



MEADOWBANK GOLD PROJECT

Screening Decision “Pipe Dream Winter Road and Mining Exploration” Project Proposal, 11EN010

2014 Annual Report

Prepared for:

Nunavut Impact Review Board

Prepared by:

Agnico Eagle Mines Limited – Meadowbank Division

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DOCUMENT CONTROL

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| 1 | 2015/04/10 | All | All | |
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Prepared By: Meadowbank Environment Department



Approved By:

David Frenette
Environmental Coordinator

The information in this document has been presented to mine managers and is endorsed and approved by senior management at AEM*.¹

¹ *AEM is a recent signatory of the Mining Association of Canada- Toward Sustainable Mining. This document presents information related to assessment tools related to: Biodiversity Conservation Management and Tailings Management.

SECTION 1. ANNUAL REPORT

The NIRB requested in his screening decision No 11EN010 to report any exploration activities in the vicinity of the Meadowbank Project:

The Proponent shall include within its annual report for the Meadowbank Gold Project (NIRB 03MN107), a summary of activities undertaken as authorized by the Board for File No. 11EN010. This summary is expected to include a map showing approximate locations of drill sites and routing of winter trails.

Agnico Eagle Mines Limited (AEM) signed an exploration agreement with the Nunavut Tunngavik Inc. in January 2013 for the IVR property, now named Amaruq property. This property is located approximately 50 km north-east of the Meadowbank mine and 125 km north of the Baker Lake community. The mineral exploration aims gold mineralization.

This Screening Decision no. 11EN010 Annual Report is complementary to the 2014 Annual Report sent to the NIRB on April 10, 2015.

As part of this addendum, you will find below information relating to the 2014 exploration activities as requested by NIRB file No. 11EN010.

1.1 DRILLING

In 2014, 146 drilling holes, all located on IOL, were drilled by Agnico Eagle Mine Exploration Division (see Figure 1-1) for a total length of 31,646 meters. All drilling areas were managed in such a manner as to reduce our environmental footprint. Drill hole reclamation was completed during the 2014 drilling program.

Some drillings on ice were conducted, but most were done on land. No winter road or trails were used in 2014; all material, equipment and workers moves were made by helicopter.

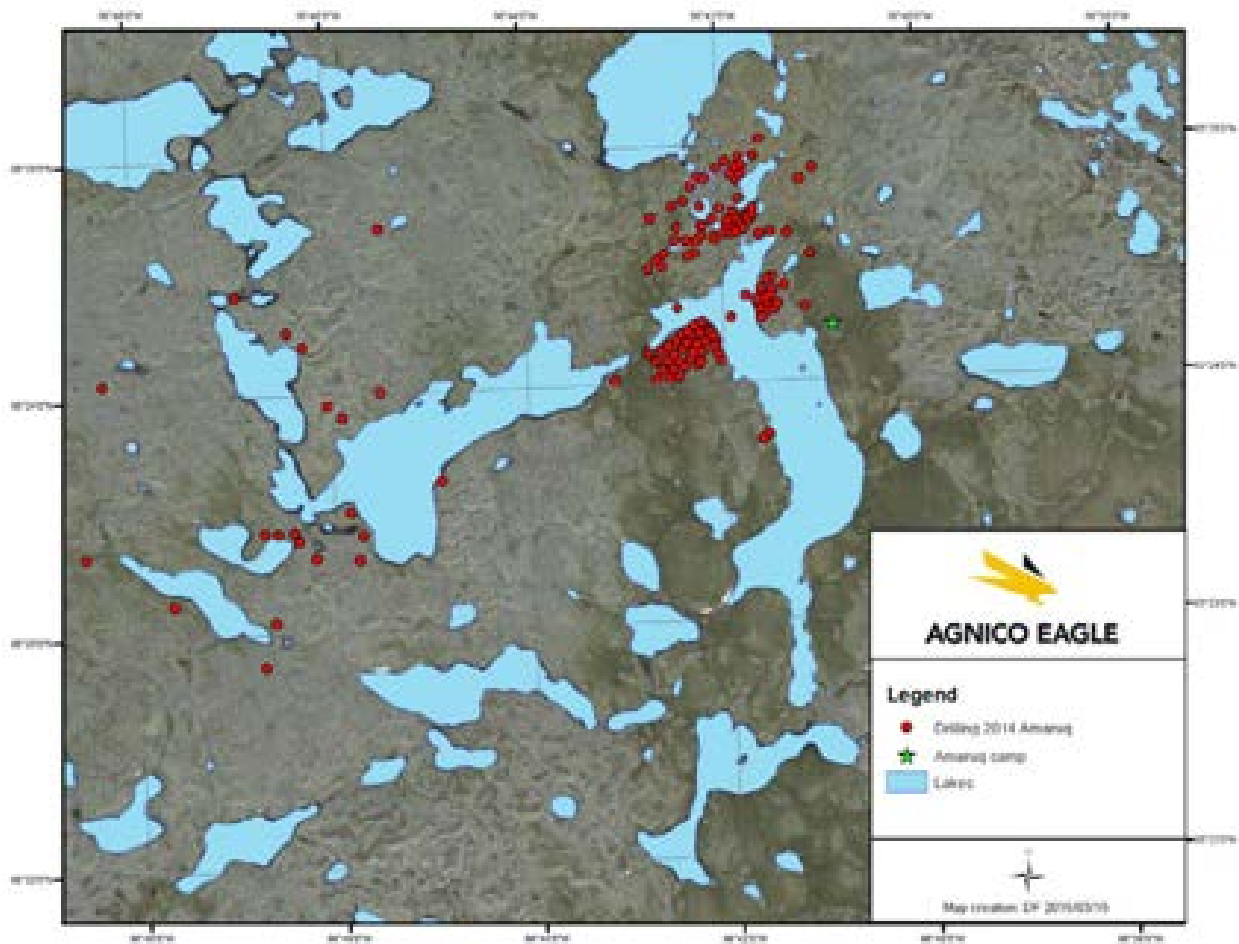


Figure 1-1: AEM 2014 Drilling Program Locations

1.2 TRENCHES

No trench done in 2014.

1.3 WORK PLAN FOR 2015

You will find in Appendix A the 2015 work plan for Amaruq Exploration Project (Lease KVL312C03).

1.4 SUMMARY OF MONITORING RESULTS BASED ON THE MITIGATION AND MONITORING PLAN

In Part J of the 2014 Annual Report presented to the Nunavut Water Board (see Appendix B), there is a compilation of the monitoring results.

The 2014 Annual Report submitted to KIA is also included in Appendix C.

1.5 PROTECTION OF ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

To protect archaeological and paleontological resources, Agnico Eagle Mines (Exploration division) has hired a consultant firm to do an archeological impact assessment in 2013 and 2014. The 2014 final report is in Appendix D.

1.6 WATER USE

The water usage is approved by the NWB Type B Water License 2BE-MEA1318 and the consumption details can be found in 2014 Annual Report Part J prepared for the NWB (Appendix B).

1.7 WASTE MANAGEMENT

1.7.1 Solid waste

All solid wastes are sorted at the work sites and regularly transported to the Meadowbank mine site for proper disposal. All wastes are kept inaccessible to wildlife at all times.

1.7.2 Grey water

In 2014, only the Amaruq camp operated under the water licence 2BE-MEA1318, the Meadowbank exploration camp was not open. By the end of 2014, the Meadowbank exploration camp was dismantled to be prepared for transport to Amaruq in 2015.

For the Amaruq camp, the grey water coming from the kitchen and the showers was disposed of in a sump dug in the soil. The Amaruq camp was only used during the months of September and October.

1.7.3 Sewage

All the toilet waste was recuperated in bags (Pacto toilets) and disposed of in an incinerator.

1.7.4 Drill waste

The drill cuttings were disposed of in natural topographic depressions near of the drilling, located at least 31 meters away from any water body, where there is no risk of runoff.

1.8 FUEL AND CHEMICAL STORAGE

The storage of hazardous material is done in a manner to avoid any release of substances into the environment, kept inaccessible to wildlife and at least thirty-one (31) meters away from the high water mark. The refuelling of all equipment also occurs at a minimum of thirty-one (31) meters away from the high water mark. In 2014, AEM did not have to treat or dispose of any hydrocarbon contaminated soil resulting from his activities.

1.9 WILDLIFE

Wildlife monitoring was conducted during the exploration in 2014. The animals seen by the workers were noted in a log. The table is in appendix E

APPENDIX A

2015 Work Plan

Amaruq Exploration Project (Lease KVL312C03)



AMARUQ GOLD PROJECT

2015 Work Plan

Commercial Lease KVL312C03

Prepared by:

Agnico Eagle Mines Limited, Exploration Division

January 2015

Submitted to:

Kivalliq Inuit Association

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1. Location

Agnico Eagle Mines Limited (AEM) signed an exploration agreement with the Nunavut Tunngavik Inc. in January 2013 for the Amaruq (IVR) property. This property is located approximately 50 km northwest of the Meadowbank mine and 125 km north of the Baker Lake community. The mineral exploration seeks gold mineral deposits. Drilling on this property began during the summer 2013 with helicopter support.

Agnico Eagle started the installation of an exploration camp during the summer 2014 and plans to continue the construction and upgrade of the camp during 2015. A request to obtain a commercial lease with the Kivalliq Inuit Association has been submitted. The commercial lease would include the exploration camp and the associated infrastructures, small exploration roads to access drilling sites, roads from the camp to the future gravel pits and a small airstrip.

2. Proponent

Agnico Eagle Mines Ltd.

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Environmental Coordinator

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3. Land Use Authorization

This 2015 work plan covers the proposed activities for the Amaruq Gold Project under the license KVL312C03. Activities described in this work plan are authorized by various authorizing agencies. The Amaruq Gold Project is located on Inuit Owned Land administered by the Kivalliq Inuit Association.

4. Permitting Summary

The following table summarizes permits issued for the Amaruq Gold Project.

Table 1: Authorization summary

| License | Location | Issued by | Details | Licence Expiry date |
|-------------|-------------------------------|----------------------------|---|---------------------|
| 2BE-MEA1318 | | Nunavut Water Board | Water License | 2018/03/06 |
| KVRW11F01 | | Kivalliq Inuit Association | Land use, winter road | 2015/05/16 |
| 11EN010 | | NIRB | | |
| KVL312C03 | BL42-BL43, 66H07, 66H08 | Kivalliq Inuit Association | Staking, prospection, exploration, drilling | 2016/08/28 |
| N2013F0030 | | AANDC | Winter acces Amaruq | 2016/04/15 |

5. Equipment and Contractors

For 2015, Agnico Eagle has contracted Orbit Garant for drill services. Up to six (6) diamond drills are planned to be in operation in 2015. For helicopter support, Agnico Eagle has contracted Helicopter Transport Services, two (2) helicopters will be on site between March and October. Material, fuel and equipment transport between Meadowbank and Amaruq will be provided by Peter Expediting Ltd. based at Baker Lake.

Major Contractors

| | | | |
|------------------|-----------------------|----------------|--------------|
| Diamond Drilling | Orbit Garant Drilling | Val-d'Or, QC | 819-824-2707 |
| Helicopter | HTS | Carp, On | 613-839-5868 |
| Expediting | Peter Expediting | Baker Lake, Nu | |

6. Proposed Activities

1. The Amaruq camp reopening is planned for February 2015.
2. The Meadowbank exploration camp will be dismantled, transported and reinstalled at the Amaruq camp site. It will be transported in February-March 2015 using the winter access road and tracked tractors with sleds.
3. Material, equipment and fuel will be transported with the tracked tractors between February and May.
4. Drilling is planned to start in March 2015 and up to 6 drills will be in operation during 2015. The drilling is planned to end by October.
5. Prospecting, mapping and geophysical surveying could be conducted on the entire property.

7. Areas of Activity

Most diamond drilling will target the “Whale Tail”, “I”, “V”, and “R” areas. Prospecting, mapping could be conducted on the entire property. Exploration drilling will be conducted inside areas shown on the figure 1.

8. Period of Land Use Operations, 2015

February to November:

- Camp maintenance, construction.

February:

- Reopening of the Amaruq camp.

February- May:

- Material, equipment and fuel transportation with the tracked tractors.
- Trailers installation (camp).

March - October:

- Diamond drilling.

June – October

- Continue the installation of camp equipment (waste water treatment system, garage, generators, incinerators, etc).

9. Environmental Management

Waste management

More details are presented in the “Amaruq waste management plan” but this is a summary:

- Putrescible waste such as paper, food packaging, and food waste will be incinerated.
- Untreated wood could be incinerated.
- Scrap metal and used tires will be stocked in containers and transported to southern facilities to be recycled.
- Non-hazardous, solid “inert” waste (wood, plastics, glass) will be disposed of in an approved landfill or segregated and disposed of in facilities in the south.
- All hazardous wastes and waste items that cannot be incinerated or landfilled will be securely packaged and sent to a proper treatment facility.
- Prior to disposal, the hazardous waste will be properly packaged, labeled, stored and manifested in a Transportation of Dangerous Goods (TDG) approved shipping container; the container will have the appropriate hazardous waste labels.
- Sewage: Pacto toilets will continue to be used until the water toilets and the sewage treatment plan (Bionest) are in operation. The waste coming from the Pacto toilets will be incinerated. The waste coming from the water toilets will be directed to a Bionest system that will treat the waste water. The solids will be retained in a primary tank that will be emptied 1 time per 2 years. The solids coming from this tank will be pumped and disposed of in a pit dug near the camp, treated with lime and finally covered with at least 30 cm of compacted soil (as suggested in the “Northern land use Guidelines, Camp and Support Facilities, AANDC”).

- Grey water: The grey water will be treated in the Bionest system or disposed of in a sump. The water will then return in the environment.

Fuel Storage

Fuel at Amaruq will be mostly stored in double-walled fuel tanks. 13 x 50 000 liter tanks and 2 x 100 000 liter tanks will be transported and used at the Amaruq site. Part of the fuel, mainly jet fuel, could also be stored in 205 liter drums located in a secondary containment (berm). Also, Agnico Eagle will retain some gasoline in barrels for the operation of snowmobiles and small pumps (approximately 50 barrels, as needed).

Figure 1: Drilling area

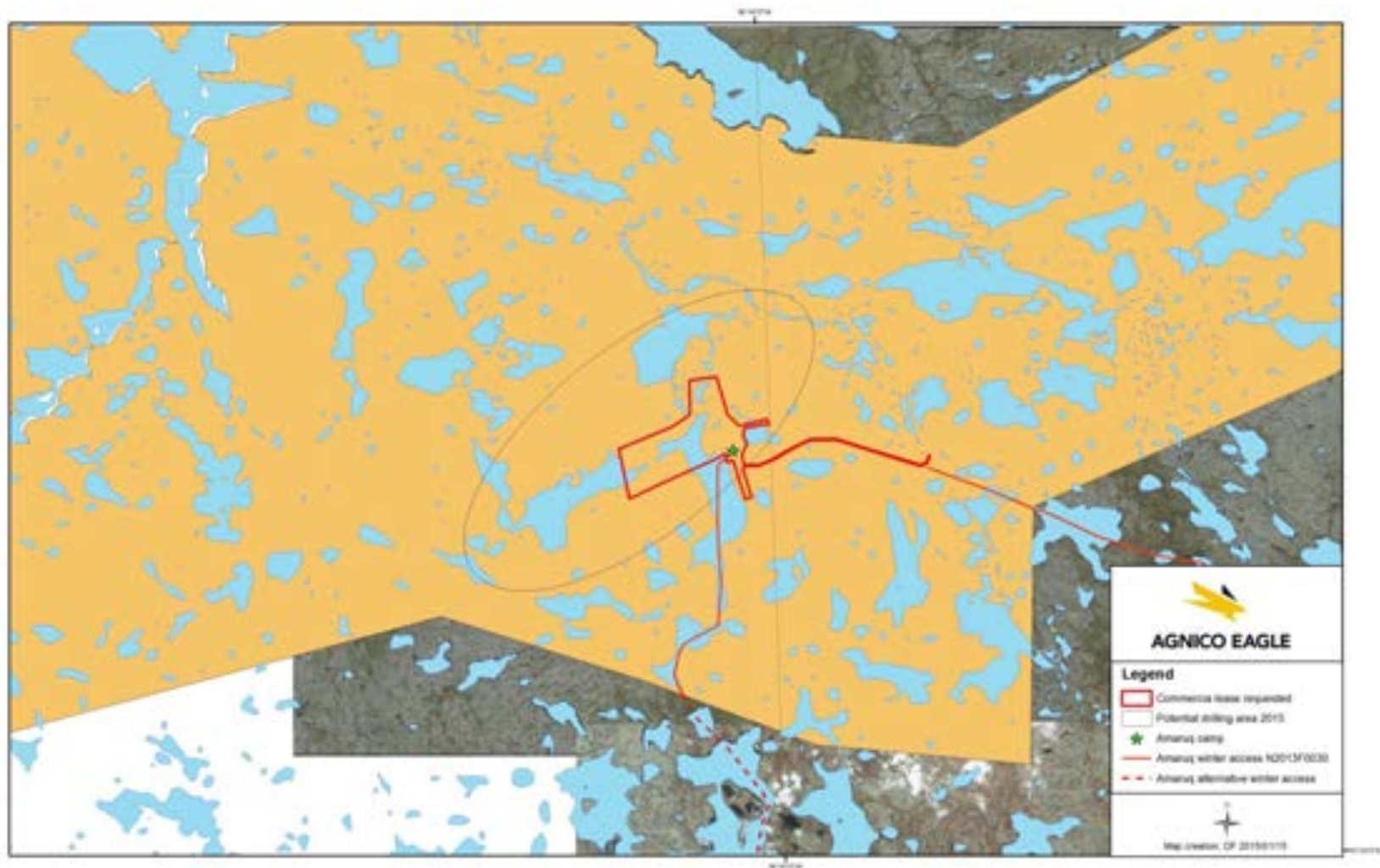
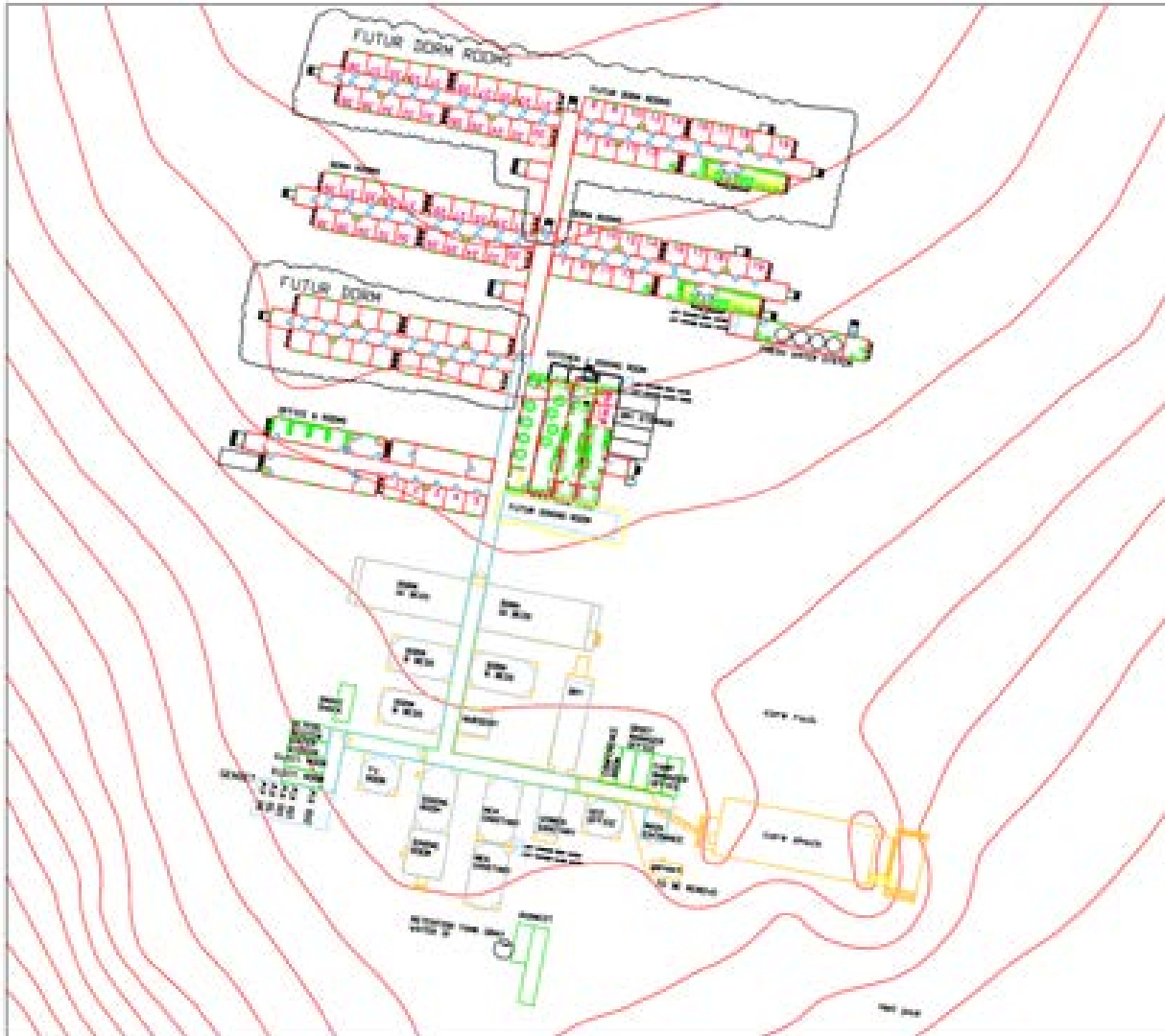


Figure 2: Camp plan



APPENDIX B

AEM 2014 Annual Report: License 2BE-MEA1318



AMARUQ GOLD PROJECT

ANNUAL REPORT: LICENCE 2BE-MEA1318

PRESENTED TO THE NUNAVUT WATER BOARD

FEBRUARY 2015

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B2. The Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31st of the year following the calendar year being reported which shall contain the following information:

a. A summary report of water use and waste disposal activities;

In 2014, only the Amaruq camp and drilling on the Amaruq property was done under this water licence. The Meadowbank exploration camp was not opened and by the end of 2014, the Meadowbank exploration camp was dismantled to be transported to Amaruq in 2015.

The Licence authorizes the use of a maximum of 269m³/day and we used only an average of 97m³/day for the drilling and an average of 2.6m³/day for the camp.

b. A summary of waste disposal activities including volumes and locations of waste released including but not limited to, greywater and drill cuttings, procedures for disposal thereof, and results of any pre-release monitoring and/or treatment

Solid Waste:

All solid wastes were sorted at work sites and regularly transported to the Meadowbank mine site for proper disposal.

Greywater:

At the Amaruq camp, the grey water coming from the kitchen and the showers was disposed of in a sump dug in the soil.

Sewage:

All the toilet waste was recuperated in bags (Pacto toilets) and disposed of in an incinerator.

Drill Waste

Cuttings: The drill cuttings were disposed of near the drill, in natural topographic depressions located at least 31 meters away from any water body, where there is no risk of runoff.

c. A summary of trenching and drilling operations;

Drilling

146 drill holes all located on IOL were done by Agnico Eagle Mines in 2014. All the drilling was located on the Amaruq property. Drill site reclamation was completed during the program.

Trenches

No trench was dug in 2014.

d. A summary of construction activities or modifications carried out;

The construction of the Amaruq camp started during 2014 and will continue in 2015 with the addition of the trailers (camp) coming from the Meadowbank exploration camp.

e. A list of unauthorized discharges and a summary of follow-up actions taken;

No unauthorized discharge.

f. Any revisions to the Spill Contingency Plan and Abandonment and Restoration Plan, including contact information;

Please see Appendix A for the Spill Contingency Plan Updated on February 2015 and Appendix B for the Closure and Reclamation Plan Updated on January 2015.

g. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;

Drill hole reclamation is completed during the drilling program. The drilling sites are inspected after the drilling to insure that no waste is present and that the casings are removed or cut to ground level.

h. A summary of all information requested and results of the Monitoring Program; and

No information requested. See Part J for the Monitoring Program results.

i. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No details were requested by the Board.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes.

| Months | Drills | Camp | Total |
|-----------|--------|------|-------|
| January | 0 | 0 | 0 |
| February | 0 | 0 | 0 |
| March | 0 | 0 | 0 |
| April | 41.2 | 0 | 41.2 |
| May | 94.6 | 0 | 94.6 |
| June | 0 | 0 | 0 |
| July | 87 | 0 | 87 |
| August | 99 | 0 | 99 |
| September | 114 | 2.7 | 116.7 |
| October | 145 | 2.5 | 147.5 |
| November | 0 | 0 | 0 |
| December | 0 | 0 | 0 |

2. The Licensee shall provide the GPS co-ordinates of all locations where sources of water are utilized for all purposes.

Camp water intake (UTM Nad83, Zone 15): (351597,5;7215626,7)

Water sources for drilling location (UTM Nad83, Zone 14)

| X | Y |
|--------|---------|
| 603385 | 7255211 |
| 602938 | 7255643 |
| 603562 | 7256154 |
| 602676 | 7253317 |
| 603343 | 7253679 |
| 604059 | 7253884 |
| 604151 | 7254651 |
| 604555 | 7254303 |
| 603520 | 7254679 |
| 606499 | 7255424 |
| 607031 | 7255565 |
| 607180 | 7254636 |
| 606974 | 7256558 |
| 606463 | 7256778 |
| 605825 | 7254963 |
| 606974 | 7256034 |
| 606662 | 7256317 |

- 3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations and drilling operations are deposited.**

During 2014, all the wastes were brought and managed at the Meadowbank mine site.

- 6. The Licensee shall obtain representative samples of the water column below any ice, where required under Part F, Item 6 and 7. Monitoring shall include, at a minimum, the following:**

Total Suspended Solids

pH

Electrical Conductivity, and

Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and

Trace Arsenic and Mercury

Three holes were drilled on a lake that had water during the winter, but a logistical problem with the sampling material occurred and no samples were taken for these drillings. For 2015, more drilling is planned on the lakes and the sampling material is already on site, so the required monitoring will be conducted.

Appendix A

Spill Contingency Plan Updated on February 2015



AMARUQ GOLD PROJECT

Spill Contingency Plan Exploration camp and sites

In Accordance with Water License 2BE-MEA1318

Agnico Eagle Mines Limited – Exploration Division

February 2015

EXECUTIVE SUMMARY

This document presents the Spill Contingency Plan principally for the Amaruq exploration project, but also for the other exploration sites under the water licence no. 2BE-MEA1318 issued on June 09, 2008. The Spill Contingency Plan (SCP) designates lines of authority, responsibility and establishes proper reporting and details action plans in the event of a spill. This plan is applicable to all AEM employees and any contractors associated with the AEM exploration projects.

In case of a major spill, the Exploration division could use the Meadowbank Mine Resources. This document includes some of the Meadowbank mine protocols and procedures.

IMPLEMENTATION SCHEDULE

As required by Water Licence 2BE-MEA1318, this Plan revision is effective immediately and subject to any modification proposed by the NWB as a result of the review and approval process.

DISTRIBUTION LIST

AEM – Camp Managers

AEM – Geology Supervisors

AEM – Environmental Coordinator

DOCUMENT CONTROL

| Version | Date (YMD) | Section | Page | Revision |
|---------|------------|---------|------|---|
| | 2012/09/28 | | | Update to include license requirement for the amendment no 2. |
| | 2013/05/22 | 6 | | Addition of the barrels storage procedure |
| | 2013/05/22 | 2.1 | | Spill kits use |
| | 2013/05/22 | 2.2 | | Refuelling during drilling |
| | 2014/10/17 | | | Document adaptation to include Amaruq, complete revision |
| | 2014/02/18 | 2.3 | | Addition information related to the fuel transport |
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Table 1 - Document Control

David Frenette
Environment Coordinator

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SECTION 1 • INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE SPILL CONTINGENCY PLAN

The overall purpose of creating a spill contingency plan is to minimize the impacts of spills by the establishment of predetermined lines of response and action plans. This plan has been designed to facilitate effective communication and the efficient clean-up of spills from potentially hazardous materials. These hazardous materials include:

- Hydrocarbon liquids such as diesel fuel, gasoline, hydraulic oil;
- Soluble liquids, such as glycols, and paints;

More specifically the objectives of this Spill Contingency Plan (SCP) are to:

- Identify roles, responsibilities, and reporting procedures.
- Provide readily accessible emergency information to the cleanup crews, management, and government agencies.
- Comply with federal and territorial regulations and guidelines pertaining to the preparation of contingency plans and notification requirements.
- Promote the safe and effective recovery of spilled materials.
- Minimize the environmental impacts of spills to water or land.

. This plan has been prepared in accordance with the following reference documents:

- Indian and Northern Affairs Canada (INAC) 2007. *Guidelines for Spill Contingency Planning*.
- Government of Nunavut (GN), *Contingency Planning and Spill Reporting in Nunavut. A Guide to the New Regulations*.
- Government of Nunavut (GN) 2002, *Guideline General Management of Hazardous Wastes in Nunavut*.
- Northwest Territories Resources Wildlife and Economic Development Environmental Protection Service. 1988. *Spill Contingency Planning and Reporting Regulations*.

SECTION 2 • PROJECT DESCRIPTION

The Amaruq Gold Exploration Project, operated by Agnico Eagle Mines Limited, is located approximately 50 km NNW of the Meadowbank mine.

Amaruq Exploration Project components include the exploration camp and the different exploration sites.

The fuel at the Exploration camp site will consist to 13 tanks of 55000 litres and 2 tanks of 100 000 litres.

Emergency spill response equipment (i.e. spill kits) is installed at each fuel storage location. Spill kits contain the appropriate type, size and quantity of equipment for the volume and type of product present at the storage location. Heavy equipment and light vehicles are all equipped with spill kits.

2.1 PREVENTION AND INSPECTIONS

The first step in spill response is to take actions to prevent the spill from occurring. Transport, transfer and storage of materials are performed by trained personnel using secondary containment, with well-maintained equipment and containers. Refuelling stations at the camp site will be equipped with a lined area to contain any minor leaks or spills while refuelling. Good housekeeping practices are adopted especially in areas such as storage facilities, loading and unloading zones. Site orientations are conducted with all employees and spill prevention and response is discussed in detail. Regular worksite inspections are conducted to identify measures to minimize the risk of spills. All personnel are trained to be aware of the potential hazards associated with the fuel/chemicals with which they are assigned to work

AEM supports the following general principles for spill prevention:

- Provide up to date and accessible Material Safety Data Sheets (MSDS) for all hazardous materials
- Daily inspections fuel/chemical storage areas for leaks
- Daily inspections of hazardous materials storage areas
- Train workers in the use of safe work procedures for hazardous materials, and procedures to clean up spills
- Encourage workers to take reasonable measures to prevent spills
- Keep drums/containers sealed or closed,
- Place drums/containers within a suitable form of secondary or spill containment
- Keep empty drums nearby to contain leaking drums

- Keep storage areas secure from unauthorized access
- Segregate incompatible materials
- Ensure chemical storage areas are adequately protected from weather and physical damage
- Provide adequate spill response materials at storage areas (details of spill prevention equipment are outlined in Section 8).
- A spill kit including shovel, barrels, absorbents, etc., should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill.

2.2 REFUELLING DURING DRILLING

Refuelling must not take place below the high water mark of any water body and shall be done in such a manner as to prevent any hydrocarbon from entering any water body.

2.3 FUEL TRANSPORT ON THE WINTER ROAD

The fuel will be transported on the winter road using skidded tanks pulled by tractor. The transport tanks are double walled to reduce the risk of spill.

Spill kits will be in each transport and also be present at Amaruq and Meadowbank camps to clean rapidly eventual spills.

Radio and satellite phone will be in the tractors to assure a rapid communication between the transporter and the Agnico Eagle Staff to manage adequately the emergency situation.

SECTION 3 • DEFINITIONS

3.1 WHAT IS A SPILL?

For the purposes of this plan, a major spill is defined as an accidental release of product into the environment that has the potential for adverse impact. The Meadowbank emergency response team must be notified immediately of a major spill or emergency.

A minor spill is defined as any hazardous chemical spill that does not involve highly toxic, highly reactive, or explosive chemicals in a situation that is not life threatening. Furthermore, this type of spill presents a manageable physical or health hazard to personnel who, when wearing proper personal protective equipment, will not be exposed to any chemical at a level that exceeds any recognized action level or permissible exposure limit. Minor or simple spills are still to be reported to the Environment Department but they are not expected to involve emergency responders.

3.2 MATERIALS AND REPORTABLE SPILLS ON SITE

As a precaution, if there is any doubt as to whether the quantity spilled meets the minimum reportable thresholds listed in **Table 2**, the spill incident will be reported. Furthermore, AEM will maintain a detailed log of all spills of hazardous materials, including non-reportable spills. As part of AEM's overall environmental management system and in the spirit of a continuous improvement of environmental performance, procedures will be implemented to encourage all employees to communicate non-reportable spill incidents.

To ensure compliance with Section 36(3) of the *Fisheries Act* and Section 35 of the *Migratory Bird Regulations* all spills of fuel or hazardous materials, regardless of quantity into a water body, shall be reported immediately to the NT-NU 24-HOUR SPILL REPORT LINE (at 867.920.8130).

Table 2 - Spill Quantities that Must Be Reported to the NT-NU 24-HOUR SPILL REPORT LINE

| <i>Transportation Class</i> | <i>Type of Substance</i> | <i>Compulsory Reporting Amount</i> |
|------------------------------------|---|---|
| 1 | Explosives | Any amount |
| 2.1 | Compressed gas (flammable) | Any amount of gas from containers with a capacity exceeding 100 L |
| 2.2 | Compressed gas (non-corrosive, non-flammable) | Any amount from containers with a capacity exceeding 100 L |
| 2.3 | Compressed gas | Any amount |
| 2.4 | Compressed gas (corrosive) | Any amount |
| 3.1, 3.2, 3.3 | Flammable liquid | 100 L |
| 4.1 | Flammable solid | 25 kg |
| 4.2 | Spontaneously combustible solid | 25 kg |
| 4.3 | Water reactant solids | 25 kg |
| 5.1 | Oxidizing substances | 50 L or 50 kg |
| 5.2 | Organic peroxides | 1 L or 1 kg |
| 6.1 | Poisonous substances | 5 L or 5 kg |
| 7 | Radioactive substances | Any amount |
| 8 | Corrosive substances | 5 L or 5 kg |
| 9.1 (in part) | Miscellaneous substances | 50 L or 50 kg |
| 9.2 | Environmentally hazardous | 1 L or 1 kg |
| 9.3 | Dangerous wastes | 5L or 5 kg |
| 9.1 (in part) | PCB mixtures of 5 ppm or more | 0.5 L or 0.5 kg |
| None | Other contaminants | 100 L or 100 kg |

Note: L = litre; kg = kilogram; PCB = polychlorinated biphenyls; ppm = parts per million.

SECTION 4 • RESPONSE ORGANIZATION

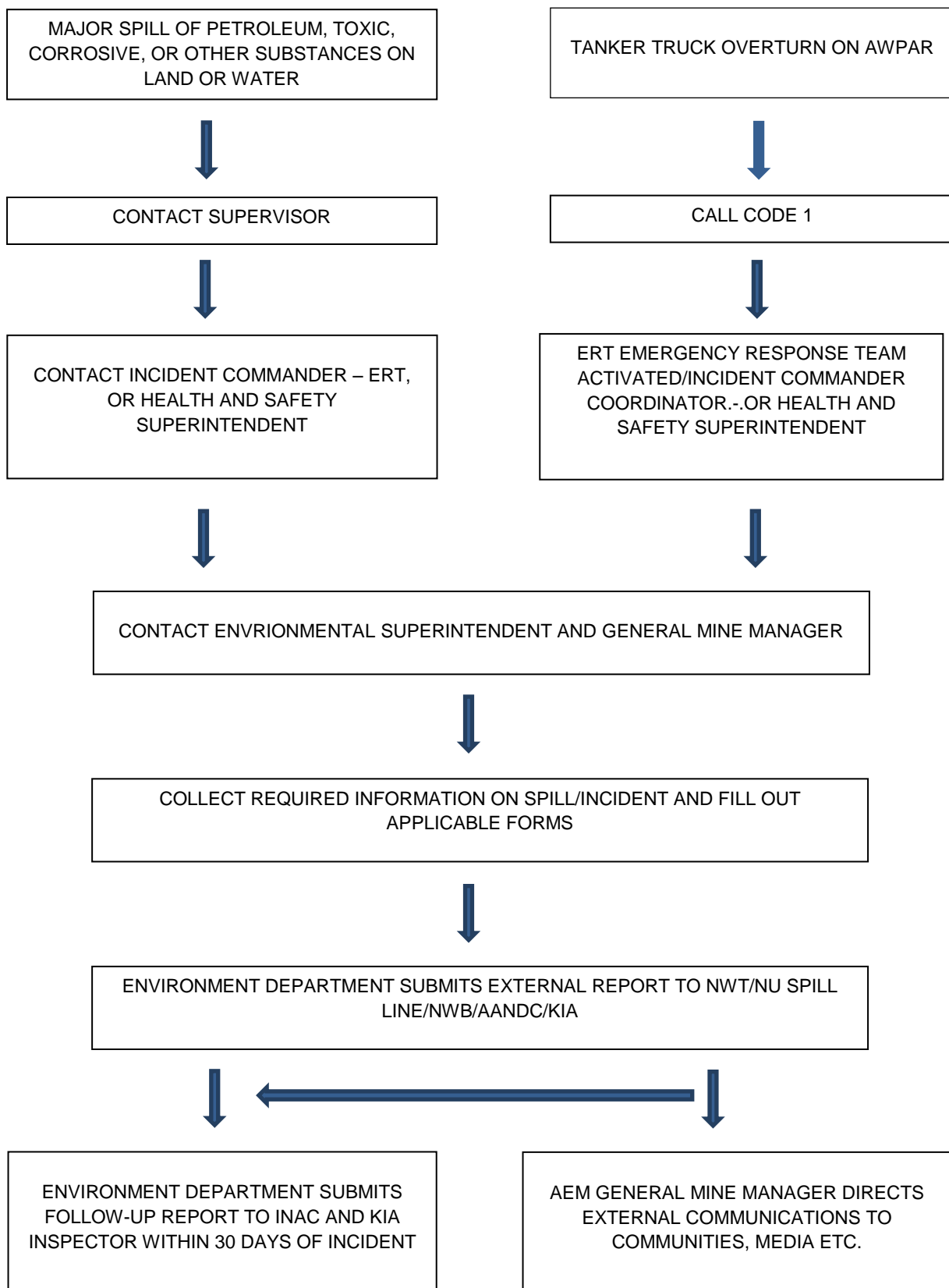
This section addresses the response organization and the responsibilities of each individual during response to an incident.

Figure 1 illustrates AEM's Spill Reporting Procedure in the event of a spill and Sections 4.1- 4.9 list the major responsibilities of site staff that will be participating in the emergency response management.

The first person (first responder) to notice, or come in contact with, any spill situation either initiates a Code 1 (example: in the case of a tanker truck overturn on AWP/AR) or reports to his/her immediate supervisor (in the case of all other spills on land or water). The supervisor is responsible for reporting the incident to the designated Incident Commander for a major spill or to the environment department for a minor spill. If a Code 1 is initiated, the incident commander will respond to any emergency in conjunction with the ERT. Major responsibilities such as initial coordination, spill clean-up and mobilizing the Emergency Response Team (ERT) are part of the Incident Commander's duties.

The Incident Commander will contact the Environmental Superintendent and/or General Mine Manager or alternate, who in turn will inform the VP, Environment and Sustainable Development. After all the information has been collected, the Environmental Superintendent or alternate will submit a spill report and follow up spill report to the NWT/NU Spill Line, Nunavut Water Board, Kivalliq Inuit Association and Aboriginal Affairs and Northern Development Canada. Incidents that require media communications will be the responsibility of the AEM General Mine Manager or alternate.

Figure 1 : Major spill/incident reporting procedure



4.1 FIRST RESPONDER

The person who has caused a spill or is the first to observe the spill is the first responder.

The responsibilities of the First Responder are as follows:

- In case of a tanker truck overturn, initiate a Code 1. Remain on radio to provide guidance to the ERT.
- In case of spill on land or water, contact the supervisor to report the incident.
- Identify and contain the spill, IF SAFE TO DO SO.
- Participate in spill response as a member of the clean-up crew.

4.2 SUPERVISOR

The responsibilities of the Supervisor are as follows:

- Initial assessment of the severity of the incident.
- Contacts the Incident Commander.
- Gathers facts about the spill.
- Participates in spill response as a member of the clean-up crew.

4.3 INCIDENT COMMANDER

The responsibilities of the Incident Commander are as follows:

- Assume complete authority over cleanup personnel and the spill scene, as well as assume responsibility for all mitigation efforts.
- Evaluate the initial situation and assess the magnitude of the problem.
- Activate the initial response plan.
- Alert and assemble key personnel in the response team, as deemed appropriate, to handle the situation.
- In consultation with the Environmental Superintendent or designate, develop the overall action plan for containment and cleanup of the specific incident, as well as direct and implement the plan.
- Ensure assigned responsibilities are carried out and the activities of team members are coordinated.
- Assess the requirements for people, equipment, materials, and tools to contain the spill in light of what resources are immediately available; urgency will depend on the nature of the spill.

- In consultation with the Environmental Superintendent or designate, mobilize any additional resources that may be required and arrange for the transportation of necessary personnel and/or materials to the site.

4.4 EMERGENCY RESPONSE TEAM

AEM has an Emergency Response Team (ERT) that is trained and responsible for controlling large spills as well as spills from tanker truck overturns along AWP/AR, and assisting with medical and other emergencies that may occur at the camp. These team members attend regular training sessions.

4.5 EMERGENCY RESPONSE TEAM COORDINATOR

The responsibilities of the Emergency Response Team Coordinator (ERTC) are as follows:

- Mobilize all ERT personnel, equipment, personal protective equipment and supplies as required to the site of the spill.
- Assist Incident Commander in obtaining any additional resources not available on site.
- Ensure that appropriate PPE is worn properly.
- Assist in developing and implementing emergency response training programs and exercises.
- Ensure that all spill response personnel receive adequate training to fulfill their responsibilities as part of the ERT.

4.6 ENVIRONMENTAL SUPERINTENDENT OR DESIGNATE

The Environmental Superintendent or designate is responsible for implementing and maintaining the SCP. In addition, the Environmental Superintendent's or designate's responsibilities in the case of a spill are to:

- Liaise with the Incident Commander.
- Provide technical advice on the anticipated environmental impacts of the spill.
- Advise on the effectiveness of various containment, recoveries, and disposal options, and suggest the most appropriate approach.
- Prepare and submit any formal reports (see Appendix A for NWT/NU Spill Report Form) to regulators and AEM management detailing the occurrence of a spill.
- Contact the Senior Vice President - Environment and Sustainable Development immediately for a major spill.
- Act as the spokesperson with regulatory and government agencies.
- If authorized by the General Mine Manager, act as a spokesperson with the public and media, as required.

- Implement a sampling protocol for the collection and analysis of samples to identify and monitor possible contaminant levels resulting from the spill.
- Ensure on-site resources for spill response and cleanup are available.
- Monitor the effectiveness of the cleanup operation and recommend further work, if necessary.
- Review incident occurrences and recommend preventative measures.
- Assist in implementing training and simulation requirements for spill response personnel.

4.7 GENERAL MINE MANAGER ON DUTY

The General Mine Manager / designate is required to inform team members of the detailed nature of the operations to be performed in the event of a facility malfunction causing a spill during the Operations phase. The responsibilities of the General Mine Manager/designate are as follows:

- Liaise with AEM personnel resources and keep them informed of cleanup activities.
- Assist the Incident Commander and ERT as needed, particularly in obtaining any additional resources not available onsite for spill response and cleanup.

4.8 HEALTH AND SAFETY SUPERINTENDENT OR DESIGNATE

The following are the responsibilities of the Health and Safety Superintendent or designate in conjunction with the Training Department:

- Maintain emergency and health and safety records.
- Assist in conducting emergency spill response exercises.
- Track all emergency and health and safety training that on-site staff have received, and when retraining will be required.
- Notify the Incident Commander (related to ERT) when retraining is required.
- Ensure that employees are retrained in appropriate emergency response skills, Workplace Hazardous Materials Information System (WHMIS) training, Hazard Communication (HAZCOM), Occupational Health and Safety Administration (OHSA) training, first aid, and respirator fit-testing prior to expiry of existing training certification.
- Consult with appropriate organizations regarding retraining requirements and schedules.

4.9 ON-SITE HEALTH CARE PROVIDERS

On-site medics are responsible for the following:

- Providing on-site first aid and other medical support.
- Providing additional training for ERT members.

In addition to the health care providers on site, the Baker Lake Hamlet health professionals will be called first on the scene, if required.

4.10 SPILL RESPONSE CONTACT INFORMATION

Internal contact information is contained in Table 3 for all AEM personnel involved in spill recovery and subsequent reporting. Table 4 provides contact information for AEM contractors present at the mine site. Important external contacts such as regulatory agencies and health organizations are listed in Table 5. Table 6 provides contact information for external contractors should incident warrant assistance from outside sources.

Table 3 - Internal Contacts

| Title | Name | Telephone No. |
|--|--|--|
| Environmental Superintendent | Ryan Vanengen | 867.793.4610 ext. 6838 |
| Health and Safety Superintendent or Assistant Superintendent | Norm Ladouceur/ Yves Levesque | 867.793.4610 ext.6720 |
| Emergency Response Team | Andre Rouleau/ Philippe Beaudoin | 867.793.4610 ext.6809 |
| Environmental Coordinator Or Environmental Department | Jeffrey Pratt Or Environmental Technicians | 867.793.4610 ext. 6728 Or 867.793.4610 ext. 6747 |
| Incident Commander | Ryan Vanengen/ Jeff Pratt | 867-793-4610 ext. 6728 |
| Exploration Manager | Denis Vaillancourt | 819-874-5980 ext 3605 |
| Exploration Environmental Coordinator | David Frenette | 819-874-5980 ext 3622 |
| On-site Medics | On-site Nurses | 867.793.4610 ext.6734 |
| Site Security | On-site Security | 867.793.4610 ext.6748 |

Table 4 - Contractor Contacts

| Title | Telephone No. |
|---------------------------|--|
| Nolinor Aviation Services | Protocol Agent 867.793.4610 ext. 6808 |
| First Air | 867.446.1744 |
| Calm Air | 867.793.2873 |

| | |
|--|------------------------------|
| Dyno Nobel Explosives Ltd. | 867.793.4610 ext.6804 |
| Woodward Group of Companies (Shipping) | 709.896.2421 or 709.896.6569 |

Table 5 - External Contacts

| Organization/Authority | Telephone Number | Fax Number |
|---|----------------------------------|--------------|
| NT-NU 24-Hour Spill Report Line | 867-920-8130 spills@gov.nt.ca | 867-873-6924 |
| Workers Safety and Compensation Commission | 867-979-8637 | 867-979-8501 |
| Kivalliq Inuit Association | 867-645-5725 | 867-645-2348 |
| Nunavut Water Board | 867-360-6338 | 867-360-6369 |
| AANDC Inspector | 867-975-4548 | 867-979-6445 |
| Environment Canada, Enforcement Branch | 867-975-4644 | 867-975-4594 |
| Department of Fisheries and Ocean (DFO) – Nunavut Regional Office | 867-979-8000 | 867-979-8039 |
| Manager, Environmental Protection, Government of Nunavut | 867-975-7748 | 867-975-5981 |
| Kivalliq Health Services – Baker Lake (Health Centre) | 867-793-2816 | 867-793-2813 |
| Baker Lake Hamlet Office | 867-793-2874 | |
| Baker Lake Fire Emergency | 867-793-2900 | N/A |

Table 6 - External Spill Response Contractor Phone Numbers

| Contractor | Telephone No. | Area of expertise |
|-----------------------------------|---------------|---------------------------------|
| Local | | |
| Baker Lake Contracting & Supplies | 867.793.2831 | General Contracting and repairs |
| Peter's Expediting | 867.793.2703 | Transportation |
| NWT Ltd (Arctic Fuel) | 867.793.2311 | Fuel Transportation |

SECTION 5 • ACTION PLAN

Spills may be the result of any of the following occurrences:

- Tanks, drums or containers may develop leaks or rupture.
- Failure of equipment such as valves, piping or containment structures.
- Overfilling.
- Improper storage.
- Spills during transfer of fuel, chemicals or waste products.
- Spills resulting from accidents during transportation.

5.1 INITIAL ACTION

For all spill emergencies, it is required that priority actions be undertaken. These are:

- Respond Quickly;
- Ensure Safety; and
- Report the Spill.

5.1.1 Respond Quickly

- Identify the spilled material.
- Be alert – ensure safety of yourself and others by notifying them of the incident.
- Shut off ignition sources such as vehicles and unplug electrical equipment – NO SMOKING.
- Attend to the injured.
- Assess the severity of the spill.
- Contact the Incident Commander, identify the location and request assistance as required. Incident Commander will mobilize the Emergency Response Team if required.

The primary form of ensuring safety is by using preventative measures. All personnel who deal with chemicals must have training in first aid and safe materials handling, including the Workplace Hazardous Materials Information System (WHMIS). In addition, regular training updates and site-specific exercises / drills are integral to preventing incidents.

5.1.2 Respond Safely

- Consult the MSDS and Product Guides for further information on the substance;
- Keep people away from spill site;
- Wear appropriate PPE such as impervious clothing, goggles, and gloves when containing the spill
- Approach spill from upwind IF IT IS SAFE TO DO SO
- Assess whether the spill, leak, or system failure can be readily stopped or brought under control;
- Stop product flow or leak if possible and IF IT IS SAFE TO DO SO
- Do not contain compounds (e.g. gasoline, aviation fuel) if vapours might ignite – allow them to evaporate.
- Depending on the type of compound spilled and IF IT IS SAFE TO DO SO, contain product using booms, berms, absorbent pads, earthen dikes, trenches or improvise with materials at hand.

5.1.3 Report Spill

- Obtain all necessary information to complete the external reportable spill. External reportable spills must be reported to the NWT-NU 24 Hour Spill Line/AANDC/Kivalliq Inuit Association (KIA) and the Nunavut Water Board by AEM Environment Staff.
- A detailed spill report, no later than 30 days after reporting the spill, will be submitted to the AANDC Water License Inspector and the KIA Land's Inspector by AEM Environment Staff. This report will contain the amount and type of spilled product, the GPS location of the spill and the measures taken to contain, clean up and restore the spill site.

Procedures will vary depending on the season and hazardous material lost. The MSDS must be consulted to ensure that safety procedures are followed. Response procedures specific to spills on land, water, snow and ice are presented in the following sections as general guidelines.

5.2 SPILLS ON LAND

Response to spills on land will include the general procedures detailed in the following section. The main spill control techniques involve the use of two types of barriers: dykes and trenches. Barriers should be placed down-gradient (down-slope) from the source of the spill, and as close as possible to the source of the spill. Barriers will slow the progression of the fuel and will also serve as containment to allow recovery of the fuel.

Depending on the volume spilled, the site of the spill as well as available material, a dyke may be built with soil, booms, lumber, snow, etc. A plastic liner should be placed at the foot of and over the dykes

to protect the underlying soil or other material and to facilitate recovery of the fuel. Construct dykes in such a way as to accumulate a thick layer of free product in a single area (V-shaped or U shaped).

Trenches are useful in the presence of permeable soil and when the spilled fuel is migrating below the ground surface. A plastic liner should be placed on the down-gradient edge of the trench to protect the underlying soil. Liners should not be placed at the bottom of the trench to allow water to continue flowing underneath the layer floating oil.

The use of large quantities of absorbent materials to recover important volumes of fuel should be avoided. Large volumes of free-product should be recovered, as much as possible, by using vacuums and pumps, and containerized. Mixtures of water and fuel may be processed through an oil-water separator. Absorbent sheets should be used to soak up residual fuel on water, on the ground (soil and rock), and on vegetation. Peat moss may also be sprinkled on vegetation to absorb films of petroleum products.

5.3 SPILLS ON WATER

Response to spills on water will include the general procedures provided in the following section. Various containment, diversion and recovery techniques are discussed in the following sections. The following elements must be taken into consideration when conducting response operations:

- type of water body or water course (lake, stream, river)
- water depth and surface area
- wind speed and direction
- type of shoreline
- seasonal considerations (open-water, freeze-up, break-up, frozen)

Containment of an oil slick in water will require the deployment of mobile floating booms to intercept, control, contain and concentrate (i.e., increase thickness) the floating oil. One end of the boom will be anchored to shore while the other will be towed by a boat and used to circle the oil slick and return it close to shore for recovery using a skimmer. Reducing the surface area of the slick will increase its thickness and thereby improve recovery. Mechanical recovery equipment (i.e., skimmers and oil/water separators) will be mobilized to site if required.

Measures will be taken to protect sensitive and accessible shoreline. The oil slick will be monitored to determine the direction of migration. In the absence of strong winds the oil will likely flow towards the discharge of the lake. Measures will be taken to block and concentrate the oil slick at the lake discharge using booms where it will subsequently be recovered using a portable skimmer, a vacuum, or sorbent materials.

In small slowly-flowing rivers, streams, channels, inlets or ditches, inverted weirs (i.e., siphon dams) will be used to stop and concentrate moving oil for collection while allowing water to continue to flow unimpeded. In the case of floating oil in a stream heading for a culvert (i.e., at a road crossing), a culvert block will be used to stop and concentrate moving oil for collection while allowing water to continue to flow unimpeded. In both cases the oil will then be recovered using a portable skimmer or sorbent materials.

In the case of spills in larger rivers, with fast moving currents, diversion booming will be used to direct the oil slick ashore for recovery. Single or multiple booms (i.e., cascading) may be used for diversion. Typically, the booms are anchored across the river at an angle. The angle will depend on the current velocity. Choosing a section of the river that is both wider and shallower will make boom deployment easier. Diversion booming may also be used to direct an oil slick away from a sensitive area to be protected.

5.4 SPILLS ON SNOW AND ICE

In general, snow and ice will slow the movement of hydrocarbons. The presence of snow may also hide the oil slick and make it more difficult to follow its progression. Snow is generally a good natural sorbent, as hydrocarbons will have a tendency to be soaked up by snow through capillary action. However, the use of snow as a sorbent material will be limited as much as possible. Snow and frozen ground will also prevent hydrocarbons from migrating down into soil or at least slow the migration process. Ice will prevent seepage of fuel into the water.

Most response procedures for spills on land may be used for spills on snow and ice. The use of dykes (i.e., compacted snow berms lined with plastic sheeting) or trenches (dug in ice) will slow the progression of the fuel and will also serve as containment to allow recovery of the fuel.

Free-product will be recovered by using a vacuum, a pump, or sorbent materials. Contaminated snow and ice will be scraped up manually or using heavy equipment depending on volumes. The contaminated snow and ice will be placed in containers or within plastic lined berms on land.

5.5 SPILLS ON LAND WITHIN 30 METERS OF A WATER BODY

In case of a spill on this area, a combination of the protocol to manage a spill on land and a spill on snow and ice will be used. The license amendment no 2, authorizes to drill within 30 meters of a water body, under some conditions.

- Must be during winter;
- On stable ground such as frozen tundra or bedrock;

- All sumps and fuel caches shall be located at a distance of at least 30 metres from the high water mark of any adjacent water body. An exception to this condition: while drilling, a limited quantity of fuel required to support the drilling operation can be allowed within 30 metres. All fuel must be in a secondary containment.

5.6 DISPOSAL OF SPILLED MATERIAL

All contaminated spill pads and booms are placed in Quatrex bags or drums and contaminated water is placed in drums for shipment to an approved disposal facility. All contaminated soil is placed in a temporary site to be treated later on.

SECTION 6 • HAZARDOUS MATERIALS STORED ON SITE

For the exploration, a limited variety of petroleum products and other hazardous materials will be used. All these products are considered as potential environmental and safety hazards.

Material Safety Data Sheets (MSDS) of all materials transported, stored and used on-site will be made available at strategic locations near to where hazardous materials or toxic substances are stored or utilized. Appendices B and C provide General Response Procedures for Spilled Chemical Substances.

Table 7 identifies the predominant hazardous materials transported, stored and generated at the site.

Table 7- Materials Stored at Site during Operations

| Material | Maximum amount present on site | Storage location |
|-----------------|---------------------------------------|-------------------------|
| Acetylene | 30 cylinders | Camp site |
| Diesel Fuel | 700 000 Liters | Camp site |
| Ethylene Glycol | 2 000 Liters | Camp site |
| Grease | 2 000 Kg | Camp site |
| Jet Fuel | 300 000 Liters | Camp site |
| Oil | 5 000 Liters | Camp site |
| Propane | 100 cylinders | Camp site |
| Unleaded gas | 10 000 Liters | Camp site |

When barreled fuel is used, the barrels must be located in a secondary containment as self-supporting insta-berm or a constructed lined berm.

SECTION 7 • POTENTIAL SPILL ANALYSIS

In order to prepare for an emergency spill response, a potential spill analysis was conducted on various worst case scenarios. The exercise serves to identify potential risk areas, as well as to determine the fate of spilled products and their environmental effects. One potential scenario was identified for the Meadowbank Gold Project:

- Road between Baker Lake and the Meadowbank Mine Site – spill contents of a tanker truck into water body.

Scenario #1: Road Accident Tanker Truck Spill on AWP

Description of incident: Spill of the contents of a fuel tanker to the ground or water during transport from the Baker Lake to the Meadowbank Mine Site.

Potential causes: Vehicle accident, human error

Hazardous products spilled: Diesel fuel

Maximum volume spilled: 40,000 litres.

Immediate receiving medium: stream, river or lake.

Distance and direction to nearest receiving body of water: N/A

Resources to protect: streams, rivers and lakes

Estimated emergency response time: Maximum time is 90 minutes depending on location of spill (assuming truck driver is injured and cannot commence spill response procedures). Minimum time to respond to a spill on the AWP is 15 minutes.

Spill response procedures: Contain and recover oil slick down river as described in Section 5.3, protect shorelines using sorbent booms. Collect free product for temporary storage. Clean up soiled shorelines. If the response crew arrives before the complete spill, seal the leak where feasible, contain and recover oil spill on ground using dykes, sumps or trenches as described in Section 5.2. Also if the truck driver is not injured, he will act as a first responder and immediately initiate the spill contingency plan as defined in Section 5 using the spill kit kept in the fuel trucks.

SECTION 8 • RESPONSE EQUIPMENT

8.1 GENERAL EQUIPMENT

This section addresses the emergency response machinery, equipment, tools and other resources that will be made available on-site for spill counter measures.

Mobile Equipment available to AEM at Amaruq, that will be used for spill contingency include:

- Helicopter
- Backhoe
- Snowmobiles
- ATV
- Mini excavator
- Excavator
- Dump truck
- Generators

Mobile Equipment Available to AEM at Meadowbank, that will be used for spill contingency include:

- | | |
|----------------|----------------|
| • Graders | Winch Trucks |
| • Cranes | Pickup Trucks |
| • Snowmobiles | Generator Sets |
| • Vacuum Truck | Fire Truck |
| • Loaders | Aluminum Boats |
| • Backhoe | Fuel Trucks |
| • Bulldozer | Bobcat |
| • Forklift | Haul Trucks |
| • Water Trucks | Snow Cat |
| • Excavators | |

If required, additional equipment on site will be made available to assist with spill recovery.

Temporary containment systems are also available on site and include:

- Booms
- Drums
- Tanks
- Spill absorbent material packages/pads
- Silt fencing
- Maritime Barrier

Emergency means of transportation that will be used under an emergency situation are:

- Aircraft (fixed wing or helicopter)
- 4-wheel drive vehicles

- Snowmobiles
- Boats

Communication equipment on site includes radios, telephones, faxes and other wireless communication systems that will be used in the event of an emergency situation.

Spill Response kits are strategically located where required. Each department and work area is responsible for providing sufficient spill response kits in their respective work areas. The kits are kept in marked and accessible locations. The locations include all fuel storage areas, chemical storage areas and so on.

All of the mobile equipment on site (heavy equipment) contains an emergency spill kit.

Spill management material will be located to the Amaruq camp site which will contain the following items:

| Material | Description | Number |
|-------------------------------|--------------------|-----------|
| Resorb universal matting rool | Universal | 5 |
| Resorb universal matting | Universal | 10 |
| Resorb oil matting roll | Oil only | 30 |
| Resorb oil matting | Oil only | 30 |
| Boom 510 (5") | Oil only | 1 pallet |
| Boom 810 (8") | Oil only | 1 pallet |
| Oil dri quicksorb | Oil | 1 pallet |
| Oil pillow | Oil | 2 boxes |
| Yellow oil spill kit | Oil only | 3 |
| Universal spill kit | Hazmat | 2 |
| Quatrex bag | Black no 27 | 1 pellet |
| White quatrex bag | For used batteries | 5 bags |
| Boom 2-12 | Non absorbent | 200 feets |
| Containment pallet | 05UT1112 | 4 |
| Silt fence | 36"x100' | 4 |
| Peat moss | 5 pounds bag | 20 |
| Plug pattie | | 2 |
| Drums with lids | 45 gallons | 20 |
| HDPE liner roll | thickness 1.5mm | 1 |
| Geotextile roll | | 1 |

If required, external resources are available in the hamlet of Baker Lake and those contacts are found in Table 6.

SECTION 9 • TRAINING & EMERGENCY SPILL / EXERCISE

9.1 TRAINING

9.1.1 On-site Personnel

At the mine, a designated ERT consisting of on-site personnel has been established. AEM will ensure that the ERT is trained and present at all times. All members of the team are trained and familiar with emergency and spill response resources, including their location and access, the SCP, and appropriate emergency spill response methodologies. The ERT has up to 40 members, each of whom train 8 hours per month.

The following training is included:

- A review of the spill response plan and responsibilities of the ERT members.
- The nature, status, and location of fuel and chemical storage facilities.
- The on-site and off-site spill response equipment and how to use it.
- Emergency contact lists.
- Desktop exercises of “worst case” scenarios.
- The likely causes and possible effects of spills.

Every employee at AEM receives spill and waste management training during their initial site orientation so they are able to respond to small spills and raise the alarm if a larger response is required. ERT members receive more extensive HAZMAT training and learn how to respond while wearing personal protective clothing.

The Environmental Department regularly attends tool-box sessions to provide information on spill response and reporting procedures.

SECTION 10 • LIST OF ACRONYMS

| | |
|-------|---|
| ANFO | Ammonium Nitrate Fuel Oil |
| AWPR | All Weather Private Road |
| CCME | Canadian Council of Ministers of the Environment |
| DFO | Fisheries and Oceans Canada |
| EMS | Environmental Management System |
| ERP | Emergency Response Plan |
| ERT | Emergency Response Team |
| ERTC | Emergency Response Team Coordinator |
| GN | Government of Nunavut |
| HCN | Hydrogen Cyanide |
| HMMP | Hazardous Materials Management Plan |
| INAC | Indian and Northern Affairs Canada |
| LEL | Lower Explosion Limit |
| AEM | Agnico-Eagle Mines Limited |
| MSDS | Materials Safety Data Sheets |
| NIOSH | National Institute for Occupational Safety and Health |
| OHSP | Occupational Health & Safety Plan |
| PCB | Polychlorinated Biphenyls |
| PPE | Personal Protective Equipment |
| SCP | Spill Contingency Plan |
| TDG | Transportation of Dangerous Goods |
| WHMIS | Workplace Hazardous Materials |

Appendix A

NWT/NU Spill Report Form

February 2015



Canada

NT-NU SPILL REPORT

OIL, GASWNE, GHEI, ICM.S AND OIHEIR HAZARDOUS MATERI.US

NT, JIII 24-KOUR SPILL REPORT UNE
 IR.: [867]9211-8130
 FAX: [867]873-6124
 !11JL: spills@gll.nt.ca

RBIOT UIIE IISE ONLY

| | | | | | |
|---|---|--------------------|--|---------------------|--|
| A | REPORT DATE: MONTH DAY YEAR | REPORT TIME | ORIGINAL SPILL REPORT, OR | | REPORT NUMBER |
| | REPORT DATE: MD-JA-Y-YEAR | REPORT TIME | TO THE ORIGINAL SPILL REPORT | | |
| C | LAND USE PERMIT NUMBER (IF APPLICABLE) WATER USE (IF APPLICABLE) | | | | |
| O | GEOGRAPHIC PLACE NAME OR SITE NAME IN REGION FROM INLAND LOCATION | | | | |
| E | REGION | | | | |
| E | LATITUDE | | | | |
| F | DEGREE | MINUTES | SECONDS | DEGREES | MINUTES |
| F | RESPONSE VESSEL OR VESSEL NAME | | RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION | | |
| G | NOTIFICATION INVOICE | | CONTRACTOR ADDRESS OR FACILITY LOCATION | | |
| H | PRODUCTS | | CONTAMINANTS, KJ, CJ, GRAYSON CUICTUETIES | | J.N.N.A.I.I.I.H |
| H | SECOND PRODUCT SPILLED (IF APPLICABLE) | | CONTAMINANTS, KJ, CJ, GRAYSON CUICTUETIES | | J.N.N.A.I.A.H |
| I | POLLUTION | | POLLUTION CAUSE | | AREA OF CONTAMINATION SOURCE |
| J | FACTORS OF RECOVERY | | DEBRIS / WASTE STANCEROWED | | HAZARD TO PERSONS; PROPERTY OR EQUIPMENT |
| K | ADDITIONAL INFORMATION, COMMENTS, ACTIONS FOR PROTECTION OF ENVIRONMENT, RECOVERY OF SPILLED PRODUCT AND CONTAMINANTS | | | | |
| M | REPORTED TO SPILL UNIT BY | P0811CN | EWI/LEI/EJI | LOCATION CAWNG FRAU | TELEPHONE |
| M | REPORTED TO COAST GUARD | P0811CN | EWI/LEI/EJI | LOCATION CONTACT | ALTERNATE TELEPHONE |
| N | REPORT LINE NUMBER ONLY | | | | |
| N | RECEIVED AT R.L.I.I.E.BY | P0811CN | EWI/LEI/EJI | LOCATION CAWNG FRAU | REPORT LINE NUMBER |
| N | RECEIVED AT R.L.I.I.E.BY | STATION CIPERAILOI | EWI/LEI/EJI | LOCATION CAWNG FRAU | REPORT LINE NUMBER |
| N | EVALUATION: Y C/JEC C/JCOO I/JGHNT I/J OILA DINAC I/JNEB C/JIC | | ACAH:E I/JUNCR I/JWJCJI I/JUNKCJI/11 | | REPORT STATUS I/JOPEN C/JCLOSED |
| N | AOE-CY | CONTAMINANT NAME | CONTAMINANT | IABMRKB | |
| N | ...EVALUATION | | | | |
| N | RISK SUPPLY OF TAGBOCY | | | | |
| N | SECOND SUPPLY OF TAGBOCY | | | | |
| N | THIRD SUPPLY OF TAGBOCY | | | | |

Appendix B

General Response Procedures for Spilled Chemical Substances

Compressed Gases

Compressed Gases

AEM commits to review, modify, approve as required, and establish this procedure as appropriate for Meadowbank Gold Project.

The following is a general spill response procedure for compressed gases. Consult the MSDS for the specific spilled compound to determine whether deviations from the general guidance are required. AEM commits to review and test, and if necessary, modify and update this spill response procedure on an annual basis.

For a **compressed (inert and flammable) gas leak**:

- 1) IF SAFE TO DO SO and if it will stop the gas leak, turn off cylinder valve.
- 2) If the leak cannot be stopped by closing the cylinder valve, and it is **an inert atmospheric gas** (e.g. nitrogen, carbon dioxide, etc.), isolate and evacuate the affected area. If the leak is a **flammable gas** and the leak is outside of a ventilated building enclosure that will contain the gas, immediately activate the fire alarm system and evacuate the area/building.
- 3) Contact the On-Scene Coordinator who will assemble spill response team members and the appropriate spill response materials outside the spill area. **Obtain and read the MSDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.
- 4) If possible and safety permits, adjust leaking cylinder so that gas escapes rather than liquid.
- 5) If possible and safety permits, eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area) and turn off electrical equipment.
- 6) If the spill has occurred outdoors, stay upwind and avoid low lying areas. If the spill has occurred inside a building, prevent spread of vapours throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, then it may also be necessary to have it shut-down. Allow vapours to ventilate outdoors by opening windows and doors to the exterior.
- 7) Isolate area until gas has dispersed. On-Scene Coordinator to verify safe conditions.

Appendix C

General Response Procedures for Spilled Chemical Substances

Flammable and Combustible Liquids

Flammable and Combustible Liquids

AEM commits to review, modify, approve as required, and establish this procedure as appropriate for use at the Meadowbank Gold Project. The following is a general spill response procedure for flammable or combustible liquids, particularly petroleum hydrocarbon products. Consult the MSDS for the specific spilled compound to determine whether deviations from the general guidance are required.

AEM commits to review and test, and if necessary, modify and update this spill response procedure on an annual basis.

For a spill of flammable or combustible petroleum hydrocarbon product (liquid):

- 1) Isolate and evacuate the spill area.
- 2) Immediately extinguish any open flames and remove ignition sources (no smoking, flares, sparks in immediate area) IF SAFE TO DO SO.
- 3) Stop leak and contain spill (**see Step 9**) IF SAFE TO DO SO.
- 4) Contact the On-Scene Coordinator who will assemble ERT members if required and the appropriate spill response materials outside the spill area. **Obtain and read the MSDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.
- 5) Put on appropriate personal protective equipment. Depending on the scale of the spill and properties of the spilled substance, this can include:
 - a. Gloves **as recommended by the MSDS or glove manufacturer.**
 - b. Splash goggles or face shield.
 - c. Shoe covers or rubber boots.
 - d. Lab coat or TyvekTM coveralls.
 - e. Half mask air-purifying respirator with **organic vapour or combination** cartridges, or **as otherwise recommended by the MSDS or respirator manufacturer.**
- 6) If the spill has occurred outdoors, stay upwind and avoid low lying areas. If the spill has occurred inside a building, prevent spread of vapour throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, then it may also be necessary to have it shut down.
- 7) Ventilate (open windows/doors to outdoors) closed spaces before entering. Ensure adequate explosion-proof ventilation for clean-up. A vapour suppressing foam or water spray may be used to reduce vapours.

8) Remove all sources of ignition (no smoking, flares, sparks or flames in immediate area) combustible materials (wood, paper, oil, etc.) within the spilled area.

9) Contain spill by using spill absorbent, spill pads or pillows, soil or snow to construct a dike that limits flow and prevents entry to sewer, waterways or onto ice. For spills to land, excavation of trenches/pits to capture spill flow may also be appropriate. If possible, compact soil or snow dikes, and place plastic tarps over the dike and at its foot to allow the product to pool on the plastic for easy recovery.

Note: Do not use paper towels to absorb spill as this increases the rate of evaporation and vapour concentration in the air.

Note: Do not flush with water into drainage areas or ditches as this will spread spill.

Note: Snow works well as a natural absorbent to collect and contain spilled petroleum hydrocarbons. However, its use in containing a spill will result in a water-contaminant mixture that may be more difficult to manage. It is important to scrape up the contaminated snow and ice as soon as possible.

10) Carefully cover the spill area with spill absorbent, spill pads, soil or snow, starting at the outside and working inward. Do not touch or walk through spilled material.

11) Sweep up or shovel the residue using non-metallic, spark-proof tools and place the residue into a labelled, plastic, waste container (plastic pail with lid or double heavy duty plastic bags). For larger spills to land, excavate impacted absorbent material and soil, place in lined and bermed temporary storage area or directly into sealed drums/containers.

Note: The drums/containers/residues are to be stored in ventilated areas away from incompatible materials for eventual treatment at on-site landfarm or off-site disposal at a licensed disposal facility. Electrically ground all containers and transporting equipment.

Note: Larger pools of product may be pumped into empty storage tanks or drums.

12) If spill is indoors, mop the affected area using detergent and water. Dispose of this water in drums for eventual off-site disposal at a licensed disposal facility. Spills to land may require further excavation or remediation of contaminated soil until acceptable soil quality is achieved. The On-Scene Coordinator and/or Environmental Superintendent will assess this requirement.

13) For spills to water, immediately limit the area of the spill on water using absorbent pads and booms and similar materials to capture small spills on water. Deploy and slowly draw in absorbent booms to encircle and absorb the spilled product. Recover larger spills on water with floating skimmers and pumps, as required, and discharge recovered product to drums or tanks.

Note: Petroleum hydrocarbons are generally hydrophobic, and as such, do not readily dissolve in water. They typically tend to float on the water's surface. Absorbent booms are often relied on to recover hydrocarbons that escape land containment and enter water.

Note: Antifreeze sinks and mixes with water. If released to water, attempt to isolate/confine the spill by damming or diverting the spill. Pump contaminated water to tanks or drums.

14) Remove and bag personal protective equipment for cleaning, informing laundry personnel of contaminant hazards, or disposal at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated leather articles, (including shoes) that cannot be decontaminated.

Appendix B

Closure and Reclamation Plan Updated on January 2015



**Conceptual
Closure and Reclamation Plan
&
RECLAIM Estimates**

Version 4

January 2015

**Water Licence 2BE-MEA1318
Amaruq and Meadowbank Exploration Projects
Agnico Eagle Mines Limited**

January 2015

DOCUMENT CONTROL

| Version | Date (YMD) | Section | Page | Revision |
|---------|------------|---------|-------|---|
| 1 | 2014-06-11 | | | Draft 1 of the Conceptual Closure and Reclamation Plan |
| 2 | 2014-08-28 | | | Merge the Meadowbank Exploration and AMARUQ Exploration Projects for closure and Reclamation |
| 3 | 2014-10-05 | 9 | 7 & 8 | Corrections made to Table 1 and 2 as they were in error. They now match the spreadsheets in Appendices A and B |
| 4 | 2015-01-12 | | | Trailers from the Meadowbank exploration camp are being moved to the Amaruq Project site. This change is reflected in the Plan and in the RECLAIM calculations. |
| | | | | |

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1. Introduction

This plan describes the concepts for the closure and reclamation of the Amaruq and Meadowbank Exploration Projects under water licence 2BE-MEA1318.

Agnico Eagle Mines Limited's Amaruq Exploration Project is located 50 kilometres (km) NNW of its Meadowbank Gold Mine in Nunavut. The intent of the Amaruq Exploration Project is to explore mineral claims for potential ore deposits. At this point, an exploration camp has been established to undertake geological, geochemical, and/or geophysical exploration. Diamond drilling is also being used in exploring promising areas on the claim block.

Agnico Eagle Mines Limited's Meadowbank Exploration Project camp is located near Third Portage Lake adjacent to km 100 on the all weather private access road (AWPAR) between the hamlet of Baker Lake and the Meadowbank mine site. In 2014, trailers presently located at the Meadowbank exploration camp were prepared for transport over the winter road to the Amaruq site. These will be moved in early 2015. The remaining infrastructure at the Meadowbank Exploration Project camp will remain in place.

2. Closure and Reclamation Principles

The conceptual reclamation and closure plan for the exploration projects covered by water licence 2BE-MEA1318 has the objective of mitigating the negative environmental effects of the campsites and exploration activities on the surrounding natural environment. Wherever practicable, progressive reclamation will be employed before final closure and reclamation commences, with the intent of returning negatively impacted areas as soon as possible to productive and lasting use by wildlife and humans.

Agnico Eagle's conceptual closure and reclamation plan for the Projects is guided by the following four principles¹:

1. *Physical Stability* – Any project component that remains after closure should be constructed or modified at closure to be physically stable, ensuring it does not erode, subside, or move from its intended location under natural extreme events or disruptive forces to which it may be subjected. Closure and reclamation will not be successful in the long-term unless all physical structures are designed such that they do not pose a hazard to humans, wildlife, aquatic life, or environmental health and safety;
2. *Chemical Stability* – Any project component (including associated wastes) that remains after closure should be chemically stable. Chemical constituents released from the project components should not endanger human, wildlife, or environmental health and safety, should

¹ Principles largely adapted from the Mackenzie Valley Land and Water Board and Aboriginal Affairs and Northern Development, November 2013. *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*

not result in the inability to achieve any water quality objectives set for the project, and should not adversely affect soil or air quality in the long term.

3. *No Long-Term Active Care* – Agnico Eagle Mines Limited (Agnico Eagle) will make all practical efforts to ensure that any project component that remains after closure does not require long-term active care and maintenance. Thus, any post-closure monitoring can only continue for a defined period. Physical and chemical stability will help ensure achievement of this principle.
4. *Future Use (including aesthetics and values)* – Wherever practical, closed sites should be compatible with the surrounding lands and water bodies upon completion of the closure activities.

3. Closure and Reclamation Approach

A practical, cost-effective approach will be central to closure and reclamation. The intent is to pursue closure and reclamation based on the four principles noted above so that no long-term active care is required for the camp and drill sites afterwards.

The Plan will be updated, and revised as required on a regular basis, and will ultimately result in a final Plan upon closure. Each iteration of the Plan will provide more details and greater certainty regarding the sequence of events to be undertaken for closure and reclamation.

Progressive reclamation will be practiced in reclaiming areas that are no longer needed for exploration by physically and/or chemically stabilizing disturbed land surfaces and promoting re-vegetation. This approach will employ best practices and will ultimately advance the return of reclaimed areas to natural conditions while at the same time reducing the overall cost of closure and reclamation.

Wastes will be managed on an ongoing basis at the two sites and consequently, there will be little to no accumulation of wastes on-site. When no longer needed, obsolete equipment, metal waste, surplus chemicals, hazardous waste, and buildings will be removed to Agnico Eagle's port and laydown facilities in Baker Lake for shipment south to a certified waste management company for treatment, recycling and/or disposal in another provincial or territorial jurisdiction². At the Amaruq site, all domestic and camp waste suitable for incineration will be incinerated in the on-site incinerator with the ash returned to the Meadowbank Gold Mine for disposal in their landfill, if it is suitable for landfilling. For the Meadowbank Exploration Project, all waste will be managed by the Meadowbank Gold Mine.

² The RECLAIM model described later in this Conceptual Closure and Reclamation Plan assumes that the Meadowbank Gold Mine is not available in the final closure of the two Projects. However, ongoing management of wastes during Project operations will use the waste management facilities available at the Meadowbank Gold Mine.

4. Infrastructure

4.1 Amaruq Exploration Project

The camp is located a minimum of 31 metres from any water body. The following infrastructure is part of the Amaruq campsite:

1. Double walled envirotanks holding diesel fuel with a total capacity of 400,000 litres³;
2. Double walled envirotanks holding helicopter jet-A with a total capacity of 250,000 litres;
3. Two small incinerators for incinerating solid, non-hazardous, combustible camp waste and human waste from Pacto toilets;
4. A stick built building for the camp's generators;
5. Twelve to fifteen insulated tents with wooden floors having the capacity to accommodate up to 50 people. The tents include a core shack, sleepers, TV Room, women's washroom, men's washroom, dry, furnace and water holding tank, dining-kitchen. All tents will be connected to each other with a wooden corridor;
6. Eighteen - 12 by 60 foot trailers with kitchen – dining room, additional bedrooms, water holding tanks, infirmary and office;
7. A water intake from the lake in front of the camp;
8. A sump located at least 31 metres from any water body for gray water; and
9. Possibly a floating dock to allow summer access using a floatplane to the camp;
10. Two Bionest water treatment systems installed in shipping containers (sea cans);
11. A garage having shipping containers for walls and a stick built roof.

4.2 Meadowbank Exploration Project

Agnico Eagle Mines Limited's Meadowbank Exploration Project is located near Third Portage Lake at kilometre 100 on the AWPART between Baker Lake and the Meadowbank Gold Mine.

The following infrastructure is part of the Meadowbank exploration campsite:

1. Two - double walled envirotanks holding diesel fuel with a total capacity of 85,000 litres;
2. One -double walled envirotank holding helicopter jet-A fuel with a total capacity of 75,000 litres;
3. One- 12 by 24 foot drillers shack;
4. One- 42 by 50 foot coverall for drillers;
5. One- 50 by 70 foot Garage;
6. Forty-seven – 8 by 20 foot Seacans.

³ All the combined fuel is stored in nine-55,000 and two-100,000 litre envirotanks.

5. Conceptual Closure and Reclamation of AMARUQ and Meadowbank Exploration Projects

The following scenario assumes that Agnico Eagle no longer renews any permits, leases, licenses and other authorizations for the Amaruq Exploration and the Meadowbank Exploration Projects, and enters into closure and reclamation for both. To be conservative in calculating costs for closure and reclamation, it is assumed that the Meadowbank Gold Mine will not be available to provide services during closure and reclamation activities but that the AWPARG will be available to transport all materials and fuel from the two projects to Agnico Eagle's port and laydown facilities in Baker Lake.

All equipment, structures, camp and drill supplies, fuel, fuel pumps, envirotanks and wastes will be removed from the project areas prior to expiry of the land use permits. Fuel will first be pumped from all envirotanks to tanker trucks prior to their movement.

If practicable, solid combustible non-hazardous waste will be incinerated onsite with any metals recovered from the ash and placed in containers suitable for shipment. Waste materials to be incinerated include wood tent floors, wood corridors, wood roofs and stick built buildings.

At the Amaruq Exploration Project, trailers will be used as a summer camp for reclamation and closure activities. Over a summer, all tents will be disassembled and prepared for transport. All equipment, trailers, drill supplies, envirotanks, fuel and chemicals will also be prepared for transport. Stick built buildings will be disassembled for transport, or demolished and incinerated onsite. Wastes that cannot be incinerated will be prepared for transport. During the winter, a winter road will be used to remove all materials from the site to a staging area next to the AWPARG or moved directly to Baker Lake. Challengers or equivalents pulling sleighs are expected to move all materials and fuel over the winter road to the staging area. Similarly, Challengers or equivalents will pull all trailers directly to Baker Lake if winter road condition allows. Finally, transport, flat bed and tanker trucks will move all materials and fuel from the staging area to Agnico Eagle's port facility and laydown in Baker Lake.

Seacans, empty envirotanks, fuel, fuel pumps and disassembled buildings will all be moved from the Meadowbank Exploration Project via the AWPARG to Agnico Eagle's port facility and laydown in Baker Lake. Non-hazardous, solid, combustible waste will be incinerated on site; this includes any stick built structures.

At both sites, the only materials and structures remaining after closure and reclamation will be drill cores stored on permanent racks.

5.1 Heavy Equipment and Trailers

Heavy equipment, generators, incinerators, drills, trailers and other equipment are valuable and reusable. These will be moved to Agnico Eagle's port facility at Baker Lake for storage, sale and/or shipment south on the annual sealift.

5.2 Fuel, Drilling Supplies and Chemicals

Fuel from both projects will be removed from the envirotanks prior to these being moved. Fuel resupply the year before closure will be planned to leave a minimum amount in the envirotanks upon closure. Fuel from the Amaruq site will first be transported in a fuel sleigh by Challenger or tanker truck to the staging area. From here, tanker trucks will transport the fuel to Baker Lake where it will be sold.

All useful drilling supplies such as salt and other drilling compounds such as grease will be removed to Baker Lake for sale, shipment and/or storage

All chemicals and hazardous materials still in unopened packages at closure will be used elsewhere by Agnico Eagle, sold or shipped south. Open packages and waste materials will be shipped to a certified waste management company for treatment, recycling and/or disposal in another provincial or territorial jurisdiction.

The ongoing annual removal of surplus chemicals and hazardous waste, and the immediate clean-up of spilled fluids will minimize the quantity of material requiring handling, packaging and removal upon closure.

5.3 Non-combustible Waste

All non-combustible, non-hazardous and hazardous liquid and solid waste from Amaruq Exploration and Meadowbank Exploration Projects will be transported to Baker Lake in proper containers for shipment south to a certified waste management company for treatment, recycling and/or disposal in another provincial or territorial jurisdiction

6. Camp Sites

The camp areas will be allowed to re-vegetate naturally once cleared of all buildings and other infrastructures. Revegetation is expected to be slower in higher, drier areas than in low-lying, moist areas. Where they exist, irregular surfaces will be left in place as these capture snow over the winter, which in turn provides moisture to plants in the spring. Where applicable, fertilizer may be used to promote re-vegetation. The use of fertilizer is generally most effective in moist sites and while it helps on drier sites, the response of the tundra plant community will be slower.

7. Reclamation of Drill Sites

All drill sites will be reclaimed. Following completion of a drill hole, and if possible, the casing will be pulled. If it cannot be pulled, the casing will be cut off at or below ground level. Water and drill cuttings will naturally flow down the hole or casing and freeze in place thereby plugging the drill hole. Fertilize and/or peat moss may be applied to drill sites in the spring or over the summer period. These additives can assist in the recovery of the plants in the immediate vicinity of the drill hole and for the re-establishment of vegetation where plants were lost.

8. Storage of Drill Core

Upon closure, the core will be evaluated for long-term storage stability. Core stored in unstable conditions will be restacked on more durable pads for long-term storage and access.

9. Cost of Implementing Reclamation and Closure

RECLAIM 7.0 was used in calculating the costs of reclamation and closure. The calculation of costs is conservative. It assumes no reliance on the Meadowbank Gold Mine for services during closure, but does assume that the All-weather Private Access Road will remain available for use. However, a 50 kilometre long winter road will be built from the AWPARG to the Amaruq camp site as part of closure and reclamation. A summary of costs is provided in tables 1 and 2 for the AMARUQ and Meadowbank Exploration Projects, respectively. Appendices A and B provide more detail on the calculated costs for the two Projects.

Table 1. Summary of RECLAIM Costs for Closure and Reclamation of Amaruq Exploration Project

| SUMMARY OF COSTS – Amaruq Exploration Project | | |
|--|---------------------------------|------------------|
| CAPITAL COSTS | COMPONENT NAME | COST |
| BUILDINGS, WATER INTAKE AND EQUIPMENT | | \$94,680 |
| INTERIM CARE AND MAINTENANCE | | \$0 |
| | SUBTOTAL: Capital Costs | \$94,680 |
| INDIRECT COSTS | | COST |
| MOBILIZATION/DEMOBILIZATION | | \$161,052 |
| POST CLOSURE MONITORING AND MAINTENANCE | | \$0 |
| ENGINEERING | 5% | \$4,734 |
| PROJECT MANAGEMENT | 5% | \$4,734 |
| HEALTH AND SAFETY PLANS/MONITORING & QA/QC | 1% | \$947 |
| BONDING/INSURANCE | 1% | \$947 |
| CONTINGENCY | 20% | \$18,936 |
| | SUBTOTAL: Indirect Costs | \$191,350 |
| TOTAL COSTS | | \$286,030 |

Table 2. Summary of RECLAIM Costs for Closure and Reclamation of Meadowbank Exploration Project

| Summary of Costs – Meadowbank Exploration Project | | |
|---|---------------------------------|-----------------|
| CAPITAL COSTS | COMPONENT NAME | COST |
| BUILDINGS AND EQUIPMENT | | \$47,958 |
| INTERIM CARE AND MAINTENANCE | | \$0 |
| | SUBTOTAL: Capital Costs | \$47,958 |
| | PERCENT OF SUBTOTAL | |
| INDIRECT COSTS | | COST |
| MOBILIZATION/DEMOBILIZATION | | \$21,332 |
| POST-CLOSURE MONITORING AND MAINTENANCE | | \$0 |
| ENGINEERING | 5% | \$2,398 |
| PROJECT MANAGEMENT | 5% | \$2,398 |
| HEALTH AND SAFETY PLANS/MONITORING & QA/QC | 1% | \$480 |
| BONDING/INSURANCE | 1% | \$480 |
| CONTINGENCY | 20% | \$9,592 |
| | SUBTOTAL: Indirect Costs | \$36,678 |
| TOTAL COSTS | | \$84,636 |

Appendix A Amaruq Closure and Reclamation Calculation – Relevant Pages from RECLAIM 7.0

Conceptual Closure and Reclamation Plan
Amaruq and Meadowbank Exploration Projects
January 2015

| Mobilization/Demobilization: | Amaruq Exploration Project | | | | | |
|--------------------------------------|--|--------------|-----------------|------------------|------------------|-------------|
| ACTIVITY/MATERIAL | Notes | Units | Quantity | Cost Code | Unit Cost | Cost |
| MOBILIZE HEAVY EQUIPMENT | Onsite fuel will be used in all equipment | | | | | |
| Challenger + Sled or equivalent | To be used on the Amaruq winter road to the staging area next to AWPAP | km | 150 | MHER | 3.4 | \$510 |
| Flat bed truck | A flat bed truck will come from Baker Lake to Amaruq via AWPAP & winter road | km | 150 | MHER | 3.4 | \$510 |
| Transport truck or equivalent | A transport truck or equivalent will pull the 18 trailers from Amaruq to Baker Lake | km | 150 | MHER | 3.4 | \$510 |
| Fuel truck | Fuel truck or sledge will come from Baker Lake and will be used to transport fuel removed from envirotanks. Fuel to be sold in Baker Lake. | km | 150 | MHER | 3.4 | \$510 |
| Loader | Loader will come from Baker Lake to load the flat bed truck with camp materials. | km | 150 | MHER | 3.4 | \$510 |
| Light duty vehicles | Two light duty trucks will come from Baker Lake (150 km x 2) | km | 300 | MHER | 3.4 | \$1,020 |
| MOBILIZE MISC. EQUIPMENT | | | | | | |
| Minor tools and equipment | | allow | 1 | #N/A | 2000 | \$2,000 |
| MOBILIZE CAMP | | | | | | |
| Reclamation activities | A trailer will be used for accommodation during reclamation activities. | allow | 0 | #N/A | 0 | \$0 |
| Accommodation and food on site | Six workers for 3 weeks at Amaruq site | allow | 126 | ACCM | 175 | \$22,050 |
| MOBILIZE WORKERS | | | | | | |
| Reclamation activities - travel time | Travel from Baker Lake to Amaruq by float plane (6 workers x 2 hours) | Man hours | 12 | MW | 31 | \$372 |
| WORKER ACCOMMODATIONS | Existing trailer will be used for accommodations | | | | | \$0 |
| MOBILIZE FUEL | Onsite fuel will be used. | | | | | \$0 |
| WINTER ROAD | | | | | | |
| Construction and operation | | km | 50 | WRC | 2000 | \$100,000 |
| DEMObILIZE HEAVY EQUIPMENT | | | | | | |
| Challenger + sled | Return to Baker Lake | km | 150 | MHER | 3.4 | \$510 |
| Flat bed trucks | Flat bed truck will return to Baker Lake | km | 150 | MHER | 3.4 | \$510 |
| Transport truck or equivalent | Return to Baker Lake | km | 150 | MHER | 3.4 | \$510 |
| Loader | Loader will return to Baker Lake | km | 150 | MHER | 3.4 | \$510 |
| Light duty vehicles | Return to Baker Lake - 2 trucks | km | 300 | MHER | 3.4 | \$1,020 |
| DEMObILIZE WORKERS | | | | | | |

Conceptual Closure and Reclamation Plan
Amaruq and Meadowbank Exploration Projects
January 2015

| | | | | | | |
|---------------------|--|------|---|----|--------------|------------------|
| crew transportation | Six flights are expected between Baker Lake and Amaruq during summer reclamation activities. None during winter. | each | 6 | MW | 5000 | \$30,000 |
| | | | | | Total | \$161,052 |

| Buildings/Equipment | Amaruq Exploration Project | | | | | |
|---|---|--------------|-----------------|------------------|------------------|-----------------|
| ACTIVITY/MATERIAL | Notes | Units | Quantity | Cost Code | Unit Cost | Cost |
| Remove Buildings | | | | | | |
| 15 tents - sleepers, core logging, dry, storage, washrooms, etc | Tents removed from site to staging area next to the AWPAP, and later to Baker Lake | m2 | 632 | BRW | \$27.50 | \$17,380 |
| 18 trailers, each having an area of area 67 m2 | There is no unit cost for removing trailers so Agnico Eagle used \$1500 to move each trailer from Amaruq to Baker Lake | each | 18 | each | \$1,500 | \$27,000 |
| Stick built buildings, corridors, roof and dock | Wooden tent floors, corridor, stick built buildings, roof & dock demolished & incinerated on site | m2 | 120 | BRW | \$27.50 | \$3,300 |
| Freshwater intake | Remove intake, piping and dock from lake | each | 1 | each | \$3,000 | \$3,000 |
| Drills | Remove 5 drills from Amaruq to staging area followed by transport on the AWPAP to Baker Lake | each | 5 | #N/A | \$1,500 | \$7,500 |
| Water Treatment Facilities | Modular water treatment plants in sea cans. There is no unit cost & Agnico Eagle used \$1500 for loading & moving each to BL. | each | 2 | each | \$1,500 | \$3,000 |
| Incinerators | Modular incinerators located in stick built building. There is no unit cost and \$1500 was used to load and transport each to BL. | each | 2 | each | \$1,500 | \$3,000 |
| Fuel Envirotanks | Empty fuel envirotanks to staging area and later to Baker Lake using AWPAP | each | 11 | #N/A | \$2,500 | \$27,500 |
| Landfill for Demolition Waste | There is no landfill associated with the Project | | | | | |
| Grade and Contour Pads | No pads requiring contouring | | | | | |
| Puncture Lined Sumps | No liners associated with the Project | | | | | |
| Reclaim Roads | There is only a winter road associated with the Project that needs no reclamation. | | | | | |
| Specialized Items | | | | | | |
| Dispose of misc. debris and laydown area refuse | Remove waste from Amaruq to staging area followed by transport to Baker Lake | | 1 | #N/A | \$3,000 | \$3,000 |
| | | | | | Total | \$94,680 |

Appendix B Meadowbank Exploration Closure and Reclamation Calculation – Relevant Pages from RECLAIM 7.0

| Mobilization/Demobilization: | | Meadowbank Exploration Project | | | | |
|--|--|--------------------------------|----------|-----------|--------------|-----------------|
| ACTIVITY/MATERIAL | Notes | Units | Quantity | Cost Code | Unit Cost | Cost |
| MOBILIZE HEAVY EQUIPMENT (100 km from Baker Lake to camp site) | | | | | | |
| Flat beds truck | Flat bed truck from Baker Lake to camp site at KM 100 on the AWPAP | km | 100 | MHER | 3.4 | \$340 |
| Crane | A crane to lift seacans onto flatbeds trucks | km | 100 | MHER | 3.4 | \$340 |
| Loader | For miscellaneous clean-up of waste on site | km | 100 | MHER | 3.4 | \$340 |
| Fuel Truck | Remove remaining fuel from envirotanks | km | 100 | MHER | 3.4 | \$340 |
| Light duty vehicles | 2 - light duty trucks from Baker Lake | each | 200 | MHER | 3.4 | \$680 |
| MOBILIZE MISC. EQUIPMENT | | | | | | |
| Minor tools and equipment | | allow | 1 | each | 2000 | \$2,000 |
| MOBILIZE WORKERS | | | | | | |
| Reclamation activities - travel time | 6- workers from Baker Lake (2 hours travel time x 40 days) | man hours | 480 | MW | 31 | \$14,880 |
| WORKER ACCOMMODATIONS | | | | | | |
| MOBILIZE FUEL | | | | | | |
| WINTER ROAD | | | | | | |
| DEMOBILIZE HEAVY EQUIPMENT | | | | | | |
| Flat bed truck | | km | 100 | MHER | 3.4 | \$340 |
| Crane | | km | 100 | MHER | 3.4 | \$340 |
| Loader | | km | 100 | MHER | 3.4 | \$340 |
| Light duty vehicles | Two light duty trucks | km | 200 | MHER | 3.4 | \$680 |
| DEMOBILIZE CAMP | | | | | | |
| DEMOBILIZE WORKERS | | | | | | |
| crew travel time | 6- workers from Baker Lake (2 hours by truck) | hrs | 12 | MW | 31 | \$372 |
| crew transportation | use light trucks for transportation - no charge | each | | #N/A | 0 | \$0 |
| WINTER ROAD | | | | | | |
| | | | | | Total | \$21,322 |

| | | | | | | |
|---|--|--------------|-----------------|------------------|------------------|-----------------|
| Building / Equip Name: | Meadowbank Exploration Project | | | | | |
| ACTIVITY/MATERIAL | Notes | Units | Quantity | Cost Code | Unit Cost | Cost |
| DISPOSE MOBILE EQUIPMENT | | | | | | |
| REMOVE BUILDINGS - see note below | | | | | | |
| Stick built drillers shack | Stick built buildings will be demolished and incinerated on site | m2 | 28 | BRW | \$27.50 | \$770 |
| Sea cans | 47 sea cans - 15 m2 each - moved to Baker Lake for shipment south by sea | m2 | 705 | BRW | \$27.50 | \$19,388 |
| Storage Facilities for drillers | Coverall for drillers - dissemble for transport to Baker Lake | m2 | 195 | BRW | \$40.00 | \$7,800 |
| Garage | Dissemble for transport to Baker Lake | m2 | 325 | BRW | \$40.00 | \$13,000 |
| Fuel tanks | 3 - fuel envirotanks | each | 3 | each | \$1,000 | \$3,000 |
| LANDFILL FOR DEMOLITION WASTE | No landfill will be established | | | | | |
| GRADE AND CONTOUR PADS | No pads will require grading or contouring | | | | | |
| PUNCTURE LINED SUMPS | There are no liners on site | | | | | |
| RECLAIM ROADS | There is no road to reclaim | | | | | |
| SPECIALIZED ITEMS | | | | | | |
| Dispose of misc. debris and laydown area refuse | Pack any extraneous waste in empty seacans for transport south from Baker Lake | each | 4000 | each | #N/A | \$4,000 |
| | | | | | Total | \$47,958 |

APPENDIX C

AEM 2014 Annual Report: Lease KVL312C03



2014 Annual Report

Amaruq (IVR)

Exploration

Project

Lease KVL312C03

Prepared for the Kivalliq Inuit Association

January 2014

Contact:

David Frenette

Agnico Eagle Mines Ltd

Environmental Coordinator

C.P. 87

765 Chemin de la mine Goldex

Val-d'Or, Quebec, J9P4N9

david.frenette@agnicoeagle.com

1. Introduction

Agnico Eagle Mines Limited (AEM) signed an exploration agreement with the Nunavut Tunngavik Inc. in January 2013 for the Amaruq (IVR) property. This property is located approximately 50 km northwest of the Meadowbank mine and 125 km north of the Baker Lake community. The mineral exploration seeks gold mineral deposits. Drilling on this property began during the summer 2013 with helicopter support.

Agnico Eagle started the installation of an exploration camp during the summer 2014 and plans to continue the construction and upgrade of the camp during 2015 to support the exploration in this area.

2. Water Licence

The water licence related to this area is the 2BE-MEA1318. The annual report will be submitted to the Nunavut Water Board for March 31st and a copy will be sent to the KIA at the same time.

3. Environment monitoring reports

The wildlife monitored during the exploration work is found in appendix A. A report for the water monitoring will be included in the 2BE-MEA0813 annual report and sent to the KIA at the same time.

4. Reclamation work undertaken or required to be undertaken in accordance with this lease

Drilling

One hundred forty-six (146) drilling holes (Figure 1) were made in 2014. As requested by the KIA, we calculated the land use fees related to the drilling, using a buffer of one (1) hectare for each drilling site. The fees are 50\$/ha and the total area for these sites is 98.5 hectares (Figure 2).

Table 1: Final fees for 2014

| 2014 Drilling areas | Number of sites | Areas (ha) | Fees |
|----------------------------|------------------------|-------------------|-------------|
| Amaruq area | 146 | 98.5 | 4925 |

Figure 1: Drilling locations

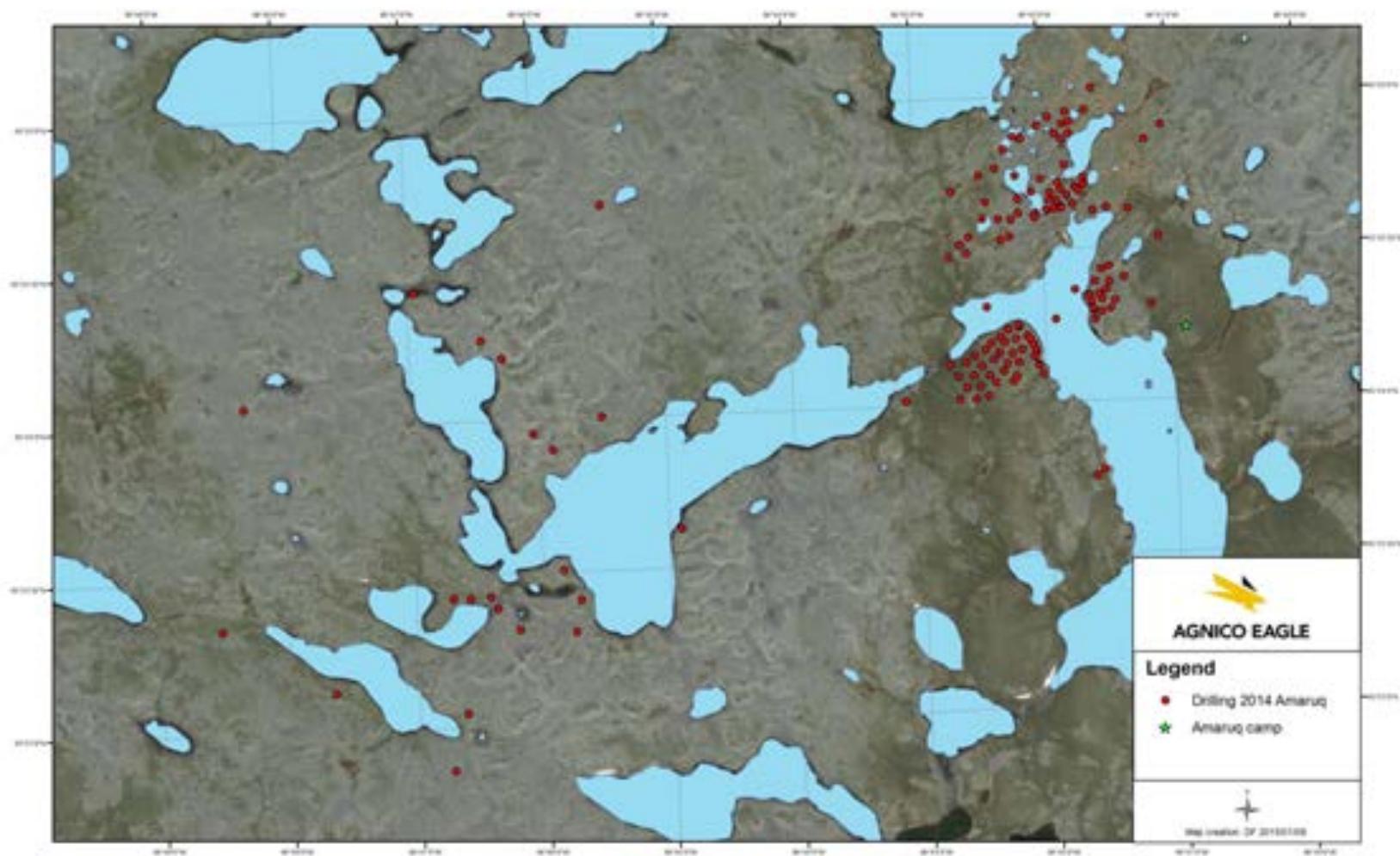
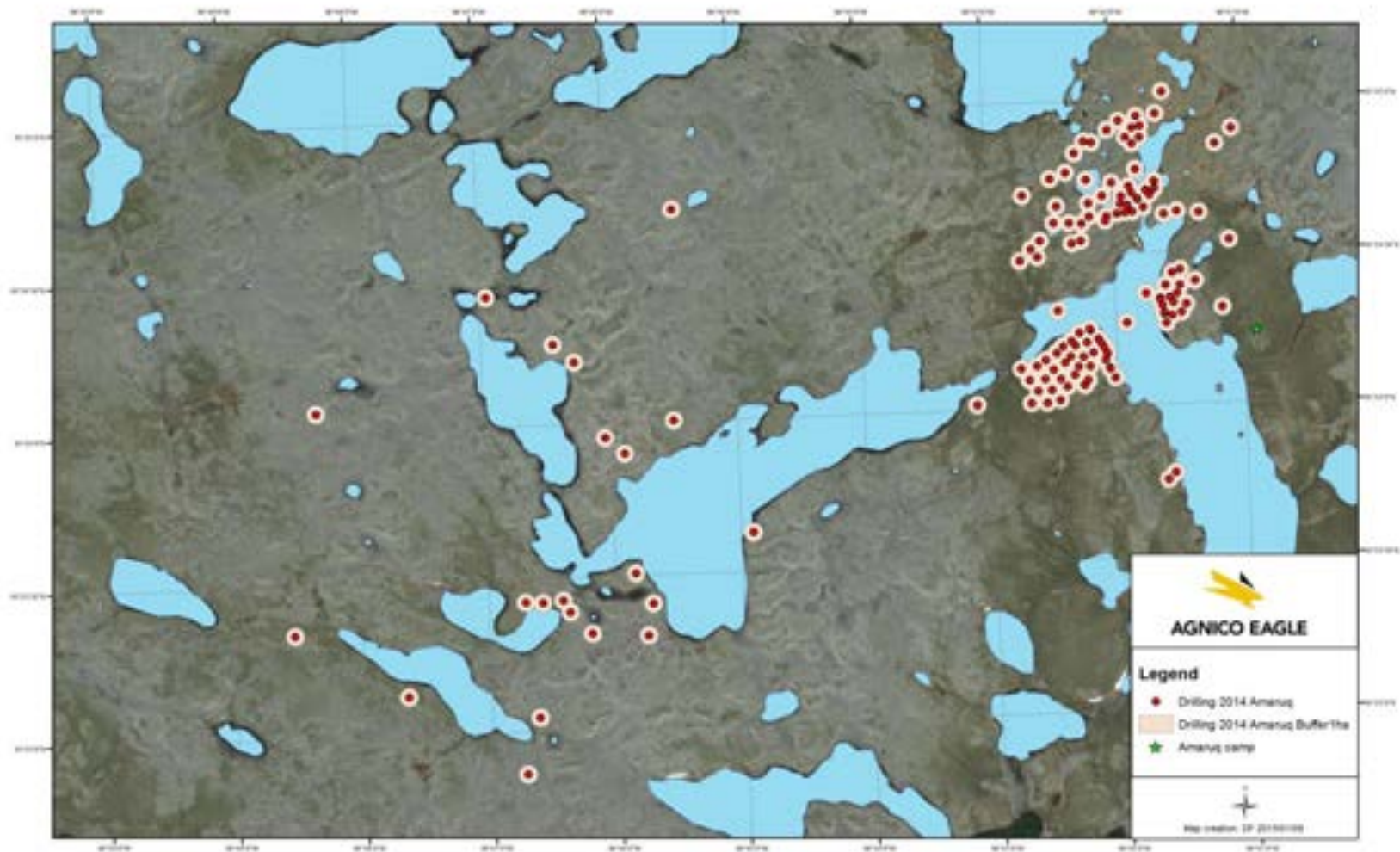



Figure 2: Area to pay (buffer 1 ha per drill site)



Appendix A Wildlife monitoring

| <div><div>AGNICO EAGLE</div><div>2014 Amarug Wildlife observation</div></div> | | | | | | | |
|---|---------|---------------------|----------------------|---------------------------|---|-------------------|--------------------------|
| Date | Time | Wildlife species | Number of individual | Place | Behavior | Observer Name | Action taken |
| 11/05/2014 | 3h00 am | Wolverine | 1 | IVR14-041 SITE AREA | run away | Sylvain Thivierge | Nothing |
| 01/07/2014 | all day | Caribou | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 02/07/2014 | all day | Caribou | 1 | Cone shack & drill | stay around | Steeve Lavole | Nothing |
| 03/07/2014 | all day | Caribou | 1 | Cone shack & drill | stay around | Steeve Lavole | Nothing |
| 04/07/2014 | all day | Caribou | 1 | Cone shack & drill | stay around | Steeve Lavole | Nothing |
| 05/07/2014 | all day | Caribou | 1 | Drill | stay around | Steeve Lavole | Nothing |
| 06/07/2014 | all day | Caribou | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 07/07/2014 | all day | Caribou | 1 | Cone shack & drill | stay around | Steeve Lavole | Nothing |
| 08/07/2014 | all day | Caribou | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 17/07/2014 | 16h30 | Sisk | 1 | between drill & coneshack | stay around | Jerome Lavole | Continue my way |
| 02/08/2014 | 11h00 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 03/08/2014 | 16h40 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 04/08/2014 | 7h00 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 05/08/2014 | 16h00 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 06/08/2014 | 18h15 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 07/08/2014 | 15h45 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 08/08/2014 | 11h15 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 09/08/2014 | 14h00 | Caribou | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 09/08/2014 | 9h00 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 10/08/2014 | 9h30 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 11/08/2014 | 18h15 | Sisk | 1 | Cone shack | stay around | Steeve Lavole | Nothing |
| 20/08/2014 | | Sisk | 1 | Amarug area | stay around | Jerome Lavole | Nothing |
| 21/08/2014 | | Sisk+Geese | 1+50 | Amarug area | eat on the ground | Jerome Lavole | Nothing |
| 22/08/2014 | | Geese | 75 | Amarug area | eat on the ground | Jerome Lavole | Nothing |
| 23/08/2014 | | Geese+Caribou | 100+20 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 24/08/2014 | | Geese+caribou | 200+70 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 25/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 26/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 27/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 28/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 29/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 30/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 31/08/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 01/09/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 02/09/2014 | | Geese+caribou | 300+100 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 03/09/2014 | | Geese+caribou | 400+50 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 04/09/2014 | | Geese+caribou | 400+50 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 05/09/2014 | | Geese+caribou | 500+10 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Isolated caribou |
| 06/09/2014 | | Geese+caribou, wolf | 500+10, 1 | Amarug area | Many, sparse, pay no attention to us, wolf pass by us 200 fts | Jerome Lavole | Isolated caribou |
| 07/09/2014 | | Geese+caribou | 500+3 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Nothing |
| 08/09/2014 | | Geese+caribou | 300+1 | Amarug area | Many, sparse, pay no attention to us | Jerome Lavole | Nothing |
| 09/09/2014 | | Geese, fox | 50, 1 | Amarug area | Many, sparse, pay no attention to us | Steeve Lavole | Nothing |
| 10/09/2014 | | Geese | 25 | Amarug area | Many, sparse, pay no attention to us | Steeve Lavole | Nothing |
| 14/09/2014 | | Fox+Wolves | 1+10 | Amarug/Loker area | Many, sparse, pay no attention to us | Sylvain Guay | Leave the area by Helico |
| 17/09/2014 | | Sisk | 1 | Amarug area | Many, sparse, pay no attention to us | Steeve Lavole | Nothing |
| 21/09/2014 | | Rabbit | 1 | Amarug area | Many, sparse, pay no attention to us | Steeve Lavole | Nothing |

APPENDIX D

AEM 2014 Archaeological Assessment Report

**ARCHAEOLOGICAL IMPACT
ASSESSMENT
Meadowbank Mine 2014 Exploration
Program**

Agnico Eagle Mines Ltd.

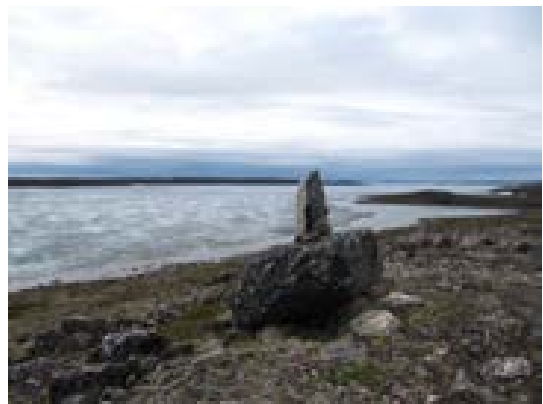
Permit Number: Nunavut 14-017A

Final Report



Prepared for:
Agnico Eagle Mines Ltd.
Val-d'Or, Quebec

Prepared by:
Stantec Consulting Ltd.
Calgary, Alberta



Project Number: 124910368.400

March 2015



Stantec Consulting Ltd.
Suite 130 – 2886 Sunridge Way NE
Calgary AB T1Y 7H9
Tel: (403) 245-5661

March 17, 2015
File: 124910368.400

Attention: David Frenette
Agnico Eagle Mines Ltd.
765, Chemin de la mine Goldex
Val-d'Or, QC Canada J9P 4N9

Dear Mr. Frenette,

I am pleased to submit to you this report entitled ***Archaeological Impact Assessment Meadowbank Mine 2014 Exploration Program Agnico Eagle Mines Ltd. Permit Number: Nunavut 14-017A***. Should you have any questions regarding this project, please do not hesitate to contact me.

Regards,

STANTEC CONSULTING LTD.

Jennifer Tischer, M.A.
Principal, Senior Archaeologist
Phone: 403-806-1314
Email: Jennifer.Tischer@Stantec.com

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Meadowbank Mine 2014 Exploration Program

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Executive Summary

At the request of Agnico Eagle Mines Ltd. (Agnico Eagle), Stantec Consulting Ltd. conducted an archaeological impact assessment for the Meadowbank Mine 2014 Exploration Program under Nunavut Archaeological Permit 14-017A.

The archaeological studies were requested by Agnico Eagle in order to ensure that no archaeological sites would be impacted by the 2014 exploration program. The archaeological program included assessment relative to exploration activities located approximately 50 km to the south of the Meadowbank Mine, and in the Amaruq (formerly IVR) exploration area 50 km to the northwest of the Meadowbank Mine; some additional potential future exploration areas were also assessed approximately 30 km northwest of the Meadowbank Mine. In addition, a proposed winter road extending from the Meadowbank Mine to the Amaruq exploration area was also assessed.

During the archaeological impact assessment, eight archaeological/historic sites were newly identified, including two sites within proximity of the winter road corridor, and six within proximity of exploration areas. A ninth site was revisited to confirm its relationship to the exploration area and to update the site status.

Of these nine archaeological sites, eight are stone feature sites, each represented by between one and nine features; some of these sites appear to be historic or possibly contemporary in age, whereas some sites appear to be of greater antiquity. Stone features identified include stone circles, collapsed inukshuks, hearths, blinds, caches, possible traps, marker stones, and one grave. Highly weathered wood pieces were identified at two sites. The ninth site identified is a precontact archaeological site represented by a single surficial artifact find consisting of a burin made of light grey chert. No other precontact artifacts were observed at this site, but shovel testing was not conducted given that avoidance was planned relative to the exploration program.

None of the sites were identified in conflict with the drilling program (known exploration areas or winter road). Locational information for these newly recorded sites was provided to Agnico Eagle to ensure avoidance by ongoing exploration activities.

Agnico Eagle has committed to ensuring avoidance of archaeological sites during exploration activities, and has continued to demonstrate this commitment by conducting these archaeological studies.

Study Limitations

This document was prepared by Stantec Consulting Ltd. at the request of the proponent relative to their obligations under the Nunavut Archaeological and Palaeontological Sites Regulations (Nunavut Government 2001). The material in it reflects Stantec's best judgment in light of the information available at the time of preparation. Any use that a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. Stantec is not responsible for any unauthorized use or modification of this document.

The findings of this study pertain only to the Project as outlined within this report. Any changes or additions to the Project must be reviewed in terms of archaeological concerns and the potential need for further assessment.

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Project Personnel

| | |
|------------------|------------------------|
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1.0 Introduction

At the request of Agnico Eagle Mines Ltd. (Agnico Eagle), Stantec Consulting Ltd. (Stantec) conducted an archaeological impact assessment for the Meadowbank Mine 2014 Exploration Program under Nunavut Archaeological Permit 14-017A.

The archaeological studies were requested by Agnico Eagle in order to ensure that no archaeological sites would be impacted by the 2014 Exploration Program. The 2014 program included exploration activities approximately 50 km to the south of the Meadowbank Mine, and in the Amaruq (formerly IVR) exploration area 50 km to the northwest of the Meadowbank Mine; some additional potential future exploration areas were also assessed approximately 30 km northwest of the Meadowbank Mine. In addition, a proposed winter road extending from the Meadowbank Mine to the Amaruq exploration area was also proposed. Figure 1-1 illustrates the general locations of the archaeological assessment conducted for the 2014 Exploration Program (green polygons), and the proposed winter road to the Amaruq exploration area.

1.1 Project Background

The Meadowbank Mine, operated by Agnico Eagle Mines Ltd. – Meadowbank Division, is located approximately 70 km north of the Hamlet of Baker Lake, Nunavut. The Meadowbank Mine is an open pit gold mine that started production in early 2010. The existing project components include the mine site, a 110 km all season private access road between Baker Lake and the Meadowbank Mine site, and a barge offloading, marshaling and fuel storage facility near the Hamlet of Baker Lake.

1.2 Previous Archaeological Studies

Previous studies were conducted for the Meadowbank Mine Project under seven archaeological permits; these studies are summarized in Table 1-1.

1.3 Current Studies

In 2014, exploration activities were proposed or occurring mainly within the Amaruq Property, located approximately 50 km northwest of the Meadowbank Mine, but some additional activities were conducted approximately 50 km to the southwest of the Meadowbank Mine (near Whitehills Lake). In addition, some additional potential future exploration areas were proposed approximately 30 km northwest of the Meadowbank Mine. As such, Agnico Eagle requested that Stantec conduct archaeological impact assessments relative to the proposed drill locations/exploration activities. Currently, access to the Amaruq Property is by helicopter only; however, a winter road has been proposed to allow for winter access to the property, and this proposed winter road was also subject to archaeological impact assessment during the 2014 studies.

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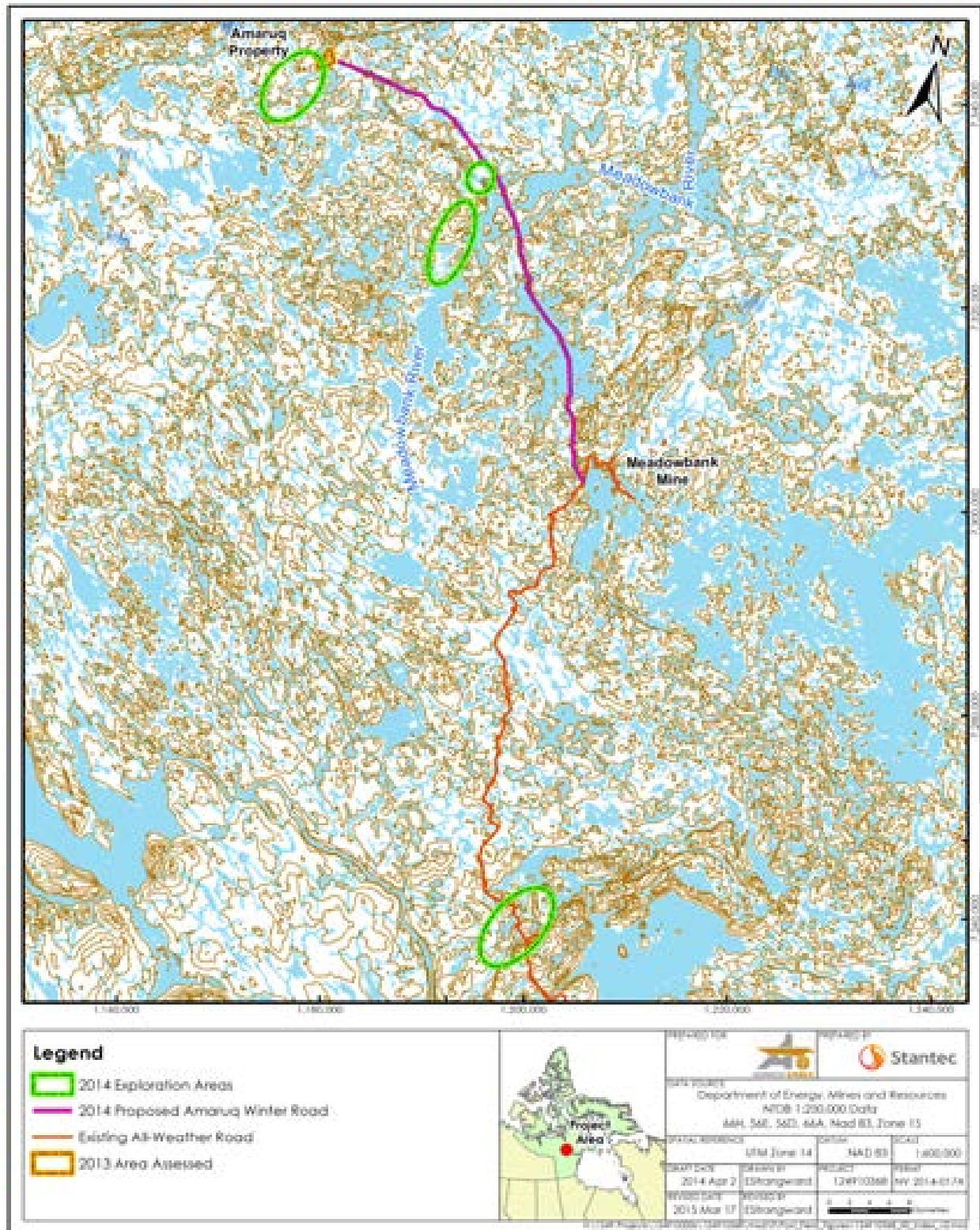


Figure 1-1 Location of 2014 archaeological impact assessment

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Table 1-1 Summary of previous archaeological studies

| Archaeological Permit | Reference | Summary |
|-----------------------|--------------|---|
| 99-003A | Webster 2004 | Studies focused on assessment of the then-proposed mine area; some assessment of the marshaling area/tank farm and the all-weather access road to Baker Lake was also conducted. Forty-two sites were recorded during the 1999 archaeological survey. In 2003, 42 previously unrecorded sites were documented and eight previously recorded archaeological sites were revisited to update site status. |
| 03-012A | | |
| 05-012A | Prager 2006 | Studies focused on assessment of the proposed all-weather road between the hamlet of Baker Lake and the Meadowbank Mine. A total of 28 archaeological sites were newly recorded, and an additional 32 localities containing features were noted but not recorded as archaeological sites either due to the perceived recent nature of the sites, or if they were observed only from the air. |
| 06-027A | Tischer 2007 | Because the 2005 assessment of the all-weather road was not considered complete due to issues with coordinates of the road right-of-way and difficulties in obtaining access, a second assessment was undertaken in 2006. During the studies, 24 previously recorded sites were revisited and 47 sites were newly recorded along the proposed all-weather road and associated borrow sources. Two new sites were also recorded during an assessment of 12 additional proposed borrow sources located east of the Meadowbank Mine. |
| 10-022A | Tischer 2010 | Studies conducted in 2010 included elder interviews, an assessment of the tank farm expansion at Baker Lake, an audit of archaeological sites within proximity of the marshaling area, all-weather road, and the mine, as well as an education program for exploration personnel. During those studies, 102 archaeological sites were investigated, including 79 revisited sites and 23 newly identified sites. |
| 11-015A | Tischer 2012 | The 2011 studies included both post-impact assessment of 2010/2011 exploration activities, and pre-impact assessment at potential exploration zones prioritized for assessment by Agnico Eagle. Five archaeological sites were investigated, and locational information provided to Agnico Eagle to ensure ongoing avoidance. |
| 13-015A | Tischer 2013 | Archaeological studies relative to the IVR (now Amaruq) 2013 exploration area were conducted. No archaeological sites were identified. |

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1.4 Objectives

The objectives of the 2014 archaeological studies were to document any previously recorded or newly identified archaeological sites relative to the 2014 Exploration Program, and to complete an impact assessment of any sites identified. Specifically, the field program was designed to provide information on archaeological sites, determine site types, site nature and association, site context, and potential site values. These data were used to evaluate the impact of the program on specific archaeological sites identified, to ensure avoidance of any identified archaeological sites by Agnico Eagle during exploration activities, and to provide information on archaeological resources relative to project planning and design.

1.5 Scope of Work

The scope of work for the 2014 archaeological impact assessment consisted of the following components:

1. **Record Review** - to identify previously recorded sites within proximity of the exploration program, and to determine the nature of the database in the general area.
2. **Ground Reconnaissance** - to relocate, in the field, any archaeological sites that were previously recorded within proximity of the exploration areas, as well as to identify and record any new sites. Site discovery was based on surficial inspection.
3. **Site Evaluation** - to evaluate the nature of the existing resource database, the quantity and quality of observable remains (e.g. site condition, content, uniqueness, and complexity) and the potential of the site to contribute to the regional archaeological database.
4. **Impact Assessment** - to assess the potential for impacts to the identified historical resource sites, as well as the local and regional database, and to recommend site specific mitigative measures commensurate with the assigned value of the site.

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2.0 Environmental Setting

2.1 Introduction

Precontact economic strategies as well as many aspects of the material culture of the human inhabitants were intimately related to the opportunities and constraints provided by the regional environment that they occupied. In many respects, regional environment also strongly influenced where certain activities were conducted and consequently, where archaeological sites, testimony to precontact use and occupation, are located. The distribution of precontact sites in the barren grounds includes a wide variety of landforms but sites are most frequently associated with coastlines and lake shores, river and creek margins, eskers and kames, and bedrock knolls. This distribution pattern partially reflects environmental opportunities presented to human populations as well as cultural preferences in site location. Terrain influenced many forms of human activity, directing travel, biasing routes of communication, enhancing or limiting resource procurement activities, and restricting human occupation areas to selected localities. As a result, human populations were not uniformly distributed across the landscape, but were non-randomly clustered within the most suitable habitats. Because of the close relationship that precontact occupants had with the environment, a brief description of the regional and local environments is provided.

2.2 Regional Environment

The Meadowbank Mine is located within the Northern Arctic Ecozone and within the Wager Bay Plateau physiographic unit of the Canadian Shield physiographic region as defined by Bostock (1970) (Figure 2-1). The surficial geology in the general project area is dominated by discontinuous thin veneers of organic material, till and/or weathered parent material overlying undulating to hummocky bedrock. Large areas of weathered bedrock interspersed by thin veneers of moraine or organics are common (Bryden et al. 2003).

The Meadowbank Mine is located approximately 70 km north of Baker Lake. Exploration areas investigated during the current studies were located primarily in and adjacent to the Amaruq Property, approximately 50 km northwest of the existing mine, but also included additional exploration areas 30 km north of the mine and 50 km southwest of the mine. A proposed winter road between the Meadowbank Mine and the Amaruq Property was also investigated.

Generally, the area is characterized by rolling terrain covered in heath tundra interspersed with higher bedrock outcrops and boulder fields. Glaciation has shaped the terrain; eskers and kames are not numerous, but an esker running generally north-south is situated to the east of the Amaruq property and is crossed by the proposed winter road.

Vegetation within proximity of the mine consists largely of the Heath Tundra Community and Lichen/Rock Community in the Ecological Land Classification (Bryden et al. 2003). The Heath Tundra Community is found on morainal deposits on gently sloping uplands with low to medium

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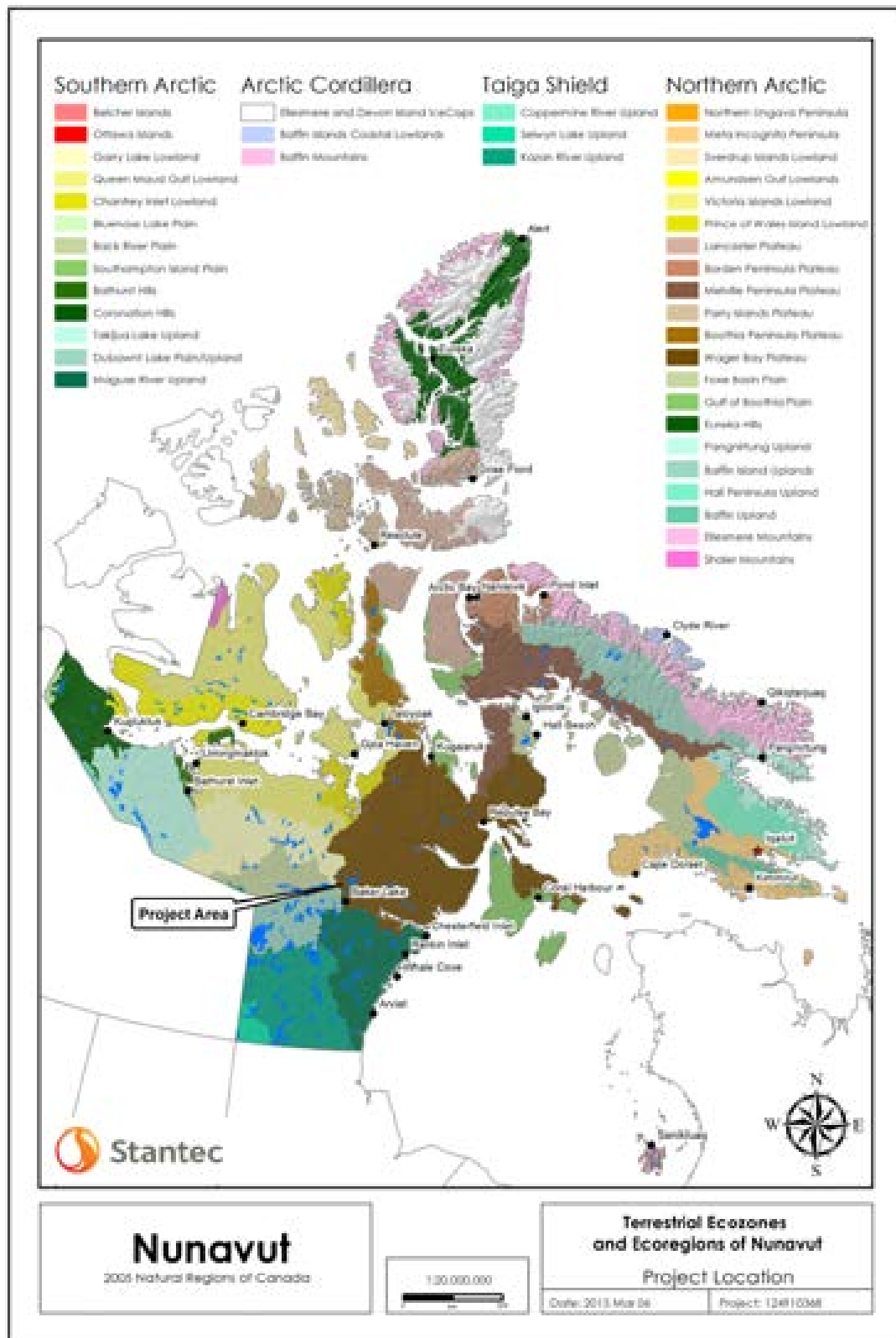


Figure 2-1 Terrestrial Ecozones of Nunavut

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moisture and nutrient regimes, and is characterized by bog blueberry, lingonberry, white arctic heather, Labrador Tea, bearberry and crowberry. The Lichen/Rock Community is found on gentle slopes with low water and nutrient regimes and thin and absent soils, including boulder fields and bedrock outcrops. Sedge communities are associated with lake edges.

2.3 Project Environment

Four components were included in the 2014 archaeological impact assessment. Figure 2-2 illustrates the exploration investigation areas (green polygons on Maps 1, 3, 4 and 6); study areas assessed along the proposed winter road are illustrated on Maps 2, 3 and 5. Figures 2-3 to 2-8 show detail of these study areas. The four components assessed include:

- 1) Exploration areas 50 km south of the Meadowbank Mine (Map 6 on Figure 2-2; Figure 2-8)
- 2) Amaruq Property exploration areas (50 km northwest of the Meadowbank Mine; Map 1 on Figure 2-2; Figure 2-3)
- 3) Additional exploration areas south of the Amaruq Property (Maps 3 and 4 on Figure 2-2; Figures 2-5 and 2-6)
- 4) The proposed winter road between the Meadowbank Mine and the Amaruq Property (see Figure 2-2, and details on Figures 2-4, 2-5, and 2-7)

2.3.1 Exploration Area South of Meadowbank Mine

The 2014 exploration area located approximately 50 km south of the Meadowbank Mine lies west of Whitehills Lake, along the all-weather road between the Hamlet of Baker Lake and the Meadowbank Mine. The exploration area (Map 6 on Figure 2-2; Figure 2-8) is characterized by small lakes between elevated terrain features and low-lying areas. Given that the drilling activity in 2014 was planned for summer (i.e. unfrozen conditions), drill locations were generally located in well-drained areas. Examples of the drill locations are shown in Plates 2-1 and 2-2.

2.3.2 Amaruq Property Exploration Area

The Amaruq Property exploration area, located approximately 50 km northwest of the Meadowbank Mine (Map 1 on Figure 2-2), is overall of lower archaeological potential than the exploration area south of the mine. In 2013, a large portion of the Amaruq Property exploration area was traversed and inspected for archaeological sites (see Figure 2-3); no archaeological sites were identified during that study. Additional areas were assessed in 2014 to the east, south and west of the 2013 study area in advance of 2014 drilling activities, as illustrated in Figure 2-3. The five smaller investigation areas illustrated in Figure 2-3 were all ground truthed and inspected for sites due to the perceived moderate potential of the landforms. Of these, the eastern investigation area was of the highest archaeological potential, and exhibited some well-elevated areas above lakeshores (Plate 2-3). To the west of this, the next two investigation areas exhibited moderate potential in elevated but unevenly rocky lakeshores on the north side of the lake (Plate 2-4); the south side exhibited lower shores and poorly drained terrain.

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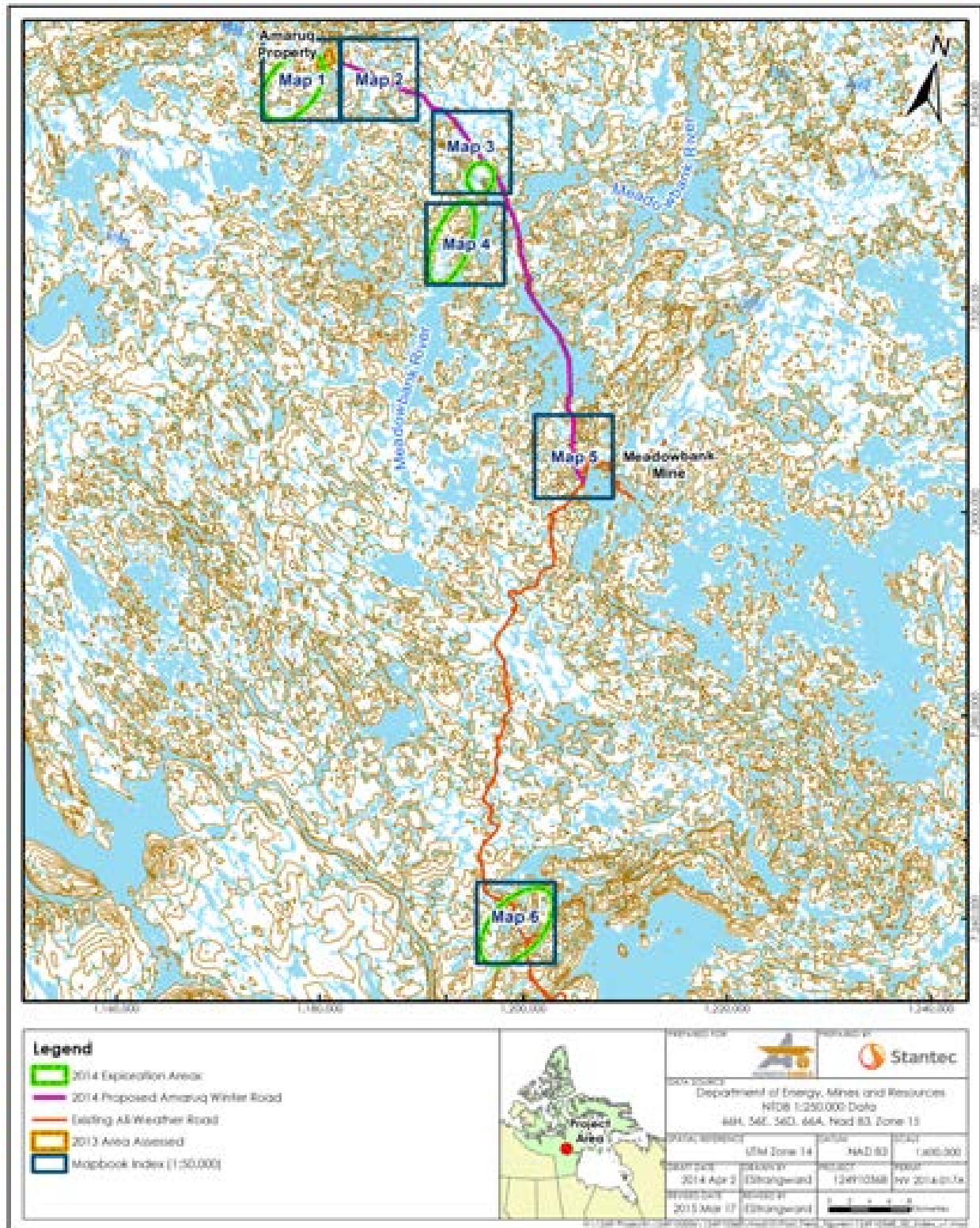


Figure 2-2 Meadowbank 2014 Exploration Program investigation areas – Index Map

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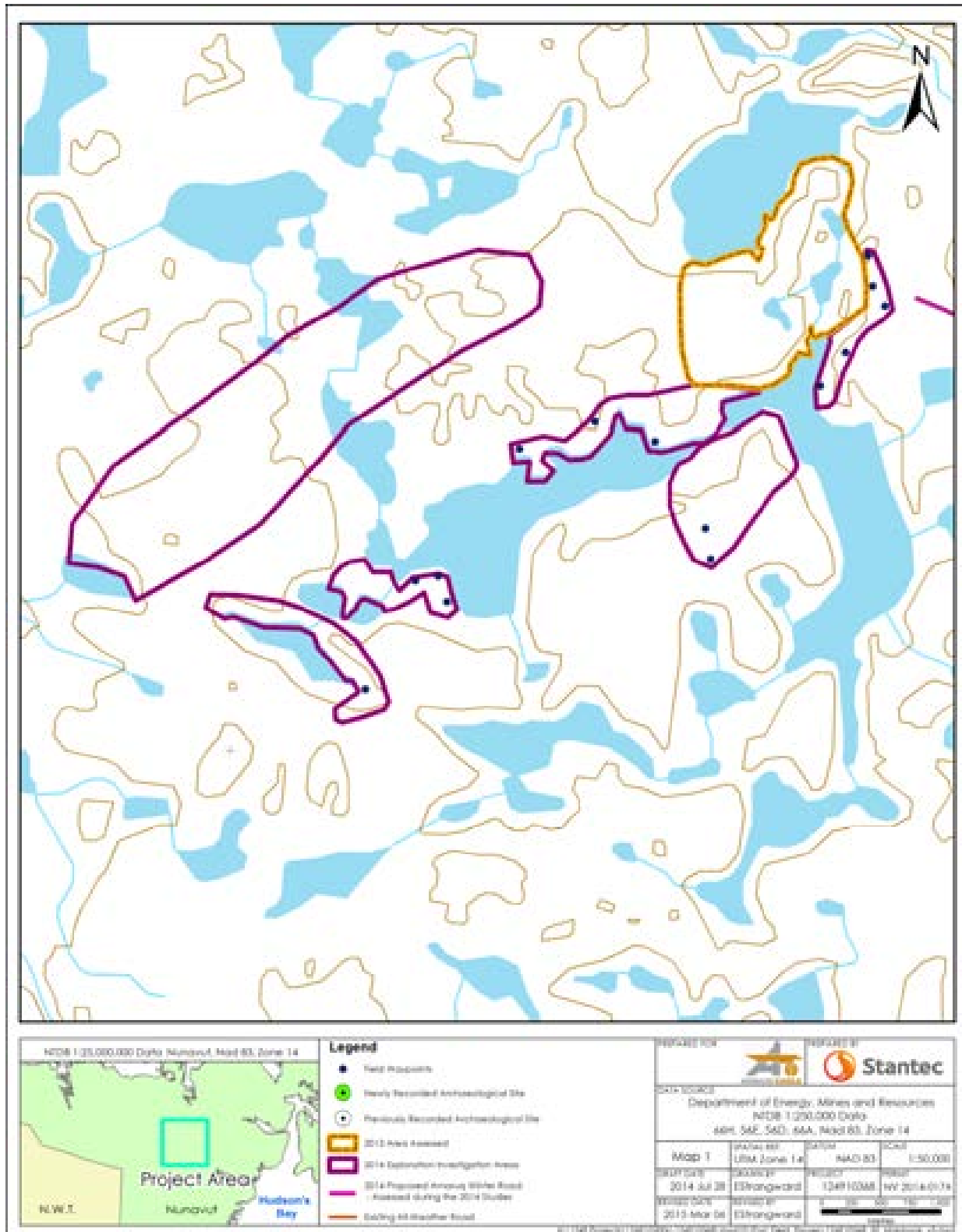


Figure 2-3 Meadowbank 2014 Exploration Program investigation areas – Map 1

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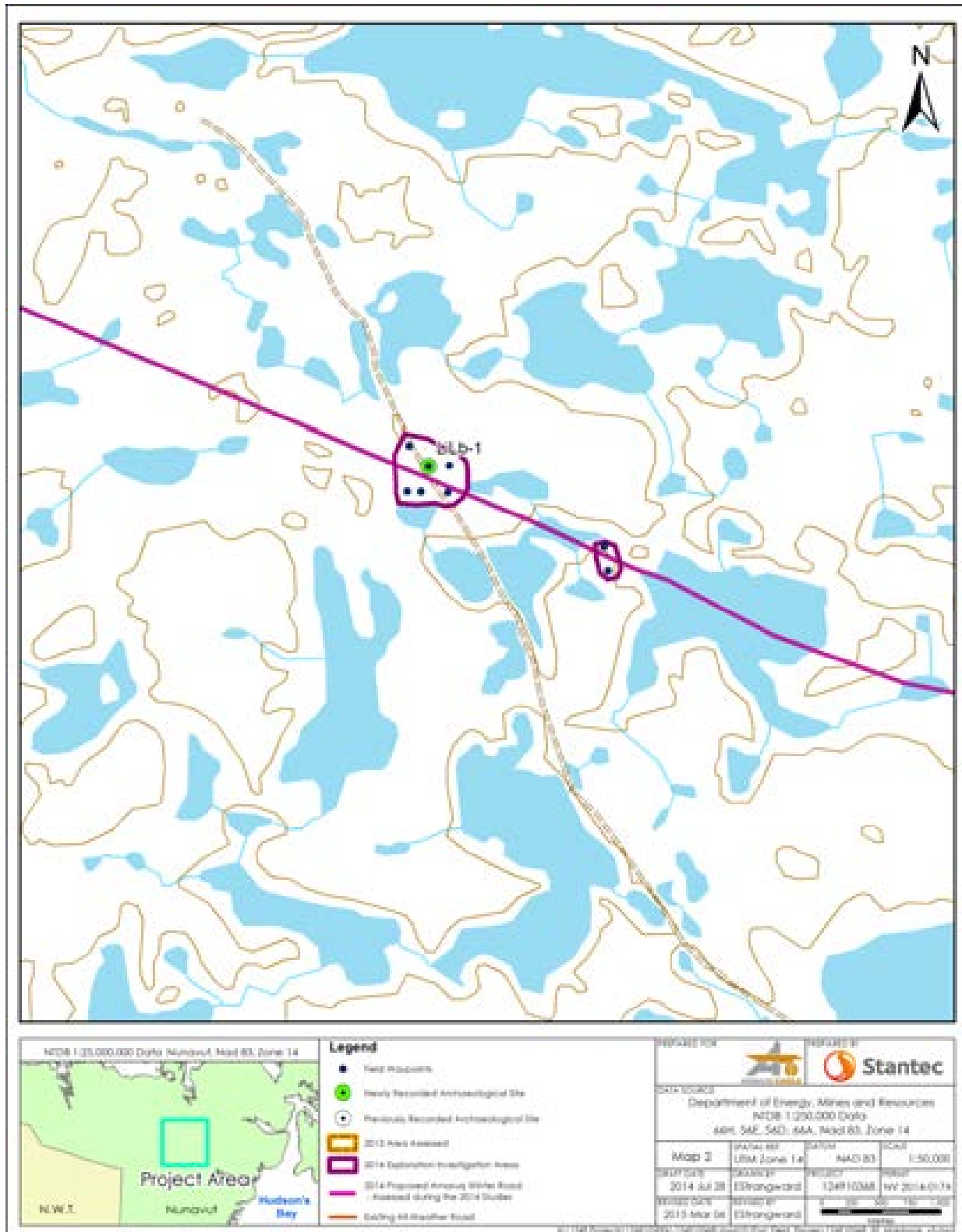


Figure 2-4 Meadowbank 2014 Exploration Program investigation areas – Map 2

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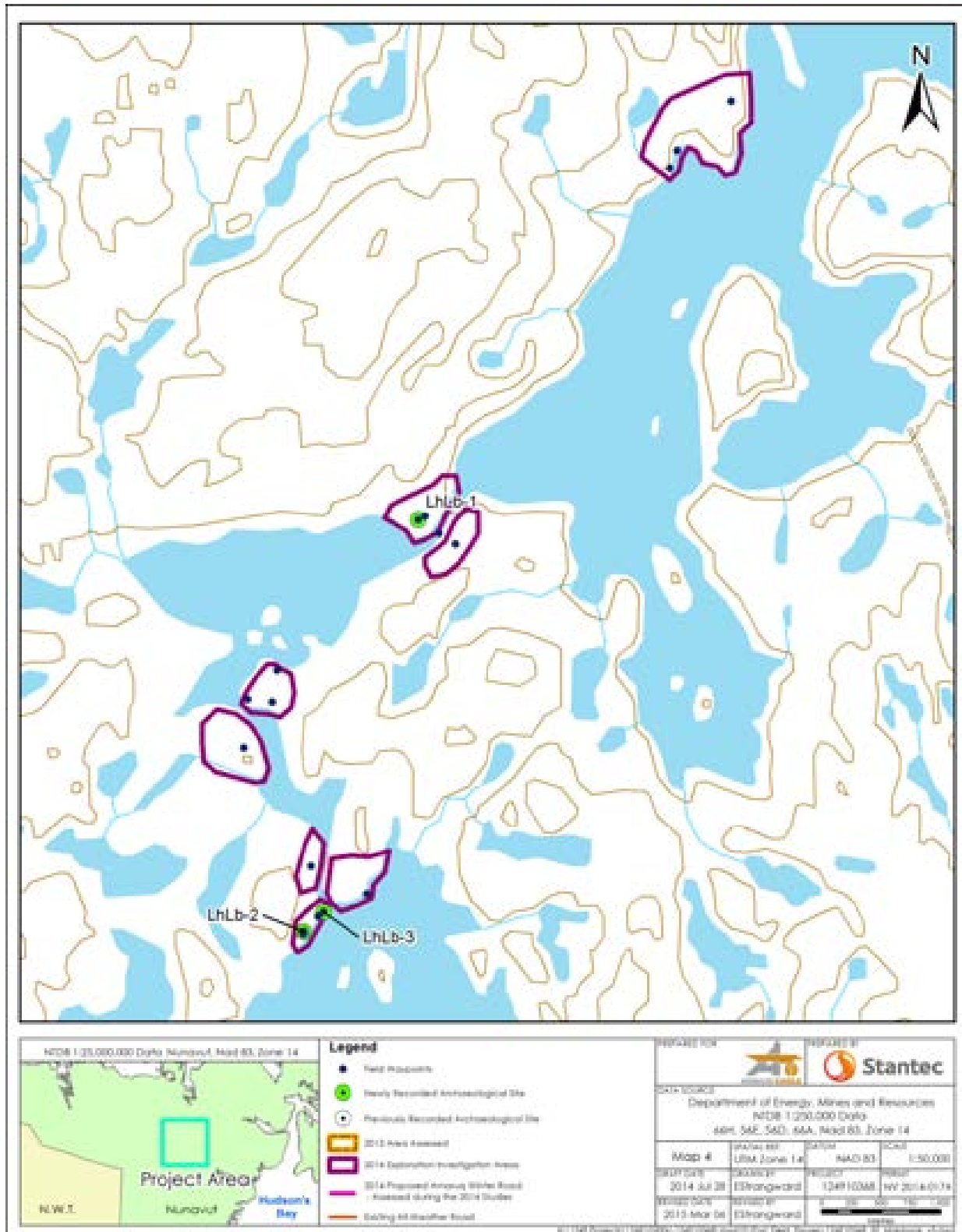


Figure 2-6 Meadowbank 2014 Exploration Program investigation areas – Map 4

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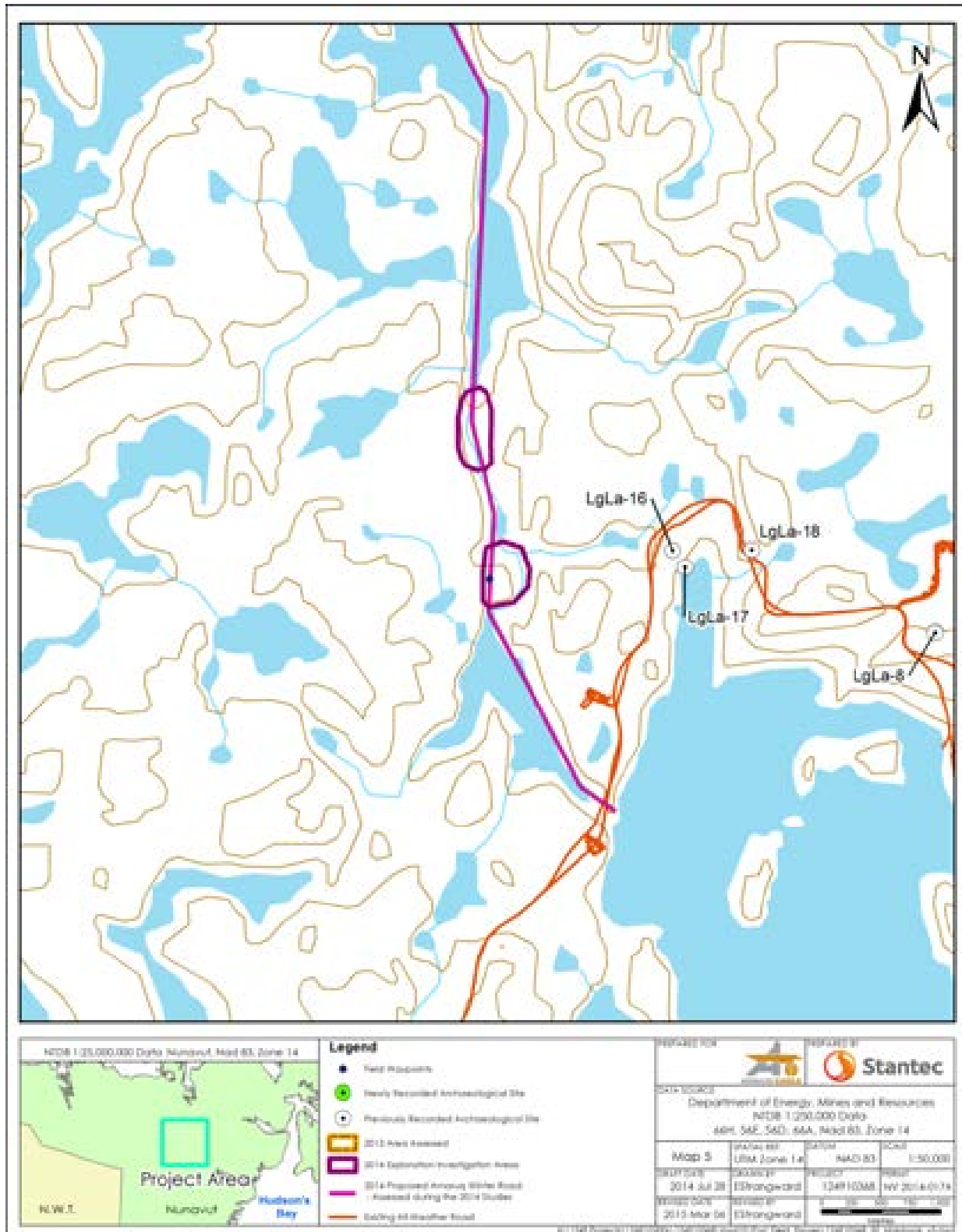


Figure 2-7 Meadowbank 2014 Exploration Program investigation areas – Map 5

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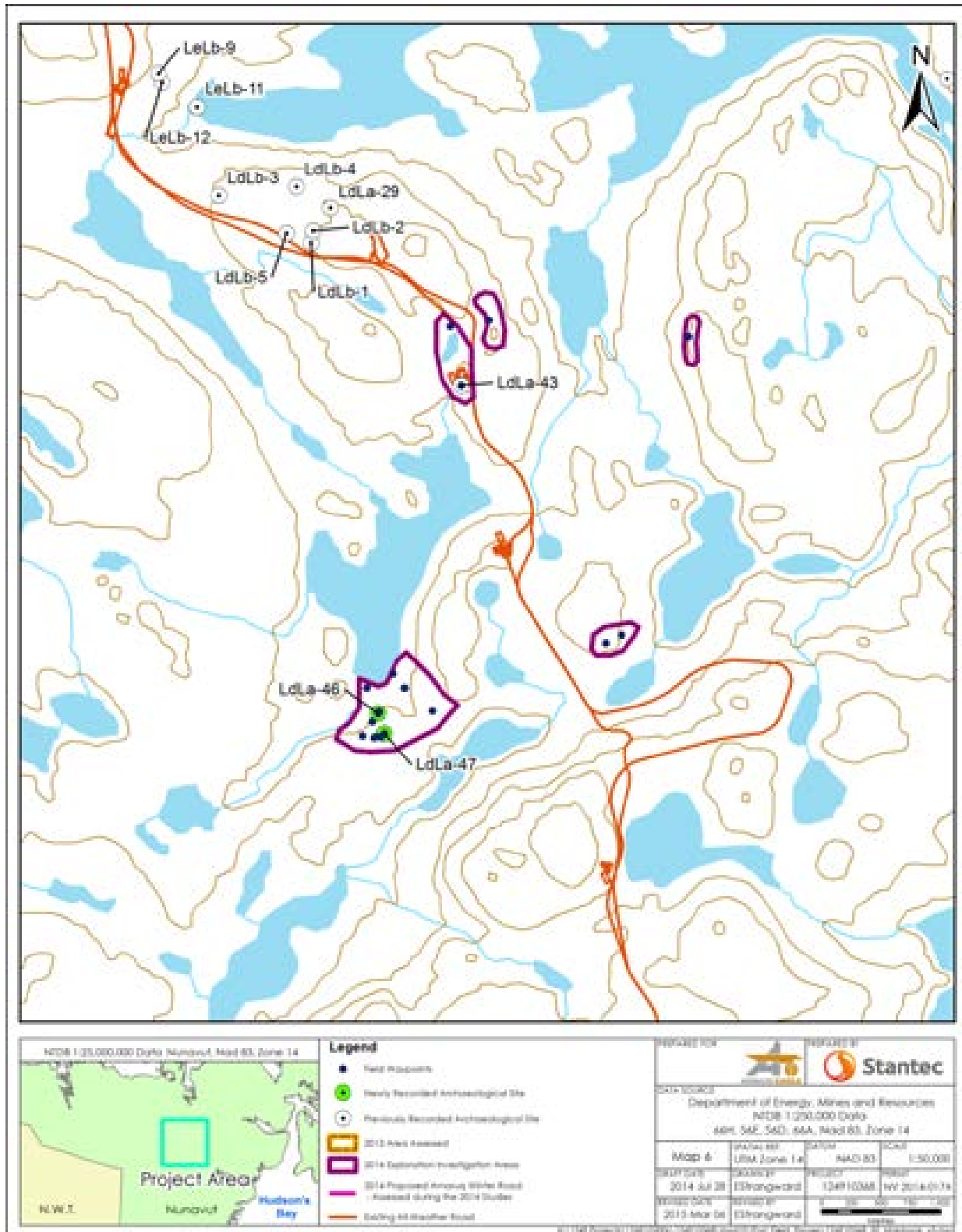


Figure 2-8 Meadowbank 2014 Exploration Program investigation areas – Map 6

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Plate 2-1 View southwest showing a drill location in the area south of the Meadowbank Mine, on well drained terrain.



Plate 2-2 View southwest showing a drill location in the area south of the Meadowbank Mine, in moderately drained terrain.

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Plate 2-3 View west from the eastern 2014 Amaruq investigation area showing elevated terrain; the area across the lake was assessed in 2013.

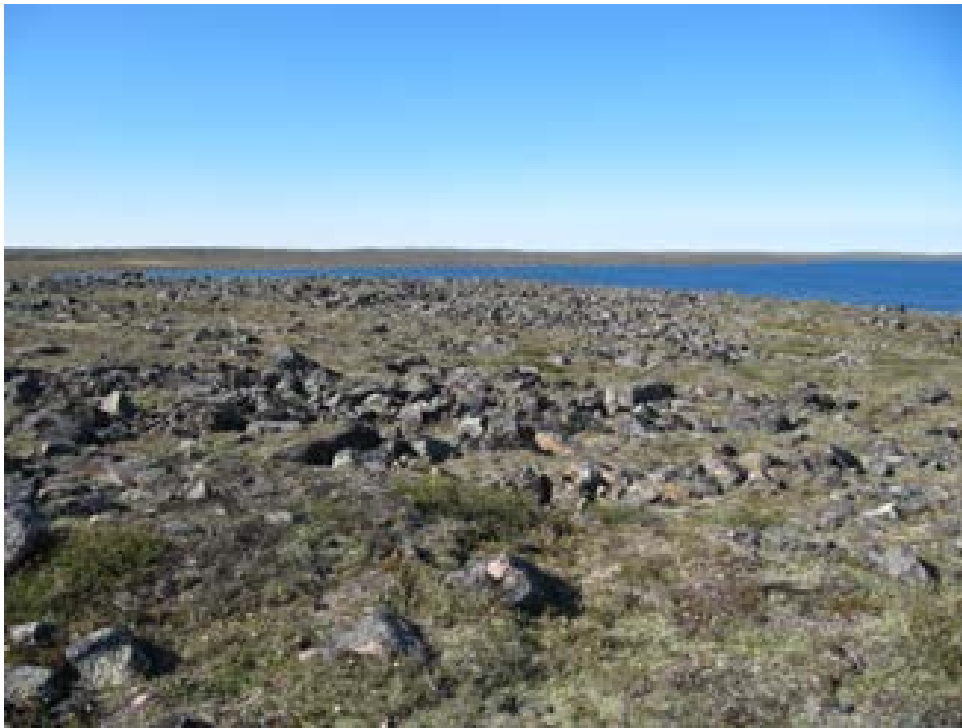


Plate 2-4 View southwest in the investigation area immediately south of the 2013 Amaruq study area, showing elevated but rocky terrain.

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To the west of this the two remaining smaller investigation areas illustrated in Figure 2-3 exhibited variable terrain, ranging from very low wet areas, to elevated level areas between lakes (Plate 2-5).

The largest investigation area assessed in the Amaruq area (i.e. the largest assessment area on Figure 2-3, northwest of the other areas) was assessed from the air only; this area was saturated with almost no elevated landforms present between the lakes (Plate 2-6). The archaeological potential was deemed to be very low within this investigation area. This area was not traversed given the very low archaeological potential, but was visually assessed from the air to confirm that no areas with archaeological potential were present.

2.3.3 Additional Exploration Area – South of Amaruq

Due to the availability of additional time, Agnico Eagle requested that some additional investigation areas be added to the archaeological impact assessment (Maps 3 and 4 on Figure 2-2). These areas lie to the southeast of the Amaruq area, and included landforms with high archaeological potential that were suggested by exploration staff to be potential locations for a future road and some additional areas within which future exploration may take place. These locations are illustrated on Figure 2-5 (the area along the esker, i.e. off the road) and Figure 2-6.

The esker area illustrated on Figure 2-5 was assessed as future exploration activities were suggested to be possible in this general area. As such, a landform with high archaeological potential was selected. This landform consists of a portion of a major esker that extends into a lake (Plate 2-7). The composition of the landform consists mainly of cobbles but also includes some finer glacial materials (gravels and sands).

All areas illustrated on Figure 2-6 were also assessed as supplemental investigation areas. The northernmost area assessed was selected from the air based on its perceived moderate to high archaeological potential (Plate 2-8). This target area is relatively level and affords good views into the Meadowbank River. No archaeological sites were identified during surface inspection of the landform. To the south of this, an elevated area on the north side of a rapids along the Meadowbank River was inspected (Plate 2-9). Although the most prominent portion of the landform did not contain any archaeological sites, a stone feature site (LhLb-1) was identified on a slightly lower elevated landform. The opposite side of the narrows was also inspected, but was determined to be of lower potential with less well-defined terrain features (Plate 2-10).

South of this, both sides of another rapids were inspected along the Meadowbank River. The highest potential areas were inspected, focusing on level and well-drained terrain (Plate 2-11). Further south, three investigation areas were inspected at another rapids on the Meadowbank River. A high feature was assessed in the northern target area along the rapids (Plate 2-12). The investigation area to the southwest of this is elevated and level, and provides an excellent view of the very wide river to the south; stone feature site LhLb-2 was identified on a higher bedrock outcrop in this location (Plate 2-13). The area on the east side of the rapids was also inspected as a high potential area due to its elevation, view and proximity to the rapids (Plate 2-14).

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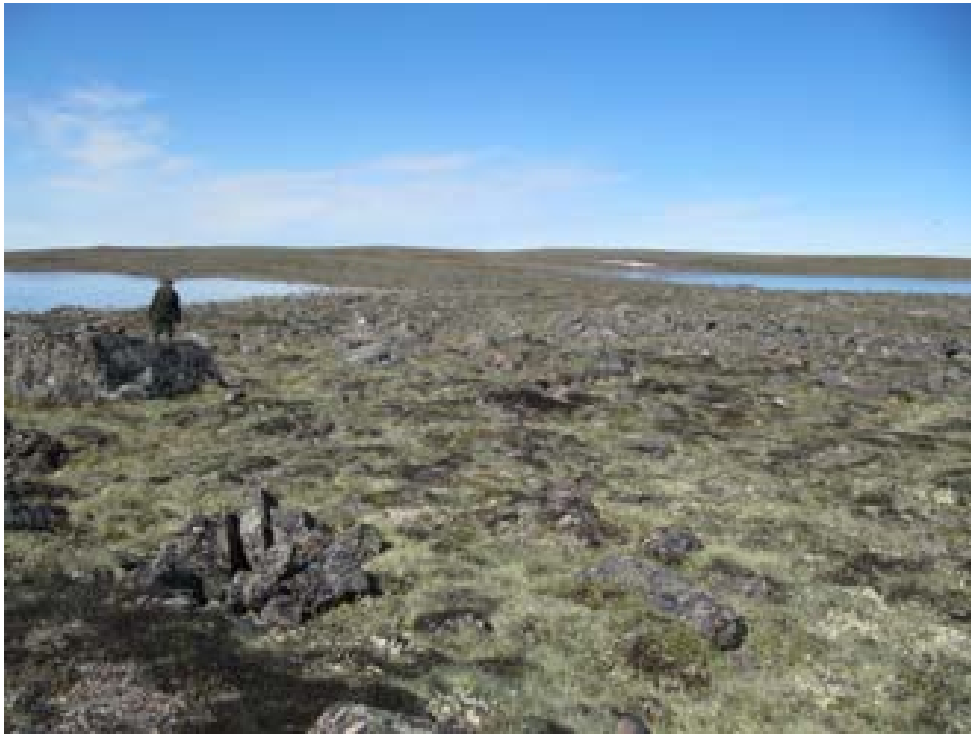


Plate 2-5 View north in the southeastern 2014 Amaruq investigation area showing moderate potential in elevated, rocky terrain between lakes.



Plate 2-6 View northeast in the northwestern 2014 Amaruq investigation area, showing very poorly drained, low potential terrain.

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Plate 2-7 View east showing the esker inspected as part of possible future exploration activities (Figure 2-5).



Plate 2-8 View southwest at the northernmost area on Figure 2-6, showing relatively level elevated terrain.

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Plate 2-9 View east at the investigation area within which LhLb-1 was identified, showing elevated terrain; LhLb-1 lies behind the photographer.



Plate 2-10 View north from lower terrain on the south side of the rapids, looking to LhLb-1 on the north side in more elevated terrain.

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Plate 2-11 View northeast at the westernmost investigation area on Figure 2-6; both the west side of the rapids (foreground) and east side were inspected.



Plate 2-12 View south from the investigation area north of LhLb-3 along the Meadowbank River.

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Plate 2-13 View west from LhLb-3 to LhLb-2, showing the elevated terrain and bedrock outcrop (LhLb-2) overlooking the wide Meadowbank River.



Plate 2-14 View east showing the two southernmost investigation areas on Figure 2-6; the wide Meadowbank River narrows into the rapids at this location.

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2.3.4 Proposed Winter Road

The proposed winter road extends between the Meadowbank Mine to the south and the Amarug Property to the northwest. A significant amount of the proposed winter road routing is situated on water as a planned ice road. Where land is required, the right-of-way with the best grade and easiest terrain to traverse will be selected. In many cases, this means that the road will follow low terrain between lakes along creeks, in areas that are not typically of high archaeological potential. In some locations, however, higher terrain with better potential, overlooking lakes and creeks, will be traversed, and these areas were the primary investigation areas selected during the archaeological assessment. Areas that were ground truthed are illustrated on Figures 2-4, 2-5 and 2-7. The entire routing was flown by helicopter in both directions in order to select investigation areas that were perceived to have high archaeological potential.

Figure 2-4 illustrates two selected investigation areas; the western investigation area is where the road will cross a major northwest-southeast running esker. As illustrated in Figure 2-4, a much larger area than that proposed for the road right-of-way was subject to pedestrian traverse to identify archaeological sites (Plates 2-15, 2-16). To the east, the second investigation area illustrated on Figure 2-4 was also selected due to the presence of glacial deposits; in this case, a relatively large kame feature was inspected for cultural materials (Plate 2-17).

Figure 2-5 illustrates four investigation areas along the proposed winter road that were also assessed. The three northern investigation areas were all relatively similar, and consisted of somewhat elevated, rocky terrain between lakes (Plate 2-18). The southern investigation area on Figure 2-5 exhibited slightly more varied terrain, with more hills and bedrock variation that would have provided for more areas of shelter, as well as affording good views due to the elevated nature of the terrain (Plates 2-19, 2-20).

South of this, the proposed right of way runs through low terrain following creeks (Plate 2-21), beyond which the route will extend along the ice of open lakes for a significant distance (Plate 2-22). Further south (Figure 2-7), near the south end of the proposed winter road, two additional investigation areas were selected as having moderate archaeological potential. The northern investigation area illustrated on Figure 2-7 was traversed to confirm that these low areas along the creek bed are of low archaeological potential (Plate 2-23). Higher potential areas are located at the elevated terrain above the creeks. The southern investigation area illustrated on Figure 2-7 was selected due to elevated and varied terrain (Plate 2-24).

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Plate 2-15 View east showing esker exposures near (west of) the proposed winter road crossing (at left of photo) of the esker.



Plate 2-16 View east showing the large cobbles characterizing the esker at the proposed winter road crossing; the road would extend generally left to right in the foreground and into the lake.

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Plate 2-17 View north showing additional esker deposits inspected within proximity of the proposed winter road (eastern area on Figure 2-4).



Plate 2-18 View west showing rocky terrain inspected at the northern investigation area illustrated on Figure 2-5.

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Plate 2-19 View southeast at the southern investigation area (as illustrated on Figure 2-5) along the proposed winter road, showing elevated terrain inspected.

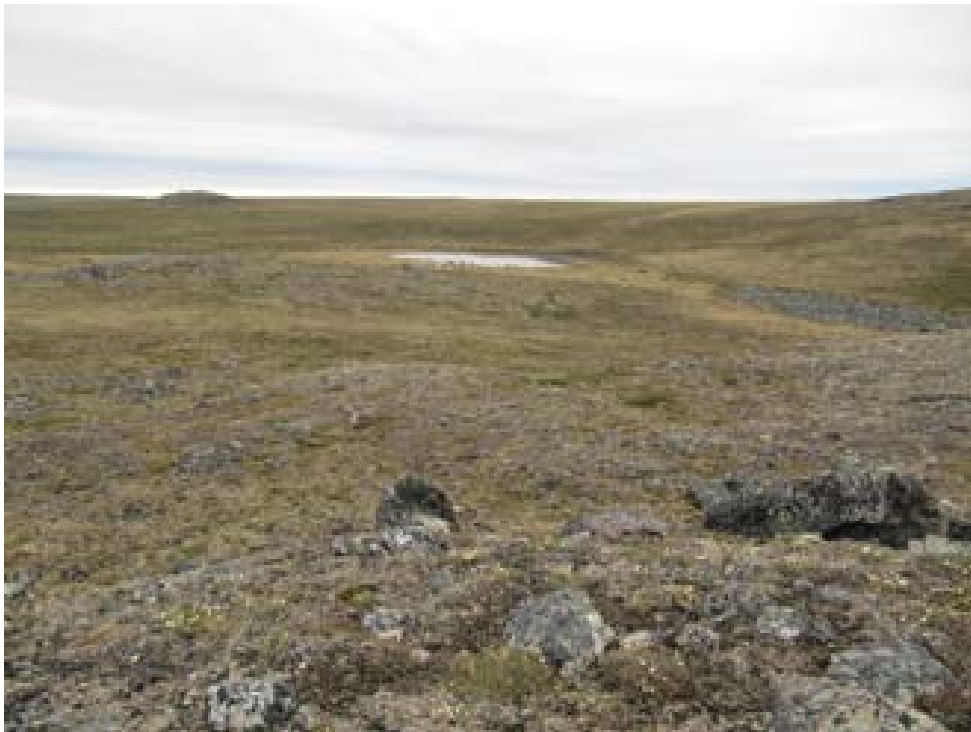


Plate 2-20 View northeast at the southern investigation area (as illustrated on Figure 2-5) along the proposed winter road, in hilly and varied terrain.

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Plate 2-21 View southeast along the proposed winter road which will extend through the low terrain narrows, as illustrated.



Plate 2-22 View southeast showing the proposed winter road where it extends for a large distance across open water/ice.

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Plate 2-23 View north along the proposed winter road where it extends from the lake onto land along the low drainage (north investigation area on Figure 2-7).



Plate 2-24 View southeast north along the proposed winter road routing at the southern investigation area illustrated on Figure 2-7.

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3.0 Heritage Resources

3.1 Definition

Heritage resources are identified by the Nunavut Archaeological and Palaeontological Sites Regulations (Nunavut Government 2001) and consist of archaeological artifacts more than 50 years old and fossils including natural casts, preserved tracks, coprolites, and plant remains as well as shells, exoskeletons of invertebrates, and vertebrate remains. Precontact archaeological sites are composed of artifacts, features, and residues of native origin. They predate the arrival of Europeans and are typically characterized by modified bone and stone, and stone structures. Historic sites are characterized by structures, features, and objects of European influence. These sites date back to contact with the Europeans but also include remains of more recent activity (i.e., more than 50 years). Historic sites less than 50 years old are generally associated with contemporary land use and document continued use and occupation of an area to the present time. Cultural landscapes consisting of either natural or man-made features important to a society's sense of place are also important heritage resources. Although palaeontological sites contain fossils of plants or animals or fossilized evidence of their existence, also of geological interest are type sites for geological formations.

3.2 Nature of Heritage Resources

Heritage resources are non-renewable and are susceptible to alteration, damage, and destruction by construction and development activities. The value of heritage resources cannot be measured in terms of individual artifacts or biological specimens, rather the value of these resources lies in the integrated information which is derived from the relationship of the individual artifacts and fossil specimens, associated features, spatial relationships (distribution), and contextual situations. Interpretation of heritage resource materials, and the ability to interpret the significance of particular sites in a landscape, is based on an understanding of the nature of the relationship between individual archaeological and palaeontological materials as well as the sediments and strata within which they are contained. As such, removal or mixing of cultural or fossil bearing sediments results in the permanent loss of information basic to the understanding of these resources. As a result, heritage resources are increasingly susceptible to destruction and depletion through disturbance.

3.3 Cultural Context

3.3.1 Precontact Chronology

Early intensive archaeological field study in the interior Canadian Shield focused on the central barren lands and is largely restricted to the work of Noble (1971) with some areally defined surveys by Gordon (1975) and Metcalf (1979). Other studies relevant to the general Baker Lake area include Harp (1961), Gordon (1974), Friesen and Stewart (1994) and Stewart et al. (2000). Intensive impact assessment studies of defined project areas have been completed in the general Baker Lake region, including the Kiggavik Uranium Project (Golder 2008, 2009, 2010,

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2014), the Meadowbank Mine Project (Webster 2004; Prager 2006, Tischer 2007, 2010, 2012, 2013) and the Baker Basin Project (Tischer 2008). Regional syntheses have been provided by Gordon (1975), Noble (1977), and Wright (1981). A summary of the chronological framework is presented below.

In the interior, the earliest archaeological materials that occur in the general region are collectively referred to as the Northern Plano Tradition. These remains are recognized on the basis of the presence of lenticular Agate Basin and Acasta notched projectile points. Sites of this time period are widely scattered in the barren grounds. In the southern Keewatin District, sites of this time period are associated with major caribou crossings or fisheries (Harp 1961). Westward, eskers figure prominently in site association (Noble 1981: 97). The similarity in style to projectile points found further south has prompted the suggestion that people of the northwestern plains seasonally exploited the barrens (Wright 1981: 87). Although the basic economic lifestyle did not change in the succeeding Shield Archaic Period between approximately 4,000 and perhaps 1,000 B.C., lanceolate projectile points continue to serve as horizon markers during this period. Sites of the Shield Archaic occur northward along the Kazan-Dubawnt-Thelon river system. The Shield Archaic is replaced by the Arctic Small Tool Tradition (ASTt), attributable to Palaeo-Eskimo peoples.

Sometime after approximately 3,500 B.C., Palaeo-Eskimo populations began to take up occupation along the coast of the central Arctic stretching eastward to Greenland. Identifiable on the basis of specialized microlithic and diagnostic standard size tools as well as a variety of bone, antler and ivory materials, these early occupations are assigned to either Pre-Dorset/Independence I (2200-800 B.C.), a transitional phase, or Dorset (500 B.C. – A.D. 1450) temporal affiliations (Maxwell 1984). Early, Palaeo-Eskimo sites occur at Dismal Lake (Harp 1958) and Bloody Falls (McGhee 1970). Both sea mammals and terrestrial ungulates (primarily caribou) were exploited; undoubtedly fish and fowl were also included in the subsistence pattern. The succeeding Dorset sites in the eastern and High Arctic suggest an increasing emphasis on sea mammals for winter subsistence and perhaps an increasing use of caribou in summer at inland lakes and of fishing weirs. The final archaeological phase is termed Thule and represented by the 'typical Eskimo' sites in the arctic (McGhee 1984). Thought to have developed in northern Alaska, it rapidly spread eastward to Greenland after approximately A.D. 1000. Characteristic of Thule culture was a dependence on whale hunting, supplemented by seal, fish, caribou and fowl, and winter villages consisting of several semi-subterranean houses as well as the appropriate hunting and survival tools and material goods.

3.3.2 Historic Inhabitants

The Project area falls within the traditional territory of the Caribou Inuit, which is located west of Hudson's Bay and extends from the tree line to just north of Baker Lake. The Caribou Inuit depended almost entirely on fish and caribou, and rarely visited the coast to hunt seals. According to McGhee (1990), the Thule ancestors of the Caribou Inuit, spreading down the coast of Hudson's Bay approximately 1,200 B.C., would have encountered the immense herds of caribou that migrate from the tree line north to the summer calving grounds around Chesterfield Inlet. However, given that the barrenlands were occupied by Chipewyan, the Inuit would not

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have been able to make much use of the caribou resource. When smallpox decimated the Chipewyan populations in the 1780s, the Inuit, who had by now acquired trade goods such as traps and rifles as a result of interaction with the Hudson's Bay Company, were able to move inland and efficiently hunt caribou.

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4.0 Methods

4.1 Introduction

In order to meet the objectives of the archaeological impact assessment, the 2014 studies included a record review of archaeological sites on record and a review of previous studies conducted for the Project. Field studies were subsequently conducted, focusing on proposed drilling locations and the access road route, supplemented by additional studies in areas that may be proposed for future impacts from drilling/access. Analysis of findings and reporting was then conducted, including site evaluation, impact assessment and formulation of recommendations.

4.2 Record Review

An updated site file search was obtained from the Nunavut Department of Culture and Heritage in order to ensure that all archaeological sites on record within proximity of the 2014 Exploration Program were considered when assessing the exploration areas. In order to obtain the database, a data license was submitted to the Department of Culture and Heritage as required.

In addition to updating the site file search, the studies previously conducted for the Meadowbank Mine Project were briefly reviewed in order to provide some archaeological and historical context for the Project area. In addition, a general literature review was also undertaken to provide regional context.

Topographic maps were reviewed to identify areas with archaeological potential. Certain terrain features are known to be of higher likelihood to contain archaeological sites because they offer a safe and/or comfortable habitation area, views of the surrounding terrain which allows observation of animals and other humans, and proximity to resources bases such as water, food, building material, fuel, or lithic materials. As such, topographic maps can provide information regarding the presence and nature of terrain features such as eskers, hills and knolls, lakes, creeks/rivers and narrows/rapids.

4.3 Field Studies

The 2014 field studies included surface inspection of proposed drill site locations and surrounding areas, the proposed winter access road, and general areas proposed for potential future impacts to identify archaeological sites.

4.4 Site Evaluation

The nature of site assessment completed at each site identified is largely contingent on the nature of the site and its physical relationship to both previous and proposed disturbance activities. For the current assessment, avoidance was the planned mitigation measure at any newly identified sites. As such, detailed site assessment (including shovel testing) was not undertaken, but individual features were documented (precise UTM location taken, mapping,

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photography, feature description); site forms and site sketch maps were completed for each site.

4.5 Site Designation

Archaeological sites are referred to by a Borden Number which consists of a four letter symbol accompanied by a number (i.e., LdNs-11). This uniform site designation scheme for archaeological sites in Canada was developed by archaeologist Charles Borden (1954). Within this system and north of latitude 62° (Figure 4-1), the upper case letters represent major blocks 2° by 4° in size (i.e., L = 64° to 66° latitude; N = 104° to 112° longitude) and the lower case letters denote 10' and 20' units within the major block (i.e. d = 30' to 40' latitude; s = 0' to 20' longitude). The numbers are assigned sequentially by the Archaeological Survey of Canada, Canadian Museum of Civilization and refer to specific sites within each unit.

4.6 Site Documentation

When identified, the locations of any archaeological sites encountered are recorded using Global Positioning System (GPS) coordinates in the NAD 83 format and the relationship of each site to the local physical features is documented. Site locations are plotted on 1:50,000 National Topographic Map Series map sheets and the relationship of each site to the Project is denoted. Site characteristics are also documented, including estimated dimensions, content, setting, and complexity. Each site is photographed using a digital camera. An Archaeological Site Record Form, including a site sketch map, are completed for each archaeological site identified and submitted to Department of Culture and Heritage and the Canadian Museum of Civilization as required.

4.7 Site Classification

Each site identified is classified on the basis of its primary physical attributes and/or predicted primary function. Precontact and historic site types include isolated finds, artifact scatters, campsites, quarries and stone features. Stone feature sites are stone alignments or configurations resulting from past human activity. Depending on the configuration of these features, function may be ascribed to these sites, for example campsites, drive lanes or caches.

4.8 Heritage Resource Values

Site values are determined on the basis of the results of the field program as well as the regional archaeological context and indigenous perspective. Generally, relative site value is based on the data obtained to date. Factors considered include site type, size, and complexity, presence or absence of subsurface materials and features, and number of artifacts observed. The scientific value of a specific site is deemed to be low if substantial disturbance or exposure has occurred or at sites with single artifacts or single features of limited antiquity. Sites at which large quantities of artifacts or diagnostic artifacts are present, or at which cultural stratification, or a large number of stone features, occur (particularly if they contain rare or unusual features), are classified as having high scientific value.

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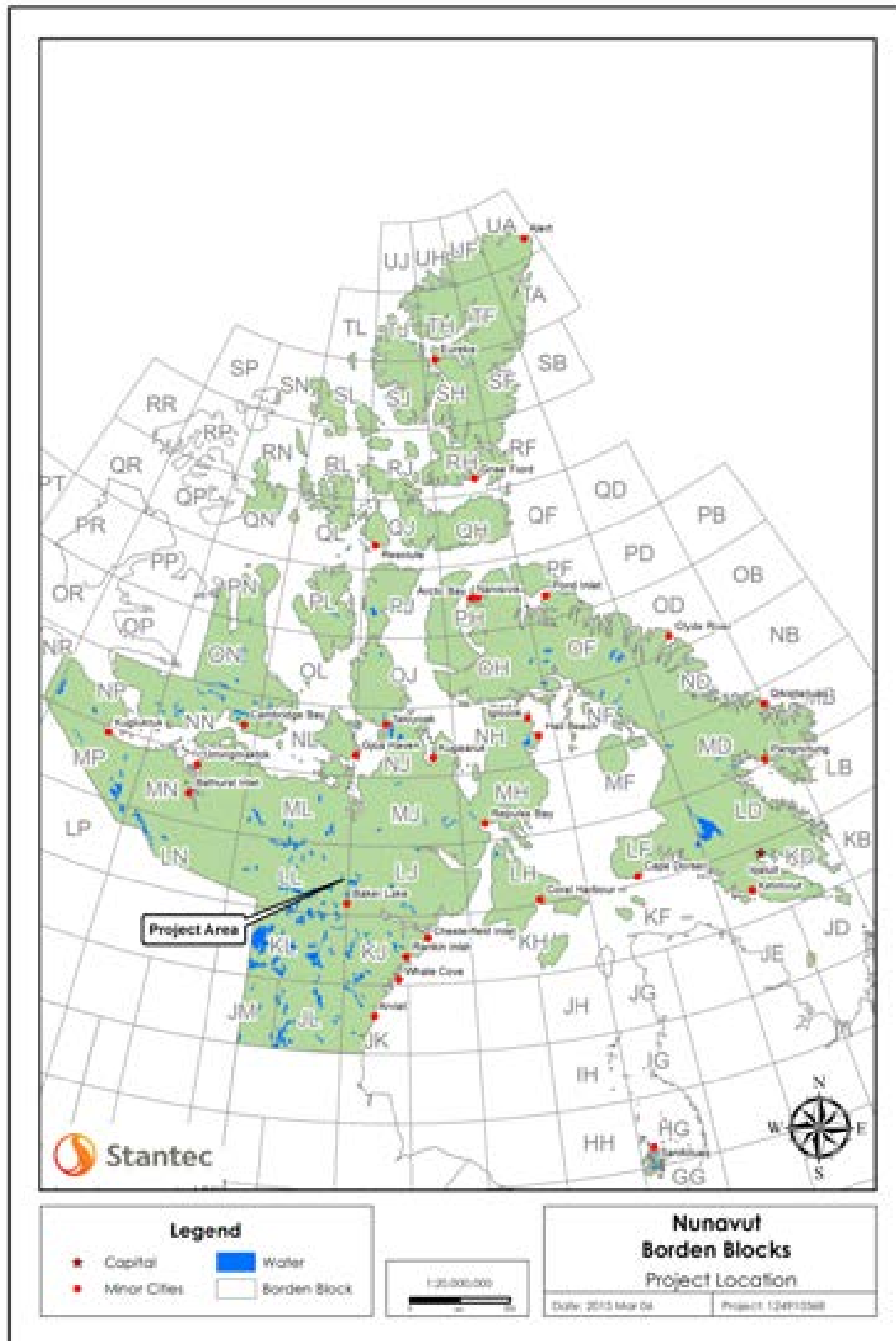


Figure 4-1 Borden units north of 60° relevant to the Project area

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In addition to these tangible variables, each site is viewed from the perspective of the regional data base. Aboriginal and public perspective of site value is also an important criterion in evaluating identified sites.

4.9 Formulation of Recommendations

Site specific recommendations are formulated primarily on the basis of the level of available information and the perceived values within the context of the predicted impact. Because of the non-renewable nature of heritage resources, avoidance as a mitigation measure is recommended as the preferred option at sites with established heritage values. Sites of limited scientific value and of limited ethnic value (for example, isolated artifact finds or fossil fragments) are generally not recommended for further study and are not considered for avoidance mitigation as the data collected at the archaeological impact assessment stage has effectively reduced or eliminated impact from the proposed development.

In general, site-specific mitigative measures recommended reflect the nature and content of each site and the heritage resource values ascribed to each site. As such, the site-specific scope of studies recommended at each site represents a professional judgment as to an appropriate balance in compensation for scientific and community information lost through site destruction.

The site-specific recommendation made for an identified site is based primarily on its location relative to proposed disturbance activities. Should disturbance to identified sites be anticipated as a result of the Project, further assessment and/or mitigation studies may be required. Mitigation requirements are determined by the Nunavut Department of Culture and Heritage.

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5.0 Results

5.1 Record Review

Numerous archaeological sites have been recorded within proximity of the Meadowbank Mine, including sites at the marshaling area/tank farm at Baker Lake, sites along the all-season road from Baker Lake to the Mine, and sites within proximity of the mine itself. Sites on record include possible prehistoric stone features, historic stone features, and historic/indigenous historic sites containing historic era materials, often associated with stone features. No sites containing prehistoric lithic artifacts had been identified relative to the Meadowbank Mine Project prior to the 2014 studies.

No previously recorded archaeological sites are on record within proximity (1 km) of the proposed winter road or any of the investigation areas assessed north of the Meadowbank Mine. Several sites were on record near the southern drill areas, but Agnico Eagle has UTM coordinates for all known site locations to ensure avoidance of known sites. One previously recorded site, LdLa-43 (a blind) was located within proximity of a drill location; the site was revisited during the current study to confirm that exploration activities had not affected the site.

5.2 Field Studies

Investigation assessment areas and site locations are illustrated in Figures 2-2 to 2-8. A total of eight archaeological sites were newly identified during the 2014 field studies, and one site was revisited. Identified archaeological sites are summarized in Table 5-1, and locations are illustrated in Figures 2-3 to 2-8.

5.3 Identified Sites

During the current study, eight archaeological sites were newly identified, and one previously recorded site was revisited. Sites investigated included eight stone feature sites, and one prehistoric lithic find. All sites were identified in surficial context during inspection of the investigation assessment areas.

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Table 5-1 Summary of sites investigated

| Site | Site Type Class | Cultural Affiliation | Site Type | Description | Geographical Setting | Recommendations |
|---------|---------------------------------------|----------------------|----------------------|---|--|---|
| LdLa-43 | Indigenous historic | Inuit | Hunting site | Stone feature – one blind; identified in 2010, revisited during the current study | High bedrock outcrop overlooking a drainage to the west | Ongoing avoidance; further investigation if future impact proposed. |
| LdLa-46 | Indigenous historic? Precontact? | Inuit? | Campsite | Stone features - one tent ring, one hearth, one collapsed inukshuk | South end of small lake, west of Whitehills Lake | Ongoing avoidance; further investigation if future impact proposed. |
| LdLa-47 | Indigenous historic? Precontact? | Inuit? | Hunting site, burial | Stone features - one blind, three traps/blinds/caches, one cache, one marker rock, one burial | South end of small lake, west of Whitehills Lake | Ongoing avoidance; further investigation if future impact proposed. |
| LhLb-1 | Indigenous historic? Precontact? | Inuit? | Campsite | Stone features – two tent rings | North side of narrows on Meadowbank River | Ongoing avoidance; further investigation if future impact proposed. |
| LhLb-2 | Precontact? Indigenous historic? | Inuit? | Campsite | Stone features - two traps, three collapsed inuksuit, a house or blind, and three stone uprights/marker rocks | Bedrock landform overlooking the Meadowbank River near a narrows | Ongoing avoidance; further investigation if future impact proposed. |
| LhLb-3 | Precontact | ASTt? | Isolated find | Lithic artifact - single grey chert burin found on the ground surface | Level landform overlooking the Meadowbank River near a narrows | Ongoing avoidance; further investigation if future impact proposed. |
| LhLb-4 | Indigenous historic? Precontact? | Inuit? | Campsite | Stone features - five tent rings, one rectangular feature (tent ring?) | End of esker that protrudes into the Meadowbank River | Ongoing avoidance; further investigation if future impact proposed. |
| LiLb-1 | Indigenous historic? Contemporary? | Inuit? | Campsite | Stone features - one hearth, one cairn or collapsed inukshuk | Wide cobble esker, west of Meadowbank River | Ongoing avoidance; further investigation if future impact proposed. |
| LiLb-2 | Contemporary? Indigenous historic? | Inuit? | Lookout | Stone feature - one collapsed marker | Level cobble covered landform between two unnamed lakes | Ongoing avoidance; further investigation if future impact proposed. |

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5.3.1 Stone Feature Sites (n=8)

Site LdLa-43

(Figure 2-8, 5-1; Plate 5-1; Table 5-1)

LdLa-43 is a previously recorded (Permit 2010-022A) hunting site consisting of a stone feature (blind). The site is located west of Whitehills Lake, east of the Thelon River, and just north of the Half Way Hills. The site is situated on a high bedrock outcrop overlooking a drainage to the west.

Relationship to the Project. Site LdLa-43 was revisited due to its proximity to exploration activities south of the Meadowbank Mine. The site was revisited to confirm avoidance and to update the site status. The site located on a high bedrock outcrop that was used previously as a borrow source; 2014 exploration activities were taking place to the north of this outcrop, in lower terrain. The site condition is unchanged, and the site's location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of a blind situated on a high bedrock outcrop, overlooking a drainage to the west. The blind is composed of number of small cobbles built on two boulders, facing west towards the drainage. The feature does not exhibit lichening of the rocks, and is not likely of antiquity. The site is located approximately 10 m to the southwest of an existing borrow source (quarry on a bedrock outcrop). The feature is unchanged from its condition and structure observed in 2010.

Given the presence of an undisturbed stone feature, this site has moderate heritage value.

Recommendations. Ongoing avoidance of LdLa-43 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

Site LdLa-46

(Figure 2-8, 5-2; Plates 5-2 to 5-5; Table 5-1)

LdLa-46 is a newly recorded campsite consisting of three stone features. The site is located west of Whitehills Lake, east of the Thelon River, and just north of the Half Way Hills. The site is situated on the south end of an unnamed lake on a large level landform.

Relationship to the Project. Site LdLa-46 was identified within the general vicinity of exploration activities. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

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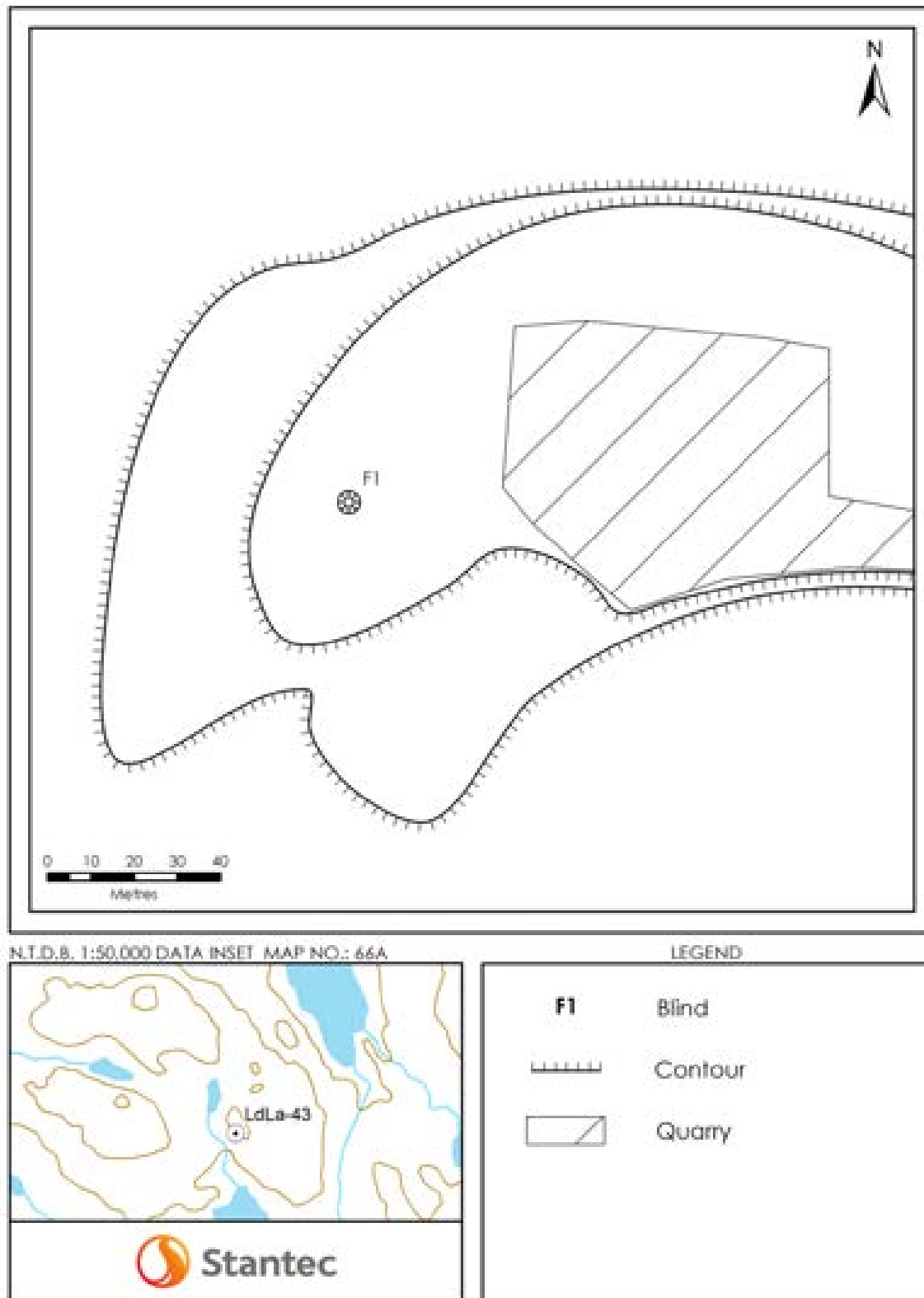


Figure 5-1 Site sketch map, LdLa-43

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Plate 5-1 View southwest at LdLa-43; the condition of the blind feature remains unchanged from that observed in 2010.

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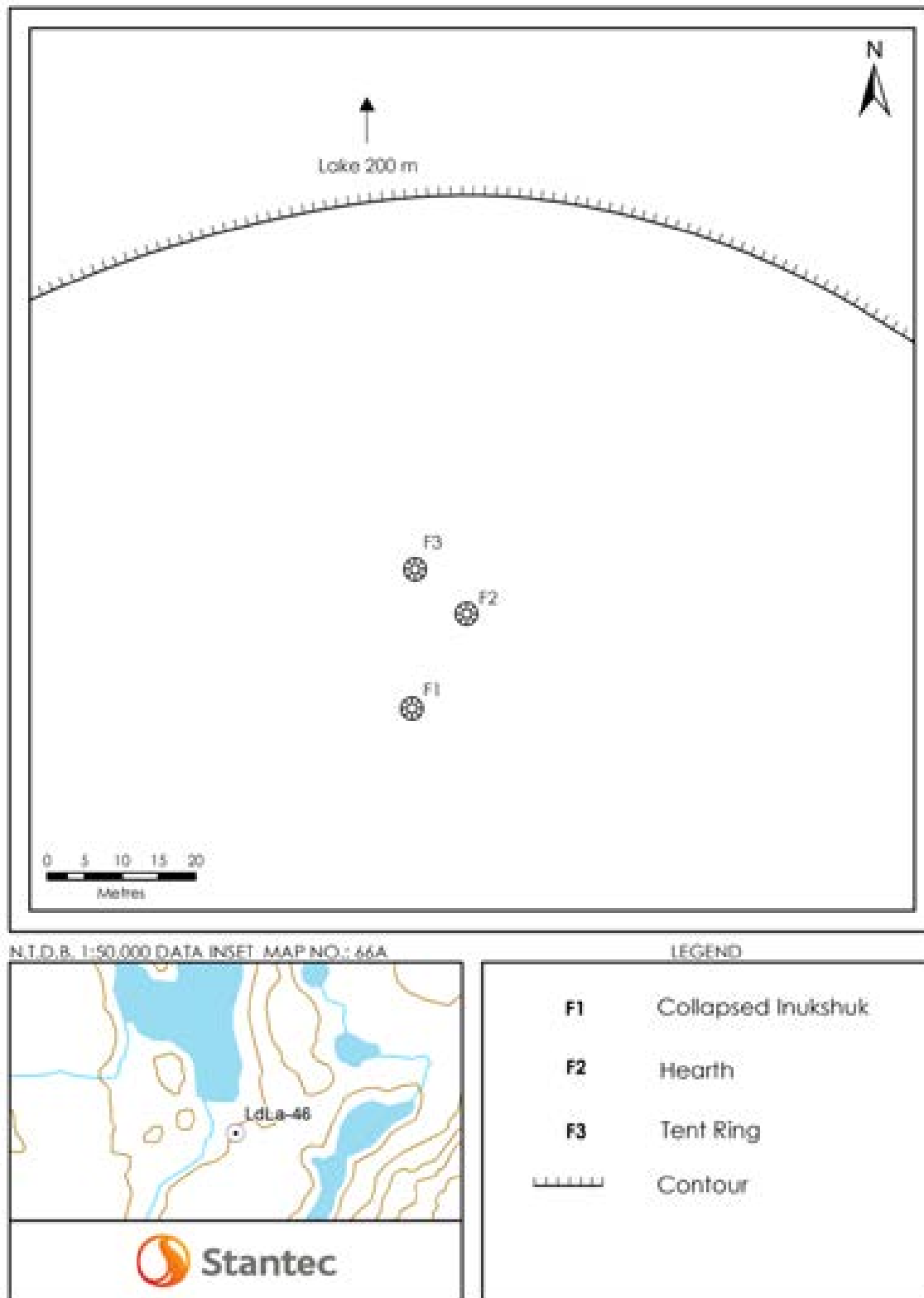


Figure 5-2 Site sketch map, LdLa-46

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Plate 5-2 View north at LdLa-46; collapsed inukshuk in foreground.

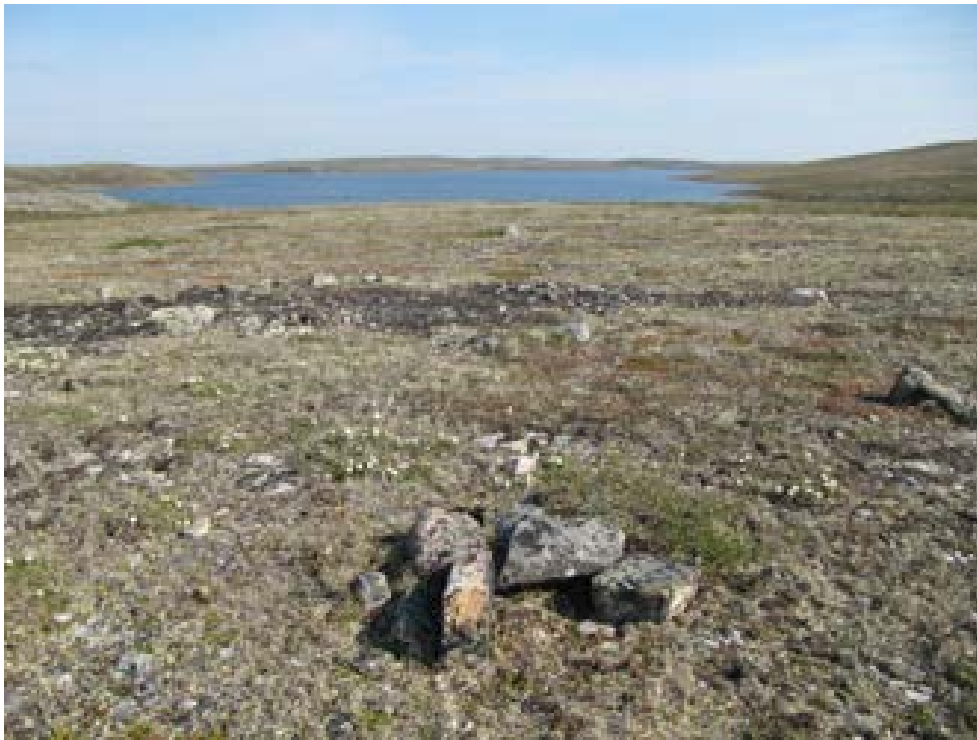


Plate 5-3 View north to the hearth at LdLa-46; the tent ring lies beyond the hearth to the north.

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Plate 5-4 View east showing the tent ring at site LdLa-46.



Plate 5-5 Detail of wood piece identified within the tent ring at LdLa-46.

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Evaluation. The site consists of three stone features identified over an area of approximately 20 m. Feature 1 (F1) is interpreted as a collapsed inukshuk; the feature is composed of nine cobbles that are positioned in a relatively tight cluster, possibly suggesting that this represents an inukshuk or taller cairn that has collapsed. Feature 2 (F2) is located to the north of Feature 1, and is a box hearth composed of five cobbles. Feature 3 (F3) is a tent ring exhibiting well sodded cobbles; the ring is approximately three m in diameter, and is composed of between 20 and 30 cobbles which are relatively sparsely distributed. On piece of weathered worked wood was observed in the ring.

Given the presence of three undisturbed stone features that may be of some antiquity and which may contain temporally or culturally diagnostic artifacts, this site has high heritage value.

Recommendations. Ongoing avoidance of LdLa-46 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

Site LdLa-47

(Figure 2-8, 5-3; Plates 5-6 to 5-13; Table 5-1)

LdLa-47 is a newly recorded hunting site and burial consisting of seven features. The site is located west of Whitehills Lake, east of the Thelon River, and just north of the Half Way Hills. The site is on the south end of an unnamed lake in an area of boulder outcrops just south of a large level landform.

Relationship to the Project. Site LdLa-47 was identified within the general vicinity of exploration activities. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of six stone features, caribou bone, and a burial over an area of approximately 100 by 100 m in size. The north-most feature (F6) is a blind which faces north towards the unnamed lake; the feature is tightly built into a rocky outcrop and is composed of approximately 20 cobbles. The cobbles that make up the blind exhibit significant lichen development, and as such the feature may be of some antiquity. To the south of this, within boulder outcrops, three features (F1, F2, F3) all adjacent to each other may represent additional blinds, open caches, or traps. These features are small in size (approximately one m in diameter interior) with well-defined walls and open tops. Like the blind, the cobbles that compose these features exhibit significant lichen growth on their surfaces.

A well-defined, open cache (F4) with caribou bone is present to the west of the traps/caches; the rocks composing the cache have pink exposed surfaces which easily distinguishes the cache from the surrounding bedrock, and which suggests that it is more recently used than some of the other features based on the different levels of lichen development.

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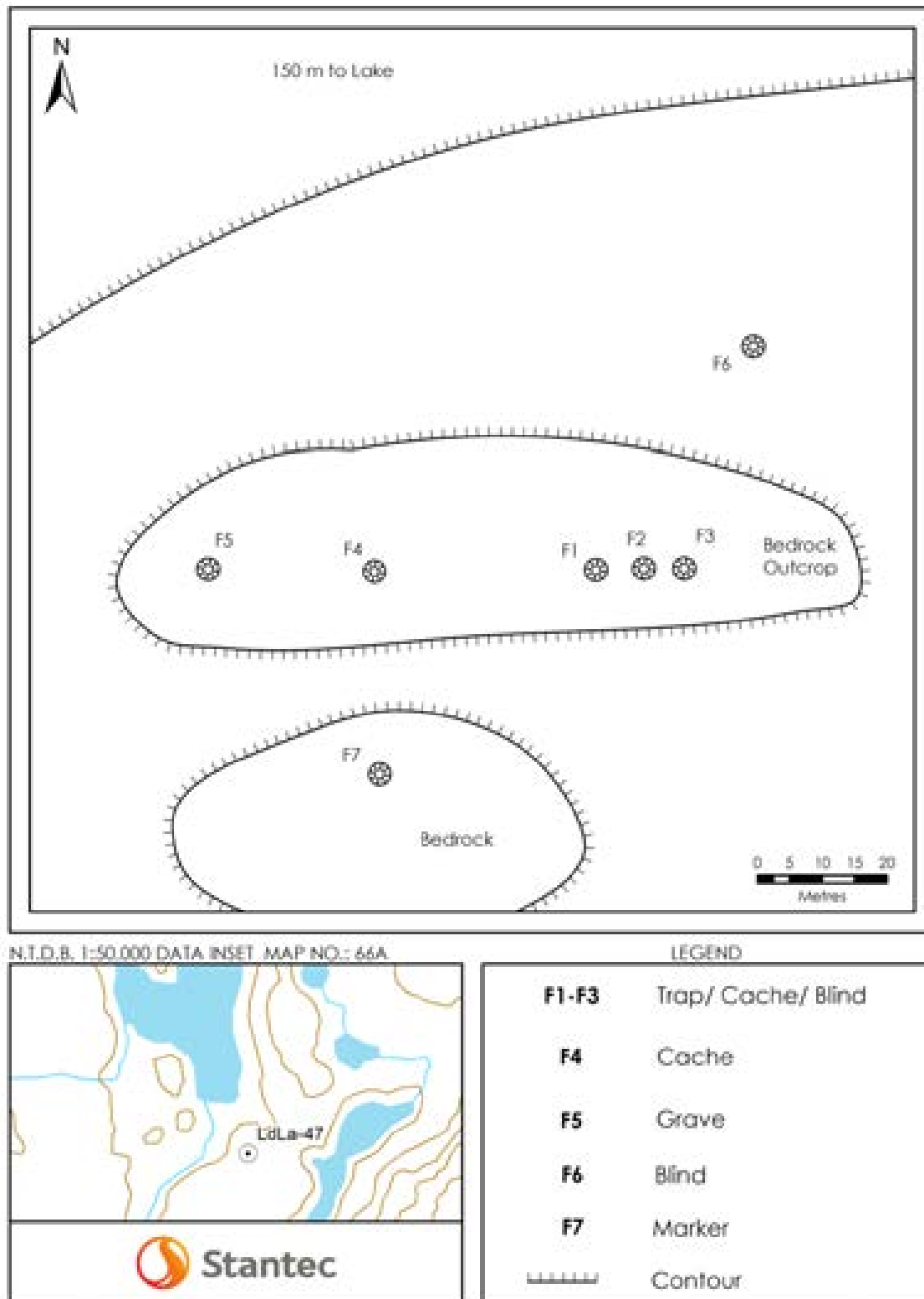


Figure 5-3 Site sketch map, LdLa-47

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Plate 5-6 View northeast at LdLa-47, blind (F6).



Plate 5-7 View south to F1 (possible blind, trap or cache) at LdLa-47.

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Plate 5-8 View south to F2 (possible blind, trap or cache) at LdLa-47.



Plate 5-9 View south to F3 (possible blind, trap or cache) at LdLa-47.

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Plate 5-10 View northwest to the open cache (F4) at LdLa-47; note pink exposed rock surfaces.



Plate 5-11 View north to the grave (F5) at LdLa-47.

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Plate 5-12 Detail of grave (F5) at LdLa-47.



Plate 5-13 View northwest at LdLa-47; marker rock (F7) is in foreground, and the remainder of the site can be seen in the boulder outcrop to the north; the arrow points to the open cache.

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A burial/grave lies to the west of the cache. The grave includes a nailed wooden box constructed from sawn wood that can be observed under boulders which have been piled on top of the box. The box does not appear to be sized for an adult or a baby, but may represent a child's (or small adult) burial. A broken wooden cross is present; the horizontal piece of the cross is no longer attached, but the vertical part of the cross is upright and relatively prominent. A pink rock interpreted as a marker rock is located to the south of all of these features, on a higher, prominent bedrock hill.

Given the presence of a number of undisturbed stone features that may represent different time periods and that may have some antiquity, and given the presence of a grave, this site has high heritage value.

Recommendations. Ongoing avoidance of LdLa-47 is recommended, and it is recommended that Agnico Eagle implement a buffer zone around this site to ensure no disturbance. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

Site LhLb-1

(Figure 2-6, 5-4; Plate 5-14 to 5-17; Table 5-1)

LhLb-1 is a newly recorded campsite consisting of two stone features. The site is located on the north side of a narrows along the Meadowbank River, approximately 100 m back from the narrows on an elevated, generally level area.

Relationship to the Project. Site LhLb-1 was identified within the general vicinity of possible future exploration activities or access. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of two tent rings each located on level landforms which are separated by a slightly lower, less well-drained area. Feature 1 (F1) is the western-most ring and is well-defined with tightly arranged rocks, with significant sodding and lichen growth; the ring is approximately 3 m in diameter and round in shape. Feature 2 (F2) is located approximately 60 m to the east, and is less well defined but heavily lichened. This ring is also approximately 3 m in diameter and round in shape. The degree of lichen growth and sodding of the rocks is suggestive of some antiquity. No artifacts or bone were observed.

Given the presence of two undisturbed stone features that may be of some antiquity and which may contain temporally or culturally diagnostic artifacts, this site has high heritage value.

Recommendations. Ongoing avoidance of LhLb-1 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

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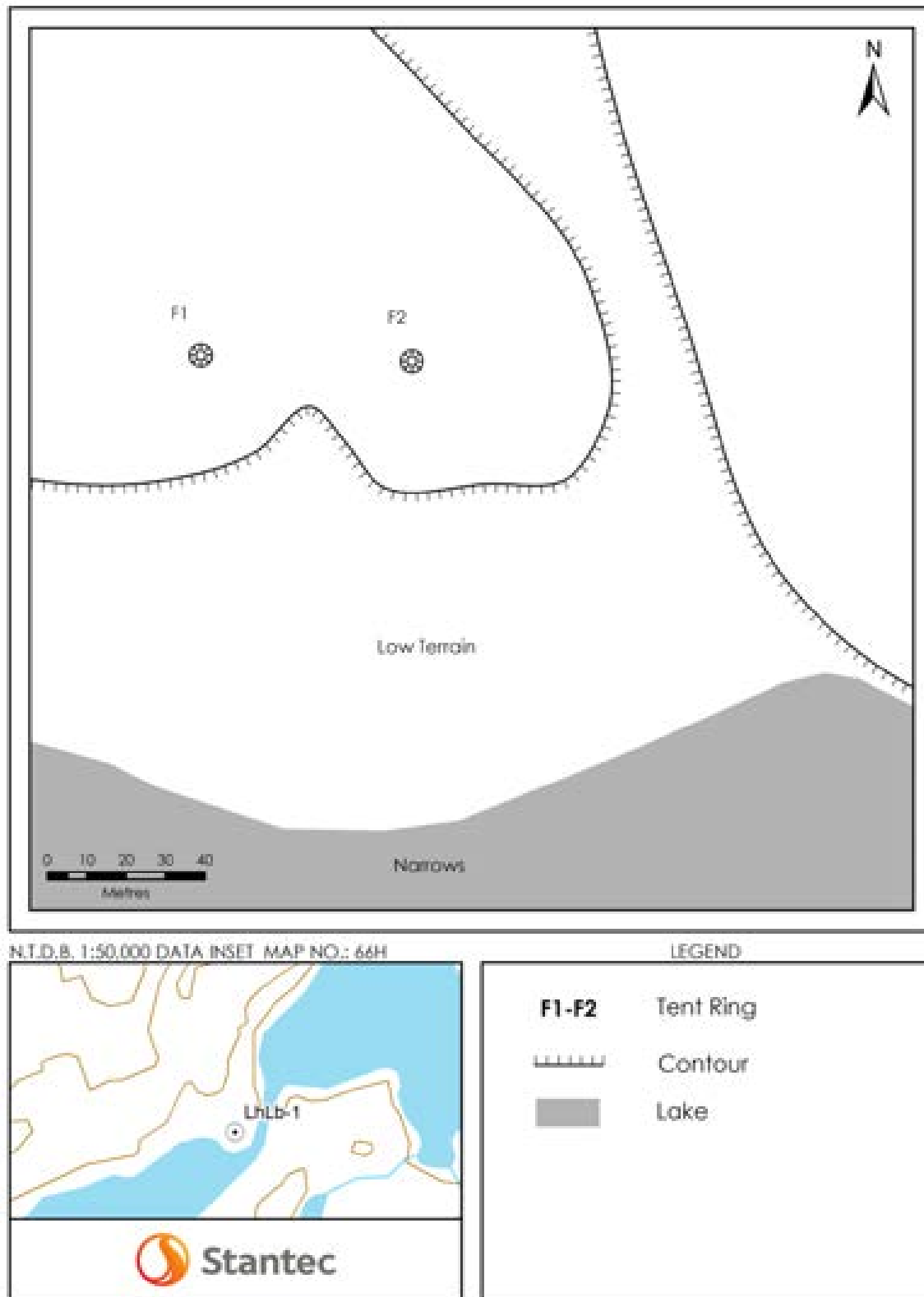


Figure 5-4 Site sketch map, LhLb-1

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Plate 5-14 View southeast to F1, a tent ring, at LhLb-1.



Plate 5-15 View south showing detail of west wall of F1 at LhLb-1.

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Plate 5-16 View south to F2, a tent ring, at LhLb-1.



Plate 5-17 View northeast to LhLb-1; F1 lies at left arrow, F2 at the right arrow.

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Site LhLb-2

(Figure 2-6, 5-5; Plate 5-18 to 5-29; Table 5-1)

LhLb-2 is a newly recorded campsite consisting of nine stone features. The site is situated on a prominent bedrock landform overlooking the Meadowbank River; at this location the river is a large lake with a well-defined narrows located just to the northeast of the landform.

Relationship to the Project. Site LhLb-2 was identified within the general vicinity of possible future exploration activities or access. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of nine stone features on a prominent bedrock landform overlooking the Meadowbank River; the river is very wide at this location, more like a lake. Two possible traps, three possible collapsed inuksuit, a house or blind, and three stone uprights/marker rocks were observed. The site occupies a very prominent location and the uprights would have been visible from a significant distance. Two weathered, curved wooden pieces were observed approximately 150 m to the northeast, and prehistoric site LhLb-3, at which a chert burin was recovered, is located approximately 200 m northeast of this stone feature site, overlooking the narrows.

Features 1 and 2 (F1, F2) are each likely traps or possible caches, both exhibiting relatively low walls. Each feature is less than 1 m in diameter, with significant lichen growth on the rock surfaces.

Features 3, 5 and 9 (F3, F5, F9) may represent collapsed inuksuit, as they are composed of multiple cobbles which lack a discernable shape. Feature 3 consists of a number of stacked stones; both Features 5 and 9 are represented by a number of rocks in a pile. Feature 9 has a small white cobble placed on the feature. All three of these features are heavily lichenized and appear to be of antiquity.

Features 4, 7 and 8 (F4, F7, F8) are all uprights or marker rocks; F5 and F7 are composed of a single rocks of pink stone, supported at their bases by smaller rocks. F8 is a slab of rock supported by smaller rocks at its base; this feature appears to have been deliberately placed at a prominent location overlooking the river/lake below. This feature in particular is visible from a great distance.

Feature 6 (F6) may represent a small living structure/house and/or blind. The base of the feature is generally round or oval, closed, and composed of relatively large cobbles. Some smaller cobbles stacked on the western side of the structure are suggestive of a blind. As with the other features at this site, there is significant lichen development on the rock surfaces, suggestive of antiquity.

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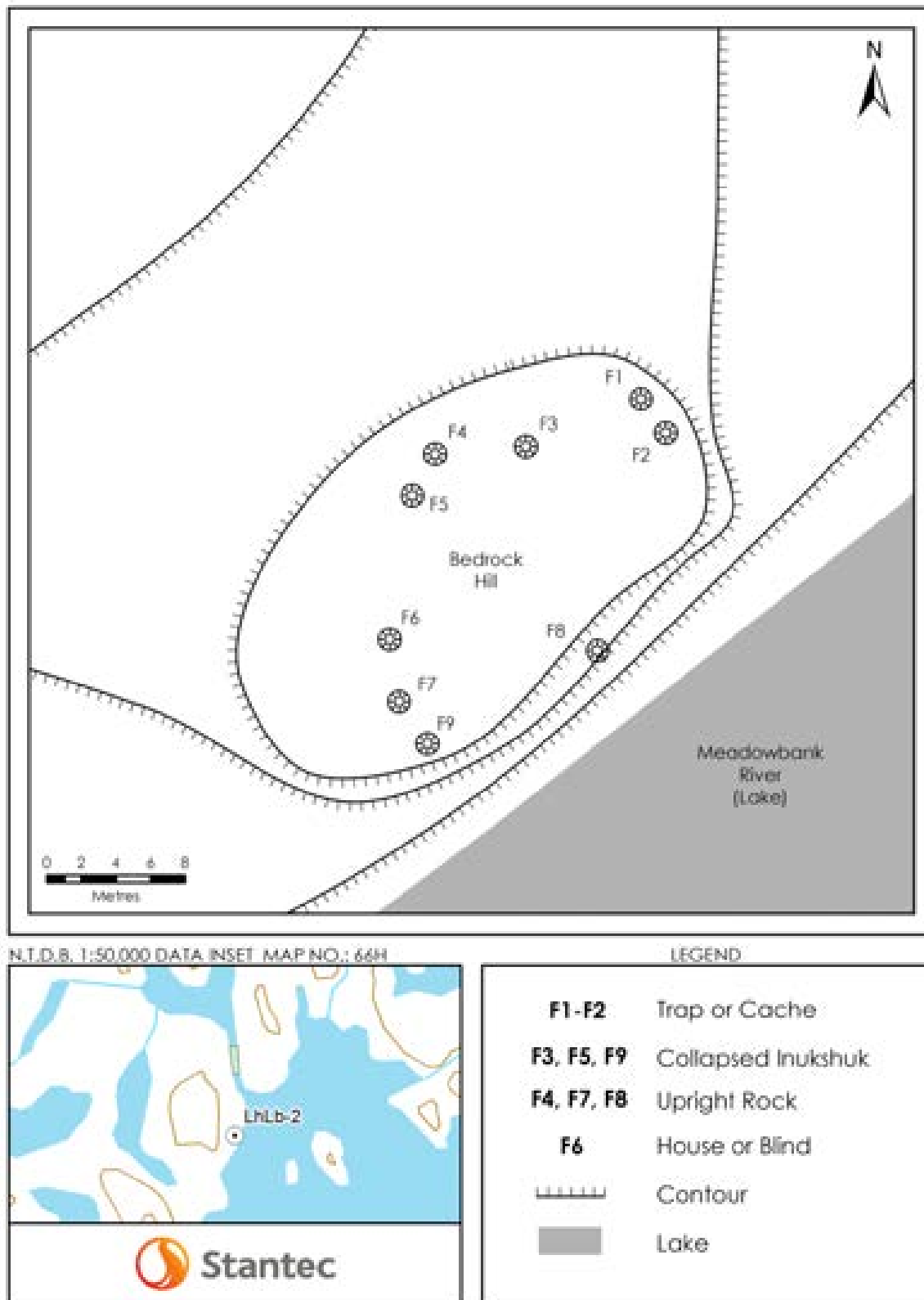


Figure 5-5 Site sketch map, LhLb-2

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Plate 5-18 View southwest to F1 (foreground) at site LhLb-2.



Plate 5-19 View southwest to F2 (foreground) at LhLb-2.

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Plate 5-20 View southwest to F3 at site LhLb-2.



Plate 5-21 View southwest to F4 at LhLb-2.

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Plate 5-22 View southeast to F5 at LhLb-2.



Plate 5-23 View southwest to F6 at LhLb-2.

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Plate 5-24 View southwest to F7 at LhLb-2.



Plate 5-25 View south to F8 at LhLb-2.

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Plate 5-26 View west to F8 at LhLb-2.



Plate 5-27 View west to F9 at LhLb-2.

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Plate 5-28 Wood piece observed to the east of site LhLb-2.



Plate 5-29 Detail of wood piece observed to the east of LhLb-2.

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Two pieces of curved wood that may have been worked were observed on the ground surface approximately 150 m to the northeast of this site. The wood pieces are between 50 cm and 100 cm in length, and are of unknown origin or purpose.

Given the presence of nine undisturbed stone features that may be of some antiquity and which may contain temporally or culturally diagnostic artifacts, this site has high heritage value.

Recommendations. Ongoing avoidance of LhLb-2 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

Site LhLb-4

(Figure 2-5, 5-6; Plate 5-30 to 5-37; Table 5-1)

LhLb-4 is a newly recorded campsite consisting of at least six stone features. The site is located at the end of an esker facing southeast into the Meadowbank River at a location at which the river has widened into a lake.

Relationship to the Project. Site LhLb-4 was identified within the general vicinity of possible future exploration activities or access. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of at least six stone features; additional features may be present. Features 1 and 2 (F1, F2) are tent rings with widely spaced cobbles; these rings are not heavily built and are somewhat sodded. Features 3 and 4 (F3, F4) are both tent rings or living structures that exhibit larger cobble construction, smaller diameters and dense, heavy walls. Feature 5 (F5) is a larger, round tent ring that is similar to F1 and F2 in the nature of the walls, but is larger and made of larger cobbles. Feature 6 (F6) appears to be rectangular in nature, but consists of widely scattered cobbles.

Given the presence of several undisturbed stone features of some antiquity, which may contain temporally or culturally diagnostic artifacts, this site has high heritage value.

Recommendations. Ongoing avoidance of LhLb-4 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

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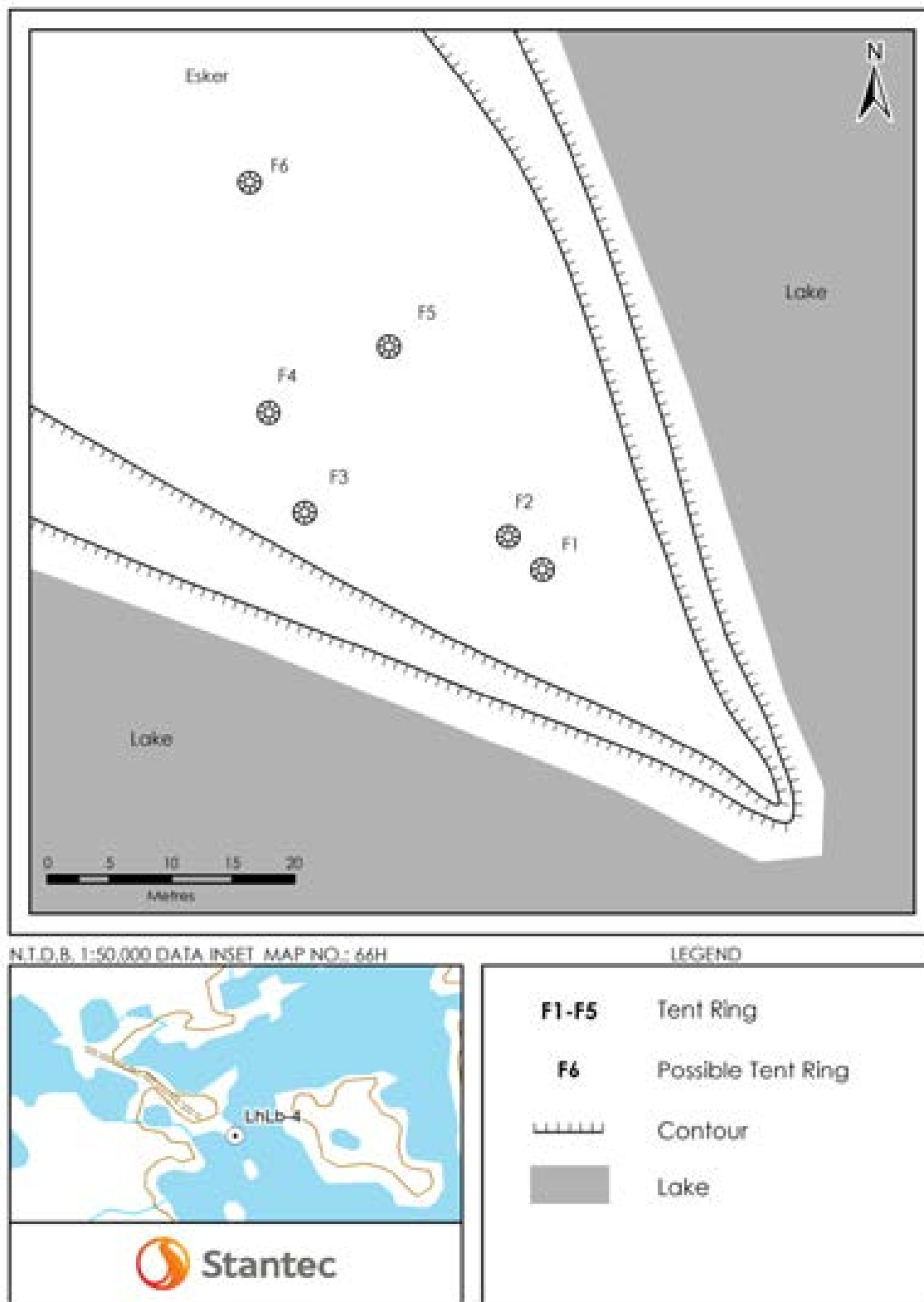


Figure 5-6 Site sketch map, LhLb-4

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Plate 5-30 View northwest from end of esker to site LhLb-4.



Plate 5-31 View southeast, Feature 1 at LhLb-4.

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Plate 5-32 View north, Feature 2, LhLb-4.



Plate 5-33 View west, Feature 3, LhLb-4.

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Plate 5-34 View south, Feature 4, LhLb-4.

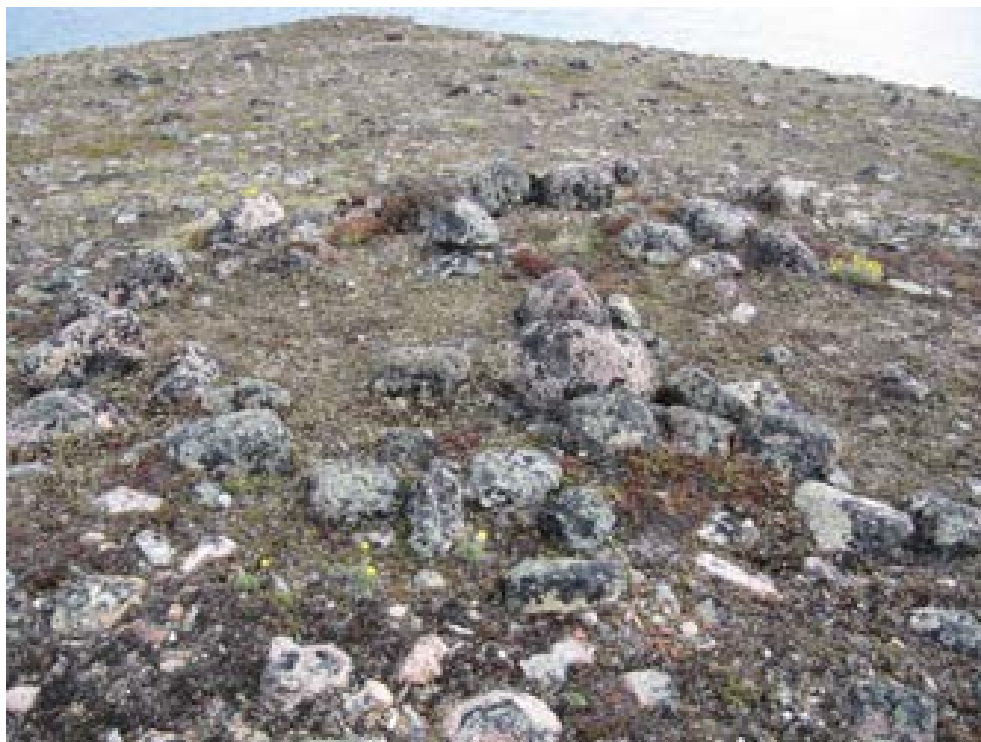


Plate 5-35 View south, Feature 5, LhLb-4.

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Plate 5-36 View west, Feature 6, LhLb-4.



Plate 5-37 Aerial view southeast showing LhLb-4 location.

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Site LiLb-1

(Figure 2-4, 5-7; Plates 5-38 to 5-40; Table 5-1)

LiLb-1 is a newly recorded campsite consisting of two stone features. The site is located on a wide cobble esker west of the Meadowbank River; the site is on the southwest facing side of the level esker overlooking unnamed lakes.

Relationship to the Project. Site LiLb-1 was identified within close proximity of the proposed winter road. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of two stone features. One feature is a cairn that may represent a collapsed inukshuk or taller cairn. There are three main cobbles as well as some smaller cobbles distributed over an area of approximately one m. The second feature is a round hearth that is open on the south side. It is composed of approximately 10 cobbles, one of which is a bright white cobble. The features are approximately three m apart. The features do not exhibit a heavy degree of lichen development, and are not likely of great antiquity.

Given the presence of two undisturbed stone features which may contain temporally or culturally diagnostic artifacts, this site has moderate to high heritage value.

Recommendations. Ongoing avoidance of LiLb-1 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

Site LiLb-2

(Figure 2-5, 5-8; Plates 5-41 to 5-42; Table 5-1)

LiLb-2 is a newly recorded lookout site consisting of a single stone feature. The site is located on a level, cobble covered landform between two unnamed lakes; the site generally faces south.

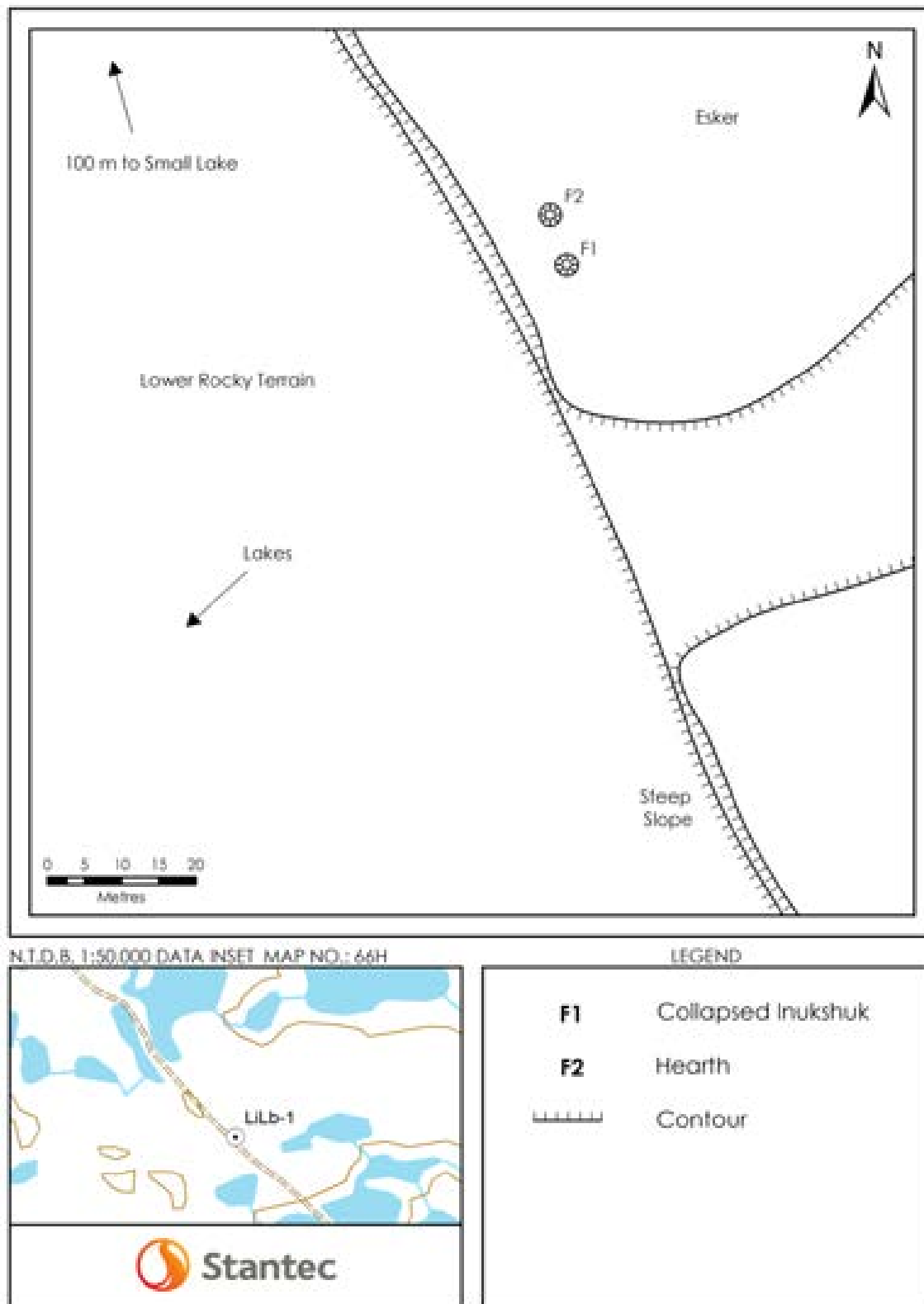
Relationship to the Project. Site LiLb-2 was identified within proximity of the proposed winter road. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. The site consists of a single stone feature that is likely contemporary but possibly historic/indigenous historic; the site is a small (three cobbles) feature situated on a cobble-covered hill. The feature may represent a marker or collapsed inukshuk. The feature does not exhibit a heavy degree of lichen development, and is not likely of great antiquity.

Given the presence of a single undisturbed stone feature that is not likely of antiquity, this site has moderate heritage value.

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Plate 5-38 View north showing LiLb-1 setting (stone features in foreground).



Plate 5-39 View north to the marker or collapsed inukshuk at LiLb-1.

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Plate 5-40 View north to the hearth at LiLb-1.

ARCHAEOLOGICAL IMPACT ASSESSMENT Meadowbank Mine 2014 Exploration Program

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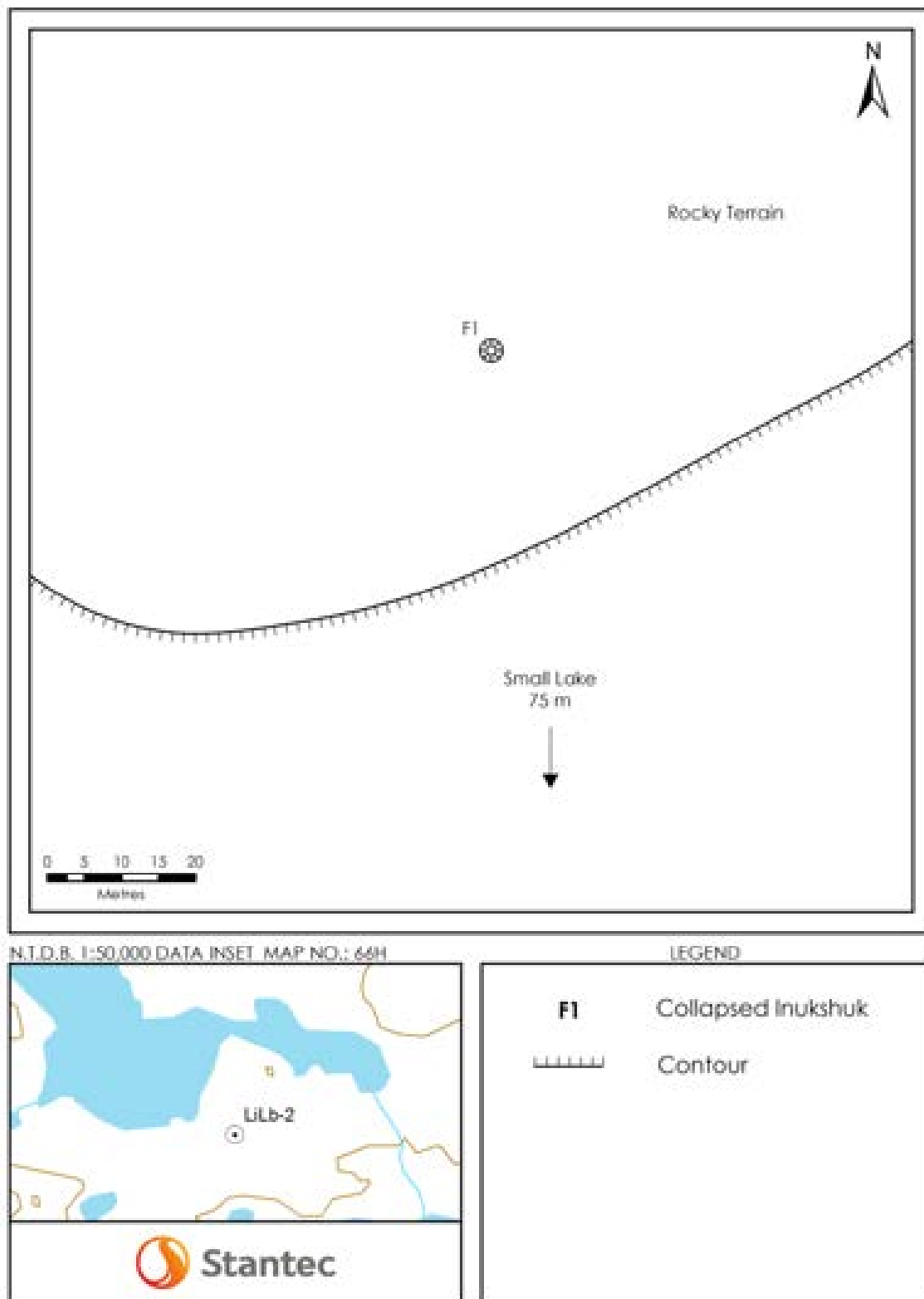


Figure 5-8 Site sketch map, Lilb-2

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Plate 5-41 View south showing Lilb-2 setting (foreground).



Plate 5-42 View south to the cairn at Lilb-2.

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Recommendations. Ongoing avoidance of LhLb-2 is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation, community consultation) is recommended.

5.3.2 Precontact Lithic Finds (n=1)

Site LhLb-3

(Figure 2-6, 5-9; Plates 5-43 to 5-45; Table 5-1)

LhLb-3 is a newly recorded precontact isolated find site consisting of a single light grey chert burin. The site is located on a level landform overlooking the Meadowbank River to the southeast (at this location the river is a large lake), and a well-defined narrows to the located northeast.

Relationship to the Project. Site LhLb-3 was identified within the general vicinity of possible future exploration activities or access. The site is undisturbed and its location has been provided to Agnico Eagle to ensure ongoing avoidance. No impacts are anticipated.

Evaluation. A single precontact stone tool, a burin, was recovered from the ground surface. Artifact LhLb-3:1 is a small, complete burin fashioned from a light grey chert. The dorsal surface is slightly convex. Dorsal modification is apparent, with flake scars traversing approximately 90% of its surface. The ventral surface is concave with moderate modification observed along the edges. The base has been bifacially flaked resulting in a thin concave edge. The right lateral edge has been moderately flaked on both the dorsal and ventral surfaces and displays continuous usewear. A negative bulb of percussion is evident at the distal end where several burin spalls or small flakes were removed at an oblique angle producing a serrated edge along the left lateral side caused by the spalls or small flakes terminating in hinged fractures. This suggests that the burin was resharpened more than once as it would have dulled during use. The process of removing additional burin spalls restores the dull bit of the working edge for continued use. This tool would have been used as a fine chisel implement for various materials and may have been discarded due to the inability to further remove spalls to sharpen the edge. The artifact has a maximum length of 20.05 mm, a maximum width of 10.88 mm, a maximum thickness of 3.48 mm and weighs 0.7 g.

Given the recovery of a precontact stone tool and the potential for additional temporally or culturally diagnostic artifacts to be present, this site has high heritage value.

Recommendations. Ongoing avoidance is recommended. If avoidance is not feasible relative to future potential impacts, additional study (mapping, excavation) is recommended.

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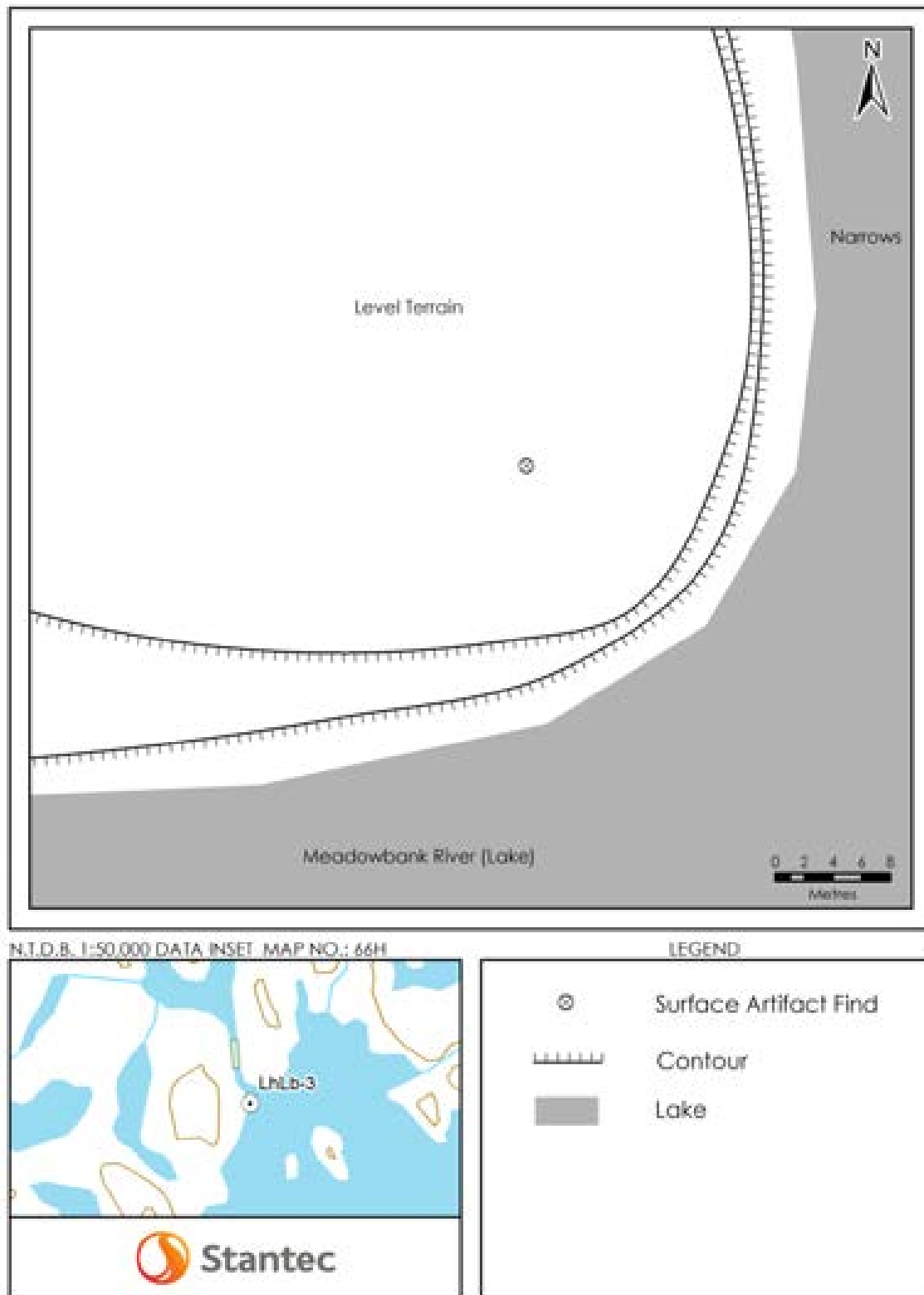


Figure 5-9 Site sketch map, LhLb-3

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Plate 5-43 View northeast showing LhLb-3 artifact find location.



Plate 5-44 View southwest; LhLb-3 lies on the level terrain in foreground, and stone feature site LhLb-2 is visible on the elevated landform beyond.

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Plate 5-45 **Artifact LhLb-3:1, a chert burin.**

ARCHAEOLOGICAL IMPACT ASSESSMENT

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Summary and Recommendations
March 2015

6.0 Summary and Recommendations

At the request of Agnico Eagle, Stantec conducted an archaeological impact assessment for the Meadowbank Mine 2014 Exploration Program under Nunavut Archaeological Permit 14-017A. The 2014 archaeological program included assessment of exploration activities to the southwest of the Meadowbank Mine, and in the Amaruq (formerly IVR) exploration area to the northwest of the Meadowbank Mine; some additional potential future exploration areas were also assessed northwest of the Meadowbank Mine. In addition, a proposed winter road extending from Meadowbank Mine to the Amaruq exploration area was also assessed.

During the archaeological impact assessment, eight archaeological/historic sites were newly identified, including two sites within proximity of the winter road corridor, and six within proximity of exploration areas. A ninth site was revisited to confirm its relationship to the project and to update the site status.

Of these nine archaeological sites, eight are stone feature sites, each represented by between one and nine features; some of these sites appear to be historic or possibly contemporary in age, whereas some sites appear to be of greater antiquity. The ninth site identified is a precontact archaeological site represented by a single surficial artifact find consisting of a burin made of light grey chert.

None of the sites were identified in conflict with the exploration program. Locational information for these newly recorded sites was provided to Agnico Eagle to ensure ongoing avoidance by exploration activities. Agnico-Eagle has committed to ensuring avoidance of archaeological sites during exploration activities, and has continued to demonstrate this commitment by conducting these archaeological studies. As such, no further study is recommended for the archaeological sites identified during this program as long as Agnico Eagle continues to ensure avoidance.

The investigation areas as illustrated in this document (Figures 2-3 to 2-8; purple polygons) are recommended to be completely assessed relative to archaeological resources. No further archaeological investigation is recommended within these areas, with the exception of the archaeological site locations, which should be subject to further investigation if they are proposed for future impact.

ARCHAEOLOGICAL IMPACT ASSESSMENT

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APPENDIX E

AEM 2014 Wildlife Monitoring

| <div>AGNICO EAGLE</div> <div>2014 Amaruq Wildlife observation</div> | | | | | | | |
|---|---------|----------------------|----------------------|----------------------------|---|-------------------|--|
| Date | Time | Wildlife species | Number of individual | Place | Behavior | Observer Name | Action taken |
| 13/05/2014 | 3H00AM | Wolverine | 1 | Amaruq_14-041 SITE AREA | Run away | Sylvain Thivièrge | Nothing |
| 01/07/2014 | all day | Caribou | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 02/07/2014 | all day | Caribou | 1 | Core shack & drill | Stay around | Steeve Lavoie | Nothing |
| 03/07/2014 | all day | Caribou | 1 | Core shack & drill | Stay around | Steeve Lavoie | Nothing |
| 04/07/2014 | all day | Caribou | 1 | Core shack & drill | Stay around | Steeve Lavoie | Nothing |
| 05/07/2014 | all day | Caribou | 1 | Drill | Stay around | Steeve Lavoie | Nothing |
| 06/07/2014 | all day | Caribou | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 07/07/2014 | all day | Caribou | 1 | Core shack & drill | Stay around | Steeve Lavoie | Nothing |
| 08/07/2014 | all day | Caribou | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 17/07/2014 | 16h30 | Siksik | 1 | Between drill & cores hack | Stay around | Jerome Lavoie | Nothing |
| 02/08/2014 | 13H00 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 03/08/2014 | 16H40 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 04/08/2014 | 7H00 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 05/08/2014 | 16h00 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 06/08/2014 | 18h15 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 07/08/2014 | 15h45 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 08/08/2014 | 11h15 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 09/08/2014 | 14h00 | Caribou | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 09/08/2014 | 9h00 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 10/08/2014 | 9h30 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 11/08/2014 | 18h15 | Siksik | 1 | Core shack | Stay around | Steeve Lavoie | Nothing |
| 20/08/2014 | day | Siksik | 1 | Amaruq area | Stay around | Jerome Lavoie | Nothing |
| 21/08/2014 | day | Siksik+Geese | 1+50 | Amaruq area | Eat on the ground | Jerome Lavoie | Nothing |
| 22/08/2014 | day | Geese | 75 | Amaruq area | Eat on the ground | Jerome Lavoie | Nothing |
| 23/08/2014 | day | Geese+caribous | 100+20 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 24/08/2014 | day | Geese+caribous | 200+70 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 25/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 26/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 27/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 28/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 29/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 30/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 31/08/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 01/09/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 02/09/2014 | day | Geese+caribous | 300+100 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 03/09/2014 | day | Geese+caribous | 400+50 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 04/09/2014 | day | Geese+caribous | 400+30 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 05/09/2014 | day | Geese+caribous | 500+10 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 06/09/2014 | day | Geese+caribous, wolf | 500+10+1 | Amaruq area | Sparse, pay no attention to us, wolf pass by us 200 fts | Jerome Lavoie | Verified if herd could be seen, just isolated caribous |
| 07/09/2014 | day | Geese+caribous | 500+3 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Nothing |
| 08/09/2014 | day | Geese+caribous | 100+1 | Amaruq area | Sparse, pay no attention to us | Jerome Lavoie | Nothing |
| 09/09/2014 | day | Geese, fox | 50, 1 | Amaruq area | Sparse, pay no attention to us | Steeve Lavoie | Nothing |
| 10/09/2014 | day | Geese | 25 | Amaruq area | Sparse, pay no attention to us | Steeve Lavoie | Nothing |
| 14/09/2014 | day | Fox+Wolves | 1+10 | Amaruq/Esker area | Walking on the area | Surveyor Team | Leave the area by Helico |
| 17/09/2014 | day | Siksik | 1 | Amaruq area | Stay around | Steeve Lavoie | Nothing |
| 21/09/2014 | day | Rabbit | 1 | Amaruq area | Stay around | Steeve Lavoie | Nothing |