



Natural Resources  
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Geological Survey of Canada  
601 Booth Street  
Ottawa, Ontario K1A 0E8

Commission Géologique du Canada  
601 rue Booth  
Ottawa (Ontario) K1A 0E8

*Date:* November 10<sup>th</sup>, 2010  
*Submitted by:* Dr. David Corrigan  
Senior Research Scientist  
Geological Survey of Canada

## **RE: Annual Report for NWB Licsence No. 3BC-GEM0911**

Camp Location: Melville Peninsula, NU

**Introduction:** This permit is for a medium-sized geoscience mapping project that took place on Melville Peninsula in the summers 2009 and 2010, by the Geological Survey of Canada (Department of Natural Resources Canada). We are planning a third and final field season in the month of July 2011. This report is for the 2010 field season, with the main camp located north of Barrow River in NTS map sheet 46-O, at the following coordinates:

N 67° 29.46'                      W 82° 49.846'

An amendment requesting relocating the camp for the 2010 season at the above coordinates was approved by INAC and is attached. The Barrow River camp was a small, minimal impact camp of about 20-25 persons conducting government geoscience and university research. The camp operated from June 30<sup>th</sup> to August 16<sup>th</sup> using tents (no permanent structures).

Note that we have left 12 unused, full, sealed, 45 gal drums of Jet-B fuel excellent condition in a cache for use in the summer 2011. We do not intend to camp in the area next summer, but we need to go back to the general area to complete the regional sampling program. The empty drums will be shipped out at the end of July 2011.

Also of note is the fact that camp demobilization at the end of the field season, planned for August 16 and 17<sup>th</sup>, was hampered by 11 consecutive days of unflyable weather due to fog (August 16<sup>th</sup> to August 27<sup>th</sup>). We managed to clean-up and move out on August 28-29-30<sup>th</sup>, with a Twin Otter. All camp material was removed except for the 12 drums mentioned above, as well as a small amount of lumber (about 30 pieces of 2"x 8"x8' untreated spruce) that had been used as bases for the Weather Haven tent frames. They have been piled on high, dry ground and will be removed in the summer 2011 as we resume operations on Melville Peninsula (final year of the project).

## ***Report Details***

### ***a. Summary of water use and waste disposal activities.***

- Approximately 1000 litres of water per day were used during camp operation, between June 30<sup>th</sup> and August 20<sup>th</sup>. Water was pumped from an unnamed river into a reservoir at the camp. Water levels and quality in the source river remained excellent throughout the summer. Water was used for cooking, drinking and showers. Dishwater was coarsely filtered by passing through perforated buckets, before being decanted in sumps dug in thick gravelly soil (esker). All solid waste was incinerated. Grey water from the shower was evacuated directly in a sump (same area, same soil type). All sumps were covered with sand/gravel at the end of the summer.
- Garbage was burned daily in a “Smart Ash” incinerator. As much metal as possible (crushed cans) was removed and shipped out to Repulse Bay for proper disposal at the municipal landfill. Heavy plastics were not burned.
- Toilet was of “out house” type. Human waste was covered with lime and buried under at least 1 meter of gravelly/sandy soil. Note that daytime camp population was 2 to 3 individuals, so toilet usage in camp was minimal.

### ***b. List of unauthorized discharges.***

- None.

### ***c. Spill Contingency Plan.***

- All fuel containers larger than jerry cans (e.g., jet-B, diesel, regular gas in 45 gal drums) were kept in two portable berms at the landing strip. Helicopter refueling was done at the berm in order to eliminate any possibility of spills on the ground.
- For electrical power, the camp used small, portable generators that were placed on drip-pans during refueling.
- Small diesel-burning furnaces were used to heat the office and kitchen tents. Fuel lines connecting 45 gal fuel drums to furnaces were wrapped with absorbent cloth from spill kits and had a drip pan underneath. No spills were observed.

### ***d. Description of all progressive or final reclamation work.***

- This was a relatively small, low-impact project without any drilling, sample processing, or use of heavy machinery. Tents were used for kitchen, office and sleeping quarters, and no permanent structures were built.
- Reclamation work consisted of picking up any piece of garbage (paper, plastic, etc...) on a daily basis, and ensuring proper flow of water in sumps to eliminate any

possibility of spill. All holes dug up for camp operations were refilled at the end of the summer.

- All used fuel drums (mainly Jet-B) were cleaned, crushed, and transported back to Repulse Bay for proper disposal.
- About 12 new, full and sealed 45 gal drums were checked for absence leaks and left in a cache for use in the summer 2011.
- About 30 pieces of untreated 2"x8"x8' spruce lumber were left on site, stacked on high, dry ground, to be removed in July 2011.

***e. Summary of all information requested and results of the monitoring program.***

- No information requested, except camp location. An inspection was done by the Nunavut Water Board on July 16<sup>th</sup> 2010 and camp operations and installations were deemed conformable with rules and regulations.

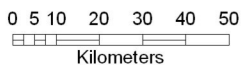
***f. Other details requested by the board.***

- None

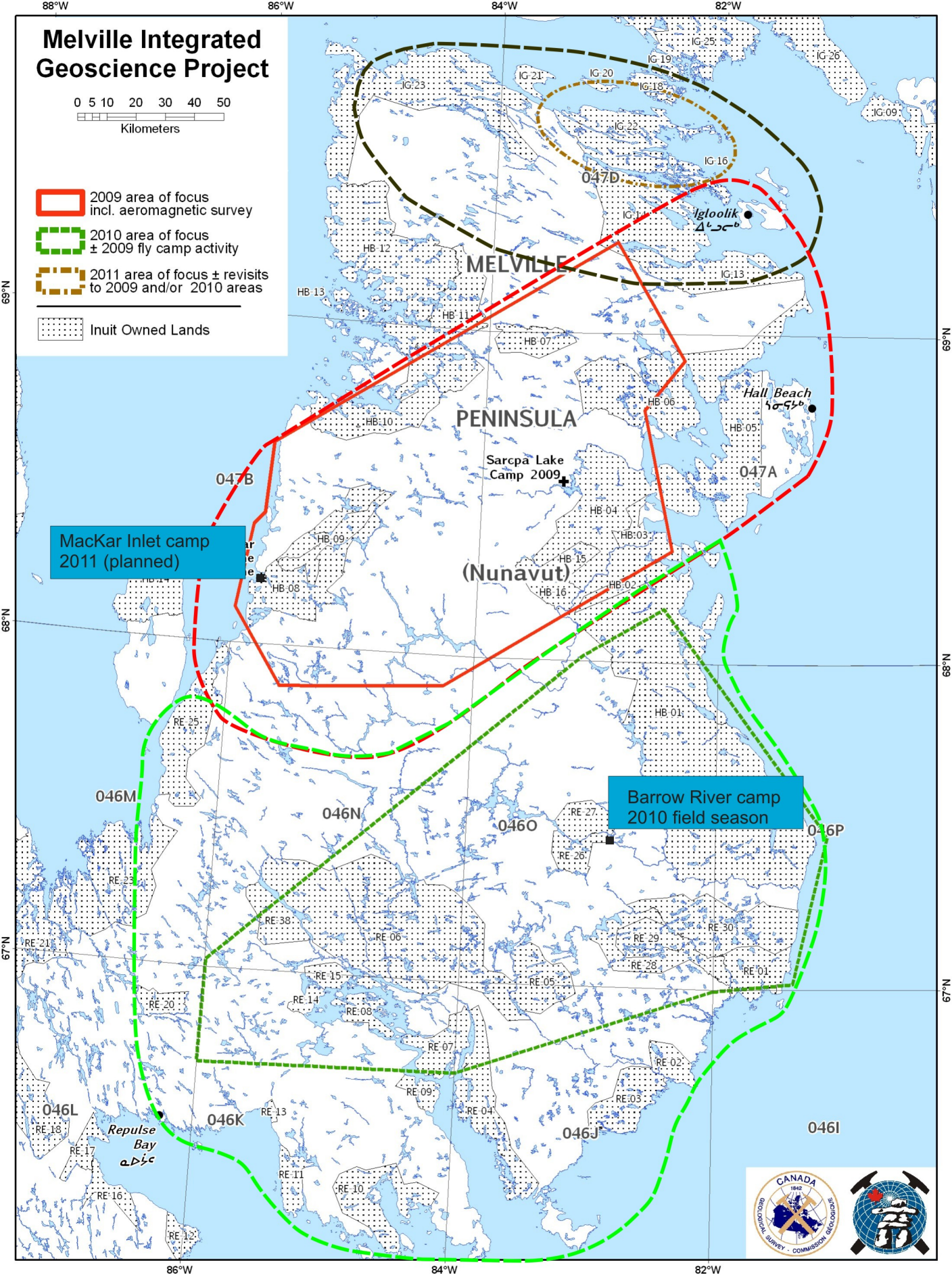
***Appendix***

- 1- Map with Barrow River camp location
- 2- Copy of letter from INAC with new camp location approval
- 3- Photograph of camp, on western shore of a south-flowing unnamed N-S river that empties into Barrow River.
- 4- Photograph of Campsite after demobilization (1)
- 5- Photograph of Campsite after demobilization (2)

# Melville Integrated Geoscience Project



- 2009 area of focus  
incl. aeromagnetic survey
- 2010 area of focus  
± 2009 fly camp activity
- 2011 area of focus ± revisits  
to 2009 and/or 2010 areas
- Inuit Owned Lands





Indian and Northern  
Affairs Canada

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Land Administration  
P.O. Box 100  
IQALUIT, NU X0A 0H0  
Phone: 867-975-4275  
FAX: 867-975-4286

*Your file - Votre référence*

*Our file - Notre référence*

July 8, 2010

David Corrigan  
c/o Geological Survey of Canada  
615 Booth Street  
Ottawa, ON  
K1A 0E9

Dear Mr. Corrigan:

**Re: Land Use Permit #N2009N003**  
**Type of Operation: Research Camp**  
**Location: Barrow Lake Area, Baffin, NU, NTS 460**

Further to our letter dated June 23, 2010, this will confirm that the above land use permit is hereby amended to include the work outlined in your request. The amendment does not require a screening by the Nunavut Impact Review Board, pursuant to Article 12.4.3, as it does not significantly modify any component or activity of the previously approved project under the above mentioned land use permit.

All conditions annexed to land use permit N2009N003 will apply to this amendment.

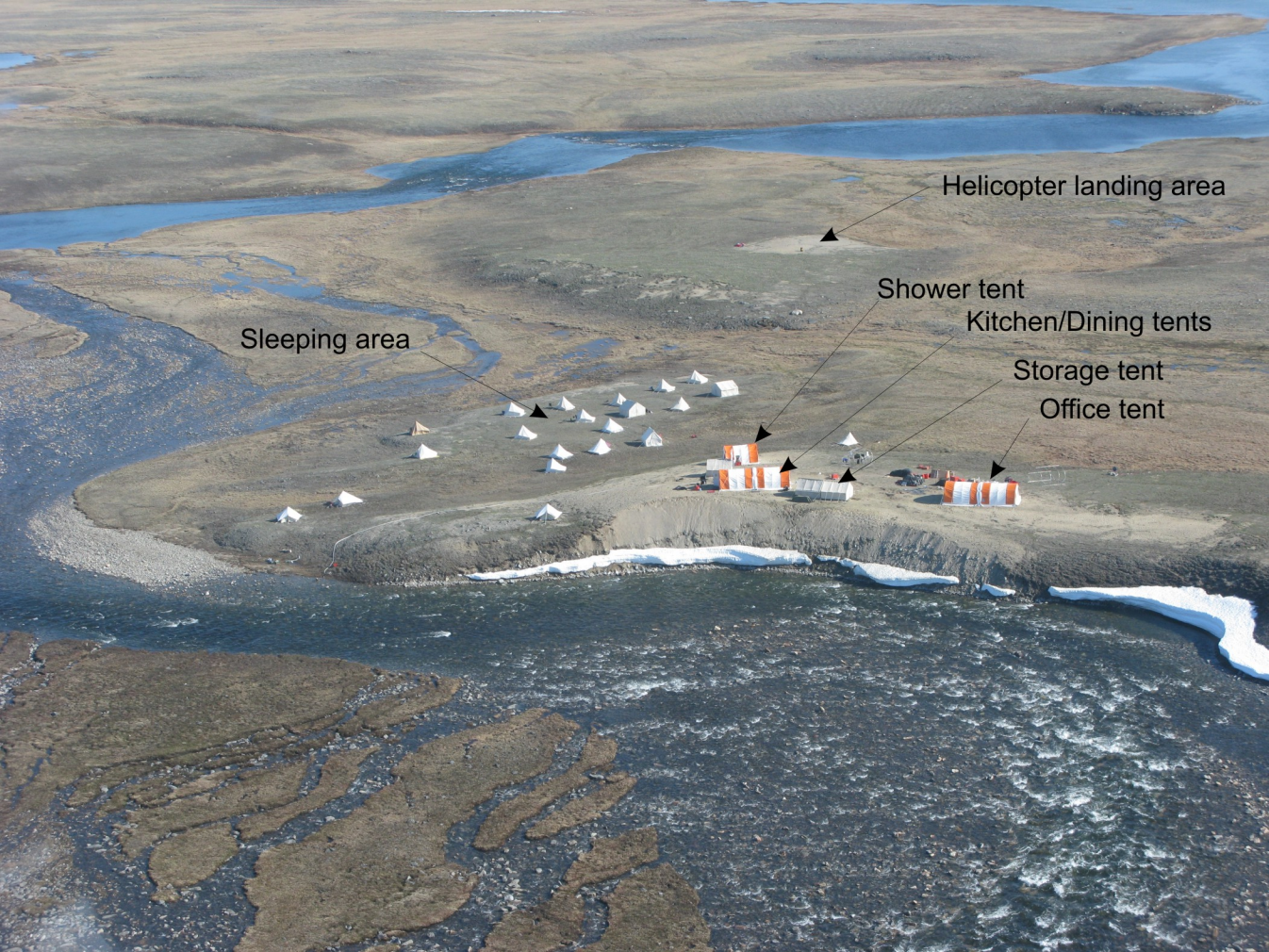
This amendment is only valid for those activities that are located on Crown Land.

Sincerely,

Brian O'Mara  
A/Land Administrator Specialist

cc: Manager, Field Operations  
RMO – Baffin  
NPC  
CIDMS #414834





Helicopter landing area

Shower tent

Kitchen/Dining tents

Storage tent

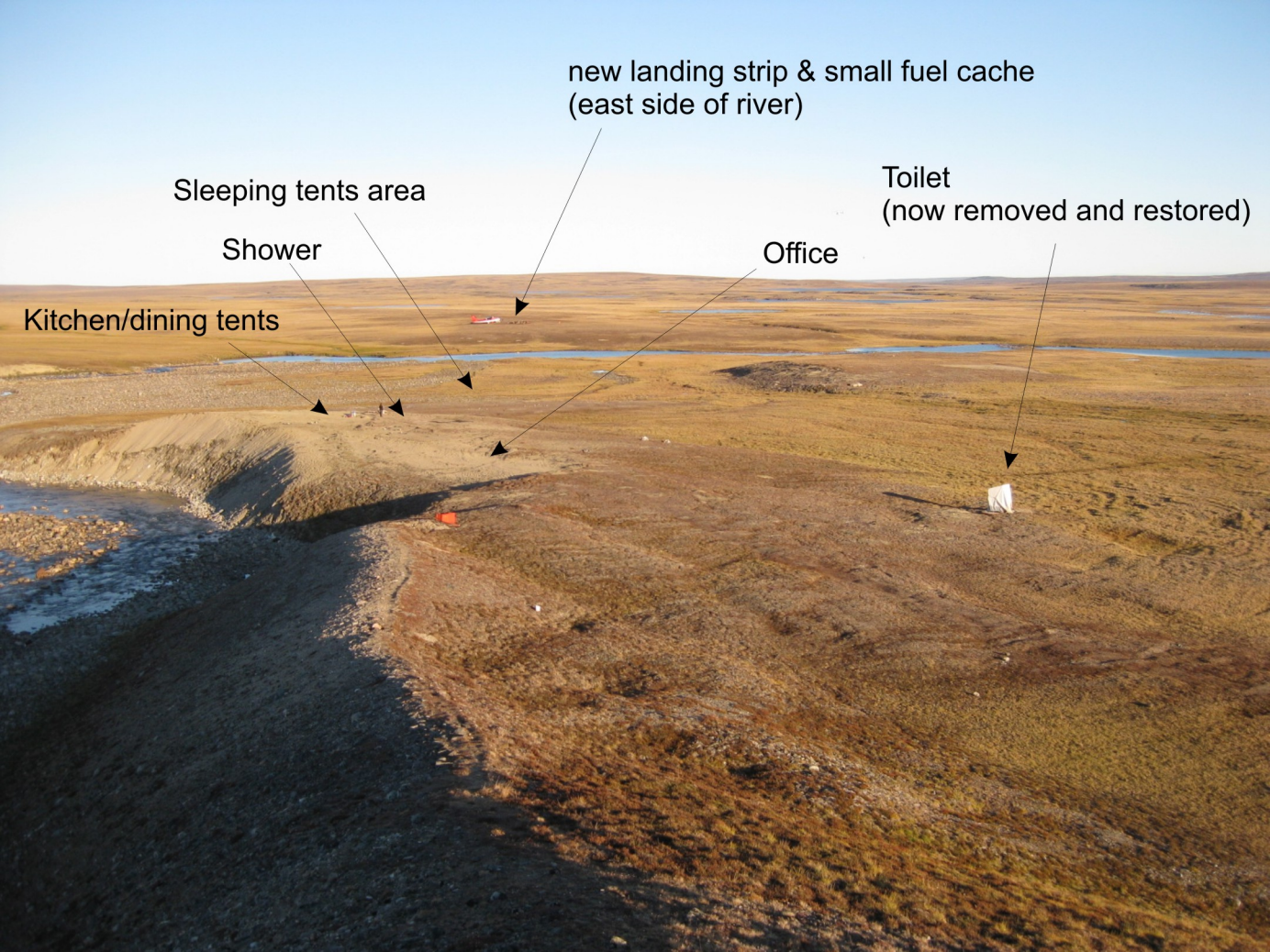
Office tent

Sleeping area









new landing strip & small fuel cache  
(east side of river)

Sleeping tents area

Shower

Toilet  
(now removed and restored)

Office

Kitchen/dining tents