



Suite 860 – 625 Howe Street  
Vancouver, BC, Canada V6C 2T6  
Tel: (604) 668-8355 Fax: (604) 668-8366  
[www.northarrowminerals.com](http://www.northarrowminerals.com)

## ***ABANDONMENT & RESTORATION PLAN***

**Hope Bay Project, NU**

Date: December 2010

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## **INTRODUCTION**

The following plan applies to the Hope Bay Project operated by North Arrow Minerals Inc. ("North Arrow"). This project is centered at approximately 68° 13' 44" N 106° 34' 02" W on Crown land.

North Arrow intends to carry out exploration work including prospecting, mapping, ground geophysics, sampling and diamond drilling. Work will be focused on the current lease area. Individuals working on the property could reach 20.

## **DESCRIPTION OF FACILITY**

Project Supervisor Gordon Clarke  
North Arrow Minerals Inc.  
Suite 860, 625 Howe Street  
Vancouver, BC V6C 2T6

Facility – If required it would consist of an exploration tent camp suitable for up to 20 personnel at approximately 68° 10' 18" N 106° 33' 36" W on Crown land, (see attached figure). Exact location will depend upon float plane access along shoreline. The camp would include 7 sleeping tents, combination cooks tent/first aid station, kitchen, dry, office, core shack, outhouse, generator shack, and a fuel cache. Specifics of the final layout will be dependent upon the topographic conditions encountered during camp construction. A layout plan would be forwarded after camp construction.

If drilling is carried out the following drill specific conditions will apply.

Locations – Fuel will be stored in an appropriate facility or containers a safe distance from the accommodations and away (>31m) from water bodies.

Size - Fuel stored at facility in 205 litre (45 gal.) steel drums

Storage Capacity – Maximum fuel stored at camp will typically be 60 drums (12,300 litres) of Jet-B, 80 drums of diesel (16,400 litres), 4 drums reg gasoline (820 litres) plus 20, 45 kg propane cylinders and several cases of 4 cycle engine oil and 2 stroke oil (1 litre each x 24/case)

A minor amount of fuel will be stored at drill sites (4 to 6 drums diesel, 2 drums Jet B, 2 cylinders propane), and removed promptly upon completion of each drill hole.

*Description of the type and amount of potential contaminants normally stored at the camp during occupation (estimated maximums):*

JET B fuel for the helicopter – 12,300 litres (60 drums)  
Propane for cooking, heating, etc. - 20, 45 kg cylinders  
Diesel – 16,400 litres (80 drums)  
Oil – 2 cases 1 litre bottles (24 per) of four-cycle Engine Oil  
2 stroke oil – 1 case 1 litre bottles (24 per)  
Gasoline – 820 litres (4 drums)

*Description of the type and amount of potential contaminants normally stored at drill site:*

JET B fuel for the helicopter – 410 litres (2 drums)  
Diesel for the drill - 1,230 litres (6 drums)  
Propane for heating, etc. - Two (2) 45 kg cylinders

Storage Location - Drums will be stored on flat stable terrain during the summer to reduce chances of a leak and bungs will be placed in a horizontal alignment position. If possible a site will be chosen such that drainage would not be toward natural water bodies.

## **ONGOING OPERATIONS, SEASONAL ABANDONMENT, FINAL ABANDONMENT AND RESTORATION PLANS**

### **ONGOING OPERATIONS**

The exploration season for the Hope Bay Project will typically run from early July to the middle of September of each year, weather permitting. Winter drilling and geophysical surveys may also be carried out, typically from March until June. Restoration during operations for drilling, fuel storage, contamination clean up and camp operations are described below.

#### **Drill Hole Locations**

- Each drill hole will be restored to as close as possible, previous conditions after completion of the hole
- If hole is drilled on-ice the drill cuttings will be scraped clean and removed to an on-land sump
- All fuel drums and drilling equipment will be removed from the site immediately upon completion of each hole.
- Each drill site will be inspected to ensure that all garbage (combustible and non-combustible) has been collected and removed from the area.
- A final inspection of the site will ensure that there is no remaining material at the site upon completion of the drill hole.

### **Core Storage**

- Core will be stored at the camp site or a centralized location. This would be dependent upon the location of drill targets. The location of any core will be indicated in yearly land use reports.

### **Fuel Storage**

- All fuel storage and handling is to be guided by the procedures set out in the Spill Contingency Plan for the Hope Bay Project.
- Empty fuel drums are to be regularly backhauled to Yellowknife, NWT for proper disposal.

### **Contamination Clean Up**

- Any soil around fuel caches or drill sites that has become contaminated will be treated as per North Arrow's Spill Contingency Plan. Before and after photos will be taken to document the contamination and the clean up.

### **Camp**

- Garbage is to be regularly transported to Yellowknife for proper disposal.
- If sewage pits are utilized they will be back filled.

## **SEASONAL ABANDONMENT**

Existing camp infrastructure will be left intact. Tents may or may not be returned to Yellowknife (depends upon agreement with expeditor). The camp generator may be removed from site for servicing and storage. All food and garbage will be backhauled to Yellowknife. All stove fuel lines will be shut off and stove barrels will have bungs tightened. Fuel caches will be inventoried and inspected for any leaks.

## **FINAL ABANDONMENT & RECLAMATION**

As work on the properties comprising the Hope Bay Project is currently still in the grass roots stage of exploration activities, it is not practicable at this time to subscribe to a definitive schedule for the conclusion of this land use operation, however upon its completion the following procedures will be followed to allow for proper abandonment and reclamation of the area:

### **Drill Hole Locations**

- As per the ongoing restoration procedures all drill holes are to be restored to as close as possible, previous conditions immediately upon completion of the hole.

### **Fuel Storage**

- All fuel storage and handling is to be guided by the framework set out in the Spill Contingency Plan for the Hope Bay Project.
- Upon completion of the land use operation all empty fuel drums will be removed from the area for proper disposal and any remaining fuel caches will be moved to an approved/permitted storage location.

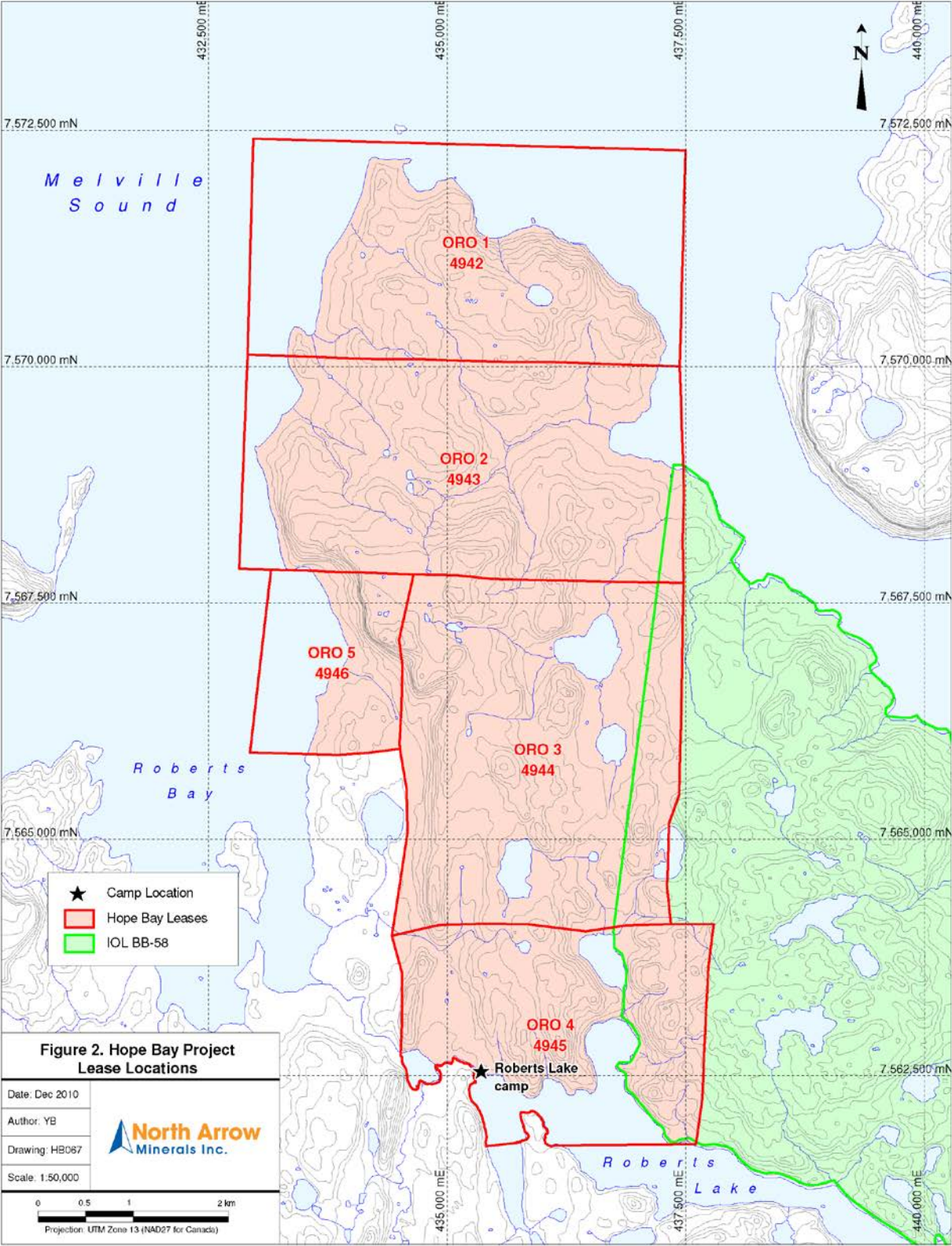
### **Camp**

- At the end of the project all camp materials and equipment, fuel drums, and drilling equipment (if applicable) will be removed from the site.
- All remaining garbage will be incinerated or backhauled to Yellowknife.
- At the end of the program all wood (tent floors, frames etc.) will be burned. The coals and ash will be raked for non-combustible items (i.e. nails etc) which will be collected and removed from the site.
- A last inspection will ensure that there is no remaining material at the site and that there is little/no evidence of North Arrow's land use activity upon completion of the operation.

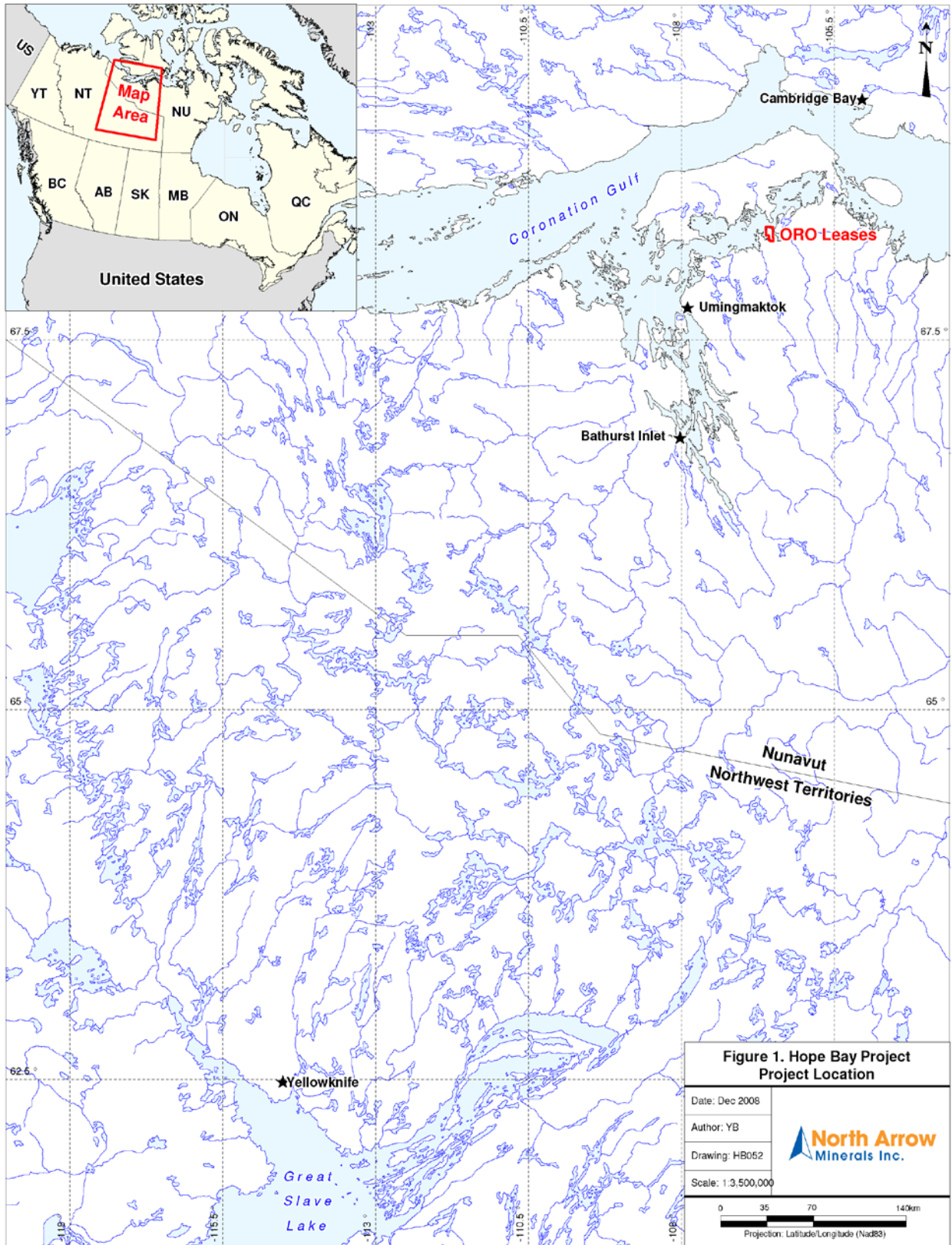
## APPENDIX 1

### Hope Bay Property, NU Maps

Detailed Lease Location Map







Regional Location Map