

SCIENTIFIC RESEARCH LICENSE

LICENSE # 01 001 27R-M

ISSUED TO: Tom Meijeraan
Arctic Reflections
Paardenmarkt 1, Delft, Zuid Holland
2611 PA The Netherlands

TEAM MEMBERS: F.Ypma, C.Owen, S.Afzali, W.Petrie, R.Pritchett, S.Mikkola

AFFILIATION: Arctic Reflections

TITLE: Arctic Ice Thickening Field Test, Qikiqtarjuaq, Nunavut

OBJECTIVES OF RESEARCH:

Arctic Reflections is testing a method called Arctic Ice Thickening. The approach is similar to constructing an ice road: during winter, seawater is pumped from beneath the sea ice onto its surface, where it freezes in the cold Arctic air and adds to the thickness of the ice. Thicker ice may persist longer into the spring and summer, potentially extending the period of sea-ice cover. In 2027, our research will take place near Qikiqtarjuaq and build on our 2026 field test in the same area. During a field test in February and March, we will pump seawater onto selected areas of the sea ice to increase its thickness. We will then monitor both thickened and non-thickened ice throughout the subsequent melting season using manual measurements, locally installed sensors, drone surveys and satellite imagery. This will allow us to assess how effectively AIT increases ice thickness and how the resulting ice develops and persists under Arctic conditions.

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 #25YN078)and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this license.

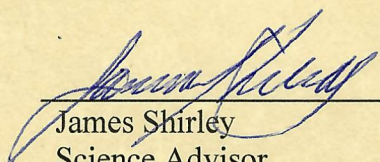
DATA COLLECTION IN NU:

DATES: February 01, 2027-July 15, 2027

LOCATION: Qikiqtarjuaq Sea Ice

Scientific Research License 01 001 27R-M expires on December 31, 2027

Issued at Iqaluit, NU on September 29, 2026


James Shirley
Science Advisor

