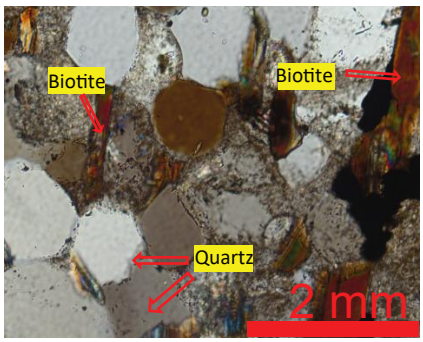
Gabbronorite from BH-01



Photomicrograph of gabbronorite in sample OL-RA-10, from BH-01 at 35.70 m



Photomicrograph of Igneous breccia in sample OL-RA-120, from BH-04 at 31.10 m



Photomicrograph of Micaceous Quartzite in sample OL-RA-180 from BH-03, at 33.95 m