

**SCIENTIFIC RESEARCH LICENSE**

LICENSE NUMBER 04 020 25R-M

ISSUED TO: Stephanie Coulombe  
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TEAM MEMBERS: Please see other attached for complete list of research personnel

TITLE: Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut

**OBJECTIVES OF RESEARCH:**

The project aims to study and monitor changes in permafrost at Cambridge Bay and southern Victoria Island through short-term research and a long-term monitoring program in collaboration with local partners. By tracking permafrost conditions, landscape shifts, and their impact on aquatic ecosystems, the research will create a continuous dataset to assess permafrost degradation, lake evolution, and coastal stability. This data will support community adaptation and inform environmental decision-making. For the 2025 field season, the methodology and study sites will remain the same as in 2024 and previous years. The team will monitor permafrost conditions, soil microbes, groundwater movement, and water quality. Drones, videos, and photos will document coastal erosion, landslides, and sea ice conditions. Soil and water samples will be analyzed for permafrost thaw and changes in microbial populations. Non-invasive geophysical methods will map subsurface features, while water sensors will track levels, waves, tides, and currents. Instruments deployed offshore and, on the seafloor, will be retrieved before freeze-up, enhancing our understanding of coastal changes in Dease Strait.

**TERMS & CONDITIONS:**

The holder of the license will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (NIRB File # 18YN020) and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this license.

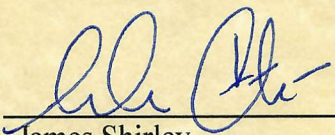
**DATA COLLECTION IN NU:**

DATES: May 1,2025 to December 31,2025

LOCATION: Victoria Island

Scientific Research License 04 020 25R-M expires on December 31,2025

Issued at Iqaluit, NU on April 16,2025

  
James Shirley  
Science Advisor

