Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 031 13N-M

ISSUED TO: Marie Claude Williamson

Natural Resources Canada

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TEAM MEMBERS: M. Williamson

AFFILIATION:

TITLE: Environmental mineralogy and geochemistry, South Fiord, Axel Heiberg Island,

Nunavut

OBJECTIVES OF RESEARCH:

The project goal is to determine how the metals contained in mine waste are dispersed in the ground and local streams in an area where permafrost encloses the waste. To reach this goal, we identify and map rust-coloured deposits or 'gossans' that are unusually rich in copper and iron. In some cases, gossans are comparable to the mine waste deposits that result from the extraction of metals for industrial purposes. The natural occurrences found on Axel Heiberg Island have the advantage of being in contact with permafrost for thousands of years. As a result, we can observe the effects of long-term processes affecting these materials, the enclosing permafrost, and the local streams and lakes. A better understanding of these processes will allow us to design effective and safe ways of containing mine waste in the Arctic environment.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and consitions of the Nunavut Impact Review Board Screening Decision Report and the Department of Culture & Heritage archeological sites terms and conditions. These terms and conditions will form part of this licence.

DATA COLLECTION IN NU:

DATES: July 03, 2013-July 30, 2013

LOCATION: Axel Heiberg Island

Scientific Research License 02 031 13N-M expires on December 31, 2013

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Mary Ellen Thomas Science Advisor



