

# Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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## SCIENTIFIC RESEARCH LICENCE

LICENCE # 0205404N-A

ISSUED TO: Malcolm Stephenson  
Jacques Whitford Limited  
711 Woodstock Road P.O Box 1116  
Fredricton, NB  
E3B 5C2 Canada  
506-457-3200

TEAM MEMBERS: Dr. M. Stephenson, Dr. D. Blanchard

AFFILIATION: Jacques Whitford Limited

TITLE: CanZinco Limited, Environmental Effects Monitoring Field Study

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### OBJECTIVES OF RESEARCH:

The objective of the research program is to collect samples as required to comply with the Metal Mining Effluent Regulation of the Fisheries Act. Jaques Whitford has been retained by Breakwater Resources Limited, the owner of the Nanisivik Mine, to carry out the required EEM program. Fish will be collected from the Strathcona Sound, in the northern part of Baffin Island. Strathcona Sound is located at Latitude. Fish from the "exposure" area will be collected near the mouth of Twin Lakes Creek. Fish from the "reference" area will be collected near the mouth of the Strathcona River. The target species will be shorthorn Sculpin and Arctic cod. A minimum sample size of 20 male and 20 female fish, of each species, will be sought at both the exposure and reference areas. IN order to ensure that the desired representation of both sexes can be obtained, it is requested that the permit allows for the retention of up to 100 shorthorn sculpin and 100 Arctic cod, in total. Fish will be killed by a blow to the head, and will be held intact in a frozen conditions prior to being shipped to Fredricton, NB, where they will be thawed and dissected as per the requirements of the MMER.

### TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and conditions (attached) from 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 licence.


### DATA COLLECTION IN NU:

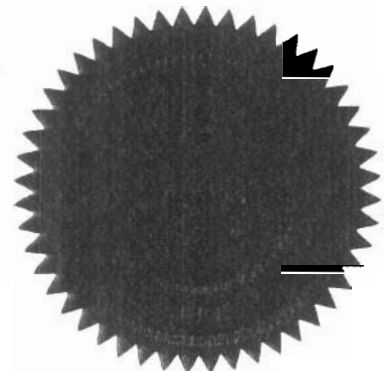
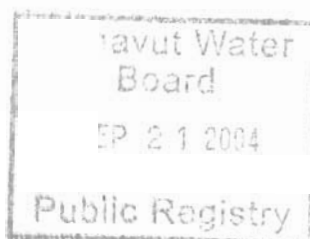
DATES: July 30, 2004-August 30, 2004

LOCATION: Nanisivik

Scientific Research Licence 0205404N-A expires on December 31, 2004.

Issued at Iqaluit, NU on September 08, 2004.

  
Earle Baddaloo  
Science Advisor



September 08, 2004

Malcolm Stephenson  
Jacques Whitford Limited  
711 Woodstock Road P.O Box 1116  
Fredricton, NB  
E3B 5C2 Canada  
506-452-7652

**RE: 2004 Science Research License**

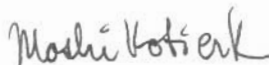
Please find enclosed your 2004 Research License No. **0205404N-A** which was prepared under the *NUNAVUT SCIENTISTS ACT*. Should you require further support from the NRI Research Centre, please contact the Manager to discuss your research needs.

Consistent with the *Scientists' Act*, researchers issued licenses must submit to NRI an *Annual Summary Report* of their research. Upon completion of your fieldwork in the Nunavut, please ensure that you submit a 500-1000 word non-technical *Annual Summary* of your research activities and findings within one year from the date of license issue, or with any new project application, whichever is earlier. To ensure maximum accessibility of your research results to Nunavut residents, we require that you provide us with an Inuktitut or Innuinaqtun translation of your *Annual Summary Report*. A list of translators is available from the Nunavut Research Institute upon request. We also require a copy of your *Final Report* and an English and translated executive summary. Copies of papers that you publish are greatly appreciated. Computer disk copies of reports, in Word Perfect or Microsoft Word, would be most appreciated for posting on the NRI web site ([www.nunanet.com/~research](http://www.nunanet.com/~research)).

Thank-you in advance for assisting in the promotion and development of a scientific research community and database within Nunavut. The reports and information you provide are utilized to prepare an annual research compendium, which is distributed to communities and organizations in Nunavut as well as to researchers across Canada.

Please accept our best wishes for success in your research project.

Sincerely,



per Mary Ellen Thomas  
Manager, Research Liaison

September 08, 2004

NOTIFICATION OF RESEARCH

PLEASE BE ADVISED THAT SCIENCE RESEARCH LICENCE No. 0205404N-A HAS BEEN ISSUED TO:

Malcolm Stephenson  
Jacques Whitford Limited  
711 Woodstock Road P.O Box 1116  
Fredricton, NB  
E3B 5C2 Canada  
506-457-3200

**TO CONDUCT THE FOLLOWING STUDY:**

CanZinco Limited, Environmental Effects Monitoring Field Study

**SUMMARY OF RESEARCH:**

The objective of the research program is to collect samples as required to comply with the Metal Mining Effluent Regulation of the Fisheries Act. Jaques Whitford has been retained to carry out the required EEM program. As a component of the EEM program, the Nanisivik Mine is required to collect fish samples from the "exposed" and "Reference" locations in order to evaluate the potential effects of the mine effluent on fish. Fish will be collected from the Strathcona Sound, in the northern part of Baffin Island. Fish from the "exposure" area will be collected near the mouth of Twin Lakes Creek. Fish from the "reference" area will be collected near the mouth of the Strathcona River. The sampling program will be July 30, 2004 and end date before August 30, 2004. The target species will be shorthorn Sculpin and Arctic cod. A minimum sample size of 20 male and 20 female fish, of each species, will be sought at both the exposure and reference areas. In order to ensure that the desired representation of both sexes can be obtained, it is requested that the permit allows for the retention of up to 100 shorthorn sculpin and 100 Arctic cod, in total. Fish will be killed by a blow to the head, and will be held intact in a frozen condition prior to being shipped to Fredricton, NB, where they will be thawed and dissected as per the requirements of the MMER. The fishing gear to be used will include angling with jigs, and gill nets (a standard experimental gill net set with mesh size ranging from 5.0 inch to 4 inch) and angling using jigs.

**TERMS & CONDITIONS:**

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**THE STUDY WILL BE CONDUCTED AT:**

**BETWEEN:** July 30, 2004 - August 30, 2004.

*Moshi Kofiek*  
per Mary Ellen Thomas  
Manager, Research Liaison