

**WILDLIFE MITIGATION AND MONITORING PLAN**

**MPH Consulting Limited**

**Turquetil-Esker Drilling Program**

**Turquetil-Henik Lakes Area**

**Nunavut**

Wildlife Mitigation and Monitoring Plan prepared March 31, 2021

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## 1. Preamble

This wildlife mitigation and monitoring plan is meant to be used as a strict guideline for MPH Consulting to ensure that wildlife in the Turquetil - Esker Drilling Project area is not disturbed.

The Turquetil - Esker Drilling Project area is within the protected area of the Qamanirjuaq Caribou herd as per Figure 1 but the Esker Operational Area is outside their traditional calving grounds (based on information provided by the Qamanirjuaq Caribou Management Board). The Turquetil Operational Area is within the western portion of the calving grounds. Spring and Fall migrations will see moderate numbers of animals in the vicinity of both operational areas as per Figures 2 and 3.

According to *Key Migratory Bird Terrestrial Habitat Sites in the Northwest Territories and Nunavut* (2008), produced by the Canadian Wildlife Service, there are no critical migratory paths or nesting areas in the project area.

According to the Natural Resources Canada online map, *The Atlas of Canada*, there is one species of mammal at risk within the Southern Arctic Ecozone, the Wolverine (Eastern Population). There are 6 species listed as of special concern for the Southern Arctic Ecozone, namely the Short-Eared Owl, the Tundra Peregrine Falcon, the Blackline Prickleback, the Wolverine (Western Population), the Polar Bear and the Grizzly Bear.

As such the focus of this plan is twofold and includes the mitigation of caribou and other wildlife disturbances in the Turquetil - Esker Drilling Project area as well as monitoring caribou and other wildlife sightings.

## 2. Mitigation Plan

- Although the Turquetil - Esker Drilling Project area is not in the traditional calving grounds as defined by the Qamanirjuaq Caribou Management Board, if caribou calving is observed in the area all activities will be suspended immediately. The appropriate authorities will be notified immediately.
- MPH Consulting will suspend all low-altitude flights by aircraft, diamond drilling activities and equipment movement if caribou are observed during pre-calving or post-calving periods.
- No fuel cache may be established within 10 km or conduct any drilling within 5 km of important caribou crossings.
- Low-level flying should be avoided when possible. If a concentration of caribou is encountered an altitude of at least 610 m above ground should be maintained. When large concentrations of birds are observed, flight level is restricted to 1,000 m vertical distance

and 1,500 m horizontal distance. If weather conditions prohibit higher altitudes the flight path must be changed accordingly.

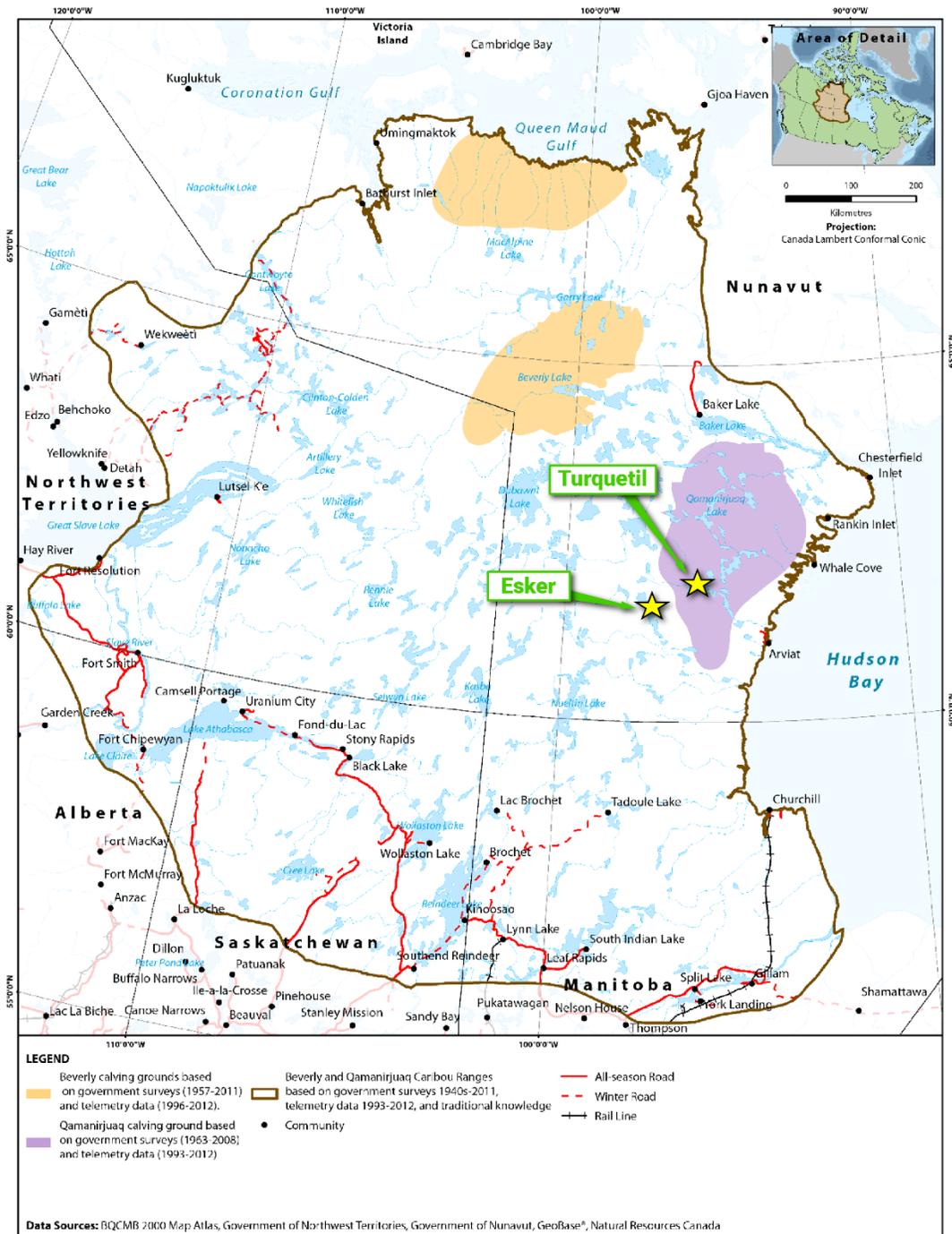
- All personnel will be trained on the following: Avoidance of Human-Wildlife interactions, wildlife safety, wildlife safety equipment, waste management, and protocol to report human-wildlife interactions.
- No feeding of wildlife will be tolerated.
- Hunting of wildlife, while conducting business on behalf of MPH Consulting, is strictly forbidden by ALL employees.
- MPH Consulting shall ensure that there will be no disturbance of nesting raptors from 15 April to September 1 by staying at least 1.5 km away from them when in transit by aircraft, and avoiding approaching nests closely while on foot
- MPH Consulting shall ensure that all disturbances to nests during the early part of the nesting cycle will be avoided (avoid nest sites from late May through to mid-July).
- Polar and grizzly bears may be encountered. Therefore, all employees should follow procedures outlined in the "Safety in Bear Country Manual" which is attached as an appendix to this document. In addition, proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation.
- Biologists at the Nunavut Department of the Environment will be notified once activity has started in the project area. At that time, camp phone numbers will be distributed such that the Henik Lake camp may be notified if caribou are migrating in the area.

### 3. Monitoring Plan

Wildlife monitoring sheets will be posted in camp. All wildlife sightings including date, type of wildlife and approximate latitude/longitude coordinates will be recorded. This information will be entered into a master spreadsheet which will comprise part of the annual report.

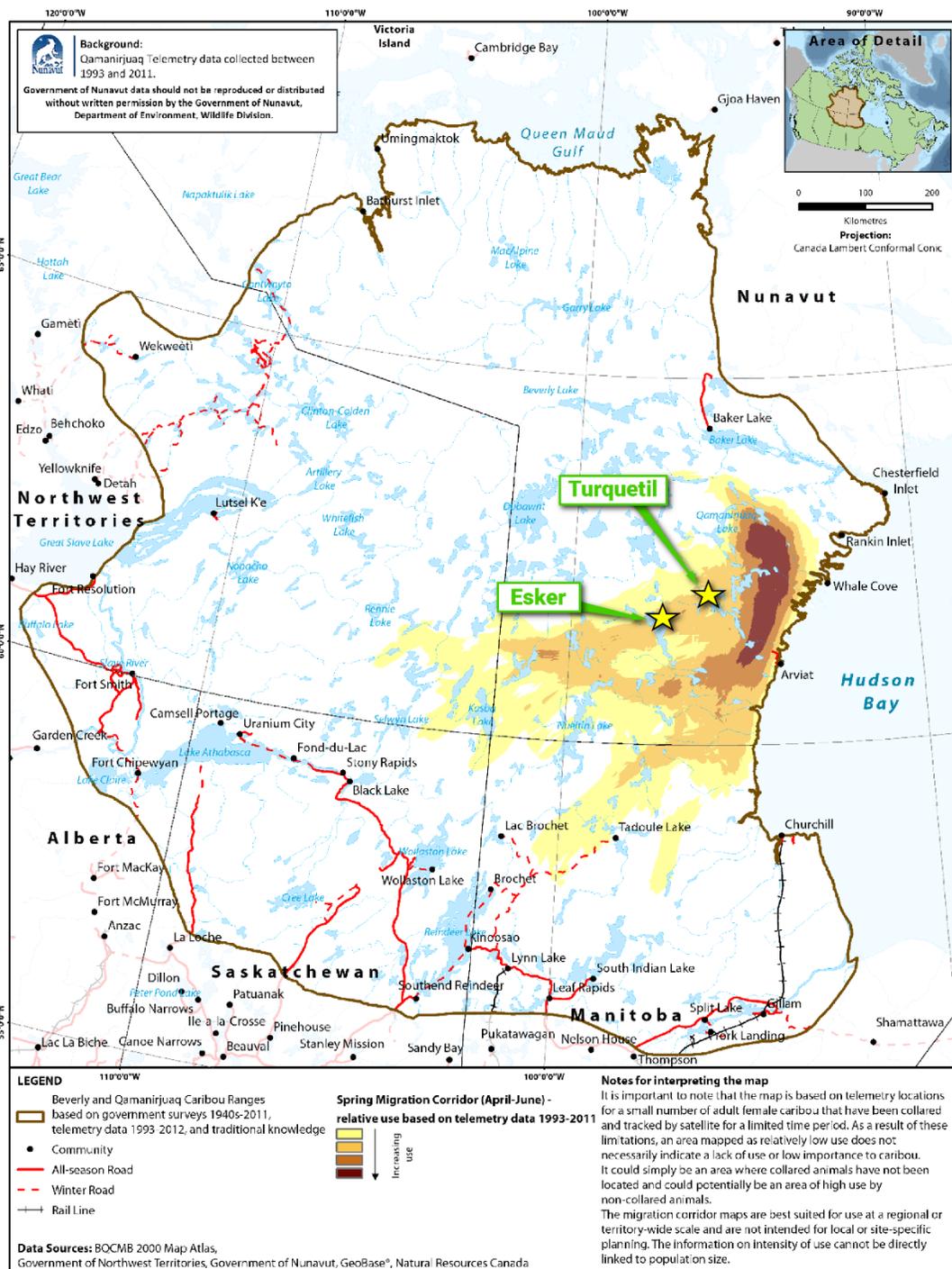
Nuisance wildlife is to be reported immediately. Proper food storage and handling of cooking wastes will prevent problems with attracting wildlife. All wastes will be stored such that they are not accessible to any wildlife until such time that they can be appropriately disposed of.

MPH Consulting will report all wildlife observations near the project area at the end of the operational season to GN-DOE (Wildlife Division): Regional Manager - Kivalliq: Rob Harmer, (867) 857-3172, [rharmer@gov.nu.ca](mailto:rharmer@gov.nu.ca) and Biologist, Kivalliq Region: Mitch Campbell, (867) 857-3171, [mcampbell@gov.nu.ca](mailto:mcampbell@gov.nu.ca).



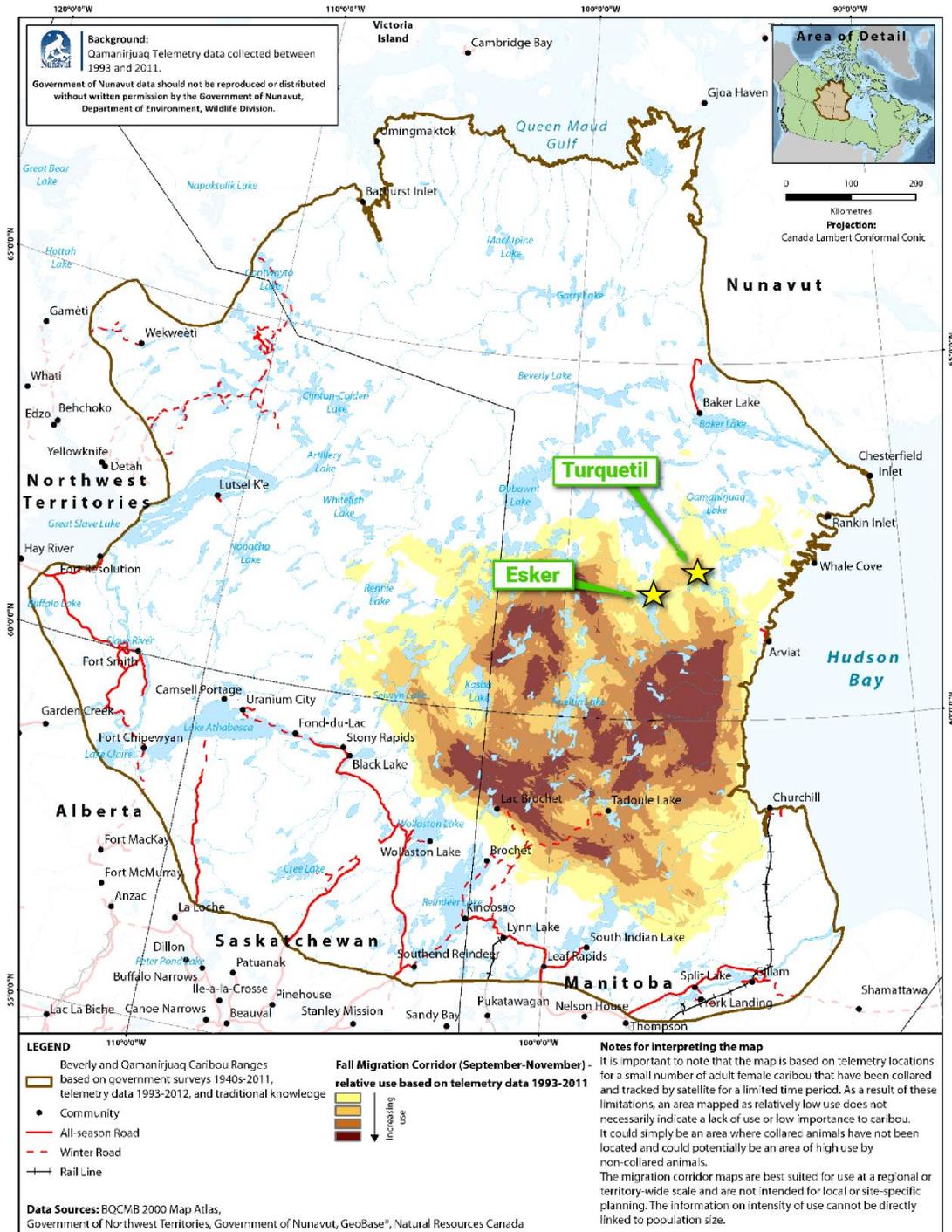
Beverly and Qamanirjuaq caribou calving grounds based on surveys (1957-2011) and telemetry of caribou cows (1993-2012).

Figure 1 – Beverly and Qamanirjuaq caribou calving grounds based on surveys (1957-2011) and telemetry of caribou cows (1993-2012).



Qamanirjuaq caribou spring migration range based on telemetry of collared cows (1993-2011).

Figure 2 – Qamanirjuaq caribou spring migration based on telemetry of collared cows (1993-2011)



Qamanirjuaq caribou fall migration range based on telemetry of collared cows (1993-2011).

Figure 3 – Qamanirjuaq caribou fall migration based on telemetry of collared cows (1993-2011)

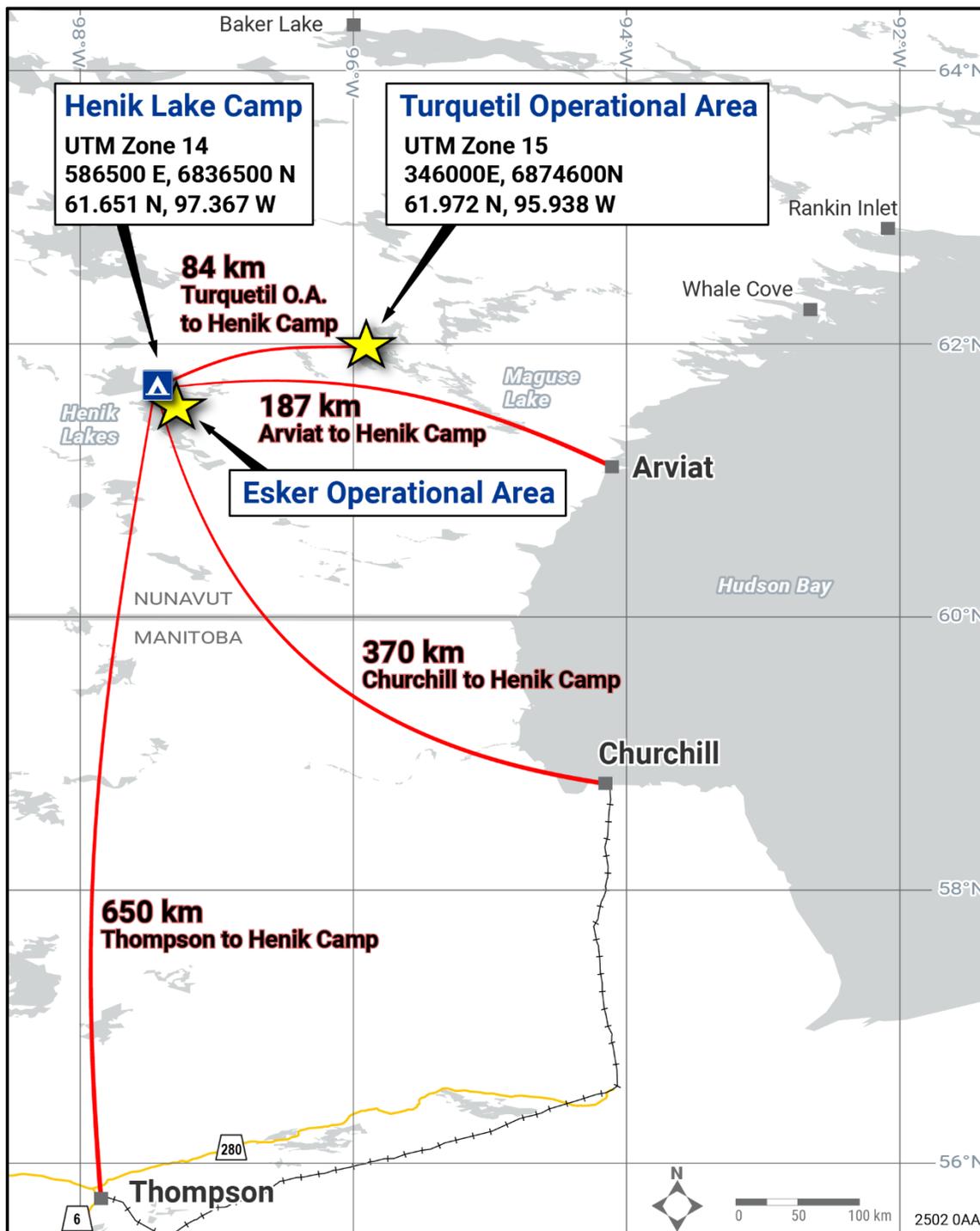


Figure 4 – General Location Map

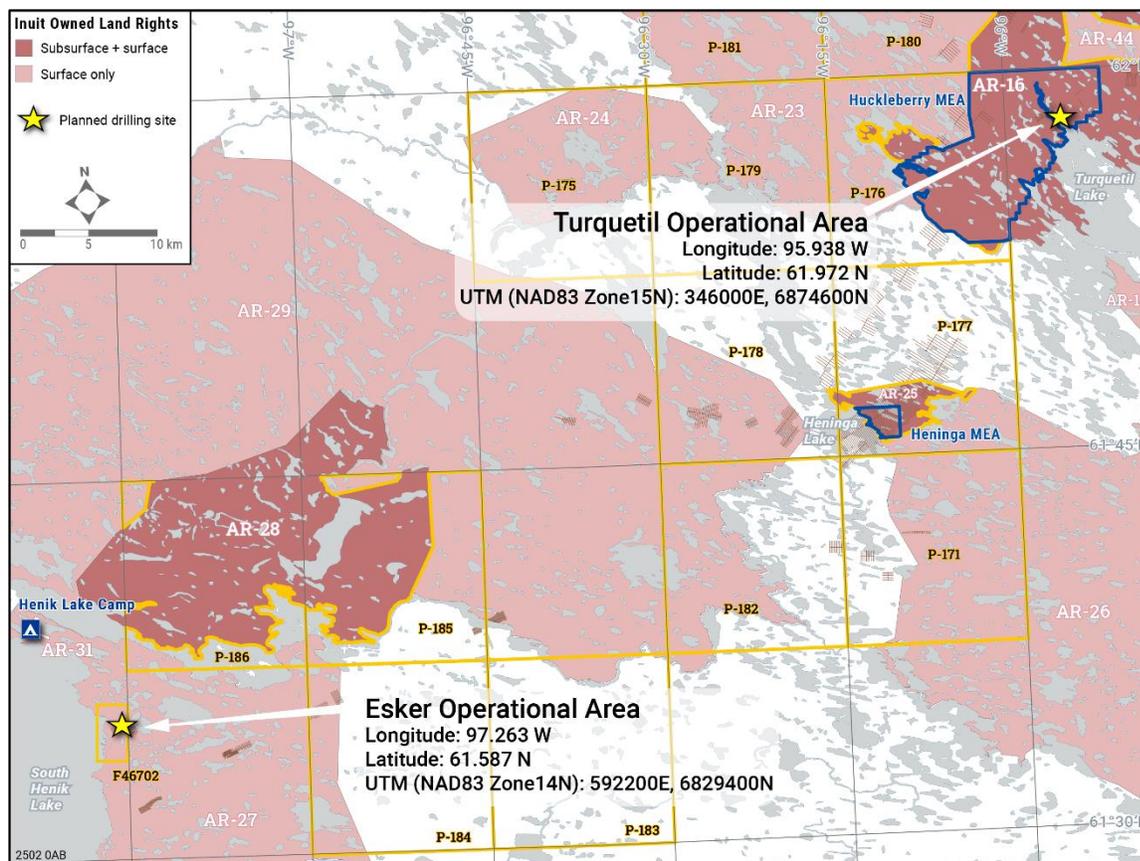


Figure 5 – Detailed Location Map for Drilling Operations

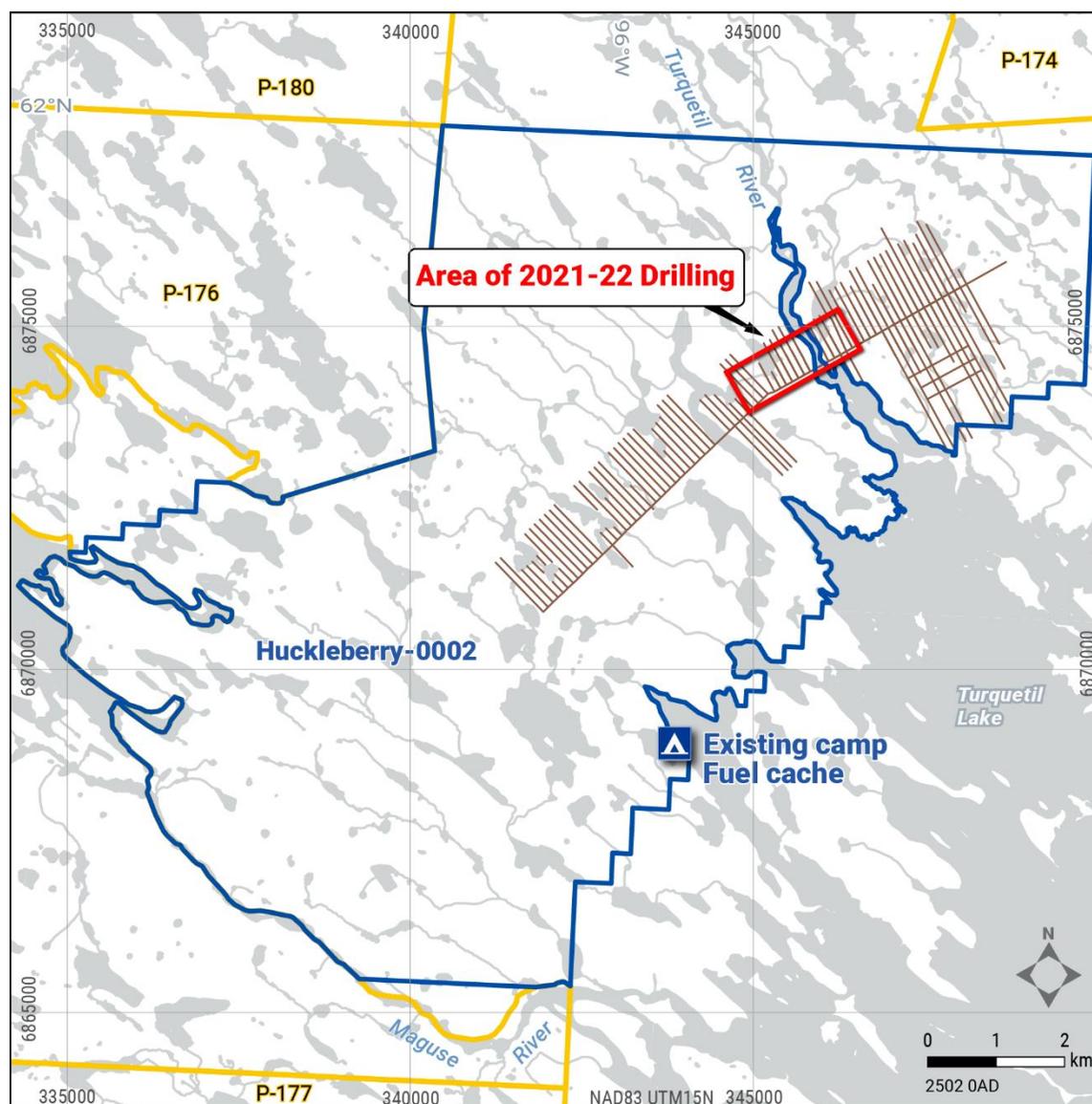


Figure 6 – Turquetil Operational Area Location Map

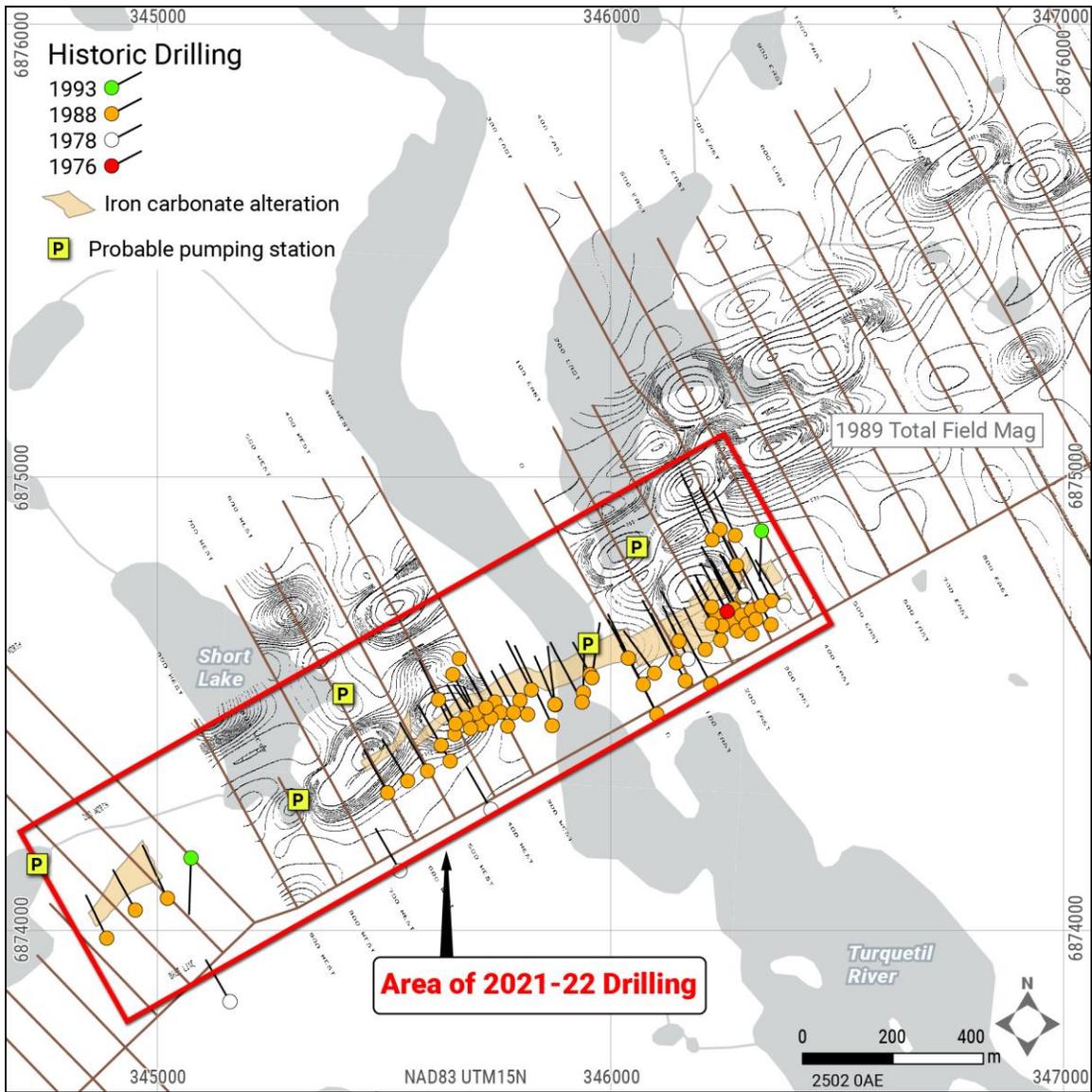


Figure 7 – Turquetil Operational Area Detailed Location Map

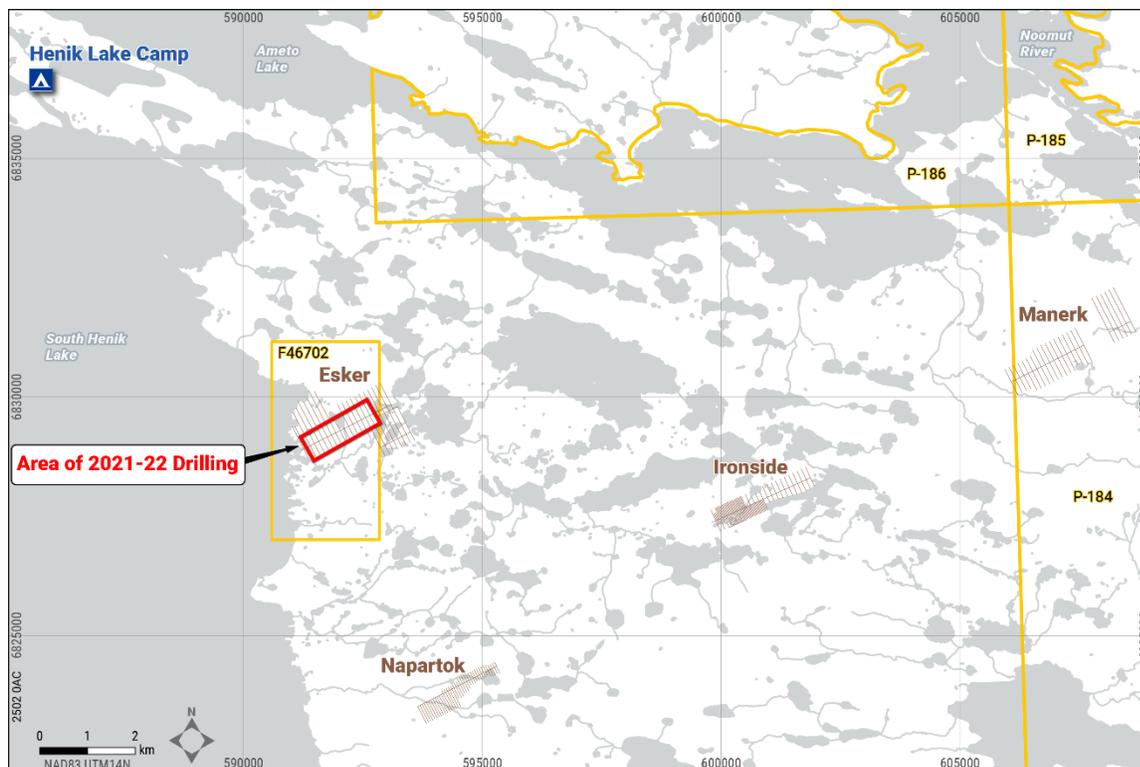


Figure 8 – Esker Operational Area Location Map

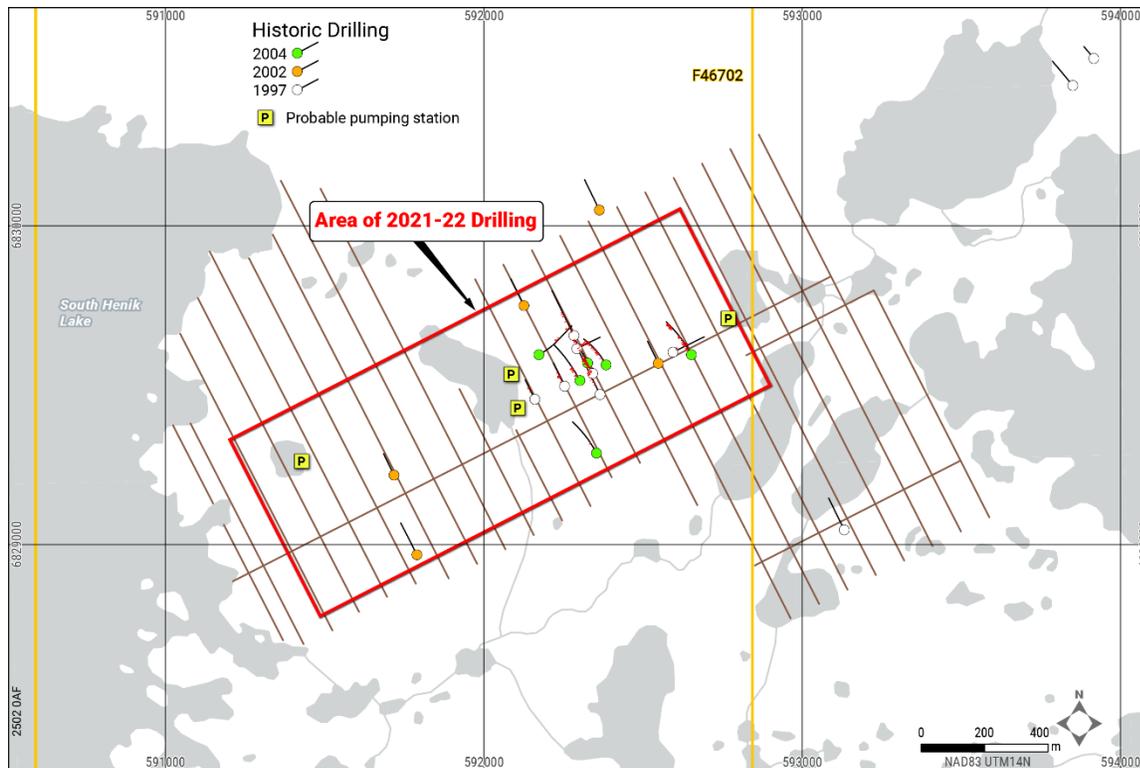


Figure 9 – Esker Operational Area Detailed Location Map

**ADDITIONAL INFORMATION**

## If You Encounter a Bear...



- Remember the 3 S's... Stop, Stand still, Stay calm.
- Ensure others know that a bear is in the vicinity.
- Do not run.
- Leave the bear an open avenue of escape.

### ...at a DISTANCE

- Alert the bear to your presence – speak in low tones, slowly wave your arms.
- Quietly walk back the way you came or make a wide detour.
- Keep an eye on the bear.
- Stay downwind.
- Consider using warning shots, noisemakers.

### ...that is NEARBY

- Do not shout or make sudden movements.
- Avoid direct eye contact.
- Back away slowly.
- Climb at least four metres up a tree to escape a grizzly. (Ineffective against black bears).

## Deterrents...



- Include... 12 gauge cracker shells, air horns, flares, and chemical repellents such as pepper spray.
- Are not completely effective against every bear in every situation.
- Should not make you less careful to avoid bear conflicts.
- Are potentially dangerous – use with extreme caution.

## If a Bear Charges...



- Many charge are bluffs – the bear will often veer to the side at the last minute.
- Use a chemical repellent only at close range.

- If you have a firearm and contact appears unavoidable, shoot to kill.
- Play dead only during a grizzly bear attack (lie on your side, curl into a ball with your legs tight to your chest, hands clasped behind your neck).

If you must shoot a bear in self-defense, report the kill to a Renewable Resource Officer as soon as possible. If an Officer is not immediately available, skin the bear and preserve the hide. The hide must be turned in to an Officer. You may not keep any part of a bear killed in self-defense.

## For Further Information...



For further information, contact any Environment and Natural Resources Office:

### Area Code (867)

Aklavik .....	978-2248
Deline.....	589-3421
Fort Good Hope.....	598-2271
Fort Liard.....	770-4311
Fort McPherson.....	952-2200
Fort Providence.....	669-3002
Fort Resolution.....	394-4596
Fort Simpson.....	695-7433
Fort Smith.....	872-6400
Hay River.....	875-5554
Inuvik.....	678-6670
Lutsel K'e.....	370-3141
Norman Wells.....	587-3500
Behchokò.....	392-6511
Tsiigehtchic.....	953-3605
Tulita.....	588-3441
Tuktoyaktuk.....	977-2350
Ulukhaktok.....	396-4505
Yellowknife.....	873-7181



Northwest Territories Environment and Natural Resources

May 2009

# Safety in Grizzly and Black Bear Country



Black Bear

## Welcome to Bear Country



Grizzly and black bears can be found throughout the Northwest Territories. They are an important part of the northern ecosystem.

Northerners are committed to maintaining healthy populations of all wildlife, including grizzly and black bears. Treat them with respect. Remember that you are in a bear's territory.

## While You are Travelling...



- Always be alert.
- Travel in groups.
- Travel only during daylight.
- Avoid carrying strong smelling foods.
- Make noise where visibility is limited.
- Avoid bear feeding areas such as flood plains, berry patches and areas rich in horsetails and other grasses.
- Avoid bear travel areas like shorelines, trails along the water or near berry patches.
- Watch for fresh bear droppings and tracks.
- Carry bear deterrents.

## If You are Camping...



- Avoid camping in areas frequented by bears.
- Always sleep inside a shelter (tent, cabin, etc.).
- Don't keep food in tents or areas of camp other than the cook tent.
- Keep a clean camp - wash all dishes and utensils after every meal.
- Avoid cooking greasy foods.
- Burn all garbage every day or take it to a bearproof disposal site. Burying garbage does not eliminate odors.
- If you're going to leave the campsite:
  - bearproof your camp - store food and other attractants (dish detergent, toothpaste, etc.) in an inaccessible place.
  - let someone know where you are going.
  - take a partner and bear deterrents with you.



Grizzly Bears

## If You are Fishing...



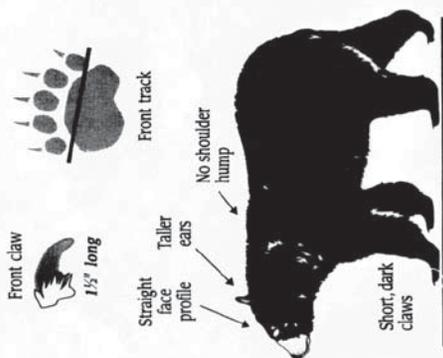
- Be cautious near streams or lakes - bears frequent these areas.
- Clean fish away from camp and store them underwater.
- Burn fish guts away from camp.
- Store fish-cleaning knives away from camp.
- Don't wear clothes that smell like fish to bed.

## If You are Hunting...



- Avoid hunting late in the day and returning to camp in the dark.
- Stay alert when dressing game or handling meat and only do so away from camp.
- Avoid shooting more than your party can pack out in a single load.
- If you must leave meat in the field, leave it near a visible landmark with a clear approach route and cover it with a tarp to discourage scavengers.
- Don't keep bloodied clothes in your tent.

## Black Bear



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## Grizzly Bear

