Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 032 12N-A

ISSUED TO:

John Tarduno

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TEAM MEMBERS:

J. Tarduno, R. Bono, R. McKinley, A. Callahan, J. Kaempfer, P. Higgins

AFFILIATION:

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TITLE: The ultra-warm Arctic 90 million years ago

OBJECTIVES OF RESEARCH:

The 90 million-year-old Arctic region contains a geologic history that records extreme climatic warmth that might provide insight into modern conditions and the potential for future climate change. We are studying fossils (including turtles) from Axel Heiberg Island that attest to the high paleo-temperatures, and volcanic rocks from Axel Heiberg and Ellesmere Islands whose eruption may have contributed carbon dioxide to the ancient atmosphere. We wish to better determine ancient Arctic temperatures and to learn if volcanic activity caused the warm conditions 90 million years ago. My work involves a small group (4-5, students and research assistants) sampling sedimentary and volcanic rocks. We work from small camps with minimal impact on the environment. Our logistic support comes from the Canadian Polar Continental Shelf Project.

TERMS & CONDITIONS:

The holder of the license will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report and by the Department of Culture, Language, Elders and Youth archeological sites terms and conditions. These terms and conditions will form part of this license.

DATA COLLECTION IN NU:

DATES:

June 28, 2012-July 28, 2012

LOCATION: Expedition Fiord, Bunde Fiord, Hansen Point

Scientific Research License 02 032 12N-A expires on December 31, 2012

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Mary Ellen Thomas Science Advisor

