

**SCIENTIFIC RESEARCH LICENSE**

LICENSE NUMBER 02 024 24R-M

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TITLE: Evaluation of Natural Bioremediation Potential of Arctic Beaches

**OBJECTIVES OF RESEARCH:**

The warming Arctic climate results in annual reductions of sea-ice. With decrease in Northwest passage ice cover, the amount of shipping traffic is increasing. Unfortunately, a consequence of more shipping is an increased risk that shipping fuel will be accidentally released into the vulnerable Arctic environment. In southern latitudes, naturally occurring bacteria in the environment can consume shipping fuels as food sources. However, it is unknown if naturally occurring bacteria living in Arctic beaches can do this in the colder Arctic conditions. The objective of this research is to determine if naturally occurring Arctic bacteria have the ability to degrade shipping fuels under Arctic conditions. It is important to know this so that in the event of a future accidental shipping fuel spill in the Arctic, we will know exactly how to respond to minimize negative environmental impacts.

**TERMS & CONDITIONS:**

The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (19YN022) 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.

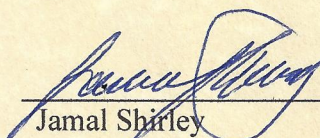
**DATA COLLECTION IN NU:**

DATES: July 1,2024 to August 15,2024

LOCATION: Cornwallis Island

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Jamal Shirley  
Science Advisor

