# Nunavummi Qaujisagtulirijikkut / Nunavut Research Institute

phone:(867) 979-7279 Box 1720, Igaluit, NU X0A 0H0 fax: (867) 979-7109 e-mail: mosha.cote@arcticcollege.ca

#### SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 048 17N-A

ISSUED TO:

Ashley Berg

University of Tennessee

1412 Circle Drive

Knoxville, Tennessee 37966 USA

**TEAM MEMBERS:** 

L. Kah, J. Dunham, G. Gilleaudeau

AFFILIATION:

University of Tennessee

TITLE: Preservation of Organic Matter in Early Diagenetic Chert

#### **OBJECTIVES OF RESEARCH:**

Ancient microbial mats preserved in chert provide the most effective mechanism for understanding Earth's early biosphere; yet visual analyses of microbial morphologies are rarely accompanied with in situ chemical data. More insight about which microbial processes, such as metabolic processes or decomposition, were active during preservation can be gained from such chemical data. The carbonate rocks and sedimentary chert of the Angmaat Formation, near White Bay, Baffin Island contain the most exquisitely preserved 1.2 billion-year-old microbial mats. This project aims to correlate the well-preserved mat morphologies to the preserved geochemical signatures in the mats. Samples collected by Linda Kah during a 1993-1994 field season for a separate, earlier project focused on the geochemistry preserved in the carbonate rocks.

### 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 15, 2017-August 01, 2017

LOCATION: Northern Baffin Island

Scientific Research License 02 048 17N-A expires on December 31, 2017

Issued at Iqaluit, NU on June 21, 2017

Mary Ellen Thomas



