

Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 038 19R-M

ISSUED TO: Gifford Miller
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AFFILIATION: University of Colorado Boulder

TITLE: Ancient DNA in Lake Sediment

OBJECTIVES OF RESEARCH:

The Arctic is currently warming twice as fast as the global average with summer temperatures predicted to be 4 to 6°C above late 20th Century averages by 2100 CE. Amplified warming in the Arctic is expected to result in a northward shift in plant ranges. We proposed to sample Baffin Island lake sediment that preserves ancient DNA from the current warm times (the last 10,000 years) and the much warmer previous warm time about 125,000 years ago. Ancient DNA will document how different plants were in those earlier warm times, and organic molecules allow us to estimate how much warmer the summers were then. By combining these data with modern vegetation studies and climate monitoring, an ecosystem-climate model will be developed to predict the likely evolution of Arctic ecosystems by 2100 CE

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.

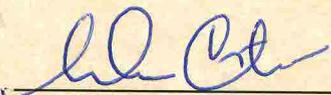
DATA COLLECTION IN NU:

DATES: May 10, 2019-August 25, 2019

LOCATION: Clyde River Area, Pond Inlet Area

Scientific Research License 02 038 19R-M expires on December 31, 2019

Issued at Iqaluit, NU on April 29, 2019

for 

Mary Ellen Thomas
Science Advisor

