

SCIENTIFIC RESEARCH LICENSE

LICENSE NUMBER 02 004 24R-M

ISSUED TO: Patrick Murphy
Woodwell Climate Research Center
149 Woods Hole Rd
Falmouth, MA
2540 USA

TEAM MEMBERS: S.Natali,K.Arndt,M.Montemayor,H.Rodenheizer,
J.Howard,J.Hung

TITLE: Permafrost Pathways

OBJECTIVES OF RESEARCH:

Our goal is to quantify permafrost greenhouse gas fluxes across the Arctic boreal region, and use these results to inform more realistic international climate policy. Currently, estimates of carbon emissions from permafrost regions are highly variable and thus, policymakers do not account for these carbon emissions when setting emissions reduction targets. We intend to measure carbon exchange where data is needed most across the Arctic boreal region using a network of monitoring stations, including in Nunavut. Over the course of five years, these stations will measure carbon dioxide and methane emissions from natural permafrost ecosystems. The monitoring stations would remain in Nunavut year-round and consist of a structure such as a metal tri-pod, with sensors attached above and below ground. These sensors collect data about weather, environmental conditions, and associated greenhouse gas movement.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this licence.

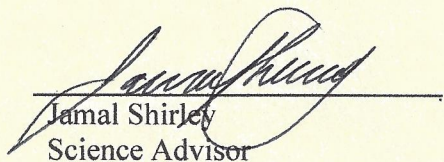
DATA COLLECTION IN NU:

DATES: July 10,2024 to August 20,2024

LOCATION: Pond Inlet,Resolute Bay

Scientific Research License 02 004 24R-M expires on December 31,2024

Issued at Iqaluit, NU on December 7,2023


Jamal Shirley
Science Advisor

