



### **Abandonment & Restoration Plan**

Roche Bay, Nunavut

### **Advanced Explorations Inc.**

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NWB License: 2BE-RBPO811 INAC License: N2007C0033 QIA License: Q08L3C03

Revised February 2009



### **EXECUTIVE SUMMARY**

Advanced Explorations Inc.'s Abandonment and Restoration Plan has been designed for the diamond drilling and associated programs currently being undertaken at Roche Bay, Nunavut, 60 km south of Hall Beach. The plan applies to exploration activities undertaken at the camp and drill locations and, upon completion of the land use operation and exploration, procedures will be implemented to allow proper abandonment and reclamation of the area.

The Roche Bay project consists of 4 mineral leases covering the A/B, C, D and E Zones of mineralization, mineral claims AEI 1 to 7 (recorded in November 2007) and claims AEI 8 to 15 (recorded in February 2009). Advanced Explorations has drilled approximately 90 holes in the C Zone to an average depth of 250-300 meters during the 2007 and 2008 field seasons. Additional drilling will be required in the future to complete the geological modeling and resource definition. This activity is necessary to prove the resource and verify that the product specification can be met.

Primary access to the site is typically by charter flights from Hall Beach, Yellowknife, and various cities in southern Canada, with helicopter or fixed wing aircraft transport from Hall Beach to Roche Bay. Ground transportation in summer and fall are limited to the minimum required, and is only considered on durable land such as the limestone peninsula, and on tundra only when necessary travel has to be undertaken and the weather does permit helicopter flights. In winter, snowmobiles and skidded equipment are used on adequate snow cover.

A 60 person camp is located on the C Zone, with the only structures erected being temporary and removable. The camp will be removed upon completion of the project. A complete inspection of all disturbed areas will be conducted prior to final closure, with photos taken to document the closure. All appropriate agencies will be contacted once the final clean up is complete and we will organize a final site inspection visit with community representatives, Land Use Inspectors and in collaboration with the Nunavut Water Board staff, if requested.

A detailed review of financial information was undertaken to determine the potential costs associated with any full shutdown and demobilization of the facilities at Roche Bay. The Company anticipates that any demobilization would be part of an orderly shutdown of the field program. The overall cost of camp demobilization is calculated to be approximately \$450,000, and Advanced Explorations is prepared to defer the 2009 field program in order to provide financial security for camp demobilization. A final plan will be submitted prior to any decision being made with respect to a 2009 program.





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### **Table of Contents**

| Preamble                                  | 2 |
|---|---|
| Introduction                              |   |
| History                                   |   |
| Schedule                                  |   |
|   |   |
| Seasonal Abandonment and Restoration Plan |   |
| Final Abandonment and Restoration Plan    |   |
| Site Maps                                 | 7 |

#### **Preamble**

This Abandonment and Restoration Plan is effective as of June 1, 2006, and updated through the life of the project. Project activities are located at Roche Bay, Nunavut at 68°15′ – 68°30′ and 82°00′ – 84°00′. The project has three permits issued as of January 2009: a water use permit from the Nunavut Water Board (2BE-RBP0811), a land use permit from Indian and Northern Affairs Canada (N2007C0033) and one land and water use permit from the Qikiqtani Inuit Association (Q08L3C03).

Roche Bay plc is currently the majority owner of the Crown mineral leases under exploration, with Advanced Explorations Inc. (AEI) earning an interest in the leases, and being operator of the joint venture with Roche Bay. Advanced Explorations Inc. finalized a Memorandum of Understanding (MOU) with Roche Bay plc in December 2008 to acquire a 100% interest in the mineral leases and claims that comprise the Roche Bay magnetite project, subject to either a cash buyout or royalty payments to Roche Bay plc.

This Plan will be distributed to all employees and personnel directly involved in the project via e-mail, and hard copies will be kept on site.

Additional copies and updates of this Plan may be obtained via e-mail at nadine@advanced-exploration.com.

#### Introduction

The Roche Bay project consists of 4 mineral leases (Crown leases 2952, 2953, 2954 and 2955) covering the A/B, C, D and E Zones of mineralization, covering 5515 acres. In addition, the project area includes mineral claims AEI 1 to 7 (recorded in November 2007) covering the entire Roche Bay peninsula, and claims AEI 8 to 15 which tie onto the mineral leases hosting the C and D Zones. Advanced Explorations has drilled approximately 90 holes in the C Zone to an average depth of 250-300 meters during the



2007 and 2008 field seasons. Additional drilling will be required in the future to complete the geological modeling and resource definition. This activity is necessary to prove the resource and verify that the product specification can be met.

The drilling that is to be done fits into the longer term project of developing a mine. The proposed timeline for this is as follows:

### **2009**:

- Complete a NI 43-101 report and scoping study
- Submit project description to NIRB/NWB
- Continue engineering and feasibility work on concentrator and nugget plant
- Pre-feasibility / Feasibility Study as warranted

### **2**010:

- Enhanced community consultations; possible IBA
- Move toward project permitting and financing

Primary access to the site is typically by charter flights from Hall Beach (connecting to commercial flights), Yellowknife, and various cities in southern Canada for both cargo and personnel, and by chartered barge and scheduled sealift from Montreal. Personnel fly via commercial airline and charter flights to Hall Beach, and helicopter or fixed wing aircraft transport them from Hall Beach to Roche Bay. Ground transportation in summer and fall are limited to the minimum required, and is only considered on durable land such as the limestone peninsula, and on tundra only when necessary travel has to be undertaken and the weather does permit helicopter flights. In winter, snowmobiles and skidded equipment are used on adequate snow cover.

A 60 person camp is located on the C Zone (refer to Figures 1 and 2), with the only structures erected being temporary and removable. The camp will be removed upon completion of the project. The location of the site was selected because of its proximity to the primary ore body to be drilled (the C Zone).

The following plan applies to exploration activities undertaken at Roche Bay, Nunavut. Upon completion of the land use operation and exploration, the following steps and procedures will be implemented to allow proper abandonment and reclamation of the area.

### History

Under previous management, the restoration of the old Borealis site, which was used in the early 80s for exploration, was never fully undertaken after abandonment. This restoration was completed by Advanced Explorations Inc. in 2007. Current management



will ensure that proper abandonment and restoration procedures are followed at the end of its current activities.

#### **Schedule**

The temporary shutdown of the campsite and associated activities are undertaken at the end of each summer drilling program. The plan is applied with the help of the project personnel under supervision of the field supervisor.

#### **Seasonal Abandonment and Restoration Plan**

### **Buildings** and Contents

All tent structures are secured for the winter and all equipment (stoves, kitchen gear, office, showers etc) are left on site. The camp is secured and minimal food (including canned food) is left on site.

### **Drilling Locations**

Drill equipment is removed from individual drill sites, dismantled, packaged and stored along with its ancillary equipment and rods at a central location. The drills are left on solid ground until next season. All drill locations are inspected immediately upon completion of each drill hole, with all waste collected and taken to camp for incineration or removal to an approved disposal location. All sumps are also backfilled. The sites are also inspected for soil contamination.

### Fuel Storage

A thorough inspection of full fuel drums as well as an inventory of all fuel drums is made prior to camp abandonment. Empty drums are to be backhauled to the storage area at the beach for re-use or to be returned on sealift voyages for proper disposal. Drums located at the storage area are placed within secondary containment berms, capable of holding 110% of the total volume stored. The soil of all fuel use areas is inspected for contamination.

#### Waste

#### Combustible waste

All combustible waste is incinerated throughout the course of the program. Ash is collected, backhauled on the sealift and disposed of in Churchill and/or Montreal. Once the camp is closed, all remaining combustible waste is burned, with the soil inspected for contamination.

### Non-combustible waste

Non-combustible waste is hauled out to Churchill and/or Montreal throughout the course of the program for proper disposal, or flown out depending on what transportation methods are available at the time. All carriers and receivers of this material are informed of the need to register with the Government of Nunavut, Department of Environment as well as having proper documentation in the form of a waste manifest.



#### Water System

Pumps, tanks and hoses are drained, dismantled, packaged and stored. Hoses are rolled and stored.

### Contamination Clean Up

Any soil at camp or at the drill sites that has become contaminated is treated as per the "Oil and Hazardous Waste Materials Spill Contingency Plan". Before and after photographs are taken to document the contamination and the clean up.

### Documentation and Inspection

Equipment and temporary structures left on site are inventoried. A complete inspection of all disturbed areas (drill sites, camp and fuel caches) is conducted prior to seasonal closure with a full inventory taken at each location.

#### **Final Abandonment and Restoration Plan**

### **Buildings** and Contents

All reusable equipment like tents, tent frames, stoves, showers etc. will be dismantled, packaged and removed from site. Wooden structures will be dismantled, moved and stored. Nails, screws, anchors and other such parts will be recovered and kept where practical, otherwise packaged and flown out to an approved municipal landfill.

### **Drilling Locations**

Any drill equipment will be dismantled, packaged and moved to its next location along with its ancillary equipment and rods. All drill locations will be inspected, and all waste will be collected and taken to camp for incineration or removal to an approved disposal location. All sumps will be backfilled and each drill collar will be cut off to ground level. The sites will be inspected for soil contamination.

### Fuel Storage

All fuel drums will be removed and the areas where there have been fuel caches will be thoroughly inspected. Any contaminated soil will be treated according to the "Oil and Hazardous Material Spill Contingency Plan", and photos will be taken of all caches to include in the final report.

### Waste

### Combustible waste

Once the camp is closed, all remaining combustible waste will be burned and the incinerator will be dismantled and moved to Churchill and/or Montreal. The soil will be inspected for contamination.



### Non-combustible waste

Non-combustible waste will be backhauled to Churchill and/or Montreal for proper disposal, or be flown out depending on what transportation methods are available at the time. All carriers and receivers of this material will be informed of the need to register with the Government of Nunavut, Department of Environment as well as having proper documentation in the form of a waste manifest.

### Water System

Pump, tanks and hoses will be drained, dismantled, packaged, and removed from the site.

### Contamination Clean Up

Any soil at camp, fuel caches or drill sites that has become contaminated will be treated as per the "Oil and Hazardous Waste Materials Spill Contingency Plan". Before and after photographs will be taken to document the contamination and the clean up.

### Documentation and Inspection

A complete inspection of all disturbed areas (drill sites, camp and fuel caches) will be conducted prior to final closure with a full inventory taken at each location. As well, photographs will be taken to document each work area and campsite before, during and after the project is complete. All appropriate agencies will be contacted once the final clean up is complete and we will organize a final site inspection visit with community representatives, Land Use Inspectors and in collaboration with the Nunavut Water Board staff, if requested.

### Cost Estimate of Final Closure

A detailed review of financial information was undertaken to determine the potential costs associated with any full shutdown and demobilization of the facilities at Roche Bay; copies of the financial spreadsheets are appended to the report. The Company anticipates that any demobilization would be part of an orderly shutdown of the field program, and this is reflected in the associated costs.



The overall cost of camp demobilization is calculated to be approximately \$450,000, and Advanced Explorations is prepared to defer the 2009 field program in order to provide financial security for camp demobilization. In the context of the current economic environment, the Company is investigating potential financial security options including a letter of credit secured by a strategic partner (negotiations underway). A final plan will be submitted prior to any decision being made with respect to a 2009 program.

| Signed "John Gingerich"   | Feb 19, 2009 |
|---|--------------|
| John Gingerich<br>Chief Executive Officer<br>Advanced Explorations Incorporated | Date         |
| Signed "Lou Nagy"   | Feb 19, 2009 |
| Lou Nagy Chief Financial Officer Advanced Explorations Incorporated             | Date         |



Site Maps

Figure 1: Site Plan

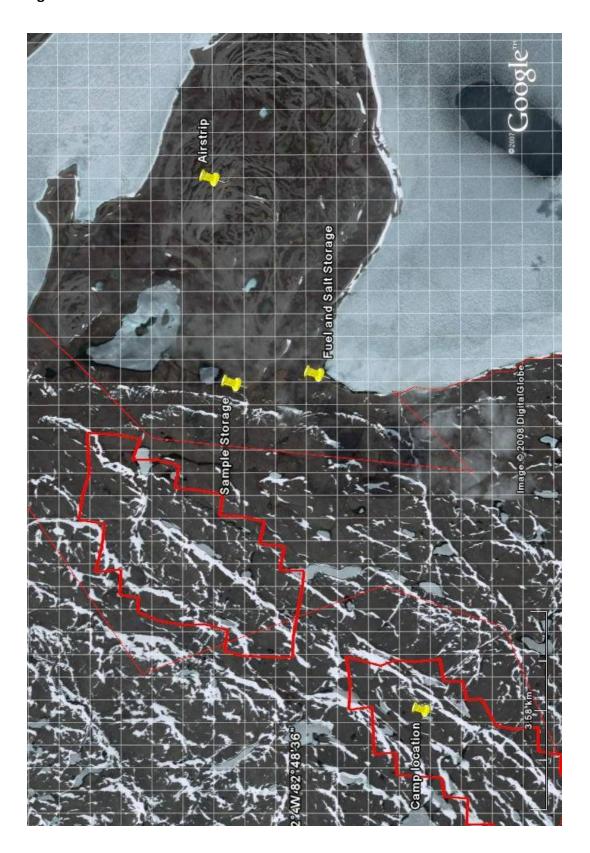
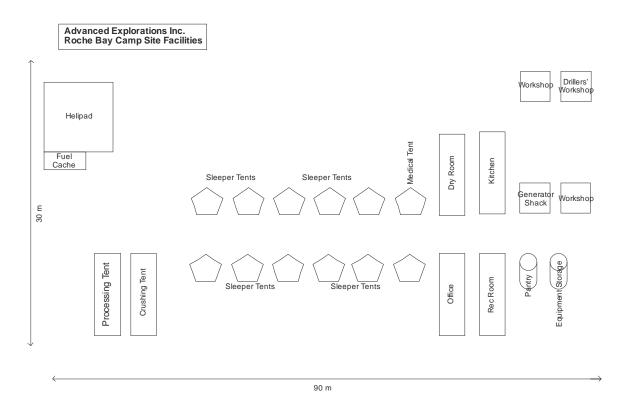




Figure 2: Schematic of temporary exploration camp layout

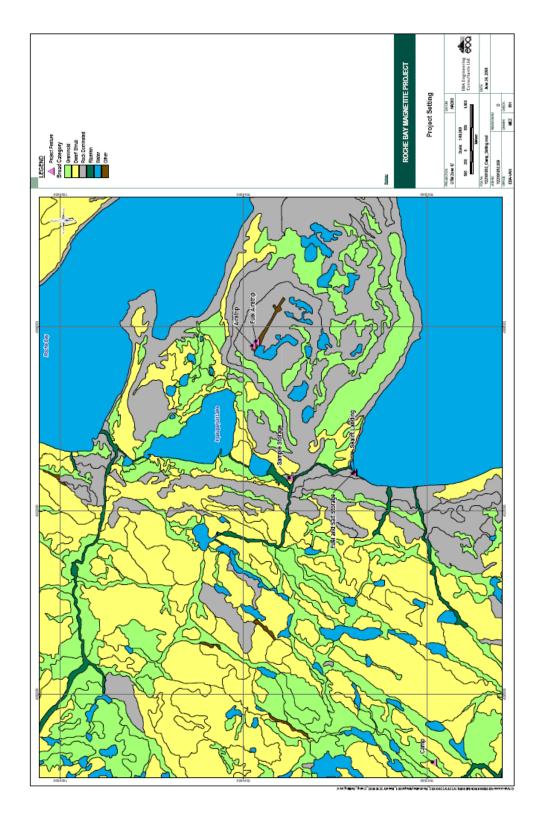


Note: diagram is representative of general site layout only; not all tents shown



Figure 3: Sites in relation to environmentally sensitive areas

The most sensitive vegetation/terrain is shown in dark green (riparian) and light green (graminoid).





**Table 1: Drill and Camp Demobilization to Staging Area** 

|                     | Units/day | Rate | Days | Cost      | Comment                    |
|---------------------|-----------|------|------|-----------|----------------------------|
| BLY Drillers        |           |      |      |           |                            |
| 2                   | 12        | 90   | 10   | \$21,600  |                            |
| Local labour        |           |      |      |           |                            |
| 8                   | 12        | 20   | 14   | \$26,880  |                            |
| Camp cook           |           |      |      |           |                            |
| 1                   | 1         | 1    | 1    | \$1       | No additional cost as      |
| Camp Supervisor     |           |      |      |           | camp is in operation       |
| 1                   | 1         | 1    | 1    | \$1       | No additional cost as      |
| Flights             |           |      |      |           | camp is in operation       |
| 6                   | 1         | 2800 | 1    | \$16,800  |                            |
| Chopper mob         |           |      |      |           |                            |
| 1                   | 1         | 1    | 1    | \$1       | No additional cost as      |
| A-Star              |           |      |      |           | camp is in operation       |
| 1                   | 6         | 1600 | 10   | \$96,000  | 5 days BLY - 5 days Matrix |
| A-Star camp support |           |      |      |           |                            |
| 1                   | 6         | 1600 | 4    | \$38,400  | Open and close camp        |
| Meals               |           |      |      |           | and move food/people/fuel  |
| 10                  | 3         | 80   | 14   | \$33,600  |                            |
| Contingency 10%     |           |      |      | \$23,328  |                            |
| Totals              |           |      |      | \$256,611 |                            |

**Assumptions:**Drill program ongoing; camp operating; chopper onsite; people onsite



Table 2: Drill and Camp Demobilization - Staging Area to Final Destination

|                        | Units/day | Rate | Days | Cost            | Comment                       |
|------------------------|-----------|------|------|-----------------|-------------------------------|
| BLY Drillers           |           |      |      |                 |                               |
| 2                      | 12        | 90   | 7    | \$15,120        |                               |
| Local labour           |           |      |      |                 |                               |
| 6                      | 12        | 20   | 7    | \$10,080        |                               |
| Camp cook              |           |      |      |                 |                               |
| 1                      | 1         | 600  | 7    | \$4,200         |                               |
| Camp Supervisor        |           |      |      |                 |                               |
| 2                      | 16        | 500  | 10   | \$5,000         |                               |
| Flights                |           |      |      |                 |                               |
| 5                      | 1         | 2800 | 1    | \$14,000        |                               |
| Chopper mob            |           |      |      |                 |                               |
| _                      |           |      |      |                 | Minor use of chopper included |
| 1                      | 1         | 1    | 1    | \$1             | in                            |
| A-Star                 |           |      |      |                 | "A Star camp support"         |
| 4                      | 4         | 4    | 4    | <b>64</b>       | Minor use of chopper included |
| 1 A Ctor comp our port | 1         | 1    | 1    | \$1             | in "A Ctor cores ourse ort"   |
| A-Star camp support    | 0         | 4000 |      | <b>#</b> 40.000 | "A Star camp support"         |
| 1                      | 6         | 1600 | 2    | \$19,200        | Open and close camp           |
| Meals                  | _         |      | _    |                 | and move food/people/fuel     |
| 10                     | 3         | 80   | 7    | \$16,800        |                               |
| Transport South        |           |      |      |                 |                               |
| 1                      | 1         | 1    | 1    | \$100,000       |                               |
| Contingency 10%        |           |      |      | \$8,440         |                               |
| Totals                 |           |      |      | \$192,842       |                               |

### **Assumptions:**

All products of value (fuel, salt, tanks, dozers) will be net zero cost to demob
- value of goods equals cost of demob
Shipping fuel off site to Hall Beach or other local mining or exploration camps
Shipping drills/camp to Montreal, ground transport to final destination