## Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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## SCIENTIFIC RESEARCH LICENSE

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ISSUED TO:

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**TEAM MEMBERS:** 

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Old Rocks in a New Light: Integrating the ca. 1.1 Ga Bylot Supergroup's Tectonic

History and Records of Environmental Change in the Context of New Age Constraints

## **OBJECTIVES OF RESEARCH:**

The late Mesoproterozoic Bylot Supergroup in the Borden Basin preserves one of the best sedimentary records archiving this great transition and provides an ideal natural laboratory to calibrate latest Mesoproterozoic global change and to test models for the Meso-Neoproterozoic transition. Recent black shale Re-Os geochronology from the lower and middle Bylot Supergroup indicate that many of these changes occurred ca. 200 Ma years later than previously thought (i.e. 1050 Ma rather than 1250 Ma), meaning they coincided with the amalgamation of supercontinent Rodinia and the Grenville orogeny. This new geochronological context suggests possible links between these tectonic, biological and geochemical phenomena through changes in continental weathering that brought about a first order shift in the nature of global carbon cycling.

## **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 09, 2017-July 27, 2017

LOCATION: Borden Basin

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