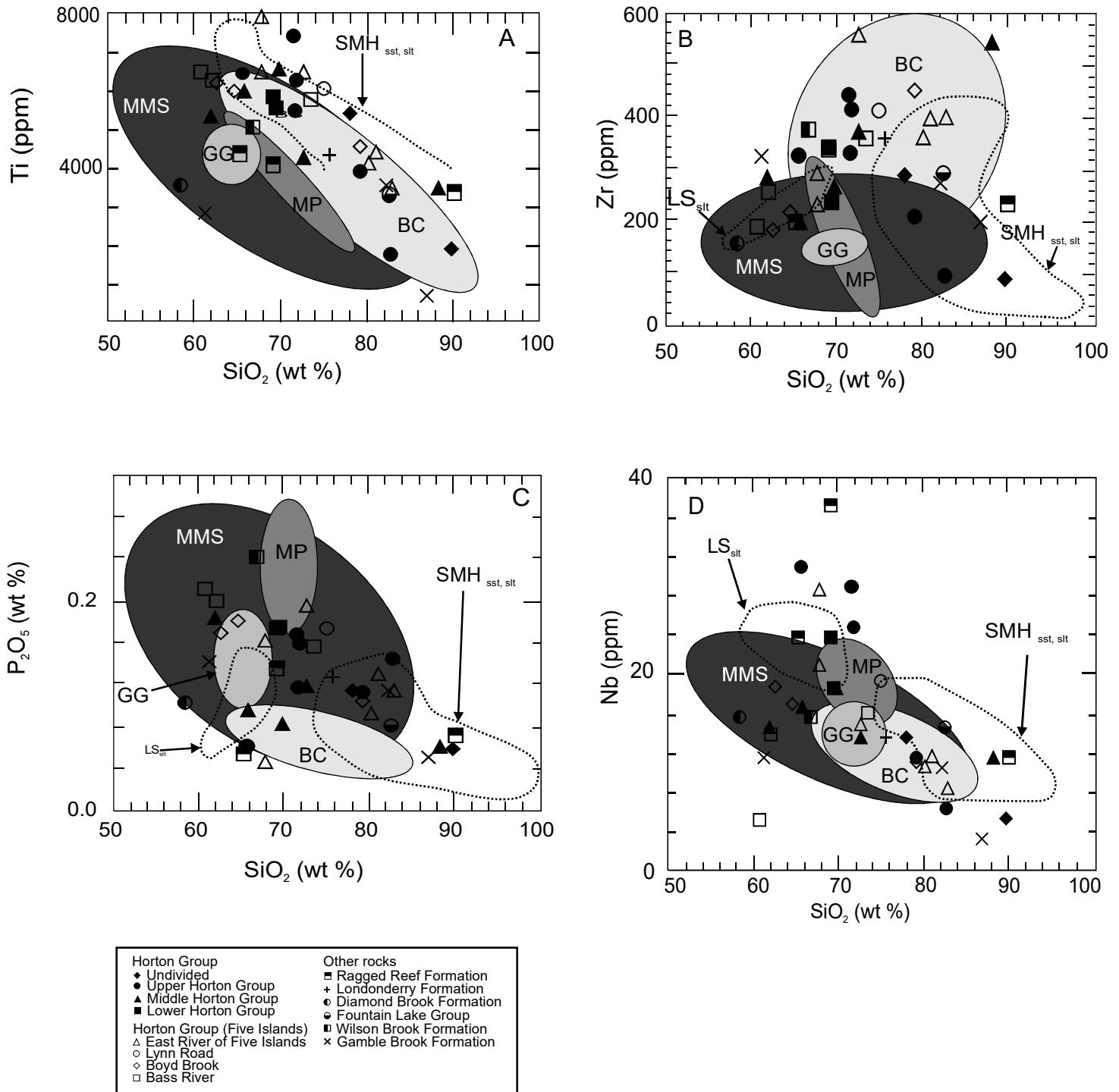


Supp. Fig. 1: Comparison of Cobequid Highlands Horton Group geochemistry with the St Mary's basin (Murphy 2000).
A: Al_2O_3 vs. SiO_2 wt % plot. LS_{sst} = Little Stewiacke Formation sandstone, $\text{SMH}_{\text{sst, silt}}$ = Sandstone from the Little Stewiacke Formation and sandstone/siltstone from other Horton Group within the St. Marys graben (Murphy, 2000), LS_{silt} = Little Stewiacke Formation siltstone (same for B.) B: Fe_2O_{3t} vs. SiO_2 wt % plot. Solid line fields after Murphy (2000), dotted line fields have been drawn from data from Murphy (2000): GG = Neoproterozoic Georgeville Group, BC = Lower Silurian Beechill Cove Formation, MMS = Meguma Group metasedimentary rocks and MP = Meguma granitoid plutons. C: $\text{Al}_2\text{O}_3 - \text{CaO} + \text{Na}_2\text{O} - \text{K}_2\text{O}$ ternary plot and D: $\text{Al}_2\text{O}_3 - \text{CaO} + \text{Na}_2\text{O} + \text{K}_2\text{O} - \text{FeO}_t + \text{MgO}$ molar proportions (after Murphy, 2000; Nesbitt and Young, 1996; Nesbitt et al., 1995). mineral field abbreviations:
Cpx = clinopyroxene, Hbl = hornblende, Bt = biotite, Chl = chlorite, Sm = smectite, Ka = kaolinite, Gi = gibbsite, III = illite, Mus = muscovite, Feld = feldspars, Kfs = K-feldspar, Plag = plagioclase. Same symbols used in all plots.



Supp. Fig. 2: Selected Harker diagrams of major and trace elements. Solid line fields after Murphy (2000), dotted line fields have been drawn from data from Murphy (2000). Fields are modified from Murphy (2000). A: Ti vs. SiO₂. B: Zr vs. SiO₂. SMH_{sst, silt} = Sandstone from the Little Stewiacke Formation and sandstone/siltstone from other Horton Group within the St. Marys graben (Murphy, 2000), LS_{silt} = Little Stewiacke Formation siltstone (same for all plots). C: P₂O₅ vs SiO₂. D: Nb vs SiO₂. MMS = Meguma Group metasedimentary rocks, MP = Meguma granitoid plutons, BC = Beechill Cove Formation and GG = Georgeville Group. Legend is the same for all plots.