



## PROPOSED BULK SAMPLING PROJECT

### PAK Rare Metals Project (Permission to take bulk sample to test rock quality)

Houston Lake Mining Inc.(HLM) is requesting permission to remove up to 1,000 tonnes of rock material from their 100% owned and optioned PAK Rare Metals Project located 180km north of Red Lake, Ontario within unpatented claim KRL 1232441 (Figure 1). The purpose of the bulk sample is to test the rock properties for it's potential applications in the technical grade silica and lithium markets.

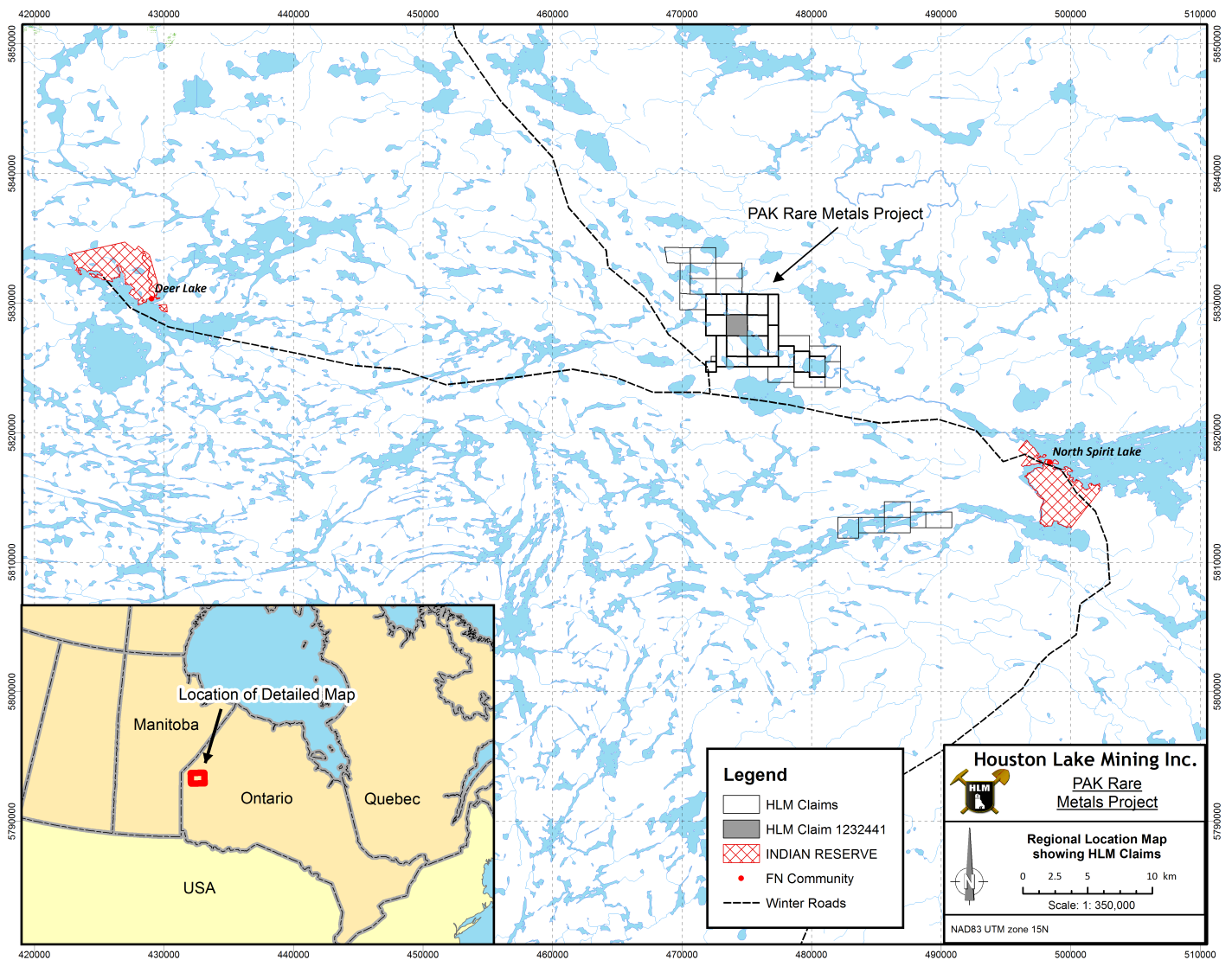


Figure 1: Location Map

## Table of Contents

|  |          |
|--|----------|
| <b>PAK Rare Metals Project (Permission to take bulk sample to test rock quality)</b> ..... | <b>1</b> |
| <b>Summary of Proposed Project</b> .....   | <b>3</b> |
| The Program .....  | 3        |
| Site plan, Locations and Dimensions of Proposed Pit .....                                  | 4        |
| Estimated Start and Completion Dates .....   | 5        |
| Means of Access to the Site .....  | 6        |
| Relevant Mining History .....  | 6        |
| Current Setting/Environment .....  | 6        |
| Potential Impacts of the Project to the Environment .....                                  | 6        |
| Other Relevant Information .....   | 7        |

## List of Figures

|   |   |
|---|---|
| Figure 1: Location Map .....                                  | 1 |
| Figure 2: Location of Project and Access Routes .....         | 3 |
| Figure 3: Detailed Location of Proposed Excavation Site ..... | 4 |
| Figure 4: Photo of Proposed Excavation Site .....             | 5 |
| Figure 5: Proposed Scheduling .....                           | 7 |

# Summary of Proposed Project

## The Program

The proposed program consists of the drilling/blast/excavation of less than 1,000 tonnes of rock. The project involved stripping the minor overburden off the bedrock blast area, drilling/sampling vertical boreholes, controlled blasting, excavation and hauling of rock material to a crushing/pulverizing facility.

Some of the waste rock (oversize material) and signage (above snow level) will be placed along the perimeter of the bulk sample excavation as a barrier to prevent easy entry or inadvertent access to the excavation. At minimum this barrier would prevent all terrain vehicles/equipment during all seasons.

No unstable slopes will exist in the excavation, and there is not a greater slope or depth than what occurs naturally within the vicinity of the greater outcrop area.

The rock will be hauled by truck to Red Lake, Ontario and reloaded on tri-axle trucks/trailer to facility yet to be determined, for crushing and grinding.

The project area showing the potential site of the bulk sample is shown on Figure 2 (Figure 2 was submitted as part of the Amendment to the drill program for Permit PR-13-10460). The site is located within an outcrop area at the north-west end of Pakeagama Lake. The bulk of the area to be excavated is on the exposed bedrock. A diamond drill program will be conducted simultaneously with the bulk sampling to minimize logistics.

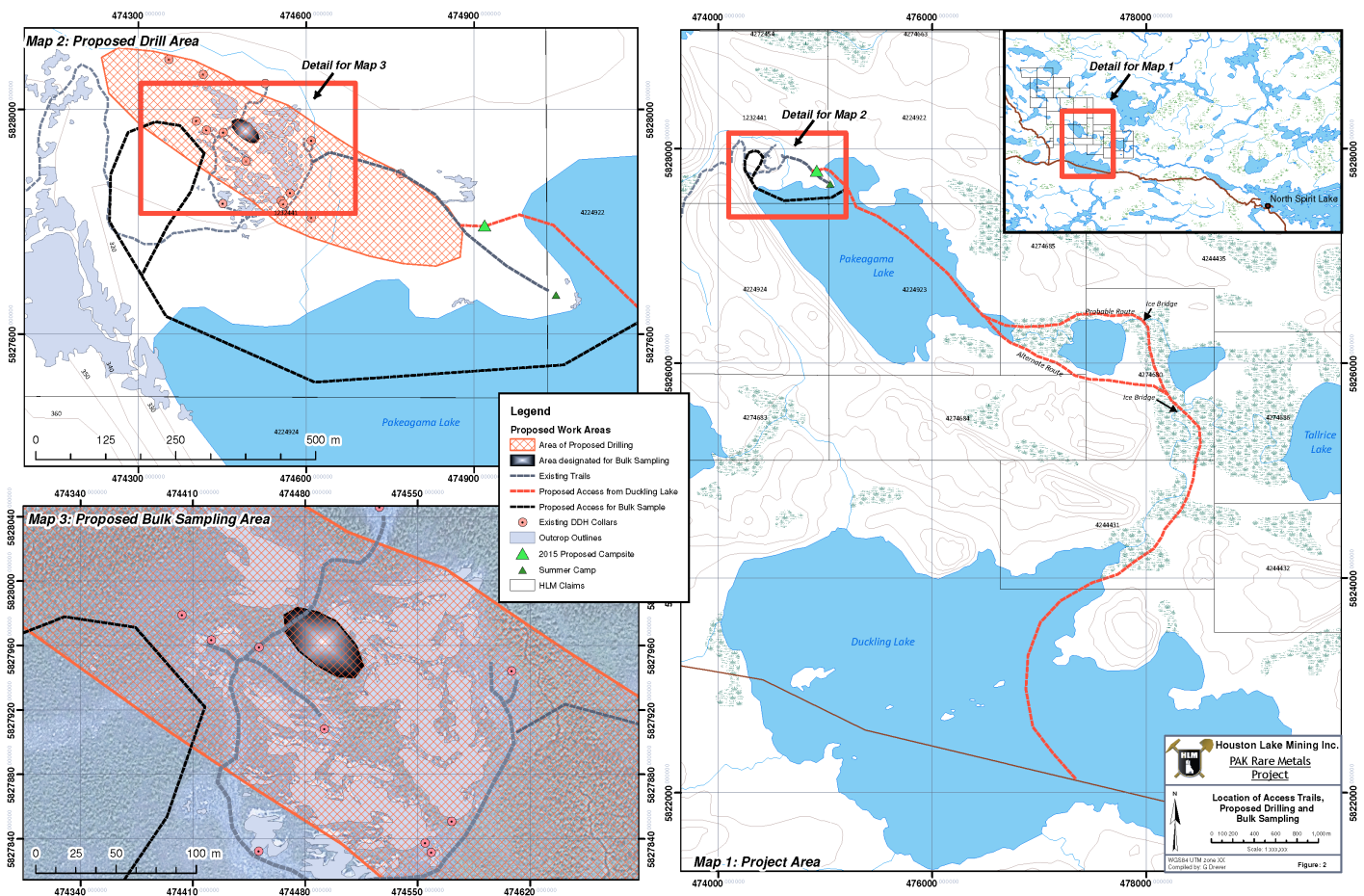


Figure 2: Location of Project and Access Routes

## Site plan, Locations and Dimensions of Proposed Pit

Figure 3 and 4 shows a plan view and photograph of the outcrop area affected. The area outlined in yellow represents the maximum extent for selecting the final pit area which will be selected in the field (dependent on truck access). The pit dimensions will be a maximum of 15m by 7m by 3.5m deep (probable site shown in black on both figures).

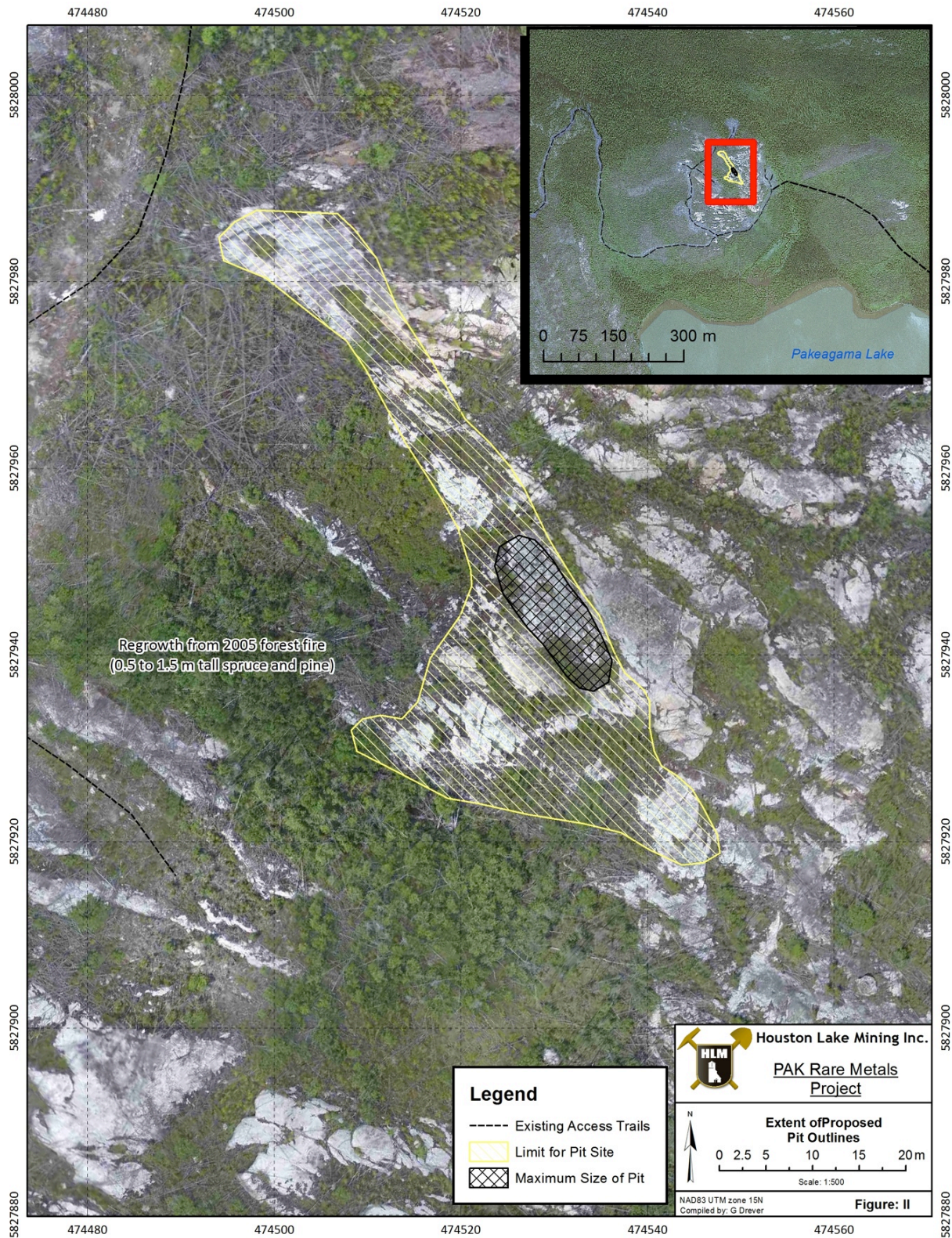
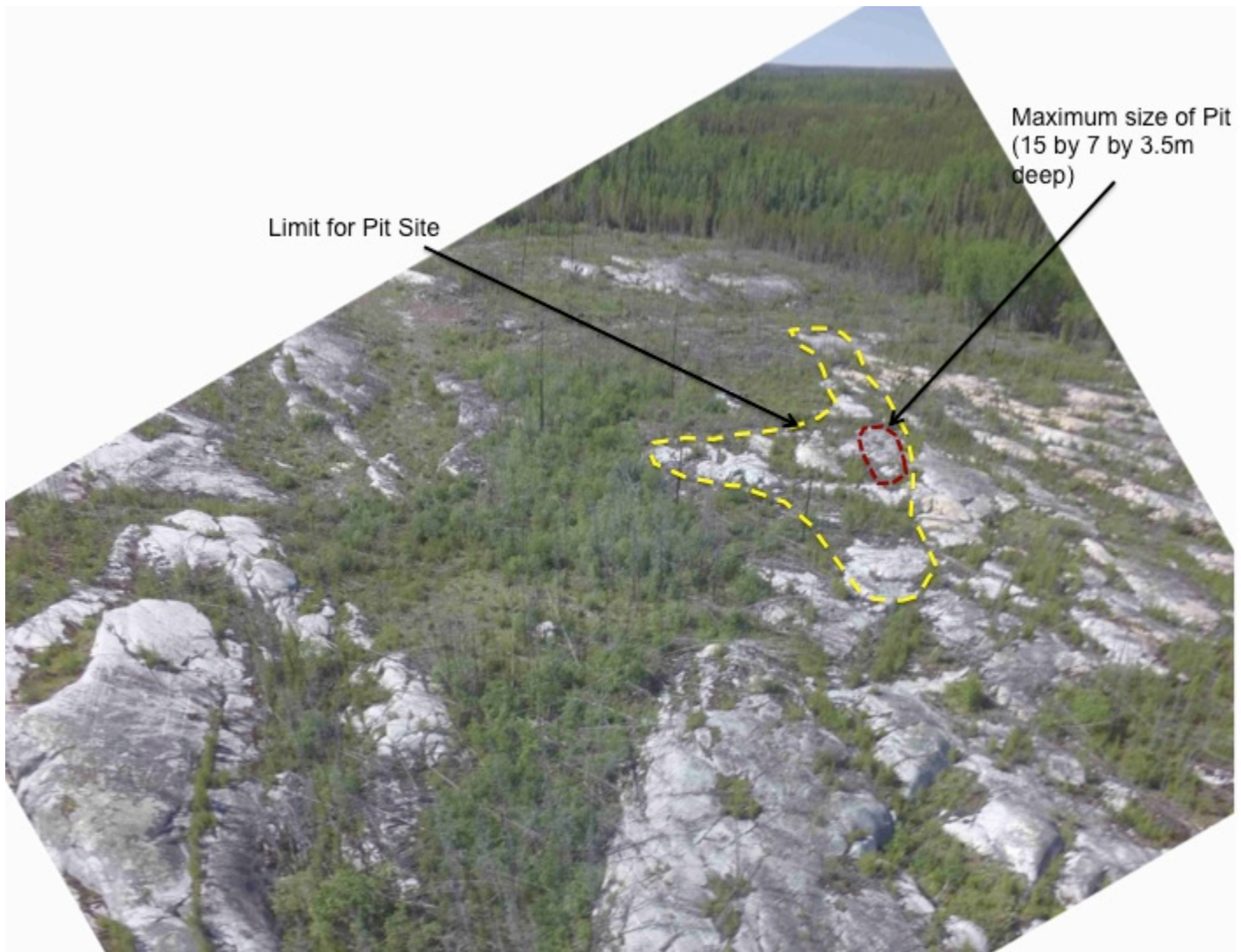


Figure 3: Detailed Location of Proposed Excavation Site



**Figure 4: Photo of Proposed Excavation Site**

Once the site is selected, production drilling will be accomplished with a 12t-18t tracked unit. The drill is a self-contained hydraulic unit that uses a top hammer. 2.75" – 3.5" (inch) diameter holes will be drilled to a depth of 3m-5m (cut). The drilling and blasting activities will be contracted out to a federally approved (licensed under Explosives Regulatory Division {ERD} of Canada) contractor. Explosives on site will be in the presence of HLM/contractor personnel; day and night as with such a small quantity/timeline explosive magazines will not be used for storage. All explosives and accessories will be sourced from licensed magazines in either Winnipeg, or Kenora ON.

12tonne +/- excavator will be used for site works and excavation.

### **Estimated Start and Completion Dates**

HLM would like to begin early February 2015 to take full advantage of the winter road system in the area. A early start in the winter season will ensure that the work will be done without risk of an early thaw, causing pre-mature demobilization.

Sample hauling should commence in early March at the latest and will be completed by March 15th, 2015. All equipment associated with the program will be removed by March 15<sup>th</sup>.

## Means of Access to the Site

Access to the area is accomplished by utilizing the main winter road network north from the Nungesser Road (immediately north of Red Lake, Ontario) to Duckling Lake and by a drill access trail to the campsite at Pakeagama Lake.

Access to the area will be by all-wheel drive vehicles from the winter campsite at Pakeagama Lake. Personnel will be transported to the campsite primarily via the winter road and also by commercial airline to either North Spirit Lake or Deer Lake, Ontario.

Production drill and excavator will be floated approximately 30 km to the campsite from the winter road on Duckling Lake 30km west of North Spirit Lake. The drill and excavator will access the pit site under their own power. Equipment will be demobed from the camp by floating on the access trail to Duckling Lake and continue on to the all weather roads 70km north of Red Lake (Nungesser Road).

## Relevant Mining History

To date, exploration activity on the project area has been restricted to ground geophysics (VLF and Magnetic), soil geochemistry, surface hand and channel sampling and most recently diamond drilling of 2,500m in 2011 and 2014. All exploration activities have been completed by HLM.

## Current Setting/Environment

Currently the site is wilderness with natural rock outcrop and forest. There is no organized use applied to the site.

Soils are virtually non-existent at the elevation of the bulk sample. A certain amount of glacial talus is present as overburden but this would be approximately negligible in the surrounding area of the pit.

Plant and animal life are largely wilderness related as is normal to the Canadian Shield.

There has been no contamination of the site from previous activity.

The outcrop area is topographically between 5 and 15m above the surrounding lowlands. The area proposed for excavation is relatively flat with the outcrop areas 0.5 to 2m above the overburden covered regions.

The entire outcrop and much of the surround area has been subjected to several forest fires with the most recent one in 2001 which burned and denuded the entire outcrop area as evident in Figures 3 and 4. Much of the spruce and pine forest immediately to the northeast was not affected by the most recent fires and consists of dense spruce and pine ranging from 2 to 3 metres tall to 10 or more metres. The area of the potential pit has been burned with only recent regrowth (0.5 to 1.5m tall and typically sparse). The area designated for equipment access is similar with sparse regrowth and mostly denuded from the recent fire.

No waste treatment systems are located on site. Garbage will be collected and hauled away to a designated dump site.

No permanent structures or infrastructure exists at the bulk sample site.

## Potential Impacts of the Project to the Environment

Because the work will be completed during winter months the impact to the environment will be minimal. Access to the outcrop and pit area for equipment will be by a new winter trail constructed from the main winter road at Duckling Lake. Most of the construction of the trail will only require clearing of snow, and only 100-150 metres of clearing (black spruce) will be required. Notification of the access trail has been submitted to the MNR.

At the immediate bulk sample area, no impact from access is anticipated. The creek that runs from north of the outcrop area along the east side and on to the Pakeagama Lake south of the outcrop is frozen solid during winter and will not be impacted by HLM's activities. Application to cross the watercourse has been applied for in the past, however MNR has provided derogation, therefore, no permit is required.

Most of the cuttings from drilling will be used as samples for analytical work prior to blasting and for library storage.

Petroleum products during the bulk sample project will be stored in tanks remote from the site. No other petroleum products, chemicals or hazardous or toxic substances will remain at the bulk sample site.

### Other Relevant Information

Starting date for winter road construction is likely between January 23-February 1, 2014 (during main winter road construction). Snow removal and stripping of the bulk sample is to commence after road access is established. There will be an approximate delay of 5-10 days after stripping before load/haul can commence. The delay will be result of production drilling, assaying and blasting by HLM. Figure 5 is a tentative schedule for the various components of the bulk sampling program.



Figure 5: Proposed Scheduling

Submitted December 2, 2014

Garth Drever, P.Eng.; P.Geo.  
Vice President, Exploration (HLM)