

Bridging the gap: nearshore zones are key mediators in Arctic land-ocean carbon fluxes

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This supplementary information consist of:

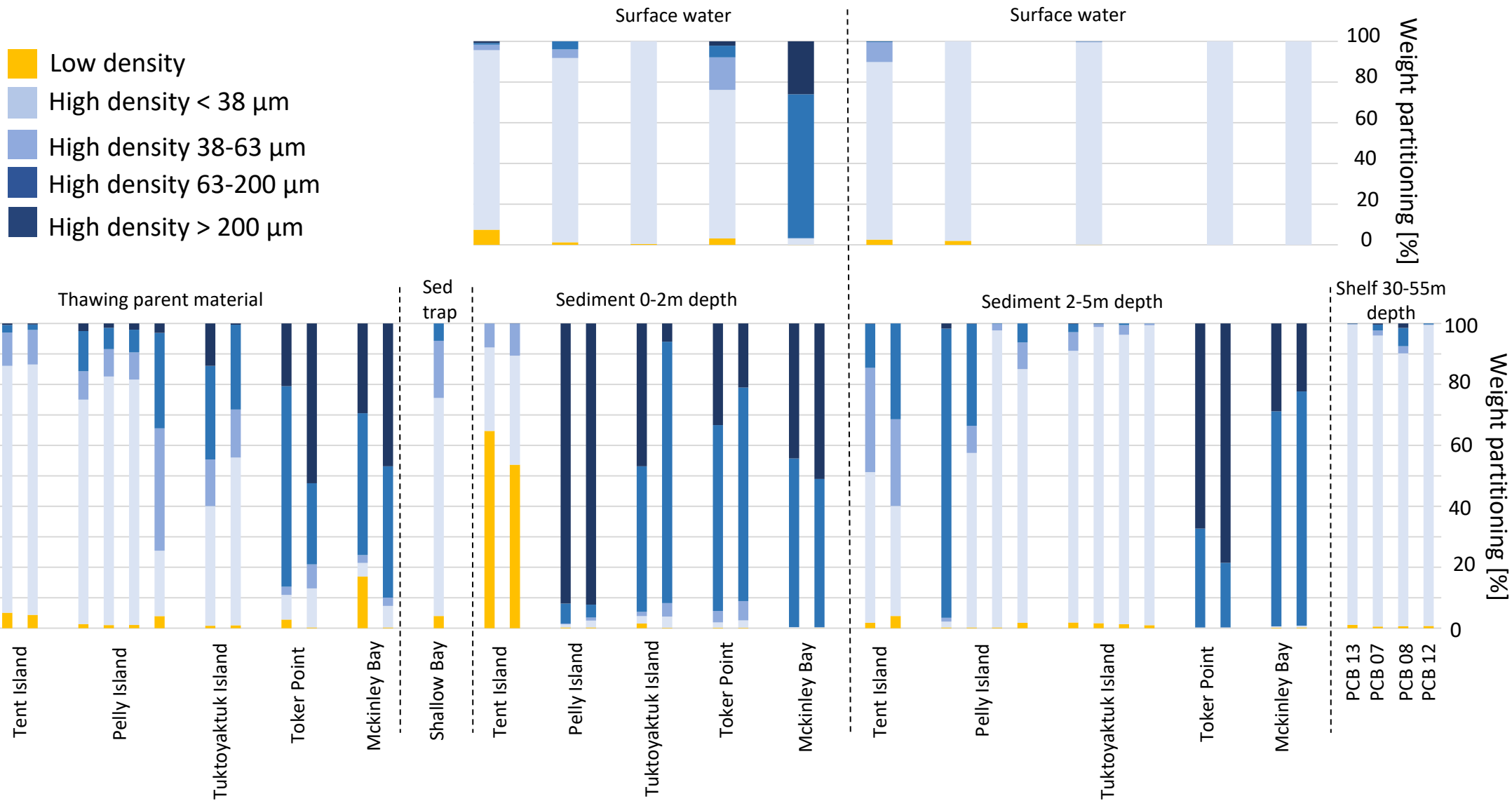
Figure 1: Fractionated samples and their corresponding weight (%), sampling locations are ordered from west (left) to east (right).

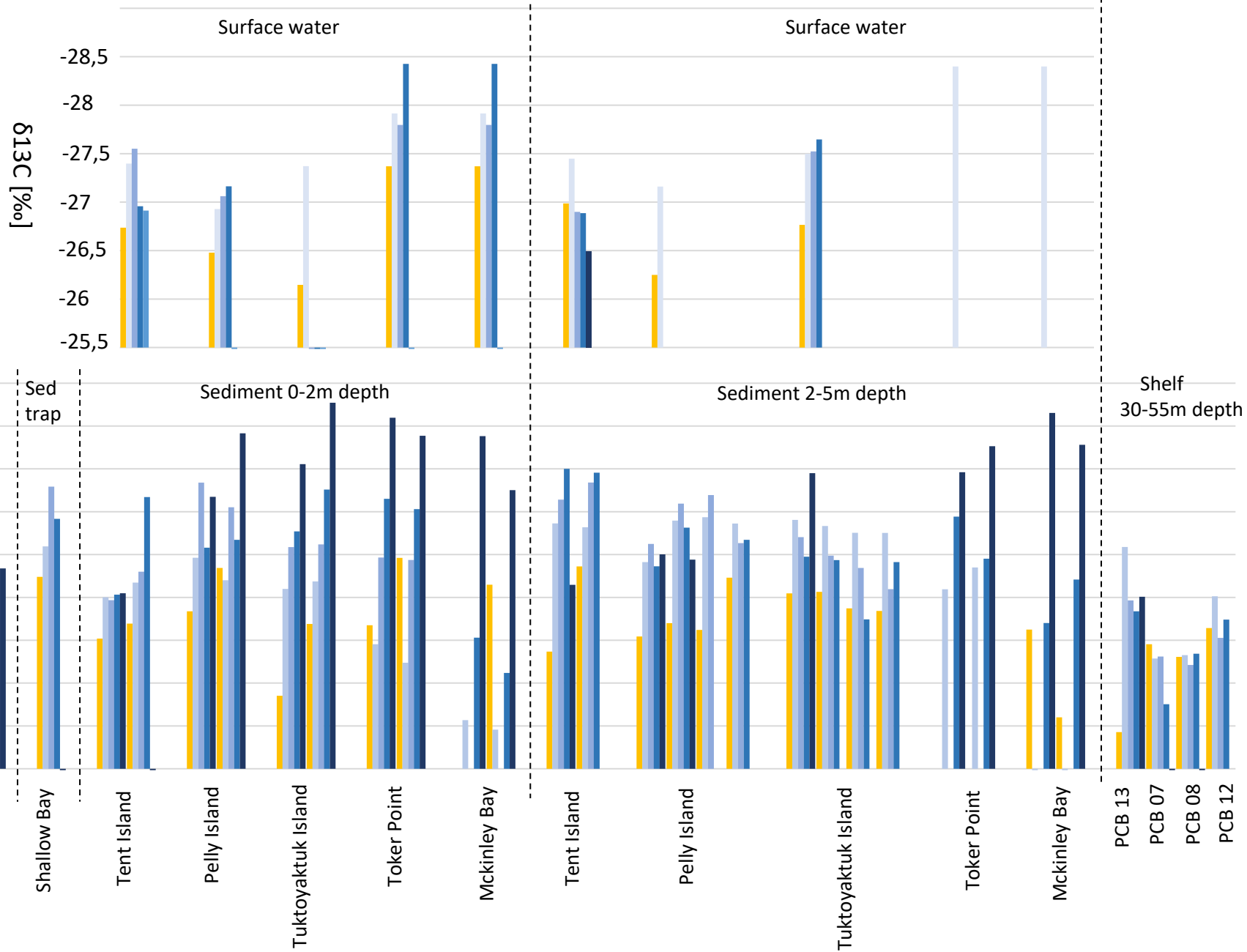
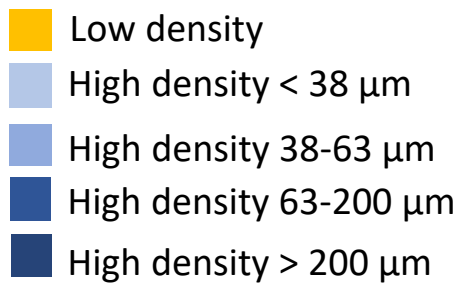
Figure 2: Fractionated samples and their corresponding $\delta^{13}\text{C}$ (‰), sampling locations are ordered from west (left) to east (right).

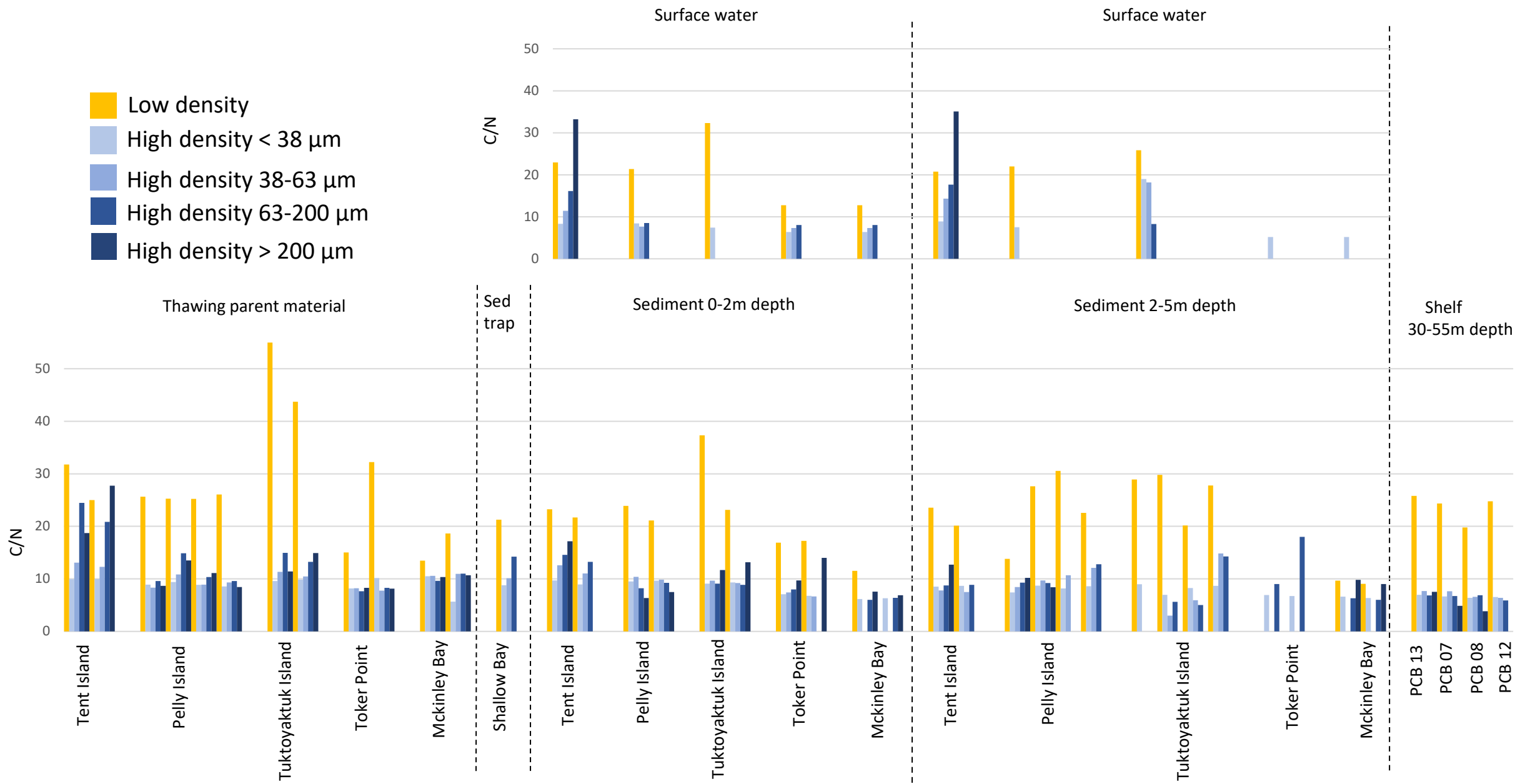
Figure 3: Fractionated samples and their C/N ratios, sampling locations are ordered from west (left) to east (right).

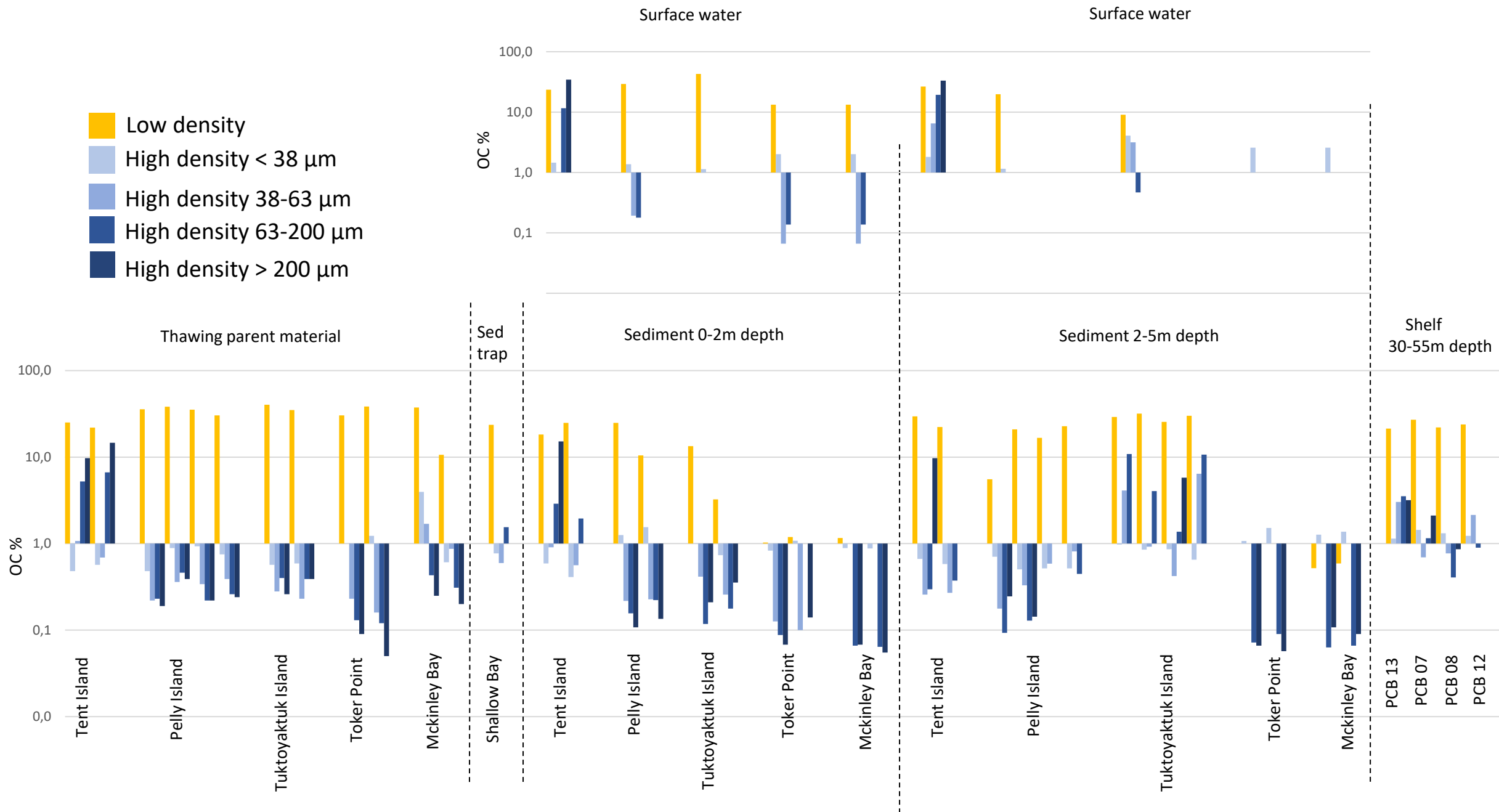
Figure 4: Fractionated samples and their OC% in a logarithmic scale, sampling locations are ordered from west (left) to east (right).

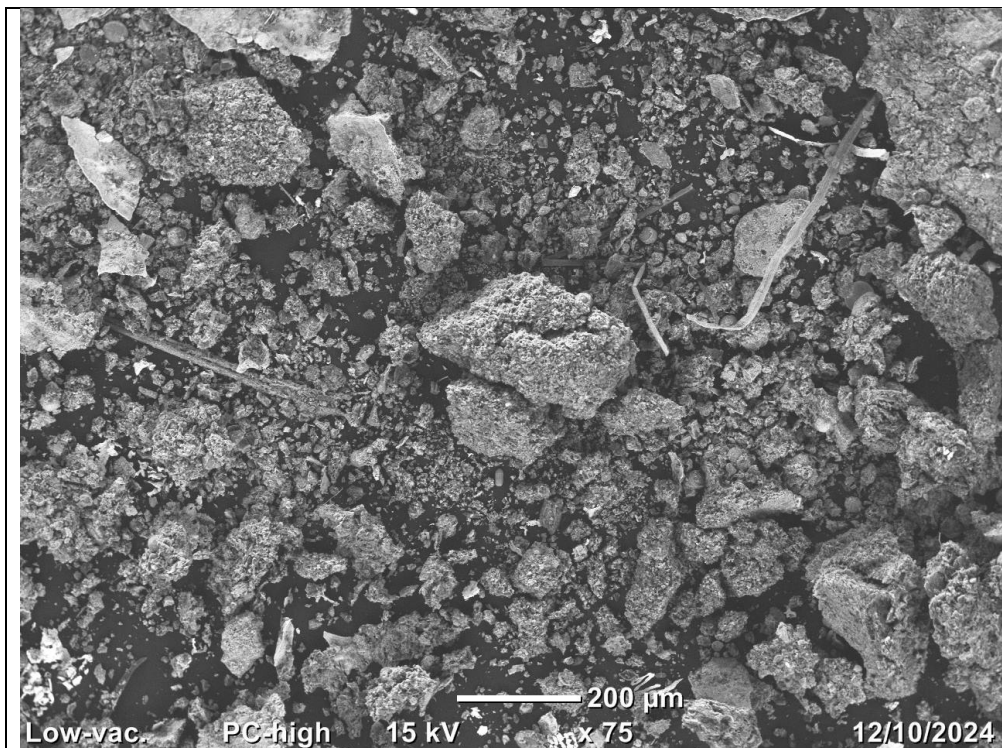
Figure 5: Additional Scanning Electron Microscope Images of samples ranging from low density to high density > 200 μm .



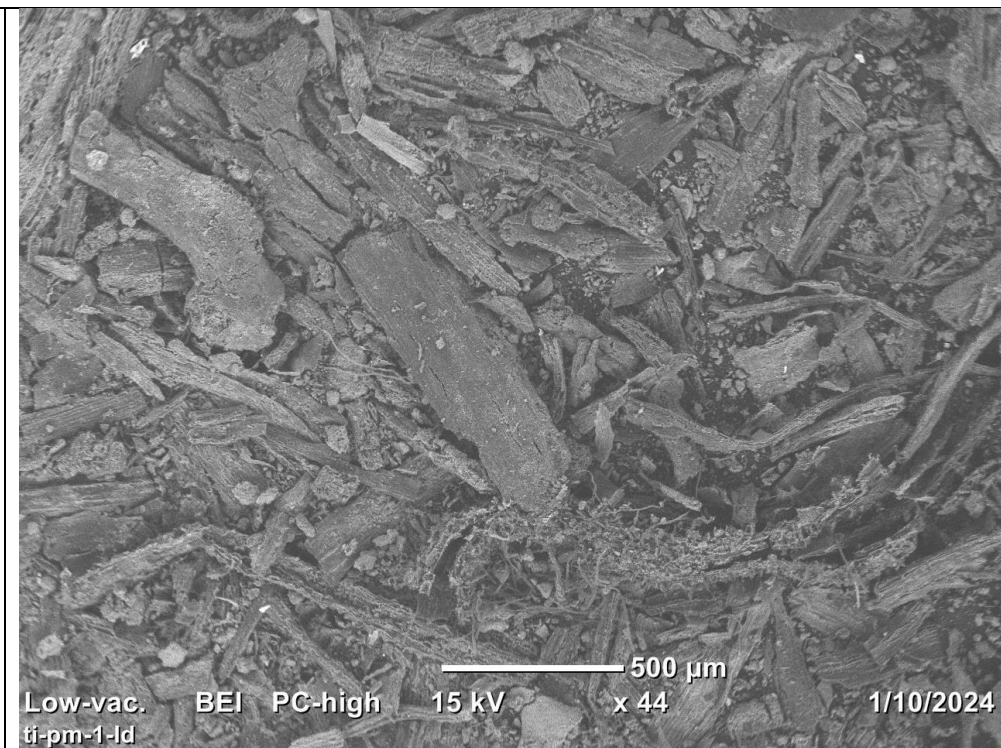




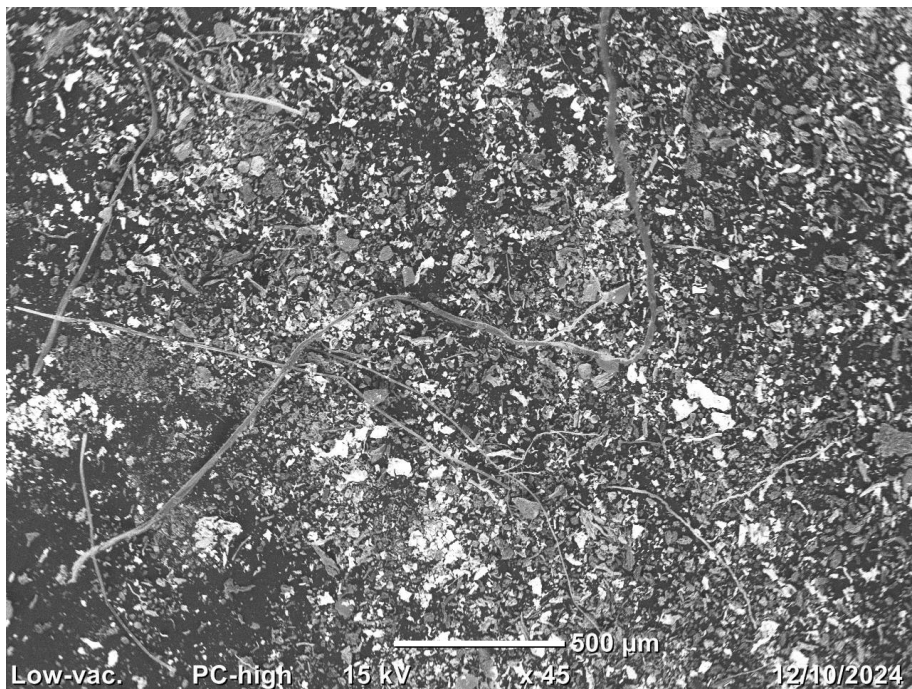




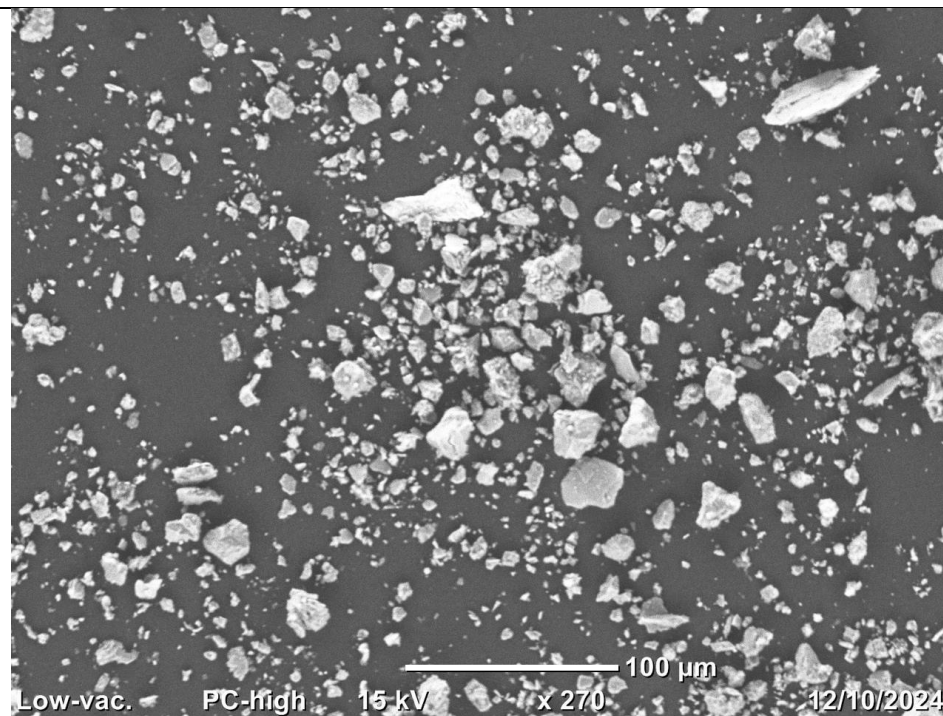
PeCaBeau 08 – surface sediment
Low density



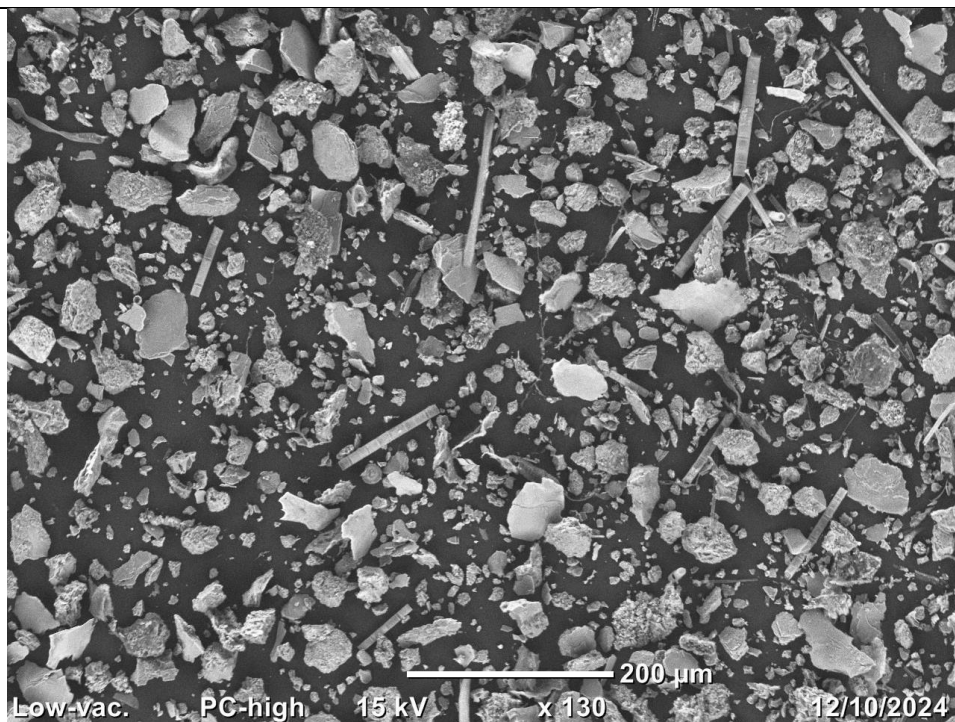
Tent Island – parental material
Low density



Pelly Island-surface water 0-2 m zone
Low density



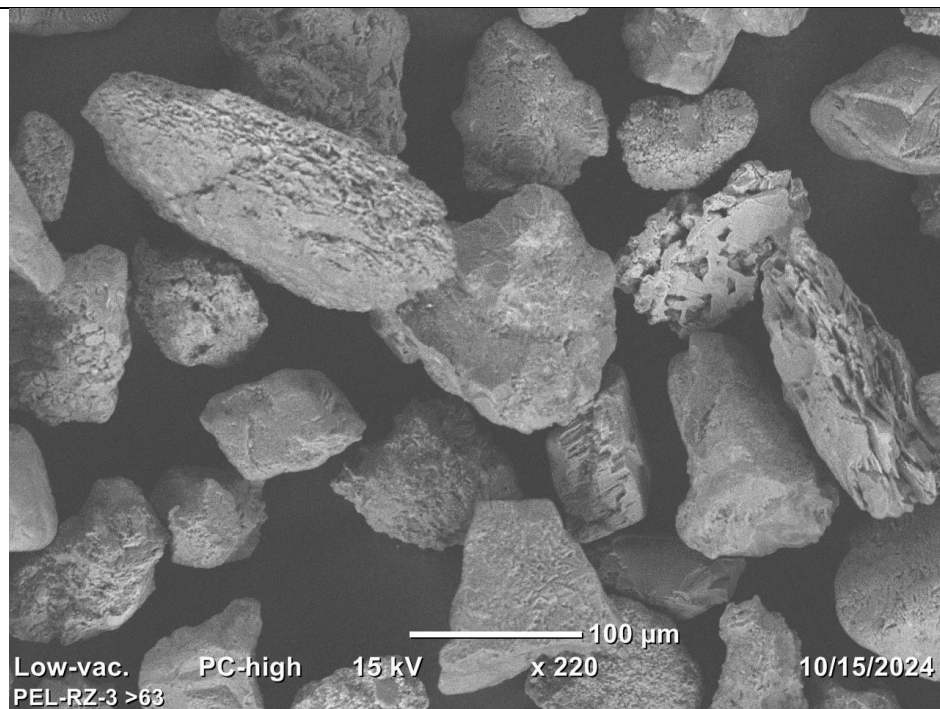
PeCaBeau 08 – surface sediment
High density <38 μm



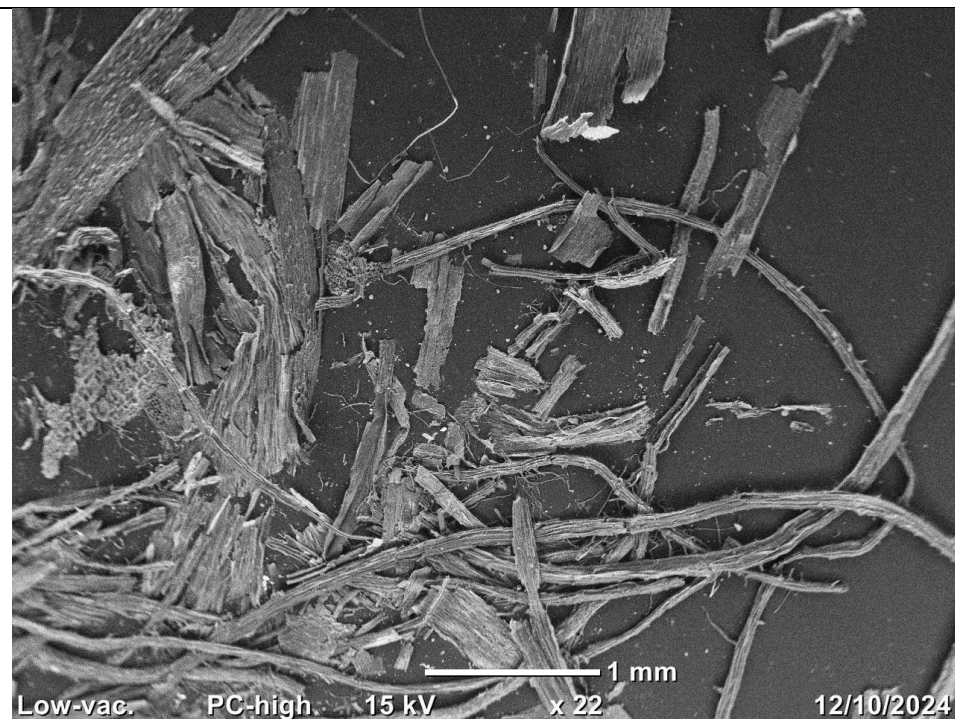
Tuktoyaktuk Island- surface sediment 0-2 m depth
High density 38-63 μm



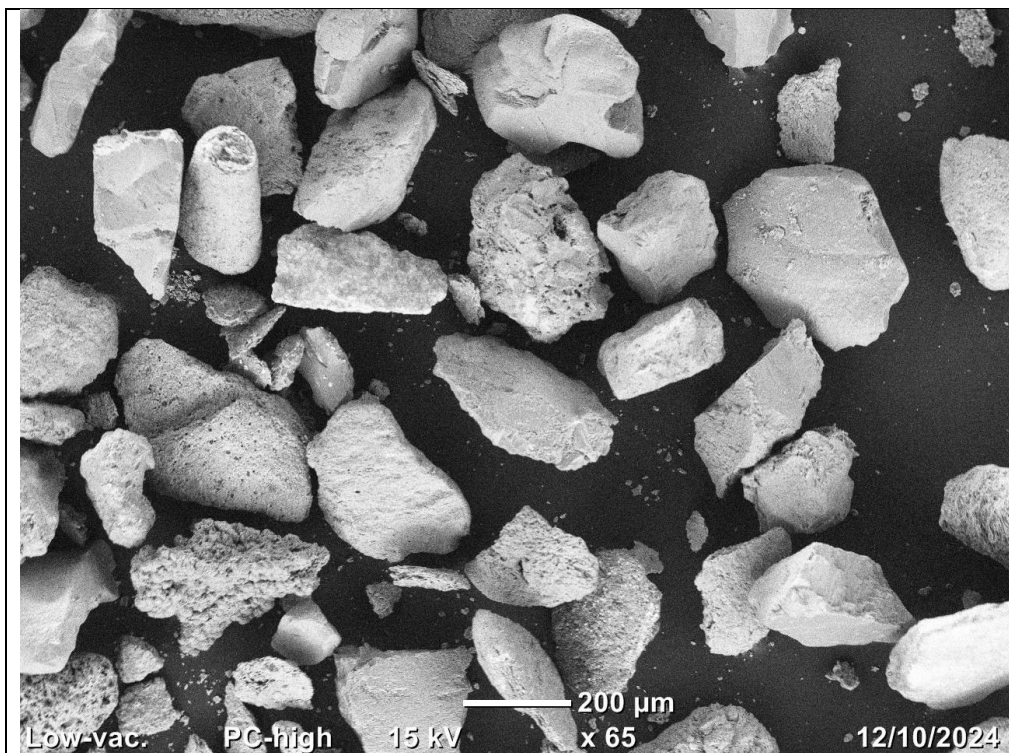
Pelly Island- surface sediment 0-2 m depth
High density 38-63 μm



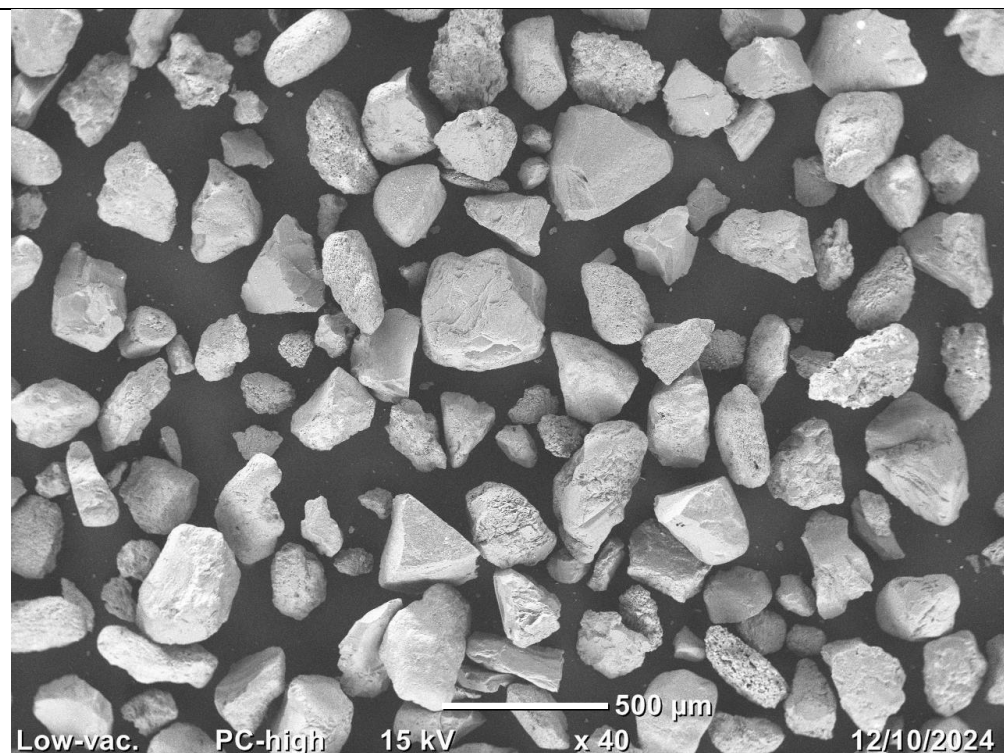
Pelly Island- surface sediment 0-2 m depth
High density 63- 200 μm



Tent Island – parental material
High density >200 μm



Tuktoyaktuk Island- surface sediment 2-5 m depth
High density >200 μm



Tuktoyaktuk Island – parental material
High density >200 μm

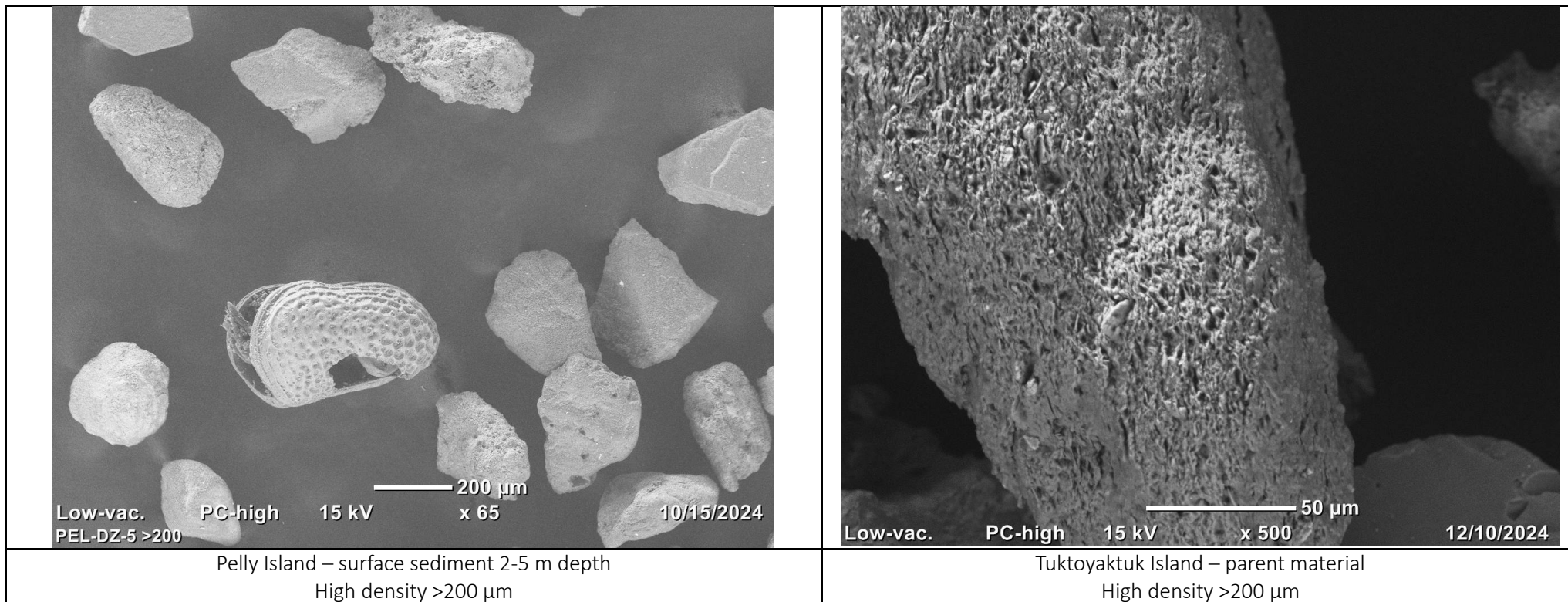


Figure 3: Additional Scanning Electron Microscope Images of samples ranging from low density to high density > 200 μm.