

SCIENTIFIC RESEARCH LICENSE

LICENSE NUMBER 01 001 25R-M

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TITLE: Seasonal Surveys of Physical, Optical and Biogeochemical Properties in Seawater along Littoral to Deep-Ocean Gradients in the Qikiqtarjuaq area, and Physiological Properties of Phytoplankton in Minimum Light.

OBJECTIVES OF RESEARCH:

The proposed project will provide an extensive survey of the main variables involved in the bottom-up control of primary production (light and nutrients), and of microalgae production itself (biomass, diversity and productivity). The formers may change significantly in the near future as a consequence of climate change related modifications of the sea ice regime, in nutrient load in the Baffin Current that brings waters from the Canadian Archipelago, and in nutrients carried with the freshwater inputs from land. Water clarity may also change because of increased sediment resuspension in shallow waters due to increased wind stress in increasingly ice-free waters, with possible consequences on benthic organisms. Finally, invasive microalgal species may emerge in the region with increased seawater temperature and ship traffic. The data produced by this project will allow detecting such changes in the future and anticipate possible cascading effect over the whole marine ecosystem.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (NIRB File # 14YN040) 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: January 6,2025 to December 31,2025

LOCATION: Qikiqtarjuaq & Surrounding Area

Scientific Research License 01 001 25R-M expires on December 31,2025

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