

## Executive summary

## Hall Peninsula Integrated Geoscience (HPIG) project

### Location of Undertaking

The project will be conducted in all or parts of six NTS (scale 1:250 000) map sheets. Specifically, these map sheets include 25 J, I, P and O and 26 A and B. The most intensive work will be conducted in map sheets 25O and 26B. Mapping will be conducted out of temporary tent-based camps in map sheet 25 O (CNGO South Camp) in 2012 and map sheet 26 B (CNGO North Camp) in 2013. Field work will be conducted approximately from June 20<sup>th</sup> to August 20<sup>th</sup> in 2012 and 2013. The possibility of an additional, less intensive, year in 2014 based from Iqaluit is possible.

The proposed campsites are located on glaciofluvial terraces overlooking lakes. South Camp is located southeast of Iqaluit (~135 km) while North Camp is located northeast of Iqaluit (~95 km). We will be supplied with a Twin Otter aircraft equipped with tundra wheels and fuel will be positioned DC-3.

### Description of Undertaking

The proposed work will consist of up to 25 scientists and support staff supported by two helicopters. We will position up to 250 barrels of fuel in the spring of 2012 and 2013. Field work will involve foot traverses and have minimal disturbance. First size rock and soil samples will be taken with a rock hammer or a shovel. A small, hand held drill will be used to extract a limited number of shallow (less than 3m) permafrost cores.

## Water Use

Water will be used only for human consumption. This will include drinking, showering, cooking and cleaning. Water will be pumped from the source once or twice daily and stored in a 1000 L plastic container. We will use a gas pump equipped with a metal screen. On average, we expect to use between 500 L and 1000 L of potable water per day. Grey water will be disposed of in pits that will be dug at least 35m from a water body and covered with fill on a regular basis. Similarly, pits for sewage disposal will be dug at least 50m from a water source and downstream/downslope from the potable water source.

## Waste

Non-combustible waste will be shipped out of the camp and disposed of at the City of Iqaluit municipal waste facility. Combustible waste will be incinerated in empty metal fuel drums equipped with a portable incinerator and the ashes will be cooled and buried. We will consult the local communities to determine the best method of disposing the empty fuel drums. At minimum, they will be removed from the camp site and left with the community, if not needed they will be transported to an approved storage or disposal site.

## Predicted Environmental Impacts

No long-term environmental impacts are expected. Each camp site will be completely cleaned following each field season. A fuel cache will be established at the camp in a self-supporting instaberm and spill kits will be on hand. Both camps occur on Crown Land and will not be affected by project activities. The project will not affect the quality, quantity, or flow of water in the area. No other water rights are known to exist in the area of the two proposed camps.