

SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 015 26R-M

ISSUED TO: Melissa Lafreniere
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AFFILIATION: Queens University

TITLE: Cape Bounty Arctic Watershed Observatory (CBAWO) Melville Island, Nunavut

OBJECTIVES OF RESEARCH:

We will measure winter snow accumulation using both remotely piloted aircraft systems and ground measurements in the spring. Throughout the entire study period we will collect daily stream water samples and install optical sensors in streams, to investigate how permafrost disturbances and different soil and vegetation community types in watersheds affect dissolved organic matter composition, nitrogen and phosphorus loads in High Arctic streams and ponds. Additionally, our team will aim to undertake a compressive investigation of the sources and pathways controlling mercury movement in atmosphere-soil-plant-water continuum. We will collect soil, plant, water, and air samples from areas representative of the major landcover types to study the forms of mercury and how it is deposited, altered and mobilized through the system. Our team will also continue with investigations of the climatic and landscape controls on terrestrial methane fluxes and plant phenology in our ITEX site, through our new experimental plots.

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 # 03YN010) and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this licence. These terms and conditions will form part of this license.

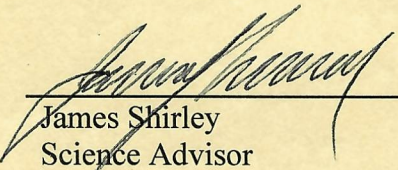
DATA COLLECTION IN NU:

DATES: May 23, 2026-August 12, 2026

LOCATION: Cape Bounty

Scientific Research License 02 015 26R-M expires on December 31, 2026

Issued at Iqaluit, NU on March 25, 2026


James Shirley
Science Advisor

