AGNICO EAGLE

Proposed All-weather Exploration Road from the Meadowbank Mine to the Amaruq Site

Baseline Traditional Knowledge Report

Version 2

December 2014

DOCUMENT CONTROL

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2	2015 -01-12	3.4.1	16	Footnote added to clarify which David Owingayak made the quote at the bottom of the page.

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Executive Summary

This traditional knowledge study focused on the area that may be affected by development of the Amaruq deposit, which is located about 60 km to the northwest of the Meadowbank Mine. Agnico Eagle is proposing to construct an all-weather exploration road to this deposit, to facilitate the continuation of exploration activities year-round.

This study concentrated on traditional Inuit knowledge of the area between the Back River and the Meadowbank Mine, and is based on a limited research component, plus a two-day workshop held in Baker Lake in December 2014. Ten Elders participated, eight men and two women, and all attended the whole workshop. All had lived in and travelled through the area. They contributed actively and enthusiastically, generously sharing their wisdom.

Discussions revolved around use of the land and wildlife of the area, survival in difficult times, legends and stories, their observations of changes in weather, climate and animal populations in recent years, establishing a baseline of placenames on a map of the area, and getting a few recommendations from the Elders as to their concerns about the project.

Many detailed stories were told regarding life when these people lived on the land, and their observations of their environment and of the wildlife that shared the land. Notes made over the two days captured these stories and form the basis for this report.

Wildlife discussions included stories of the caribou and how the people who lived in this area were totally dependent on caribou. They discussed the gradual return of the muskox to this area of the arctic. Other mammals were also highlighted; these were vital in the life of the Caribou Inuit in the past – wolves, bears, foxes and other smaller mammals so important during the fur trade years. Even newcomers such as moose and marten were mentioned. They told of fish - lake trout, arctic char, and smaller fish, and how these were critical when there were no caribou to be found. In addition, they talked of the springtimes, the coming of geese, ducks and swans to the many lakes of their land, helping vary their diets.

They spoke of the difficult times, the famine years of the 1950s, sharing personal stories of hardship and heroism, of parents who went without food so their children could survive, of walking from the Back River to Baker Lake and back again to bring food to families camped on the land, too weak to travel. In the end, they said the famine times made them stronger.

They shared stories of fish so large they could perhaps swallow a person, of shamans, spirits and shapechangers, and of the Tunit, strong people who inhabited the land before the Inuit came.

Finally, they spoke of changes they have seen in the weather, the condition of the snow, the sudden thaws of springtime, rainstorms, lightning and smoke from fires now not so far away. Additionally, they spoke of changes in where the sun rises and sets, and in the placement of the moon and stars.

They had a few recommendations for Agnico Eagle Mines. For the most part, these have to do with keeping contamination of the land to a minimum, respecting wildlife, and ensuring that local people assist with studies of the important esker area and the road route.

ᖃᐅᔨᓴᕐᓂᐅᓚᐅᖅᑐᖅ ᓇᐃᓪᓕᒋᐊᖅᓯᒪᔪᖅ

ᑕᒪ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᕆᑦ ᐊᑐᖅᓱᒋᑦ ᖃᐅᔨᓴᕈᑕᐅᓚᐅᖅᑐᖅ, ᐊᒪᕈᒃ ᐅᔭᕋᒃᑕᕆᐊᕐᕕᐅᓂᐊᖅᑐᐸ ᐊᕙᑕᓂ, ᐅᖓᓯᓂᖅᖅᓱᓂ 60 ᓄᒪ ᐊᐳᖅᑎᓐᓇᖅᑐᐸ ᐊᑦᒐᐊᓂ. ᐊᒡᓂᑯ ᐃᑯ ᐅᔭᕋᒃᑕᕆᐊᑦ ᐊᐸᖁᑎᓕᐅᕈᐊᖅᑐᑦ ᑕᐃᑯᖓ, ᐅᔭᕋᒃᑕᕆᐊᖅᑕᒥᓂᒃ ᕿᓂᕐᓱᑎᒃ ᓱᓕ. ᐊᐸᖁᑦ ᐊᑐᒐᐅᑕᕋᔭᖅᑐᕐ ᓴᓇᔭᐅᒍᒥ ᐅᑭᐅᓗᒃᑕᖅ.

ᖃᐅᔨᓴᒐᐅᓗᐊᓚᐅᖅᑐᖅ ᐃᓄᐃᑦ ᐊᑐᕐᓂᖓ ᓄᓇᒥᒃ, ᓴᓂᖓᔪᐸ ᑯᖓᓂᑦ, ᐊᐳᖅᑎᓂᓇᖅᑐᐸ ᐊᕙᑕᓄᑦ, ᒪᕈᓄᑦ ᐅᐸᓗᒃᓄᑦ ᐃᓄᑐᖃᐃᑦ ᖃᑎᒪᖃᑎᒋᔭᐅᓚᐅᖅᑐᑦ ᑐᑭᓯᒐᒥᒃ ᓄᓇᒥᒃ ᐊᑐᕐᓂᖑᒥᓂᒃ, ᑲᑎᒪᓚᐅᖅᑐᑦ ᖃᒪᓂᑐᐊᕐᒥ, ᑎᓯᐱᕆᖑᑎᓗᒍ 2014ᒥ. ᖁᓕᑦ ᐃᓄᑐᖃᐃᑦ ᐃᓚᐅᓚᐅᖅᑐᑦ, 8 ᐊᖑᑎᑦ, 2 ᐊᕐᓇᒃ, ᑕᒪᕐᒥᒃ ᑲᑎᒪᔭᖅᑐᑦᓯᐊᖅᓱᑎᒃ. ᖃᐅᔨᓴᕐᓂᐅᔪᐸ ᓴᓂᐊᓂᓗ ᐊᕙᑕᓂᓗ ᐃᓄᓯᒪᔪᑦ ᑕᒪᕐᒥᖃᔭᖅ, ᖃᐅᔨᓴᑦᓯᐊᖅᓱᑎᒃ ᓄᓇᒥᒃ. ᑕᒪᕐᒥᒃ ᐃᑲᔪᕐᓂᖅᖅᓯᐊᑐᑦ, ᖁᕕᐊᓱᒃᑐᑦ, ᐊᒥᖅᖃᑎᒋᒃᑐᑦ ᖃᐅᔨᒪᔭᕐᒥᓂᒃ.

ᐅᖃᓗᒃᑕᖅᑎᓗᒋᑦ ᐅᖃᐅᓯᕆᓚᐅᖅᑕᖓᑦ ᓄᓇ ᐊᑐᖅᐸᓚᐅᖅᑕᕆᑦ ᐊᒪᓗ ᓂᕐᔪᑎᑦ ᐅᒪᔪᑎᒋᑕᖅᑕᕆᑦ, ᑭᖑᓂᕐᒥᓗ ᐃᓄᐃᑦ ᑲᒃᔪᐊᓂᕆᓚᐅᕐᑕᖓᓂᒃ ᐅᖃᓗᐱᒃᓴᓇᐅᕐᒥᔪᑦ. ᐃᓚᓂᒃ ᐅᓂᑉᑲᖅᑐᐊᕐᓂᒃ, ᓯᓚᐅᐸᓗ ᐊᓚᖑᖅᐸᓕᐊᓂᖓᓂᒃ, ᓂᕐᔪᑎᑦᓗ ᐊᓚᖑᖅᐸᓕᐊᓂᕆᓂᒃ ᐊᒥᖅᖃᑎᖃᖅᑐᑦ ᖃᐅᔨᓴᖅᑎᓂᒃ. ᓄᓇᖑᐊᕐᒥᒃᓗ ᐊᑐᖅᓱᑎᒃ ᐊᑎᕆᓂᒃ ᑎᑎᕋᒃᑕᖅᓱᑎᒃ, ᐊᒪᓗ ᐅᔭᕋᒃᑕᕆᐊᕕᐅᓯᐊᖅᑐᖅ ᖃᓄᖅ ᐃᓱᒪᒋᔭᐅᒪᖔᑦ ᐃᑲᔪᕐᓂᖅᖅᑐᓂᒃ ᐅᖃᖅᑕᓚᐅᕐᒥᔪᑦ.

ᑕᑯᐊ ᐃᓄᑐᖃᐃᑦ ᐃᓂᕝᑲᖅᑐᐊᓚᐅᖅᑐᑦ, ᑭᖑᓂᕐᒥ ᓄᓇᒥᐅᑕᐅᑎᓗᑎᒃ ᑭᖑᓂᕐᒥ, ᐊᒪᓗ ᓄᓇᓗ ᓯᓚᓗ ᖃᐅᔨᓴᖕᒐᐃᓇᖅᓱᒍ, ᓂᕐᔪᑎᑦᓗ ᐃᖏᕋᓂᕐᒥᓂᒃ ᐅᕝᖅᑐᖅᓱᑎᒃ, ᐃᓄᓚᐅᕋᒥᒃ ᓄᓇᒥ. ᑕᒪᑯᐊ ᐃᓄᑐᖃᐃᑦ ᐅᖃᐅᓯᖏᑦ ᐃᑲᔪᕐᓂᖅᖅᑐᑦ ᐊᒪᓗ ᑕᑯᐊ ᐃᓱᒪᒋᔭᐅᓂᐊᕐᑐᑦ, ᖃᐅᔨᓴᕐᓂᕐᒧᑦ.

ᓂᕐᔪᑎᓂᒃ ᐅᖃᐅᓯᖅᖅᑎᓗᒋᑦ, ᑐᑭᓯᓇᓚᐅᖅᑐᖅ ᑐᒃᑐᐃᑦ ᐅᒪᔪᑕᐅᓗᐊᓚᐅᕐᒪᑕ. ᑐᑭᓯᓇᓚᐅᕐᒥᔪᖅ ᑕᒪᑯᐊ ᐅᒥᒪᐃᑦ ᐊᒥᓱᖑᖅᐸᓕᐊᓂᖓᑦ, ᓄᓇᒥ. ᐊᓯᖏᑦ ᓂᕐᔪᑎᑦ ᐅᖃᐅᓯᐅᓚᐅᕐᒥᔪᑦ, ᐊᒪᕈᐃᑦ, ᐊᒃᓚᑦ, ᑎᕆᖓᓂᐊᑦ, ᐊᒪᓗ ᐊᓯᖏᑦ ᒥᑭᔪᑦ ᓂᕐᔪᑎᑦ. ᐃᓚᖏᑦ ᐃᓄᑐᖃᐃᑦ ᑕᑯᕙᓚᐅᕐᒥᔪᑦ ᓂᕐᔪᑎᓂᒃ ᑕᑯᓇᓗᐊᖅᐸᖏᑐᓂᒃ, ᑐᒃᑐᕙᓂᒃ ᐊᒪᓗ ᑎᕆᐊᕐᔪᐊᕐᓂᒃ. ᑐᒃᑐᖃᓗᐊᖏᓕᕋᖓᑦ, ᐃᖃᓗᐃᑦ ᐅᒪᔪᑕᐅᓂᖏᑦ ᐅᖃᐅᓯᖃᓚᐅᕐᒥᔪᑦ, ᐃᓗᕋᓂᒃ, ᐃᖃᓗᒃᐱᒃᓂᒃ, ᐊᒪᓗ ᒥᑭᓂᖅᓴᓂᒃ ᐃᖃᓗᓂᒃ. ᐅᑭᐅᑉ ᐃᖏᕋᓂᖓᓂᒃ, ᐅᐃᖓᓴᖑᑎᓗᒍ, ᐊᐅᔭᐅᑎᓗᒍ, ᐅᑭᐊᓴᐅᑎᓗᒍ, ᑕᒪᑯᐊ ᐅᖃᐅᓯᐅᓚᐅᕐᒥᔪᑦ, ᐃᓄᑐᖃᕐᓂᑦ. ᑎᖕᒥᐊᑦᓗ, ᐃᒪᕐᒥᐅᑕᑦ ᓂᑭᐅᕙᓚᐅᕐᒥᔪᑦ ᐊᐅᔭᒥ ᐊᓯᖏᑦᓗ ᓂᕐᔪᑎᑦ.

ᐃᓄᑐᖃᐃᑦ ᐅᓂᑉᑲᓚᐅᕐᒥᔪᑦ ᐃᓄᐃᑦ ᑲᔪᐊᕐᑎᓗᒋᑦ 1950 ᑭᖑᓂᖓᓂᓗ, ᑕᒪᑯᐊᓗ ᐊᒃᓱᕈᓂᖏᑦ ᑐᑭᓯᓇᑦᓯᐊᖅᓱᑎᒃ. ᐊᒥᓱᑦ ᐅᖃᓚᐅᖅᑐᑦ ᑲᒃᓇᕐᔪᐊᖅᑎᓗᒍ, ᓱᓇᒥᐊᓂᒃ ᕿᓂᖅᐸᓚᐅᖅᑐᑦ, ᓄᑕᕋᖏᑦ ᐅᒪᓂᐊᕐᒪᑕ. ᐃᓚᖏᑦ ᓴᓂᖓᔪᒥᑦ ᖃᒪᓂᑐᐊᕐᒧᑦ ᐱᓱᒃᐸᓚᐅᖅᑐᑦ ᓂᕿᓂᒃ ᐊᐃᒃᓯᓱᑎᒃ, ᐊᒪᓗ ᐅᑎᖅᓱᑎᒃ ᓴᓂᖓᔪᒧᑦ, ᕿᑐᖓᖏᑦ ᓂᖏᓂᐊᕐᒪᑕ. ᑐᑭᓯᓇᓚᐅᖅᑐᖅ ᑲᔪᐊᓗᐊᒧᑦ ᑕᒪᕐᒥᒃ ᐊᓇᒃᓯᒪᒪᑕ, ᐅᖃᖅᓱᑎᒃᓗ ᑕᒪᓇ ᐱᒍᓕᕐᓇᖅᑐᖅ ᐃᓄᓯᕐᒧᑦ.

ᐊᓯᖏᑦ ᐅᖃᐅᓯᐅᓚᐅᕐᒥᔪᑦ, ᐃᖃᓗᔪᐊᑦ ᐃᓯᔪᒃᓇᖅᑐᑦ ᐃᓄᓂᒃ, ᐃᓚᖏᑦ ᐊᖓᑯᓂᒃ ᐃᑲᐅᒪᔭᒥᓂᒃ ᐅᖃᐅᓯᖅᖅᓱᑎᒃ. ᑕᒪᑯᐊ ᐃᓄᑐᖃᐃᑦ ᐅᖃᐅᓯᖏᑦ ᐃᑲᔪᕐᓂᖅᕐᓂᐊᕐᑐᑦ ᖃᐅᔨᓴᒐᐅᓂᕐᒧᑦ.

ᑭᖑᓕᖅᐸᒥᒃ ᐃᓄᑐᖃᐃᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᓯᓚᐅᐸ ᐊᓚᖑᖅᐸᓕᐊᓂᖓᓂᒃ, ᐊᐳᑎᐅᐸ ᐊᓚᖑᕐᓂᖓᓂᒃ, ᐊᐅᐸᓕᐊᑎᓗᒍᓗ ᒪᓂᕋᒃ ᐊᐅᕋᓚᒃᐸᓂᖓᓂᒃ, ᓂᐸᓗᒃᔪᐊᖅᑕᕐᓂᕐᒥᒃ, ᐅᑲᓕᔭᖅᑕᕐᓂᕐᒥᒃ ᓂᐸᓗᒃᖓᑦ, ᐊᐅᔭᒥᓗ ᓯᓇ ᐃᓯᓐᓇᐊᔪᐊᐸᓂᖓᓂᒃ, ᑕᒪᑯᐊ ᑐᑭᓯᔭᖕᒋᑦ ᑐᓴᕐᓇᓚᐅᖅᑐᑦ. ᓯᕿᓂᐅᐸᓗ, ᐅᐸᓗᓇᐊᑦᓗ

ᐊᑐᕐᓂᖏᓂᒃ ᐃᖏᕋᔪᓂ ᐅᖃᐅᓯᐅᓚᐅᕐᒥᔪᖅ, ᑕᒪᓇᓗ ᐊᓚᖑᖅᐸᓕᐊᓂᖓᓂᒃ. ᑕᕿᐅᑉᓗ ᐃᖏᕋᓂᖓ, ᐅᑉᓗᐃᑦᓗ ᑕᑭᓂᖓ, ᑕᒪᑯᐊ ᐊᓯᖏᑦᓗ ᖃᐅᔨᒪᔭᖏᑦ ᐅᖃᐅᓯᕆᑉᓗᒋᑦ.

ᐅᔭᕋᒃᑕᕆᐊᕐᕕᐅᔪᒪᔪᑉ ᓴᓂᐊᓂ ᐊᕙᑕᓂᓗ ᖃᓄᖅ ᐱᓕᕆᐊᕆᔭᐅᔭᕆᐊᖃᕐᒪᖔᑦ ᐅᖃᓚᐅᖅᑐᑦ, ᐅᓗᕆᐊᓇᖅᑐᑦ ᐅᔨᖅᑐᕐᓗᒋᑦ, ᓄᓇᓗ, ᐃᒪᕐᓗ ᒥᐊᓂᕆᓗᒍ ᑲᒪᒋᑦᓯᐊᕐᓗᒋᑦ ᐃᓱᒪᒋᕐᑯᔭᐅᔪᑦ, ᑕᑯᓇᖔᑦ ᐃᓄᑐᖃᕐᓂᑦ. ᓂᕐᔪᑎᑦᓗ ᐃᒪᕐᒥᐅᑕᑦᓗ ᐅᓯᕆᓗᒋᑦ, ᓄᓇᓗ ᖃᐅᔨᓴᕆᐅᒍᒥ ᐃᓄᓂᒃ ᐃᑲᔪᖅᑎᖃᕐᑯᔨᔪᑦ, ᐊᑉᕐᑯᑦ ᓴᓇᔭᐅᓯᐊᕐᑎᓗᒍ ᐅᔭᕋᒃᑕᕆᐊᓂᑦ.

1. Background and objectives

This study concentrated on the Traditional Knowledge (TK) of the area between the Back River and the Meadowbank Mine. There are two major existing traditional knowledge reports for the Meadowbank Project: the *Meadowbank Gold Project Baseline Traditional Knowledge Report* (Cumberland Resources, October 2005), and a report from an Inuit Qaujimajatuqangit workshop done in Chesterfield Inlet (Nuanmi Stantec, 2010). In addition, the excellent book *Inuit Nunamiut: Inland Inuit* (Mannik, 1998) includes in-depth interviews from many Elders who lived in the project area. The Meadowbank Traditional Knowledge Report seems very complete, so this study adds to, rather than replicates, the work done previously for the Meadowbank project.

2. Methodology

2.1 Research

In consultation with Agnico Eagle management, Page Burt and John Witteman developed an overall plan for the project, and then discussed the general plan with people on the ground in Baker Lake to ensure there was input to the plan coming from the community.

In consultation with Charlie Tautuajuk (Agnico Eagle Mines' IIBA Coordinator in Baker Lake) and interpreter Michael Haqpi, we determined that doing a workshop with a selected group of Elders would probably yield the most valuable information in a timely fashion.

We were not seeking general traditional knowledge or information on lifestyles in the Baker Lake area as this has been covered in the TK reports for the Meadowbank Mine, but were seeking specific information about the area now under consideration for the proposed road. This concept is important so that the people in Baker Lake understand that we respect the knowledge of ALL Elders and people in the community, but were seeking a specialized piece of knowledge in this endeavour.

2.2 Literature survey

We have performed a relatively brief survey of the available literature on Inuit knowledge of the area between the Back River and the Meadowbank Mine, trying to meld information in anthropological reports with information reported by local Inuit with emphasis on that which has come directly from the people. Since the *Inuit Land Use and Occupancy Project* is based on hundreds of interviews with people many of whom are no longer living, we felt it important to capture some of this knowledge as it relates to where different groups lived and travelled. Hattie Mannik's book *Inuit Nunamiut: Inland Inuit* also includes interviews of several people who lived in the study area. However, it was heavily used in the original traditional knowledge study for the Meadowbank Mine, so we have not depended heavily on it for this report. *Inuktitut* magazine provided an unexpected source of material. Articles are often

written by people from Baker Lake or the Kivalliq/Keewatin Region, plus many back issues are available in scanned form online (*Inuktitut*, 1967- present).

2.3 Research Licence

As per requirements for any research of this sort, we applied for and received a Research Licence from the Nunavut Research Institute. A copy of this Licence is attached in **Appendix 1,** along with the summary of information provided to the NRI to acquire the licence.

2.4 Methods used to establish the questions for the meeting

Following suggested protocols for traditional knowledge research as outlined in the Meadowbank Traditional Knowledge Baseline Report (2005) and on the Nunavut Research Institute website, we developed a series of topics and questions to explore with the Elders. This Guidelines document was submitted to the Nunavut Research Institute along with the research licence application, and further refined in consultation with the research team in Baker Lake.

The Guidelines were not intended to be rigidly followed, but to outline a general approach flexible enough to allow us to pursue the interests of the participants for as long as they wished to speak on a subject. Due to time constraints and fatigue of the participants, we did not get to all of the questions but were able to cover most.

2.5 Selection of participants

This study was not intended to be a “community consultation” as Agnico Eagle would organize meetings to inform the community about the project and get their input. It was very targeted – we wanted to speak with people with personal experience in the exact area of the deposit and proposed road, to get their outlook and information about use of the land.

Charlie Tautuajuk and Michael Haqpi consulted with several Elders and developed a list of people who had personal living experience in the area under consideration and who might be able to meet and consult on the subject. They then contacted each person on the list and developed a list of those who were available during the second week of December for a meeting. They then hand-delivered an invitation to these people and reviewed it personally.

Because many of the people are older Elders, we decided that a two-day workshop would be best, running from 9 am – 3 pm and including lunch, as Elders appreciate having lunch at a restaurant and seldom get to do this. We chose Nunamiut Lodge based on its popularity in Baker Lake.

We ended up with 10 participants. Michael agreed to interpret and assist with the workshop, and Agnico Eagle agreed to our use of Peter's Expediting Ltd. to pick up any Elders who wanted a ride.

In respect for their roles as consultants in this project, each Elder was paid an honorarium for their contributions.

2.6 Meetings in Baker Lake

A two-day meeting was scheduled for Dec. 9-10. The weather cooperated, and all ten Elders attended both days of the workshop and participated fully. (See Appendix 2 for a list and brief biography of all participants, and Appendix 4 for workshop photos.)

It was a stellar list, totally targeted to people who had either lived in the area or travelled through it to get to their hunting and fishing camps on the Back River.

2.7 Procedure for acquisition of placenames

We used two main printed/laminated maps of the area to the north of Baker Lake, one showing the area all the way to the Back River (Energy Mines & Resources Canada Map 66A), and an enlarged map of the area of the Amaruq deposit site and proposed road. The Elders asked for larger maps [covering a larger area, particularly the area to the east and northeast of the Meadowbank Mine (Energy Mines & Resources Canada, Maps 56E and 56D)], but, due to weather, we were unable to acquire these in Baker Lake. So, we used a laptop and Google Earth images, which could be controlled by simply enlarging and moving the area displayed. Everyone clustered around the maps and the exchange of information and active discussion far outstripped any attempt to translate, so we asked interpreter Michael Haqpi to just get the info onto the map as quickly as he could.

Most of the participating Elders, certainly all the men, greeted the use of Google Earth with enthusiasm, and became very involved in contributing placenames, particularly for lakes. Michael Haqpi started a list in which he noted the names phonetically, with coded numbers, which we placed on the map.

Almost all names contributed were names of lakes, plus a few rivers. They said they did not name eskers, but when speaking describe them by the nearest lake. They also did not name caribou crossing places, but were able to indicate these on the Google Earth image and on the printed maps.

We asked about frequently used camping sites, plus special places such as grave sites or places where there are several inuksuit. They suggested a few of these, but it was apparent that it is easier for them to identify gravesites in particular from the ground, by actually following landmarks to locate the site. And, it was apparent that the area being studied was in general part of an area through which people travelled to get to somewhere else, usually the Back River, but also Chantrey Inlet. They spoke knowledgeably of many sites along the Back River where there were fish weirs, many tent rings, qayaq

cradles, storage caches, fox or wolf traps, drying racks, and inuksuit. However, most did not know of significant sites in the area around the Amaruq deposit and the proposed road.

If the travel through this area usually occurred while snow covered the ground, then it is understandable why people would simply not know of many structures, as most are hard to locate when the ground is covered with snow.

3. Results

This meeting resulted in the collection of much information about the life and travels of Inuit in the area from the 1950s to the present, as well as much Inuit Qaujimajatuqangit regarding survival on the land in adverse conditions and knowledge of wildlife, weather, and climate. See Appendix 3 for the original notes by John Witteman and Page Burt, made during the workshop, and for examples of the annotated maps.

3.1 Place names

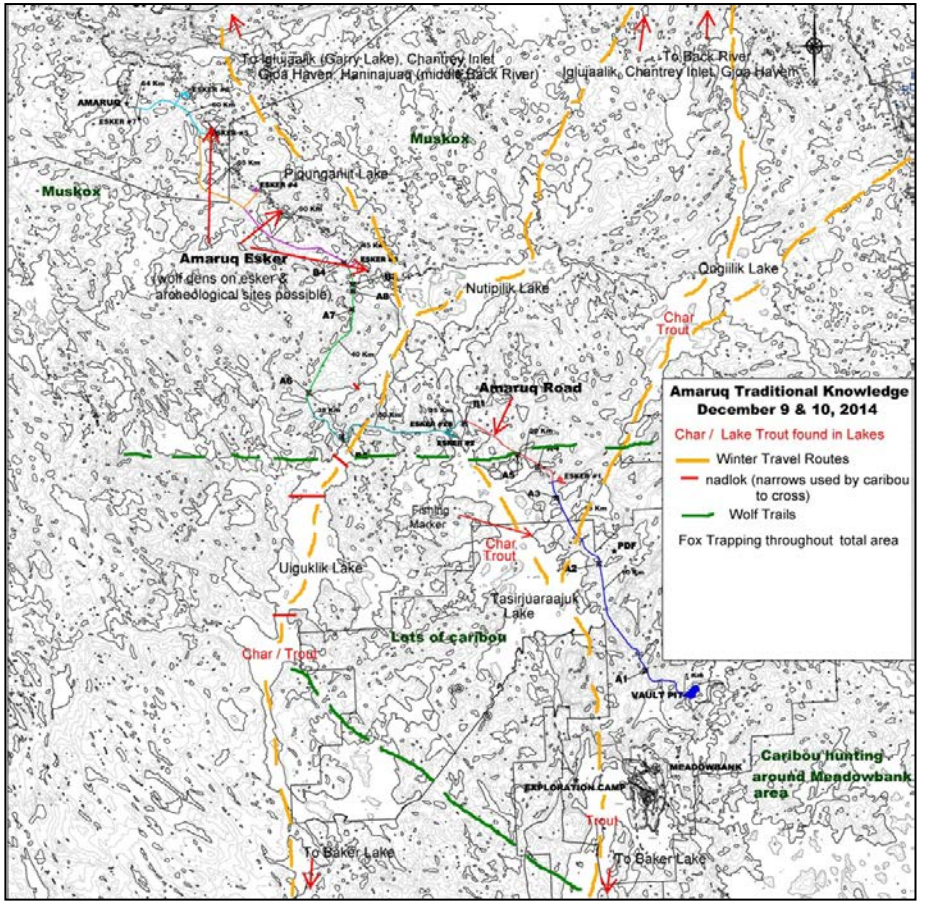
We were hopeful that we could acquire a number of new placenames for land features in the project area, and were not disappointed. These Elders were familiar with maps and well able to identify place names. Figure1, figure 2 and figure 3 follow. These maps compiled the traditional knowledge provided by the elders. Figure 1 contains most of the information developed during the workshop. Figure 2 is a Google Earth image with the addition of placenames acquired during the workshop, many outside the bounds of figure 1. Figure 3 uses the same Google Earth image as figure 2 but contains additional names and information from the earlier the Meadowbank Traditional Knowledge Baseline Report in 2005.

These maps can become the working map for the the development of the road and should be considered dynamic tools. Additional placenames and data can be added to the maps as work continues on the project.

3.2 Additional place names from KIA research

KIA has also conducted research on placenames in the Baker Lake area. However, we heard of this too close to the time of this study, and the people involved were away on holidays and not to return in time to incorporate this info into the report. Since this map will become the working map for the project, it is important that any additional placenames determined by KIA be added. KIA has indicated an interest in sharing the placename knowledge, as soon as the lands people return.

Figure 1. Amaruq All-Weather Exploration Road



The figure compiles all the information gathered from the elders at the December 9 and 10, 2014 Traditional Knowledge workshop in Baker Lake. The Elders gathered around the map and pointed out the lakes they travelled across in winter, fished and hunted caribou at narrows. The names of the lakes were provided.

Many of the lakes were fished for Lake Trout and Arctic Char in the past. Caribou are/were hunted throughout the entire area. Muskoxen have been expanding their range from the Northwest. Definitive wolf trails were noted.

Figure 2. Place Names for Lakes, Camps and Points of Interest

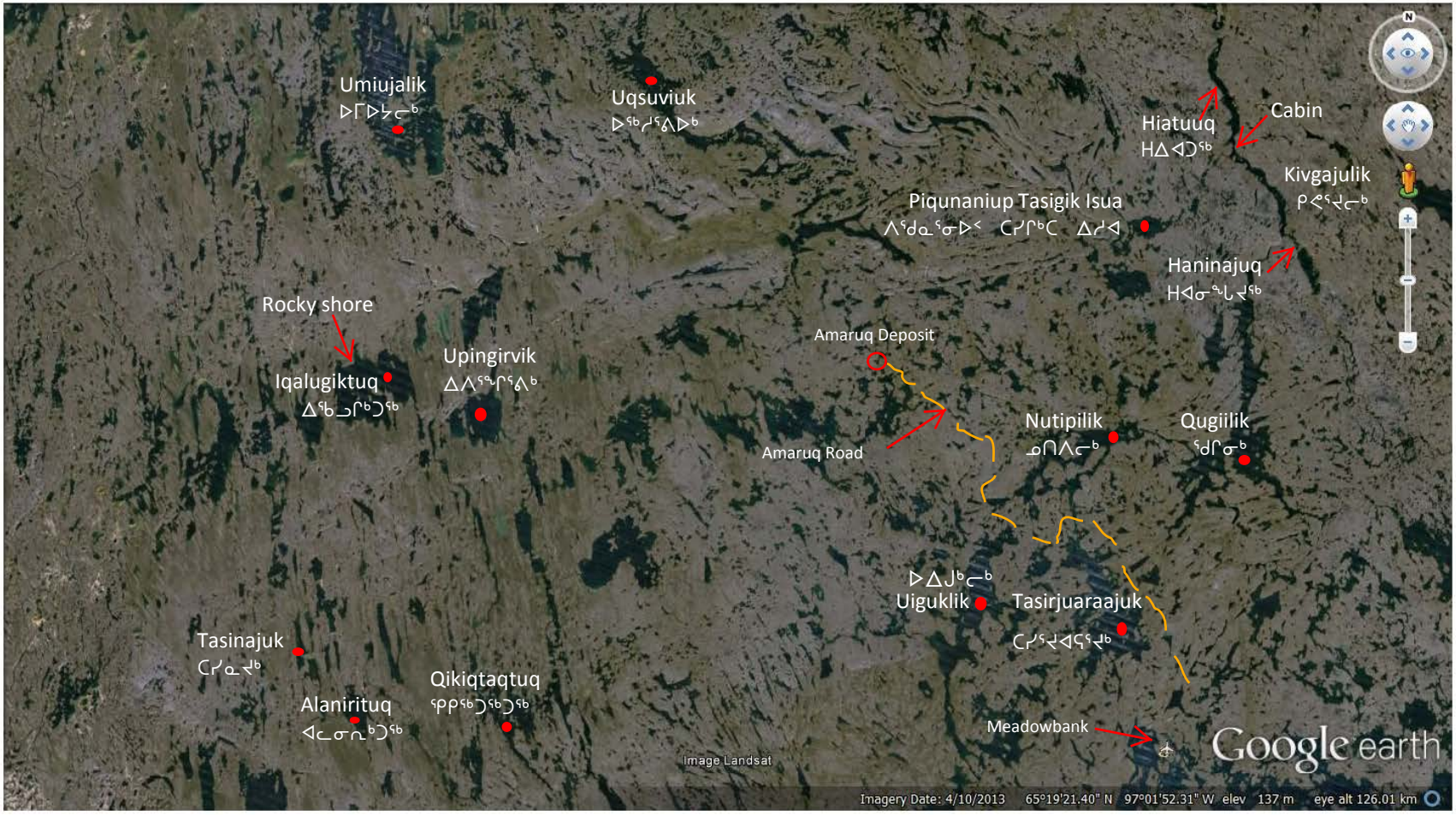
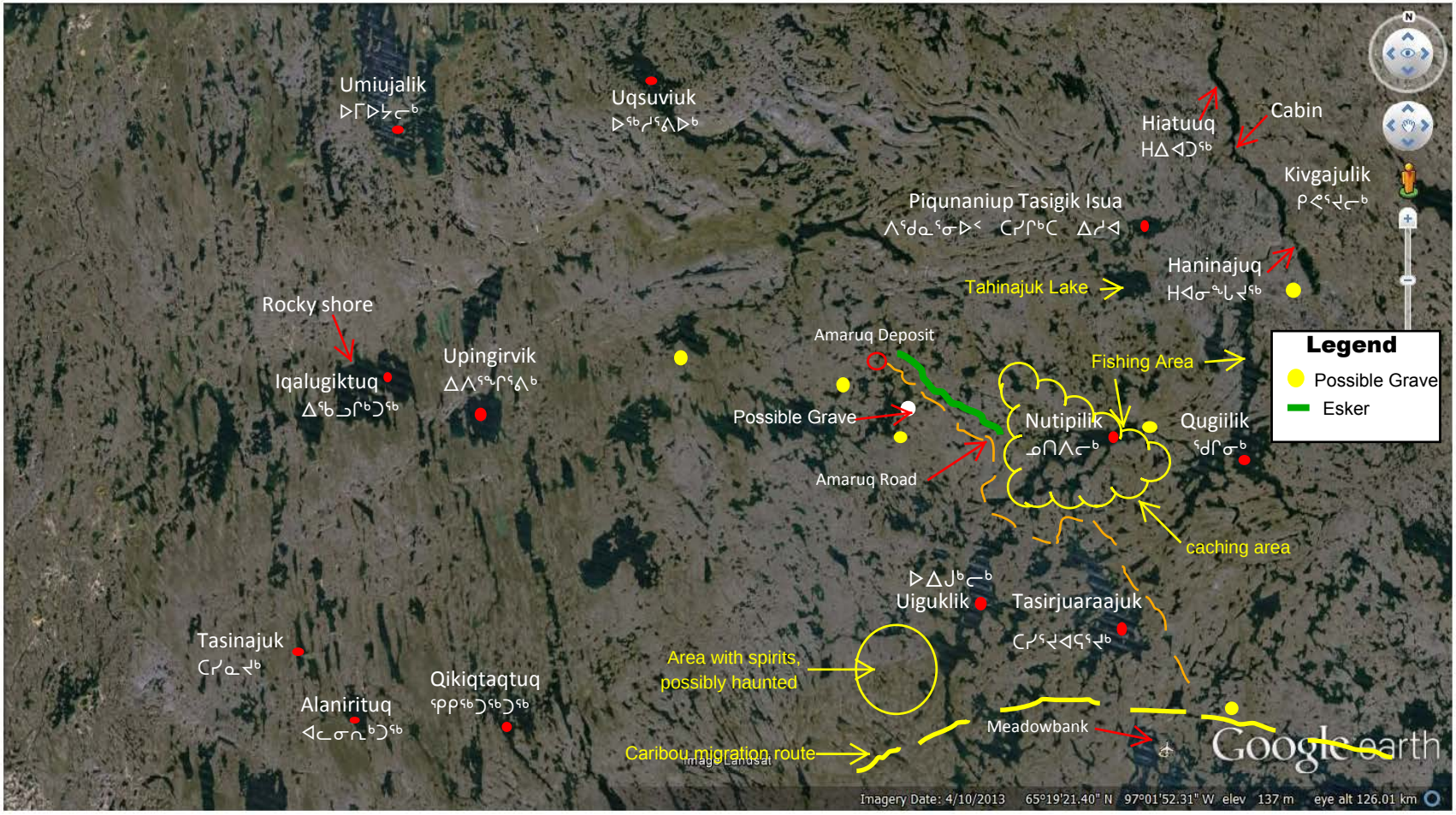


Figure 3. Additional Information added from 2005 Meadowbank Traditional Knowledge Report



Annotations in white are from the December 2014 TK, annotations in yellow are from 2005 TK Report

3.3 Regional Land Use

Inuit living in the inland areas of what is now the Kivalliq Region had little contact with "outsiders" until the early 1900s when an inland trading post was established on Okpiktuyuk Island in Baker Lake (1914). (Freeman, 1976, *Inuit Land Use and Occupancy Project*, hereafter abbreviated as ILUOP.) They knew of the coming of the "others", as they traded with the people living at the mouth of Chesterfield Inlet, but "few of the inland people visited the coast, and only a few white travelers passed through their region" (Freeman, 1976, ILUOP). Once trading began, these inlanders began to depart from their traditional subsistence ways to the trapping of white foxes and increasing dependence on the trade goods (Freeman, 1976). This study concentrates on activities of the people within "living memory", rather than on prehistoric information, which is best left to the archaeologists.

The community of Baker Lake is inhabited with the descendants of several different groups of people, who moved gradually into the community during the famine years in the 1950s, or during the 1960s, when the government was making a major effort to get all children into schools. The Amaruq study area was originally occupied by people from several different groups, but the descriptions and names of these groups vary depending on the particular reference used. Table 1 will help with the understanding of these groups.

Inuit living in the Back River area during the "trade era" (1915-1956), spent the winter at isolated small camps all along the Back River and throughout the area south of Garry Lake to Deep Rose Lake. They often traded into Baker Lake at Christmas and other times during the winter (Freeman, 1976, ILUOP), bringing furs to trade for staples, tools, ammunition, rifles, cooking implements, and more. Others occupied the lower Back River down to Chantrey Inlet, using the inland areas to hunt caribou, fishing along the river, and hunting seals in Chantrey Inlet, also trading at the Baker Lake post at intervals (Freeman, 1976, ILUOP).

Summarizing from Freeman, 1976, ILUOP: The people of the upper Back and Garry Lake area depended more heavily on caribou than did those of the lower Back. If the fall caribou hunt was poor, they were forced to continue to hunt actively into the winter. When fur became prime, they trapped and hunted foxes in the same area, using caribou for bait. They made Christmas and late winter trips to the trading posts (Perry River and Baker Lake) to trade and resupply. Those along the lower Back River used primarily fish as bait, and seal for those camped near Chantrey Inlet. They traded into Baker Lake as well as making periodic trips to Gjoa Haven to trade at the post there.

Most of the Elders we interviewed were either children or teenagers in the 1950s, so their personal stories begin in the 1940s and 1950s. They shared a few stories from their parents and grandparents, but most information comes from the last half of the century.

Caching of meat and fish was important to these inlanders, but the main caching areas were along the Back River. There were some secondary areas where caching was done in the area around Tahinijuk and

Nutipilik Lakes (identified in the *Meadowbank Mines, Baseline Traditional Knowledge Report*, 2005). This was confirmed by the Elders in the December 2014 workshop. They commented that they knew of many caches along the Back River, but few between Meadowbank Mine and the Back River.

Table 1. Different group names used for people who lived in the Amaruq area.

Area	Group name	Affiliations	Defining factor	Reference
Lower Back River	None given	Netsilik	More winter dependence on fish/seals Used fish as bait in traps Traded into Baker Lake and Gjoa Haven	Welland, IN Freeman, 1976, ILUOP
Upper Back R.	None given	Caribou Inuit	Dependence on caribou Used caribou as bait in traps Traded at Baker Lake/Perry River Travelled through Amaruq area to trade	Welland, IN Freeman, 1976, ILUOP
North of Baker Lake	None given	Caribou Inuit	Dependence on caribou Used caribou as bait in traps Traded at Baker Lake Travelled through/lived in Amaruq area	Welland, IN Freeman, 1976, ILUOP
Upper Back R.	Hanningayurmiut, from Rasmussen	Netsilik	Occupied rich fishing sites on Back River, moved up the Back during famine times on Adelaide Peninsula & Queen Maud Gulf	Balikci, IN Damas, D. Vol. 5, *Arctic* (Netsilik chapter)
Garry Lake	Uvaliarlit, from Rasmussen	Netsilik	Small transitory group that lived in the Garry Lake area	Balikci, IN Damas, D. Vol. 5, *Arctic* (Netsilik chapter)
Garry Lake	Ugyulingmiut	Caribou	Depended on caribou	Balikci, IN Damas, D. Vol. 5, *Arctic* (Netsilik chapter)
Baker Lake area	Qairnirmiut	Caribou	Chesterfield Inlet area, from coast inland Traded in Baker Lake/Chesterfield Inlet	Arima, IN Damas, D. Vol 5, *Arctic* (Caribou Eskimo chapter)
North of Baker Lake	Ahiarmiut (subgroup)	Caribou	Subgroup of Qairnirmiut, living inland north of Baker Lake Traded into Baker Lake	Arima, IN Damas, D. Vol 5, *Arctic* (Caribou Eskimo chapter)
Lower Back River	Utkuhikhalingmiut	Caribou	Depended on caribou, some fish/seal Traded into Baker Lake or Gjoa Haven	Arima, IN Damas, D. Vol 5, *Arctic* (Caribou Eskimo chapter)
Garry Lake	Hanningayuqmiut	Not given	Possible offshoot of people who lived on the lower Back	Webster, *Harvaqtuurmiut Heritage* (Illustration)
Lower Back River	Ukkuhiksalingmiut	Not given	"People of place with material for making pots" More dependence on fish, sometimes seal, at Chantrey Inlet	Webster, *Harvaqtuurmiut Heritage* (Illustration)
Baker Lake to coast	Qairngnirmiut	Not given	"Dwellers of the flat land", offshoot of people who originally lives at the coast	Webster, *Harvaqtuurmiut Heritage* (Illustration)

After two days of conversation it was apparent that the Amaruq deposit and proposed road are located in an area that was "travelled through" as opposed to being "lived in". They knew a lot about the land there, and identified a number of lakes by name, plus were able to indicate several heavily used caribou crossings on the various lakes. These were all indicated on the maps, along with the Inuktitut names for as many as possible.

These participants were all VERY familiar with the study area, and had lived in the larger area during the 1940s – 1960s, including during the famine years of the 1950s. They generously shared their stories.

All agreed that there were two main travel routes passing through the general area of the Amaruq deposit and proposed road. These were routes to different areas of the Back River. They were used (going north) to access good fishing in the Back River area, for general caribou hunting, wolf hunting, and for trapping white foxes during the trade era. Probably the most important was a route that went north through Uiguklik (Lake) and then followed the esker to the NE of the proposed road route. This followed a general caribou migration pathway. There was an eastern route to Chantrey Inlet and Gjoa Haven, passing through Qugiilik, Haninajuq, and Kivgajulik lakes. Much of the travel was in winter, so the frozen lakes provided easier travel, as opposed to the rocky uplands.

Winnie Ikinilik told of long journeys on foot: "We used to travel from Garry Lake to Baker Lake and back just by walking, sometimes in winter, when Hattie (Mannik) was just a little girl. I'm amazed when I look at a map now, it's unbelievable!" (Mannik, 1998.) She also discussed this in the workshop. They would start in the winter and try to get back before the snow melted, as it was easier to pull a sled on snow. They had few dogs then, and had to pull their belongings on a qamutik.

According to Moses Nagyugalik's interview in the book, *Baker Lake, a Community Study* (Zozula, ca. 1982), the Back River people lived in caribou skin tents in summer and igluit in winter, travelled mostly in spring and fall, on foot as they had few dogs. They carried very little, and left larger cooking utensils, made mostly of soapstone, in caches near their hunting and fishing camps.

It is apparent that nearly all travel and camping revolved around accessibility to caribou. As a backup, they depended on fish and, if they could not get fish, they hunted muskox. Then, after the people started trapping, and became accustomed to using items available at the trading posts, they needed to make the long trips to the posts to take their furs in for trade.

3.4 Wildlife

Wildlife (and wildlife habitat) is of paramount concern for all people consulted. They are hoping that all wildlife can be protected as much as is possible during the construction and operation of this mining project, and that spills and contamination of the land can as much as possible be avoided.

3.4.1 Caribou

Caribou were the mainstay of the diet of the people of the entire area from the Back River south to Baker Lake, and the defining element of their culture. Caribou were hunted anywhere they were encountered in the area. They were stored in stone caches, in a frozen state in the fall, and were dried in thin slices on the rocks and on drying racks in the springtime, then placed in the stone caches. People returned to these caches on a regular basis and depended on them when caribou were not in the area. The meat from the caches was essential for life in the winter, when no caribou could be found.

The caribou were hunted at crossing places, and the people were careful not to contaminate these crossing places by camping too near, or by leaving a lot of scent at the crossings. Dogs and younger children were kept away lest their noise cause the caribou to turn away.

Before rifles were available, caribou were hunted with bow and arrow, and with spears from qayaqs. Sometimes, people dug ditches in the snow to trap caribou. The caribou would fall into the ditches, become bogged down in the soft snow, and could be speared. Once the rifle was available, caribou could be hunted at much greater distances, and it was not necessary to get quite so close to make a kill.

However, the people still use the crossing places, and sometimes use game drive systems of small inuksuit (stone "men") to guide the caribou into a killing zone.

They emphasized that it was important to NOT kill the first herd that passed, as the scent from that herd would encourage other caribou to use that trail. And, they would not kill the leaders in a herd, but would allow them to pass, which would cause the following animals to try to follow the leaders, permitting further shots.

In the old days, almost all parts of the caribou were used. Antlers were used to make points for arrows, spears or ice chisels, handles for tools of all kinds, toggles for dog harnesses, and shovels for collecting mosses and lichens for firewood. Bones were used for scrapers, awls, and many other tools – for example, the ribs could be used to make bow drills. The skin was important for clothing, sleeping skins, tents, qayaqs, carrying packs for dogs and people, and even used to make buckets to carry water, berries, and more. The meat, fat, and marrow were used for food for humans and dogs. Caribou fat was used for fuel in the stone lamps (qulliit), and to seal the seams of the qayaq. Internal organs like the stomach, rumen, and bladder could be used as containers. Even the internal organs (heart, kidneys, and rarely the lungs) were eaten. The contents of the rumen were often eaten, supplying much needed vitamins. Even the feet could be cooked and eaten. The inland people ate much of their food raw, using precious fuel to make a warm broth flavoured with meat and fat to avoid dehydration in winter. Fat was precious, often too precious to use for fuel, so families collected large piles of lichens and prostrate small shrubs like heather, Labrador tea, and blueberry in summer and used this as fuel for small fires in winter. Snow houses were built with a large conical chamber vented at the top to allow cooking on a small fire. (Arima, IN Dumas, 1984.)

Caribou meat was dried so that there was food during the times when there were no caribou around. In his arctic survival book, David Owingayak writes, *"When there is more than enough game around, you can dry meat so you will have enough food when the hunting is not good."*[1] In the spring, many women

[1] At the time of writing, we were not aware that this was not said by the David Owingayak who participated in the workshop, but an older individual who lived in Arviat and is now deceased. The quote from the book is, however, very applicable to what was said at the Baker Lake meeting.

make slices out of raw caribou meat…..put the sliced meat on twigs and dry them in the sun. They turn the slices over as they dry, and gather and cover them as the sun goes down." (Owingayak, 1986)

In more recent years, people cache fresh caribou in the fall (just as the temperature goes below freezing). They mark the caches with antlers, and go back later to pick it up with skidoo and qamutik.

They mentioned that, in the last ten years, they are less successful in caching caribou or fish due to grizzlies and wolverines getting into the caches; that many caches are destroyed each year by these animals. Many people are not using caches anymore, due to the frequency of these events.

These Elders were not able to diagram caribou movements in the area. This is likely due to a couple reasons. First, they probably have not been in this relatively remote area for many years, and understand that caribou movements are likely to be far different now than in the past. The *Meadowbank Mine Baseline Traditional Knowledge Report* (2005) outlines a few caribou migration pathways, and those in the area of interest for this report have been added to the map. In general, caribou movements through the area seem to have been caribou mostly moving from east to west in the spring, and from west to east in the fall.

When asked if they saw cows with calves in the area, they responded positively that they did see cows and calves, frequently.

When asked about relative abundance of caribou, they said that there were more caribou now than during the famine times of the 1950s (which is when most of these Elders were living on the land in the area). However, they said that caribou were less abundant now than they were 20 years ago.

They said that they were seeing a lot more diseases like hoof rot now than in the past.

They also commented that they do not think caribou are as afraid of people and changes on the land as they used to be. They said, "Caribou used to run away as soon as they saw people or dogs, but now they don't do that, sometimes they stay around, or sometimes even come closer." Winnie Ikinilik said, "Caribou will follow a trail" and that "I have often seen them using the trail to my cabin."

They suggested that Agnico Eagle Mines and the biologists continue to try to determine what could harm caribou and keep people informed about this. They said to try to keep the environment as clean as possible by being careful not to allow spills, keeping fuel and other contaminants off the ground, and promptly cleaning up even small spills that might occur, because the smells from these spills are offensive to caribou and will persist for years.

3.4.2 Muskox

Muskox occurs in the area between the Back River and the Meadowbank Mine, especially where there are eskers. In the lifetimes of the Elders in this workshop, muskox are apparently extending their range from the northwest into the area closer to Baker Lake. They commented that muskox occur east to

Wager Bay and are becoming more common in the Repulse Bay area. Some of the Elders thought that they might be coming into this area because there is now more growth of vegetation.

In the past, muskox were hunted for food, horns, and skins. Muskox meat was secondary to caribou in terms of palatability, but, when caribou could not be obtained, they were hunted. They were an important source of food in the winter, when there were no caribou around (Arima, IN Dumas, 1984). Then, in 1917, the government asked Inuit not to hunt them as they were becoming rare, due to being hunted for the whalers and for the fur trade (Zozula, ca. 1982). One Elder commented that the Thelon Game Sanctuary was formed to save the muskox from extinction, and that, when asked not to hunt muskox, the people hunted them only if they were desperately in need of food. They told us that now there are more muskox and there are quotas. The HTO provides tags, and people limit the hunt to the number of tags available. Some muskox sports hunts are run out of Baker Lake, as well.

Muskox meat was eaten and fed to dogs in the past. The skins were used for sleeping skins and mattresses. The Elders mentioned that tools were made from muskox horns. They made good ladles and bowls, and were used to make hunting bows. To make a bow, the horns were soaked in hot water and shaped and bent, using special tools made from caribou antlers, then riveted together to make a strong, flexible bow. Caribou thongs reinforced the back of the bow, and sinews were used for bowstrings. (Norman Singaqti said he still remembers how to make a muskox horn bow.) Muskox horns were also used to make the side prongs on a kakivak (fish spear), used to spear fish in cataracts on the rivers or in a fishing weir.

3.4.3 Moose

When we asked about moose, all were in agreement that moose seem to be expanding their range into the tundra areas of the central arctic, perhaps due to a more abundant growth of taller shrubs, especially willows. They said that many more moose have been seen around Baker Lake during the last 20 years. They did not recall seeing any in the immediate area of the proposed road, but had seen them on the Back River, on the Thelon, and south of Baker Lake.

All said that people do hunt moose when they see them, and if they are equipped to handle them. (A moose is considerably larger than a caribou and requires much more strength to handle and skin.) When asked about whether they are good to eat, one fellow exclaimed, “They are the BEST!” Everyone agreed that moose are a good food source.

3.4.4 Carnivores

Carnivores were a secondary food source in the past, but during the lifetimes of the Elders in our workshop, their skins were used, and also were important trade items, providing access to technological advances like rifles, ammunition, metal pots, primus stoves, needles, scissors, knives and staple foods like flour, tea, sugar, milk, and pilot biscuits.

3.4.4.1 Bears (grizzly and polar)

Prior to the coming of the rifle, bears were hard to kill, but when the people managed to get one, it was avidly consumed and the skin was carefully saved and used for many years (Arima, IN Dumas, 1984).

Grizzlies are seen much more frequently in the area between the Back River and Baker Lake in the last 12 years or so. The Elders commented that people used to camp out on the land without using a tent, but now, due to the danger from bears, they always use tents. Even the dubious safety of a tent provides them with enough warning to get to a firearm should a bear approach the camp.

In a report for the Nunavut Wildlife Management Board, Gabriel Nirlungayak conducted interviews with several Elders in Kugluktuk and Baker Lake. Paul Atutuvaa reported, *"about forty years ago….his father in law caught one (grizzly) and he himself caught another one soon thereafter. The caribou did not come and they lived off these two animals for survival that year."* (Nirlungayak, 2008)

Apparently, polar bears are occasionally seen far inland. Several people felt they follow Chesterfield Inlet inland away from the sea, and then wander north of the waterway. Mostly these wandering bears are killed and eaten. No one mentioned seeing polar bears near the Meadowbank Mine or in the area of interest for this project.

3.4.4.2 Wolves

The Elders identified that the long esker to the northeast of the proposed road is an important area for wolves (maybe not such a surprise as someone named the deposit "Amaruq", for "amaroak/amagoak" or "wolf" in Inuktitut.) In doing the initial placenames on the maps, the Elders discussed several traditional "wolf trails" where they said wolves usually travelled. One (trending east/west) crosses at the north ends of Uiguklik and Tasirjuaraajuk (Lakes) and the second (southeast/northwest) passes just south of the Meadowbank Mine.

They identified the large esker as a traditional denning area for wolves, and mentioned that wolf pups are often seen in that area. They emphasized that it will be important to check the entire esker area for den sites and signs of wolf use before designating any borrow pits, and advised that it would be best to take a local hunter familiar with that area along to assist with the assessment.

Wolves have long been important to local Inuit groups because of the quality of their fur for garments and for ruffs. In the time before there were rifles, wolves were trapped in stone traps or with snares. Winnie Ikinilik described the stone fox and wolf traps used in the past. These were narrow stone boxes in which a wolf or fox could not turn around, with stone slab doors. When the animal entered the trap and pulled on the bait, a thong from the bait passed around an antler built into the back of the trap would pull on a trigger system, allowing the door to slip down behind the animal, trapping it inside. It would simply be speared within the trap.

The Elders also described another type of trap used for wolves – a deep narrow trench would be cut out of thick lake ice, with a steeply slanting end. "There would be a narrow, slanted entranceway that would

drop off into a deep pit in the ice, and another piece of ice is cut and placed over the hole. The entrance and pit would be just the right size for a wolf so it can't turn around, and the slope would be steep enough so the wolf couldn't go backwards because the ice is too slippery." (Silas Putamiraqtuq interview, in Mannik, 1998.)

Bait would be placed inside this trap, and a passing wolf might go after it, sliding down into the trap. The hunters would spear the wolf in the trap.

After the coming of the steel leghold traps and rifles, many more wolves were hunted as their pelts were valuable as clothing items and as trade items. This value remains today, parka ruffs made of wolf fur are much better than fox ruffs in that they do not trap as much frost, and are much more durable.

In addition, these Elders are fully aware that wolves help keep the caribou herds healthy by taking weaker animals. When asked, they replied that there are many people in Baker Lake that do hunt wolves today, and it is apparent that the wolf is an animal of interest and concern.

3.4.4.3 Wolverines

Wolverines appear to be viewed by these Elders as a nuisance animal rather than a valued fur animal. They did not seem to be really avidly interested in them (compared to the Kitikmeot, where they are actively hunted and the fur used for ruffs on the inner parkas as it sheds the ice from the wearer's breath).

The Elders did mention that, along with grizzlies, there now seem to be more wolverines and that they are a major problem where caches are used – they can get into almost any stone cache, and remove or destroy everything within.

The Elders have a great respect for wolverines saying they are smart. They told a story of seeing a wolverine carrying a piece of meat slung over its shoulder, and told tales of their great strength. They mentioned wolverines using rocks to move other rocks, possibly to get at siksiks in their burrows.

3.4.4.4 Smaller carnivores (foxes, smaller mustelids)

Arctic foxes are common in the area, though they are more common in some years than in others as their populations follow fluctuations in the lemming and vole cycles. Prior to the coming of the traders, they were not hunted or trapped as much as later, when the price of the skins was very high.

Foxes were a nuisance around a camp as they get into and destroy almost everything. Stone fox traps were used in the pre-trade days. These are narrow boxes of piled stone, similar to but much smaller than the wolf traps.

When working on the vegetation baseline studies for Meadowbank, I worked with Tom Mannik, another Elder who was invited to participate in the December 2014 meeting, but could not attend.

At the time, Tom and I discussed the stone traps in detail, and he was in agreement with the Rankin Inlet Elders who thought the trigger systems in these traps were probably made of a caribou tibia bone with a round rock balanced on the cupped end. The thong was tied around the tibia near the top. Compression-wise, the pebble and bone were very strong and could support a heavy rock slab. Laterally, this system was remarkably unstable and easily triggered. We also discussed the fact that many of these traps have no doors, and wondered why. We thought that possibly pieces of ice taken from a tundra pond could have been used as doors, and even tried to smash a 3 cm thick piece of ice which we placed between four rocks. With our mitts on, we were unable to break it, so assumed a little fox certainly could not do so. (Mannik, personal communication, 2003.)

We also discussed another type of stone fox trap also used in those distant days, and found in the area. This was a cone-type trap, called an “uplisaut/uplihaut”. Courses of stones were built up in a circle, each layer slightly narrower than the previous. The opening of this trap was on the top. The bait was tied under the overhanging edge, and across from the bait, a slab of stone was balanced on the rim of the trap. The fox climbed up the outside of the trap, went out on the balanced stone, reached for the bait, and toppled in but was unable to get out. (Mannik, personal communication, 2003)

It is certain that these stone traps pre-date the trade era, because once the steel leghold trap was available, one would never again spend the amount of time and hard physical work required to build a trap out of stone. The architects of these traps were highly skilled and deserve huge respect.

The Elders said that red foxes (in three colour phases) are occasionally seen but are still not as common in the Baker Lake area as the arctic fox. They are, however, increasing.

Smaller mustelids (ermine, marten, mink) are present but were not discussed in detail in this workshop. Both Winnie Ikinilik and Mary Singaqti stated that they had eaten almost any animal (mammal) around, except the ermine – and evinced a bit of aversion to these.

Several people had heard of marten being seen in the last few years north of the waterway to Chesterfield Inlet. In their opinions, these mustelids are expanding their range into the tundra.

3.4.5 Smaller mammals

Arctic hares and arctic ground squirrels (siksik/hikhik) were certainly a part of the diet of the people when they lived on the land, and are sometimes even eaten today, mostly by the Elders. Due to a lack of time and fatigue during this workshop, we did not really discuss these, but in passing some of the Elders commented that they hunted both species in the old days. The skins of both were used in the past, and the skins of the siksiks were used to make attractive bags and containers, and sometimes garments for small children.

Arctic hares are cyclical, and if a low hare cycle corresponded to a lack of caribou plus a late-arriving ptarmigan migration this might account for part of the apparent total lack of animals during some of the

famine years. In March or April, the ground squirrels would not yet have emerged from their burrows, and the land might certainly seem devoid of animal life.

Small rodents like lemmings and voles were not normally eaten, but certainly served as food during famine times. The Elders said that they ate them, along with anything else living, even some insects. The skins of lemmings and voles could be used as bandages for cuts or used to treat boils (Arngnakmaktiq, Anoee, and Pownuk, 1984).

3.4.6 Marine mammals

We asked about marine mammals and whether these were important to the families represented by the Elders in the workshop.

All said, “No, not really”, but were interested in the fact that marine mammals do make their way up the waterway into Baker Lake. Seals (mostly harbour seals and “ranger seals”) have done so. A killer whale appeared in August 1978 in the Prince River, 15 km east of the community. The hunters shot at it, did not think they had killed it, but the next day it was found dead. The teeth and some of the bones were used for carvings, and some of the meat and maktak was eaten. (Innakatsik as told to Kayruyuk, *Inuktitut*, 1982)

Two belugas appeared near the community in the summer of 2014, possibly following one of the barges into the lake. The Elders commented on this – they were both harvested, and everyone in the community had a chance to taste maktak (skin and a bit of blubber), which all enjoyed.

These are isolated incidences; marine mammals were not really part of the Caribou Inuit culture near the community of Baker Lake. However, those living in the lower Back River area often travelled to Chantrey Inlet in the winter to take seals at breathing holes in the ice. (Arima, IN Dumas, 1984.)

3.5 Fish

We asked the Elders to mark good lakes for fishing, and found that not only are there lake trout in the larger lakes, but also arctic char, which they seemed to catch while fishing for lake trout. When asked about the sizes of the char, one Elder showed dimensions of about 20-25 cm. Some thought the char are landlocked, others did not. Thomas Anirniq said the lakes to the northeast of the Amaruq deposit and to the north of the Meadowbank Mine connect to the Back River through Haninajuq and Hiatuuq, so they think the char in those lakes go to the sea at Chantrey Inlet.

Lake trout were the main fish caught for food in the past, and now.

They fished in both lakes and rivers depending on the season and where fish were to be found. Norman and Mary Singaqti mentioned using fish weirs up in the Back River area, but no one knew of any fish weirs in the area between the Amaruq deposit and Meadowbank Mine.

Fish nets as we know them today were not traditionally used (Arima in Dumas, 1984), but gill nets, the tools to make them and the techniques used were brought in by the traders and people were taught how to knot nets. Since all Elders consulted in this project grew up during the trade era, all knew of and used nets if they had them.

In the open water season, people used nets to fish, but when there was ice on the lakes, they jigged through leads in the ice or made holes if the ice was thin enough. When the rivers were running, they used kakivaks (fish spears) to spear fish in the cataracts and at fish weirs. They fished in winter where the ice did not form due to current or where it was thin.

Several Elders mentioned that, when fish were very plentiful, they would sometimes fish just by grabbing them with their hands.

Fish were stored in stone caches on the land, either as dried fish or as frozen, (if caught in the fall as the temperature dropped below freezing). Winnie Ikinilik mentioned that “when you eat cached fish (presumably dried), it really makes you sweat!”

Caching fish is not done nearly as often now, because ATVs and snowmachines have the capabilities of bringing back larger loads, and because people are finding that grizzlies and wolverines are getting into the caches much more often.

Lake trout and char are the preferred species, but other species of fish are also taken, including arctic grayling, broad and round whitefish, and a smaller fish, which is probably cisco. Grayling were fished by jigging, or caught with the hands. They were eaten, or fed to dogs.

We asked about several less common species. No one knew much about burbot (also called mariah) but when shown a photo, several people said that they had seen those fish. All knew about jackfish (northern pike), but said there are none in the rivers north of Baker Lake. They mentioned a fish with a “round sucker mouth with teeth”, probably a lamprey and said they are found in Baker Lake, but no one had seen this species north of Baker Lake.

During the hungry times, all fish were eaten, from lake trout down to tiny sticklebacks and freshwater sculpins, even some aquatic insects and snails.

3.5.1 Legends regarding huge fish

Legends about huge fish abound in the central arctic, and when asked about this, the Elders responded with delight. They had all heard stories of huge fish, large enough to swallow a qayak, caribou, or a human. One legend recounted by Martha Taliruq (1980) and illustrated in a drawing (Tagoona, 1976), mentions a large fish that swallowed a woman who was working at the shore of a lake. Her husband saw this, and quickly got a knife, went down to the shore, and was also swallowed. He promptly cut his way out of the fish from inside, taking his wife along, and they both survived. This was supposed to have happened at Dubawnt Lake, far south of the area of the Meadowbank Mine area.

A couple of the Elders had seen very large fish, and said, “Sometimes you just see their shape pushing the water, or under the water. You know there is a fish there and can tell the approximate size from the size of the wave.”

According to the Elders, the “big fish” lakes include Schultz Lake, Beverly Lake, and Dubaunt Lake. Winnie Ikinilik mentioned that when people see these fish from boats, they “go right to shore”; they are definitely afraid of the fish. Comment was made that they must be very old to be this large.

However, according to the Elders, many of the big lakes could hold immense fish, but they did not know of any in the project area.

3.6 Birds

Although in the past the main interest in birds was for food, all the Elders are interested in birds, and know a lot about them. They realize that birds are indicators of the health of the environment and are concerned about the stability of bird populations worldwide.

3.6.1 Waterfowl and other birds used for food

Many waterfowl were and are used for food. Geese are the most important, and are taken mostly in the spring when they are on their northward migration. Snow geese, Canada geese, and greater white-fronted geese are the species most often taken, but ducks (mostly northern pintails and oldsquaws, now known as long-tailed ducks) and tundra swans were also eaten. Eggs (of waterfowl, ptarmigan, and gulls) were also collected and eaten.

The hollow bones of birds like geese and swans could be used as straws to suck up oil and deposit it into containers made from fish air bladders, or to drink water. The feet of geese and swans were skinned carefully and made into waterproof containers (interview with Winnie Putumiraqtuq Ikinilik IN Mannik, 1998).

Some waterfowl could be caught in stone traps like pens when they were moulting and could not fly. According to David Mannik (in Mannik, 1998), “people would build a large shelter like an iglu with no roof. They tried to make is large…, and the porch faced the shore.” A person would hide, and when the moulting geese came ashore, he would start walking toward the trap, “the geese would just follow him, and after the geese, two other people would follow”. When they neared the entrance of the trap, “the person leading would just step out of the way, and let the geese in….they’d just block the entrance with a big rock.” The walls were high enough that the geese could not jump out, and they were flightless, so could not fly. “People would just reach in and grab them by the neck.” (Mannik, 1998)

Norman Singaqti mentioned that “there are lots of waterfowl” in the area, many goose nests along the shores of the lakes, but no colonies of nesting geese.

Ptarmigan are hunted at any time, wherever the birds can be found. Small bows with light arrows could be used, or sometimes just stones were thrown. Migrating ptarmigan were particularly important in

heading off famine in the spring before the caribou arrived. (Arima, IN Dumas, 1984). Norman Singaqti commented, *" there are hardly any ptarmigan between the Meadowbank Mine and Amaruq"*. He felt this was due to the many rocks in the area.

Gulls were not usually eaten, but eggs were collected, and the skins were used for cleaning rags, supposed to be very good for removing grease.

3.6.2 Raptors

Raptors are not hunted for food, but are closely observed, and the Elders knew these well. Some of the Elders thought there were more raptors around now than 20 years ago. However, they said they thought there were fewer owls.

They mentioned that in the past, bald eagles were seldom seen, but now they are seen every year, both immature and mature birds.

They could not identify specific nesting areas for raptors, but said there are peregrine falcons, gyrfalcons, and rough-legged hawks, and that these nest on cliffs in the area of the Amaruq deposit and proposed road.

David Owingayak mentioned that there were ravens around in the past, but that there now seem to be many more ravens, especially right in Baker Lake, and that they have learned to get into garbage and feed in the dump, so are around all year.

3.6.3 Smaller birds

We asked about changes observed in bird populations over the past 10 years. James Kalluk thought (and others agreed) that there were fewer owls and small birds than in the past. They do not know why this is happening, but think changes in climate probably affect it. In general, they believe there are fewer small birds.

3.7 Human use of the area

3.7.1 General use over the lifetimes of the interviewees

The area around the Amaruq deposits and proposed road was “travelled through”, and provided mammals and fish for food in the past, and probably furbearers during the trapping times, as people needed to hunt and fish as they travelled. Berries were picked and eaten wherever they were encountered, and the roots of a few other plants, such as the liquorice root (mahok) and the louseworts were eaten. Leaves of the mountain sorrel (hiirnat) and the flowers of the purple mountain saxifrage (aupiluktunguat) were eaten.

3.7.2 Famine times (stories from the difficult times in the 1950s)

Widespread famine in the central arctic during the 1950s caused incredible hardship among the widely scattered camps. Exact causes are unknown, probably extreme fluctuation of caribou populations,

overhunting, or increased predator populations along the migration routes. Because people hunted caribou by intercepting the migrations at certain traditional places, a change in the migratory route of a herd could cause the people to entirely miss opportunities to hunt, and could result in extreme hardship. But, according to the Elders in this workshop, the famines of the 1950s were due to far more than a lack of caribou. In the mid-1950s, sometimes there seemed to be nothing alive on the land that could be eaten – no birds, no caribou, no muskox, no small mammals, and no fish in the streams.

We asked if they wished to share stories of the difficult times, with no pressure to do so. They willingly participated, sharing some chilling stories.

Everyone recalled the difficult times when game was scarce and death from starvation was a very real possibility. Facing death personally was difficult, and facing it for an entire family was heartrending.

Norman and Mary Singaqti spoke eloquently of their experiences. In the famine years, they were living near Chantrey Inlet, and were starving. They walked from Chantrey Inlet to Baker Lake several times, picking up supplies and then returning to their hunting area. In April, 1954, there had been more than a year of famine. Their fathers both died, out on the land, and this was a low point in their lives. Mary had been married at a young age, and there were young children. Everyone was very weak. They were in desperate straits, and if a plane had not come to pick them up, they would have surely starved.

Also in 1954, brothers Thomas Iksiraq and Barnabas Oosuaq and their families were starving. They walked constantly, going to old caribou caches, looking for bones, remnants of caribou carcasses, even maggoty ones. They said, *"It was so hard, during the famines. There were no animals of any kind, no hares, no waterfowl, no ptarmigan, no ground squirrels and of course no large animals, not even any fish to be had. Just nothing. It was very hard."*

When asked how they managed to survive, the Elders shared further stories. Many did not survive. Everyone in the workshop knew of relatives that had died in the famines.

Because they were so weak, they had to be careful not to walk into soft snow, as it would further weaken them. Dealing with meltwater and treacherous ice on the lakes would also weaken them, or perhaps be fatal. They had to be very careful, always.

Those who survived were willing to eat "anything" to survive, including the bones or remains from wolf kills, old cached items, skins, dead animals, etc. Caribou bones from old caches were boiled to make a soup, but sometimes there was little fuel.

Violet Twyee lived on the middle Back River as a child, and now lives in Rankin Inlet. In an interview with her niece, Hattie Mannik, who was a baby at the time, Violet adds a child's view: "We got hungry that spring, and us children couldn't do a thing, since we were just children. People….would go fishing, but there was nothing. It was impossible, but it wasn't that frightening. We felt the hunger……and we knew our parents were worried and frustrated." (Mannik, 1989)

Food was given to the children first; the adults ate if anything was left. Older people weakened and died, and sometimes had to simply be left behind on the land when the others were too weak to make graves.

Dogs were the hardest to eat. They were thin, and tough, and the people did not want to kill their dogs because it meant they were losing helpers. They boiled the meat and bones from the dogs, but still had problems eating it. One Elder related how (as a youth) he was out walking, looking desperately for something to eat. He found a rotten carcass of a dog, frozen in the edge of a lake. He pulled it out, took it back to camp and they ate it. Very difficult.

One family had three dogs. The father gave food to the youngest first, rather than eating it himself. As a result, he starved to death and was left behind. The mother killed one of the dogs for food, then another. The mother and two brothers ended up with only one dog and thought they might have to eat it, but found an old caribou carcass and ate that. Eventually, they were rescued and flown to Baker Lake.

They mentioned that when one was starving, it became difficult to eat, and one could only eat a mouthful of food – gorging oneself could lead to death.

Some people managed to travel to the closest post before they became too weak to travel. In some cases, the strongest travelled to the post and brought back food and supplies for those too weak to travel. If the whole group made it to the post, they usually remained nearby because they could receive rations from the traders, missionaries, or the government. Some food was flown out to camps, perhaps being sent by family or friends in Baker Lake, but this was rare. A small plane brought moose meat to Baker Lake, but this did not feed many people.

Some just endured until the animals returned or the season changed, making other food sources available.

Inuit already in Baker Lake told the authorities that there were still families that needed to be rescued north of Baker Lake, and a plane was sent to look for them, even though the pilot and others did not think they would find anyone. They were found and rescued.

At least three of these Elders mentioned rescue in a common theme: “We were starving….and a plane came to pick us up. We would have died if that plane had not come. They saved our lives.” In some cases, they were young and could not identify the source of the plane. Some said, “Military plane.” Others said, “Small plane.” Most were taken to Baker Lake, but one person mentioned being taken to Gjoa Haven.

The most severe famines seem to have happened in the 1950s. 1954 was mentioned several times, as was 1957. Varying times of year were mentioned, but the hardest times seemed to be in the spring of 1954.

However, there were famines in earlier years as well. A police report from the Baker Lake detachment in 1918 reported on four deaths during that winter, due to starvation. (Douglas, W.O., in a *Beaver* article, reprinted in Zozula, ca. 1982.)

In all these famines, some people died, some disappeared and were presumed dead, never seen again. Others stuck it out on the land, scraping by until conditions improved.

Those who managed to get to Baker Lake still had difficult times. Other Inuit shared food with them, the churches provided some food, and the traders provided some.

After the famine years, it took many families a long time to recover. Social assistance was not sufficient, and many families still experienced real hunger until the next cheque came and they could buy a bit more food. They tried to hunt, but this was difficult without dogs. Life remained very hard for many years.

Many of the survivors returned to their traditional areas when the wildlife returned. Some stayed closer to Baker Lake, or got jobs in the developing community, working for the trading post, or for the missions, and later, the government.

The Elders told us that, during the difficult times, they had trouble visualizing a future, and this made things harder. Most felt the famine years made them stronger, however. Inuit traditional knowledge is based on survival strategies, and what can be done to survive in hard times. They did survive, and for this reason, traditional knowledge is vitally important to Inuit.

3.7.3 More recent land use

The famines were a turning point in life on the land. Although many returned to the land for a few years, they were more and more closely tied to the community and the new technologies they could get there, and there was more need for money. Trapping helped, but during the 1960s, the bottom dropped out of the fur prices due to changing fashion trends in Europe, and trapping could no longer bring in enough for people to make a living.

At the same time, many families moved into Baker Lake so the children could attend school, both because they saw advantages to the children being educated and because the government tied school attendance to family allowance and welfare. The first school was run by the Anglican Church and taught in the church by Canon James, about 1955. In this school, reading and writing were taught in Inuktitut, and they began learning English. A federal day school was started in 1959, and from then on more students attended school, encouraged by a hot lunch provided at the school. (Zozula, ca. 1982)

Medical services were being provided in a more reliable fashion by that time, another incentive to move to town. And there were more employment opportunities as the community expanded and government and municipal jobs became available.

Life on the land in the small outpost camps was finished, forever.

It was extremely difficult to keep dogs in town, so the dog teams dwindled. With the coming of the snowmobile, few dogs were kept, except for recreational purposes. A few trapline teams lingered on, but even these soon vanished due to low fur prices.

As people earned more money, they could buy more mechanical items - boats, motors, snowmobiles, ATVs, and eventually vehicles. They then faced the same problems that face most of Canada, the constant need to buy fuel, parts, and new machines when the old ones failed. Hunting caribou became very expensive indeed.

Conversely, the use of snowmachines in winter and boats in summer meant that people could travel much further, faster, than ever before. They could hunt and fish over a much wider range of area, returning at night or in a few days, to home in town. All this required fuel, which was not available for trade, but required cash. Cash meant that the heads of households had to have jobs.

Hunting by snowmobile, using high-powered rifles meant that people could go out fast, get several caribou quickly and return quickly. Hunting in the summer by boat was a bit different, people found it easy to travel on Baker Lake or up the Thelon by boat, hunting and fishing along the way. Use of the area north of Baker Lake diminished.

The coming of the Meadowbank Mine changed things again. More jobs were available and many people got jobs at the mine. The road meant that people could go out by ATV, hunting, fishing or camping, and the area north of town received more use again.

3.7.4 Special places

We inquired about special places in the area between the Back River and Meadowbank Mine, asking people to identify any special places and to locate any cabins on the map.

Only one cabin was located. They did not know of any HTO emergency cabins in the area.

The esker to the northeast of the proposed road (also identified as a source of road-building material) was pointed out as the most likely place where old campsites might be found. It was also identified as an important area for wolf denning (see section on wolves).

No one identified archaeological sites of any significance, though several people said there could be caches or tentrings in areas overlooking several lakes.

Thomas Anirniq identified a couple areas very close to the deposit area where his grandmother’s grave is located, but said he would have to be on the ground there to locate the actual grave.

There are several additional "possible gravesites" indicated in the area of the Amaruq deposit and proposed road on the map (Figure 5.2) in the *Meadowbank Baseline Traditional Knowledge Report* (2005). These have been added to the map in this report.

3.8 Legends and spirit stories

We talked about ijirait (shapechangers) and little people, but the Elders in this workshop did not specifically identify any places in the study area where these had been seen. They talked in general about them and about the Tunit, but not specifically. Most said their parents had told stories of these beings.

One Elder mentioned that, one time when he placed his tent within an old tentring, the ropes kept coming loose, even though he had tied them carefully. He looked out of the tent and saw a wolf nearby. He shot at it several times but it did not die, just kept appearing and disappearing, then appearing elsewhere. He finally gave up, and said he realized it was probably a spirit or ijiraq.

Another Elder said he had a similar experience with a caribou. He shot it from close range, but it was unaffected. He shot many times and chased it but it kept vanishing and then reappearing. He finally came to the conclusion that it was a spirit caribou or an ijiraq.

They had great respect for the strength of the Tunit, and said they used large boulders to construct their tentrings, so must have been much stronger than Inuit.

We asked if there were any special places where a shaman might have lived, in the study area. They mentioned, somewhat in passing, people with shamanistic tendencies, but did not identify any places.

However, they said that the burial place of a shaman should be considered to be under a curse. They believe that shamans are buried with many possessions on their graves and that the removal of any of these possessions could cause problems for the person removing them. They mentioned a telescope removed from a grave, and that the person who took it was beaten up shortly after doing this – perhaps as a result of the curse.

When people died and were "buried", they were not really interred due to the rockiness of the ground and the permafrost, but left on the ground. Rocks might be circled around them, and if conditions permitted, some might be piled over the body. All this was done with great respect.

No one would ever remove anything from a grave, nor disturb the site. There is great respect for those that have gone before, and a belief that the grave items are for the use of the spirit.

3.9 Archaeological sites

For this workshop, we had access only to archaeological studies done for the Meadowbank Mine (which do not extend into the Amaruq area) and to studies done in 2013 on the deposit area alone (Tischer, 2013). This report mentioned only one minor "possible" archaeological site within the deposit area.

The Elders are most concerned that graves and other archaeological sites not be disturbed, and mentioned that graves are sometimes hard to distinguish, even for an archaeologist. They felt that the road should not be built over a grave.

They urged that any work to be done on a road be preceded by a survey of the area for archaeological sites, and emphasized that people who are familiar with that area be included in the study team working on the archaeological surveys.

3.10 Hila – weather and climate, and changes

The Elders in this workshop felt strongly that the local weather has changed, for unknown reasons. They felt there is much more weather instability, and more violent weather events, now than in the past, even in the past ten years.

Weather used to come regularly from the north, but now sometimes comes in from the east or the west, bringing soft snow that drifts, but not in the same way as expected in the past.

David Owingayak remembered that in the 1970s, there was lots of good snow on the lakes, but that lately, the inland lakes have practically no snow. Barnabus Oosuaq agreed, saying, "We used to be able to make good snow shelters, but now there is often not enough snow or the right kind of snow to make a shelter.

David Owingayak commented that he had "noticed that the ice isn't safe anymore. There are many spots with thin ice and open water, even in winter. It is dangerous to travel now, because we can't rely on safe ice." He also felt that the spring thaw used to proceed as a slow, consistent pace, but now, melting begins and happens very quickly. Then, it gets cold again, and then back to a thaw. "We used to be able to travel at night in the springtime when the snow was hard. Now, we can't do this reliably, because it often doesn't refreeze at night.

Winnie Ikinilik agreed, saying that she has noticed that there are periods of extreme cold now, in June, yet the season comes earlier, but the temperature goes back and forth. "Nothing is as expected."

Thomas Iksiraq added, "When there is snow, it is not the same consistency as in the past. It is harder than usual, with more layers, and is not good for making snow blocks. It is not as easy to make an iglu as it was in the past." Barnabus agreed with him, saying that this started happening about 1989.

James Kalluk spoke of travelling to Gjoa Haven in the 1970s: "At that time, we could make good igluit along the way. The wind was mostly from the north. Now, using the same route, we find the wind is from the northwest, so the snow is different, and it is not as easy to make an iglu." He continued, "I have noticed changes in the fresh snow. We used to fill the cracks in the iglu with soft snow and could pack it

into the cracks and it would stay. Now it falls apart, and will not stay in the cracks. It is also much harder to find the right snow to make an iglu, harder to decide where to build one. The snow has more layers and doesn't hold together well."

Norman Singaqti agreed with David and Thomas, and added, *"there is less snow on the south sides of the hills now, and a change in the direction of the winds that bring the snow. We used to be able to tell the way to go by the drifts of the snow, but no longer can do that."* He also commented that it is cloudier now than in the past, when there were more clear days, and there is a change in the colour of the sky; it is much hazier now, not clear.

Thomas Iksiraq stated that in the last ten years he has seen a lot of odd changes. Even the stars seem "displaced" in the sky. "In the past, we were able to use the stars for guidance, but now they are in the wrong places, off by a considerable amount." He went on to say, "Likewise, the sun doesn't rise and set in the same place anymore. This is very disturbing. And the moon now rises in a different place than in the past." Winnie Ikinilik agreed with him and with Norman and David, saying that she too has noticed the displacement of the stars, and the fact that the moon does not seem to be where it used to be. This information from Inuit Elders has recently been documented in a new film by Zacharias Kunuk (2014).

The summer season also has changed. David Owingayak stated, "The shrubs growing on the land now seem to be growing more and getting larger than in the past." Hugh Avatituuq agreed with this, and said, "The berries are not growing right today. They are not developing right and don't get ripe when we expect them to ripen. Sometimes there are very few berries."

James Kalluk commented that there was a real drought last summer (2014), saying "Everyone was hoping for rain, but there was no rain." However, he said he noticed there was more lightning, and much smoke in the sky, "So much smoke that you could smell it. Insects were dropping from the sky."

Winnie Ikinilik summed it up well: "There are now abrupt changes in the weather, extremes, spring going from thaws to cold, summers with cold phases, then hot, droughts, more storms, but sometimes shorter storms, then storms following one after the other."

4. Recommendations from Elders participating in the meetings

The following recommendations emerged from the conversations of the two days of the workshop:

1. Study the esker to the northeast of the proposed road as it may have archaeological sites, and the esker provides denning habitat for wolves and probably other animals as well.

2. Locate as many gravesites as possible and do not build anything that will impinge on those sites.

3. Use local people to help with field studies along the road route, to identify denning sites, graves, and other places with signs of Inuit use in the past. Wildlife specialists should be accompanied by local people who truly know the land. Archaeologists should have an Elder with them at all times, but should also hire and train young people who may continue their studies in this area.

4. Keep in mind that the mining process will make irreversible changes to the land, and that it will never again be as it was in the past, so there must be clear benefits to those who own the land, who live in the area, and whose descendants will inherit the land.

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Appendix 1. Research Licence, Guidelines and Example of Consent Form

Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute
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SCIENTIFIC RESEARCH LICENSE

LICENSE # 03 019 14N-M

ISSUED TO: Page Burt
Outcrop Ltd.
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X0C 0G0 Canada
867 645 4600

TEAM MEMBERS: J.Witteman,C.Tautuapik,J.Hicks,M.Haqpi

AFFILIATION:

TITLE: Traditional Knowledge Studies Regarding Agnico Eagle Mines' Amaruq Project and Proposed Access Road.

OBJECTIVES OF RESEARCH:
The purpose of this study is to document traditional knowledge in the area of the Amaruq advanced exploration site, 50 km northwest of the Meadowbank Mine, and a proposed all-weather access road connecting this site with the Meadowbank Mine. The information will be used in the environmental permitting for this project.

TERMS & CONDITIONS:

DATA COLLECTION IN NU:
DATES: December 01, 2014-December 31, 2015
LOCATION: Baker Lake,Chesterfield Inlet

Scientific Research License 03 019 14N-M expires on December 31, 2015
Issued at Iqaluit, NU on November 28, 2014

Mary Ellen Thomas
Science Advisor

Research Project Title: Traditional Knowledge Study for the proposed Amaruq Exploration Road Project in the Kivalliq Region, Nunavut.

Name of Organizations: Agnico Eagle Mines, including subcontractors Outcrop Ltd. and Nuanuq Enterprises.

Description of the Research Project:

The purpose of this study is to document traditional knowledge in the area of the proposed Amaruq all-weather exploration road connecting the Amaruq exploration site with the Meadowbank Mine. The information may be used in the environmental permitting for this project.

We are asking you to participate in the study because you have been identified as having traditional knowledge of the area to the northwest of the Meadowbank Mine and south of the Back River. Other people from your community, and other communities, will also be participating in the study.

Names of Principal Investigators:

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Overview of Procedure:

Representatives of Outcrop Ltd./Nanuk Enterprises and Agnico Eagle Mines will be conducting interviews and focus groups regarding the development of this new exploration project.

We have asked the Hamlet Council, HTO and others to suggest names of local Elders and people with specific experience in the use of the area around this new gold deposit and proposed access road. We will be consulting these people on subjects like caribou movements, wildlife use of the area, traditional travel routes, old hunting or trapping areas, places where people camped, places of special significance, or the traditional use of plants.

During the discussions we will be asking about your knowledge of the land in the general area of this exploration site and the way people lived on the land in the past (local traditional knowledge or Inuit Qaumajatuqangit).

In these discussions, you will be able to talk about what you know but do not have to answer questions if you don't want to answer them. The amount of time required for each discussion will be based on the amount of information that you and others wish to share. Interpretation will be provided.

Notes will be taken to record the results of discussions. Discussions may be recorded and/or videotaped, but only if you agree to this. Audio or video recordings will be securely stored by Outcrop Ltd. and Agnico Eagle Mines. Copies will be made available to your community if requested. Photographs may be taken if you agree.

After the discussions, a report will be written on the information provided by you and others in your community. A copy of the report will sent to you and your community for review and comment, and changes will be made if desired.

Once the report has been reviewed by you and your community, we will use it for environmental permitting of the Amaruq Project.

Benefits of Participating in the Study

- Contribute to making the environmental permitting more comprehensive in its consideration of potential traditional resource impacts.
- Assist people (including Agnico Eagle, the Government of Nunavut, regulators and your community) to better understand and manage traditional resource impacts (both positive and negative) of the Amaruq Project.
- An honorarium will be paid to those participating in this study.

Possible Risks of Participating in the Study

- The information in the report, once comments are integrated, may be incorporated into the discussion traditional resource impacts in environmental permitting. It is expected that a document will be distributed in the public domain. However, confidentiality concerns will be respected.

CONSENT TO PARTICIPATE IN THE STUDY

I, _____, give permission to Agnico Eagle Mines (and its subcontractors, Outcrop Ltd. and Nanuk Enterprises) to discuss with me, either individually or as part of a larger group, my traditional knowledge regarding the area north of Baker Lake, between the Meadowbank Mine and the Back River.

I have been informed of the objectives of the research project being conducted. I understand these objectives and consent to being interviewed for the project. I understand that steps will be undertaken to ensure that this interview will remain confidential unless I consent to being identified. I also understand that, if I wish to withdraw from the study, I may do so at any time without any repercussions.

Having read the above:

- ❑ I agree to participate in a discussion on my traditional knowledge regarding this area to the northwest of Meadowbank Mine, between the mine and the Back River.

- ❑ I would like to be identified by name in having participated in a discussion on my traditional knowledge in any reporting on the discussions.

- ❑ I agree that my participation in a discussion on socio-economic conditions in my community and/or my traditional knowledge is:
  - ❑ Audio recorded
  - ❑ Video recorded
  - ❑ Photographed

- ❑ If applicable, I agree to participate in a discussion on traditional knowledge, but would prefer NOT to be:
  - ❑ Audio recorded
  - ❑ Video recorded
  - ❑ Photographed

OR

- ❑ I <u>do not agree</u> to participate in a discussion on traditional knowledge regarding this project.

SIGNED:_____

DATE:_____

Participant

SIGNED:_____

DATE:_____

Researcher

SIGNED:_____

DATE:_____

Witness

Received: $_____, honorarium for participation. Signed:_____

Appendix 2. List of Participants with Brief Bibliography

Winnie Ikinilik (Also: Winnie Tayak Putumiraqtuq)

Born at Hanijumi (sp?) or Garry Lake (middle Back River) and traveled all of the Back River area with her family. Moved to Baker Lake in 1967-68 so her kids could go to school. Fabric artist, worked in the Sanivik Ladies Group, and artisan's co-op that later developed into the Jessie Oonark Center. Makes wall hangings. Well-known artist, she has had work exhibited in Winnipeg and in the National Art Gallery. Talked a lot about difficult times during the famine years. An interview with Winnie appears in Hattie Mannik's book, *Inuit Nunamiut: Inland Inuit*; she is Hattie's mother.

Thomas Inirniq

Born near Gjoa Haven (before it was a community) but has travelled and hunted over the entire area, especially the lower Back River. Moved to the Amaruq area and hunted there, camped in the Meadowbank area. Moved to Baker Lake in 1967. 1970, worked as a labourer for the HBC. In 1977 worked for the hamlet as a driver. In 1980-1981, he moved back to his original outpost camp area (Amaruq) and lived there for two years. Then he moved back to the hamlet in 1985.

Hugh Avatituuq

Born around Amaulik Lake between Meadowbank and Baker Lake and lived and hunted in all that area. In 1957 or 58, moved to Baker Lake for school. Worked for the municipality.

Norman Singaqti

Born in an area north of the Back River, near the Hamon River, hunted in all that general area both with his parents and by himself. Moved to Baker Lake in 1965. He has hunted in all the area around Baker Lake as well as to the north. He has worked for the municipality, for Baker Lake housing as a carpenter, other jobs as well. Knows how to work with muskox horn, making traditional tools. Married to Mary Tatya Singaqti.

Mary Tatya Singaqti

Born north of the Back River. Lived in the Qitiquk (sp?) area (Hamon or Harmon River) with her family. Grew up all around there. In 1957, came to Baker Lake. She lived with her husband for several years before they were married in 1956. They lived in Baker Lake so her son could go to school. She is a well-known artist, doing wall hangings, prints, stone plates for prints, etc. (She has an upcoming exhibit at the Winnipeg Art Gallery.)

James Kalluk

Was born in the Garry Lakes general area, and hunted all around that area. His father was raised in the Back River area and hunted there. Travelled up and down the Back River (known as Hanungajuq to Inuit). Hunted, wintered and summered in the Amaruq area, but does not claim to know it well. Knows

most of the area, and has wintered in the area: Baker Lake to Amaulik (sp) Lake – the whole area. Moved to Baker in 1960.

Joedee Joedee

Born at Chantrey Inlet, lower Back River. Hunted all around the area, rivers and lakes. He remembers fishing in streams without rods (using kakivak), or just grabbing a fish from the stream. In the 1960, he and his sister were brought to Baker Lake (for school). His first job was at the HBC – he worked 5 days for $3. In 1965 he took a municipal job, has served on many Boards, Housing and others. In 1972, he became a lay reader in the Anglican Church, and in 2006, became a deacon in the Church. He is now the Anglican Minister in Baker Lake, and the newly elected Mayor of Baker Lake.

Barnabus Oosuaq

Born somewhere north of Meadowbank, in the Back River area. Travelled the whole area for survival and hunting. Grew up with his brother, Thomas Iksiraq, and lived in the general area of the Amaruq site. During the famine times in 1953, they moved to the Meadowbank area. In 1969, came to Baker Lake.

Thomas Iksiraq

Brother of Barnabus, with somewhat the same history. In 1960, he moved to Baker Lake so the kids could go to school. When the Sanivik Co-op started about 1968-72, he worked there, on drawings and prints, flat art. He is retired from this now, doesn't do it anymore. However, he is a well-known artist with many prints to his credit.

David Owingayak

CLARC representative for KIA. He was not born in the project area, but at Sandy Point on Hudson Bay, between Whale Cove and Arviat. Came to Baker Lake in 1949 at the age of 9, and has lived here most of his life. Has hunted, fished and trapped throughout the whole area associated with the Meadowbank Project. He did not go to school, but learned by himself. Fluent in English as well as Inuktitut. Author of two books: *Arctic Survival Book* (1986), and *On Snowmobile and Foot*, both published by Inuit Cultural Institute.

Michael Haqpi

Interpreter, younger. He is not from the area to the north of Baker Lake, but from Yathkyd Lake, Padlimiut, from Karemaluna (sp.). During the hungry times in 1959-60, they were picked up by plane and taken away. He had never seen a plane, and at first thought it was a spirit.

Appendix 3. Original notes and maps from meeting

Page Burt's notes

John Witteman's notes

Annotated maps from meeting (photos of annotated maps)

Page Burt's Notes from the traditional knowledge consultation meeting

Amaruq All-weather Exploration Road
Traditional Knowledge/Inuit Qaujimajatuqangiit Community Consultation
NOTES from Meeting, Dec. 9-10, 2014

Introduction and concept, what we need to accomplish with this meeting.

Using maps and any available photos of the area, we will introduce the plans for development of a new deposit (IVR or Amaruq) and access road to that deposit.

We need your input regarding the new area of development, especially as regards caribou use and special places that may be located in the area.

All information will be outlined or indicated on the maps.

Discuss Consent Forms and need to sign these.

Placenames.

We spent about an hour each day going over the maps, putting in placenames.

Started with the lakes, and Michael Haqpi wrote in the names in Inuktitut syllabics and in Roman orthography. On the second day, we used Google Earth and entered names of lakes, some rivers, and places of interest.

Using photos of the maps, Michael has made a Word file of the placenames, in both Roman orthography and syllabics. John Witteman will insert these into a working map.

Travel

1. What travel routes pass through the area where this road will be built?

There were three main travel routes passing through the general area of the Amaruq deposit and road. These were routes to different parts of the Back River. They were used (going north) to access good fishing in the Back River area, for general caribou hunting, wolf hunting, and for trapping white foxes during the trade era. Probably the most important was a route that went north through Uiguklik Lake and then followed the esker to the NE of the road route. This followed a general caribou migration pathway, and intersected several main travel routes for wolves. There was an eastern route to Chantrey Inlet and Gjoa Haven, but it was off the map we had, on Maps 56 D and 56 E. Then there was a western route to the Garry Lakes area.

2. How were these used and when (what season)? Where are people traveling to or from?

To access the good fishing in the Back River area, for wolf and caribou hunting, and to get to Gjoa Haven, the lower Back River and Chantrey Inlet.

3. Did people travel through this area when going up to the Back River?

Yes, definitely.

To the Queen Maude Gulf area?

No one mentioned the Queen Maude Gulf.

To Chantrey Inlet?

Yes, definitely.

4. Did people run traplines in this area in the past?

Yes, they mentioned that the white fox was the main way to get money to buy needed items and food, and it was obvious it was important to the people.

They did not seem to discuss it as “traplines” but just “trapping”.

Hunting

1. Was there a lot of hunting done in the past in the area of the proposed road and new deposit?

Yes, wherever the people went they hunted – caribou, muskox, wolves, and in season, waterfowl, ptarmigan. These people survived the famines of the 1950s and commented that when food was scarce, they ate any animal they could find.

2. For caribou?

Caribou were hunted all through the area. We identified some routes for caribou, but they did not seem to be able to actually draw caribou routes on the map. They said several times that caribou were “anywhere”. One Elder mentioned that caribou follow trails readily, if the trail goes in the general direction the caribou want to go, and that they even follow an ATV trail to her cabin.

3. How about musk oxen?

Muskox are in the esker area near Amaruq. They used to be common in the areas further north and less so to the south of the Back River, but now seem to be moving south into the area nearer to the Meadowbank mine. They occur right east to Wager Bay, and are coming into the Repulse Bay area as well. Some people thought they were coming into the area because there is more growth of vegetation.

Possibly they are returning to areas where they were common in the past before they were hunted by Inuit working for the whaling ships.

Yes, they were and are hunted for food. In the past, when a family was hungry, the hunter hunted muskox. Then, the hunt was limited as they were being hunted to extinction, Thelon Game Sanctuary forms and the hunting stopped. Now there are quotas and the HTO gives tags out. There are some sports hunts for musk ox now.

Tools were made from muskox horns, especially ladles, and the horns could be used to make very good bows for hunting. The horns were heated in water and could be shaped (special tools made of caribou antler were used to bend the horn material). They were spliced together to make a powerful bow, more powerful than bows made from caribou antler or from wood. Muskox horns were also used to make the flexible side prongs on a kakivak, used to spear fish in the rivers. Antler or metal was used to make the centre prong of the kakivak, which was designed to impale the fish and break its backbone. Sharp barbs of caribou antler were set into the horn prongs. Horn was more flexible than antler, and would spread to admit the fish's body, then close on it, with the barbs holding the fish onto the spear.

Caribou antlers were used to make points for arrows or spears or for harpoon points for fish.

Caribou skin was used to make buckets, qayaqs, sleeping skins, tents, and of course, clothing.

Caribou ribs were used to make bow drills, important for making holes in anything, and for starting fires before matches were available.

4. What can you tell us about the methods used, and time of the hunting for muskox and caribou in this area?

Caribou were hunted at crossing places, with bow and arrow and with spears from qayaqs. Sometimes people dug ditches in the snow and trapped the caribou. The caribou would fall into the ditches, become bogged down in soft snow, and could be speared.

They dug narrow ditches in ice, with slanted sides, covered with a slab of ice. These would be baited with fish or meat and used to catch wolves. The wolf would seek the meat, slide down the ramp, and could not back up. They would be speared in the traps.

There are some areas where there are inuksuit game drive systems and taluit (stone hunting blinds).

5. Was caribou meat cached in this area? At what time? When did people go back to pick it up?

Both caribou and fish were cached, in spring (as dried fish and caribou), and in the fall as fresh/frozen meat/fish. People picked it up as they returned to an area from their yearly wanderings.

In more recent years, people cache fresh caribou in the fall (just as the weather goes below freezing). They mark it with antlers, and go back later in the fall/early winter to pick it up by skidoo, thus avoiding having to carry heavy loads down to the lakes if using boats, or on their ATVs.

They mentioned that, in the last 10 years, they are less successful in caching caribou or fish due to grizzlies and wolverines getting into the caches; that many caches are destroyed each year by these animals. Many people are not using caches anymore, due to the frequency of these events.

6. Were bears hunted in the past in this area? Which species?

We really did not discuss bear hunting much, mostly damage from bears, and the increasing abundance of grizzlies. There does not seem to be the avid hunting of bears in Baker Lake, as opposed to Rankin and the coastal areas.

They did say that when a bear was obtained, it was eaten. A bear would supply protein that could last for weeks.

7. How about wolves?

Wolves came up frequently in our discussions. They mentioned that there are two or three major "wolf trails" that pass E-W through the Meadowbank area and SW-NE through the southern part of the Amaruq area (marked on the map). Spoke of hunting these wolves, and feeling that there are a lot more wolves today than even 10 years in the past. Wolves seem to be an important prey item for hunters from Baker Lake.

Winnie described stone fox and wolf traps, very narrow, with flat rocks for doors. These took a long time and skill to build, but were used to catch foxes and wolves before leghold traps were available. The animal entered the trap to get bait placed inside, and when it pulled on the bait, it released a prop holding up the door. The door came down, trapping the animal inside, where it could be killed with a spear or arrow.

Smaller versions of the wolf traps could be used to catch foxes. These were mostly used to remove foxes that were becoming pests in the camps, as fox fur wasn't really very valuable until it could be traded for items of metal, cloth, or for staples like flour, milk, sugar, or tea. Two main kinds were used, the pulat type with a movable door, and the uplisaut-type, a cone with an opening on the top.

These stone traps were not made once people had the leghold traps.

8. Wolverines?

Wolverines seem to be viewed more as a nuisance animal in the Baker Lake area than a valued fur animal. People did not seem to be really avidly interested in them (compared to the Kitikmeot, where they are actively hunted and the fur used for ruffs on the inner parkas as it sheds the ice from the wearer's breath).

Wolverines were mentioned as being a major problem in getting into caches, and destroying the meat.

The Elders have a great respect for wolverines and said they are smart. They told a story of seeing a wolverine carrying a piece of meat slung over its shoulder, and told tales of their great strength. They mentioned wolverines using rocks by banging them on other rocks, possibly to get at siksiks in their burrows. (I think it was Thomas Iksiraq and Barnabus Oosuaq who told this, but not sure.)

Fishing

1. What lakes in this area are good for fishing? Was most fishing done in the lakes or in rivers?

We asked the Elders to mark the good lakes for lake trout, and found that not only are there lake trout in the lakes but also char. When asked about the size of the char, several elders showed dimensions of about 20-25 cm. Difficult to know if these are landlocked char or not. One elder (Thomas Anirniq) said that the lakes to the northeast of Amaruq and north of Meadowbank are connected to the Back River, and those char are not landlocked.

They fished in lakes and rivers.

When asked about the use of fish weirs (river fishing), they commented that there are fish weirs in the area of the Back River, but not many in between. Norman and Mary Singaqti mentioned using fish weirs up in the Back River area.

2. For what species of fish? Lake trout? Char? Whitefish?

Lake trout, char, grayling, and a smaller fish, maybe cisco. Some people seemed to recognize whitefish, others did not. Whitefish are referred to frequently in Hattie Mannik's book, both regular whitefish, and "round whitefish".

No one really knew about mariahs (burbots), but some said they recognized it from some photos. Jackfish, no. They mentioned sculpins, but these are very small fresh water sculpins, probably not very edible, but eaten when times were hard.

Grayling were fished by jigging, or caught with the hands. They were eaten or fed to dogs.

Oddly enough, they mentioned a fish with a sucker below the mouth that seems to appear in Baker Lake, and mentioned it attacks fish. This is likely a lamprey. They described it in detail.

3. When do people fish for lake trout here?

Some jig through the ice, others use nets to fish in the open water season. Some use kakivaks to fish in rivers. Most fishing probably occurs in ice-free months or when the ice is breaking up in spring. Several Elders mentioned that where fish are common/thick, they often fished for them by just grabbing them with their hands, likely in small channels between lakes.

4. For char?

Char seem to be caught while fishing for lake trout.

5. For whitefish?

I got the impression that whitefish are not an important food fish for these people except in hard times, when any type of fish was eaten, including small sticklebacks, fresh water sculpins, and fish fry. [I asked Michael to check this, as I think the whitefish were more important than discussed in these meetings. No response yet.]

6. Were the fish stored in caches on the land? At what season?

Yes, stored as dried from spring fishing, and fresh/frozen from the fall fishing. Winnie Ikinilik mentioned that "when you eat cached (dried) fish, it really makes you sweat!"

7. Is this still done (storing fish in stone caches)?

This is only rarely done now, due to grizzlies now getting into caches. In addition, travel by boat or ATV/wagon and by skidoo/qamutik allows transport of larger quantities of fish.

8. Legends re huge fish.

In the past, there have been legends of huge fish (large enough to swallow a hunter in a kayak or a whole caribou) told about some inland lakes in the area to the west and north of Baker Lake. Do you know of stories like this for this area?

This was greeted with delight. They have all heard stories of huge fish, big enough to swallow a caribou, or a boat.

"Big fish" lakes include Schultz Lake, Beverly Lake (maybe "Kablunaktuit" (spell?)) and Dubawnt Lake. Winnie mentioned that when people see these from boats, they "go right to shore"; they are definitely afraid of them. Comment was made that they must be very old.

A couple of the Elders had seen very large fish, and said, "Sometimes you just see their shape pushing the water, or under the water. You know there is a fish there and can tell the approximate size from the size of the wave." Winnie said that when people see these from a boat, they go immediately to shore as they are afraid of them.

Certainly all of the people in the workshop really knew about these large fish.

However, no one seemed to think that any of the lakes near the Amaruq deposit or roads were occupied by super-large fish.

Difficult times in the past.

1. Tell us what you know of difficult times (starvation times) in the past in this area (to the north of Baker Lake and south of the Back River)?

This was very important to the participants, and all participated, telling chilling stories. Very emotional for some.

Everyone recalled the difficult times when game was scarce and death from starvation was very possible. Facing death personally was difficult, and facing it for an entire family even more difficult. They had trouble seeing a future, and this made things harder. Most felt the famine years made them stronger, however. Inuit traditional knowledge is based on survival, what can be done to survive in hard times. For this reason, traditional knowledge is vitally important to Inuit.

Norman and Mary Sagaqti spoke eloquently about their experiences. In the famine years, they were starving near Chantrey Inlet and walked to Baker Lake, several times. In April 1954, there had been more than one year of famine. Their fathers died, out on the land, and this was a low point in their lives. Mary had been married at a young age, there were small children, etc. They were in desperate straits, and if a plane had not come, they would have surely starved. They repeated this several times, how grateful they were for the plane.

Thomas Iksiraq and Barnabus Oosuaq, in 1954, were starving. They went to old caribou caches looking for bones, remnants of caribou carcasses, even maggoty ones. It was so hard during the famines. There were no animals of any kind, no hares, no waterfowl, no ptarmigan, no ground squirrels and of course no large animals, not even any fish to be had. Just nothing. It was very hard.

[I asked Michael, if he wanted to expand on any of this. The stories were coming so fast that I think I got behind on my notes. No response yet.]

2. How did they manage to survive the hard times?

Many did not survive – everyone in the workshop knew of relatives (some very close relatives, from the same family group – fathers, uncles, siblings, children, babies) that had died during the famines.

Because they were weak, they had to be careful to try not to walk in soft snow as it would further weaken them. Dealing with meltwater and treacherous ice on the lakes also would weaken them, or perhaps be fatal. They had to be very careful, always.

Those who survived were willing to eat “anything” to survive, including the bones or remains from wolf kills, old cached items, dead animals, etc. Caribou bones from caches were boiled to make a soup.

Food was often given to the children first, the adults ate if anything was left.

Dogs were the hardest to eat. They were tough, plus the people did not want to kill the dogs because they realized they were losing helpers. They boiled the meat from the dogs but still had problems eating it. One elder related how (as a youth) he was out walking, looking desperately for something to eat, and

he found a rotten carcass of a dog in the edge of a lake. He pulled it out, took it back to camp and they ate it. Very difficult.

They mentioned that when one was starving, it became difficult to eat, and one could only eat a mouthful of food when starving – gorging oneself could lead to death.

Some travelled to the closest post before they became too weak to travel. In some cases the strongest travelled, and then brought back food and fuel/supplies for those who were too weak to travel. If the whole group made it to the post, they usually stayed nearby because they could receive rations from the traders, missionaries, or the government. Some food was flown out to camps, perhaps being sent by family or friends in Baker Lake, but this was rare.

Some just endured until the animals returned or the season changed, making other food sources available.

At least three of these Elders mentioned rescue in a common theme: "We were starving…. And the plane came to pick us up. We would have died had that plane not come. They saved our lives." In some cases, they were young, and could not identify the source of the plane. Some said "Military plane." Others said, "Small plane." Most were taken to Baker Lake, but one person mentioned being taken to Gjoa Haven. (Michael did confirm this.)

Another said that Inuit in Baker Lake told the authorities that there were Inuit north of Baker who were starving. A plane was sent to look for them, even though the pilot and others did not think they would find anyone. They were found and rescued.

3. What group of people used to live in this area?

Have developed a table for this, based on several reports.

4. When did they suffer due to lack of caribou or other food animals? Approximate years. Approximate time of year?

Most people mentioned times in the 1950s for the most severe famines they recalled. 1954 was mentioned several times, as was 1957. Varying times of year, but the hardest times seemed to be the spring of 1954. (This could have been related to their weakened state by springtime, and the difficulty of travel once the ice on the lakes started to deteriorate.)

5. What happened to these people?

Some died, some disappeared and were presumed dead, never to be seen again. Some stuck it out on the land, scraping by until conditions improved.

Those who got to Baker Lake still had difficult times. Other Inuit shared food with them, the churches provided some food and the traders provided some. They mentioned that a plane brought some moose meat, but this did not last long.

After the famine years, it took many families a long time to recover. Social assistance was not sufficient, and many families still experienced hunger until the next cheque came and they could buy a bit more food. They tried to hunt, but this was difficult without dogs. Life remained hard for many years.

Many of the survivors returned to their traditional camping areas when the wildlife returned. Some stayed closer to Baker Lake, or got jobs in the developing community, working for the trading post, or the missions.

Many families moved into Baker Lake so the children could attend school, both because they wanted them to be educated, and because the government was pushing them to get the kids into school and refusing welfare if they were not in school. Medical services were also being provided in a more reliable fashion by that time, another incentive to move to town. And, there were more employment opportunities as the community expanded and government/municipal jobs became available.

Special places in this area.

1. Are there any cabins in the area of the new deposit or along the proposed road route? Indicate on the map and indicate whose cabins these are or if they are HTO emergency cabins.

There was a discussion about this, but only one actual cabin was located (see map). No HTO emergency cabins were identified in this area.

[Michael has confirmed that only one cabin was identified, and that there are no HTO cabins in the area.]

2. Do you know of any special places – places of spiritual meaning, places where there are graves, important caribou hunting sites, significant fishing sites, taluit, places where qayaqs were constructed or used, etc., in this area?

The esker to the NE of the proposed road (also identified as a source of road material) was pointed out as the most likely area where old campsites could be found. It was also identified as an important area for wolf denning; wolves and pups have been seen along that esker. [This came up several times. They are quite specific about the esker being important for wolf denning.]

Thomas Anirniq identified a couple areas where his grandmother's grave is located (he would have to be on the ground in the area to find the actual gravesite). These are quite near or maybe in the deposit area.

Caribou were hunted throughout the area, wherever they were found. Several crossing places were identified on some of the larger lakes (see map).

Most people tended to travel through this area to get to the Back River or Chantrey Inlet as opposed to actually living in the area for long periods of time.

No one identified archaeological sites of any significance, though several people said there could be caches or tentrings in areas overlooking several lakes.

3. If possible, indicate locations on the map.

We did the map exercises as separate items because it is difficult for Elders to get up and down and to go over to a map. They became very interested in putting placenames on the Google Earth map, and in annotating the printed maps.

4. Does the mapped route of the road pass close to or through any of these special places?

It passes close to the esker, plus several areas on the esker have been identified as borrow pits for granular material for the road. The one gravesite identified is near the deposit area and the road route but needs more specific identification. There are additional “possible gravesites” identified in the Meadowbank Mine TK Report.

5. Are there any places with large numbers of stone/sod houses (Thule) that you know of in this area?

None were mentioned specifically, although they did discuss the Tunit people a bit, but not in reference to a specific site.

6. Any special legends about the area around the road and new deposit site?

We talked about ijarait and little people, but the Elders in this workshop did not specifically identify places in the study area where these had been seen. They talked in general about them and about the Tunit, but not specifically. Most said that their parents told stories of these beings.

One elder mentioned that, when he placed his tent within an old tent ring, the ropes kept coming loose, even though he had tied them carefully. He looked out of the tent and saw a wolf nearby. He shot at it several times but it did not die. It appeared and disappeared, and he finally gave up. He realized it probably was a spirit or an ijiraq.

Another elder had the same experience with a caribou. He shot at it from close range but it was unaffected. He shot many times, chased it but it just kept appearing and disappearing. Finally, he came to the conclusion that it was a spirit caribou or an ijiraq.

7. Any places where there are large numbers of inuksuit or special inuksuit?

None were mentioned.

8. Any special places where shaman lived?

They mentioned (in passing) people with shamanistic tendencies but did not identify any who lived in this area.

They said that the burial site of a shaman should be considered to be under a curse. Often shamans are buried with many possessions on their graves, and that removal of these items can cause problems for the person who takes them. They mentioned a telescope removed from a grave and that the person who took it was beaten up shortly after doing this – perhaps as a result of the curse.

No one would ever remove anything from a grave – there is great respect for those who have gone before and a belief that these grave items are there for the use of the spirit.

Archaeological sites.

For this workshop, we had access only to the archaeological studies that were done on the deposit area in 2013. These mentioned only one minor site within the deposit area. We did not have access to any reports on archaeological studies done along the road route. Some may have been done in 2014, but none of the elders knew of any work done this summer.

The Elders urged that any work that is to be done on the road be preceded by a survey of the area for archaeological sites, and emphasized several times that people who are familiar with that area be included in the study team working on the archaeological surveys.

They are most concerned that graves not be disturbed, and mentioned that graves are sometimes hard to distinguish, even for an archaeologist. The road should not be built over a grave.

In the days we were discussing here (1940s through 1970s) people were traditionally just laid out on the ground. Sometimes rocks were piled over the body, but often that wasn't possible (rocks frozen down?). Sometimes rocks just put around the body. They were not "buried" or interred, due to rocky ground and permafrost, could not dig into it.

Wildlife and concerns re wildlife.

Caribou.

1. What can you tell us about the movement of the caribou herds in the area of the new deposit and road route?

The elders in this group did say much about caribou movements as such. (This is completely understandable – to understand caribou movements in a big picture, you need to be actually doing a survey of the movements, using info from satellite collars, aerial surveys and mapping exercises. This is

hard to get when you are on the ground, simply hunting.) They said that caribou can be found throughout the area between Meadowbank Mine and the Back River, all year. They were hunted where convenient and where they could be approached. They did identify a number of crossing places (nadlok) where it is likely that caribou were hunted.

Though they were able to point out several high-use wolf trail areas, they could not do the same for caribou. This may be due to the difference in the way Inuit hunt caribou vs wolves. They cut a wolf trail and follow it until they find the wolf. With caribou, they intercept the animals at a crossing place or a place where they can get a good shot.

They were not able to map caribou movements, even though asked at least twice. So, the map does not show caribou movements over time.

2. Have you seen cow caribou with calves in the area between Meadowbank Mine and the Back River.

Yes, often see cows with calves in this area.

[NOTE: We need to better identify the calving grounds of caribou in this area, and where the post-calving aggregations occur. Check with Mitch Campbell? Maybe this is not our responsibility, but the responsibility of the wildlife team?]

3. Are caribou more abundant in this area than in the past? Less abundant?

More abundant than during the famine times of the 1950s (which is the time in which most of the people in this workshop spent time on the land). Becoming less abundant than they were 20 years in the past.

4. What kind of disease problems are you seeing in caribou in recent years?

Hoof rot is seen more than in the past. There is concern over diminishing populations of caribou, but these Elders did not seem to be willing to assign a cause to this.

Muskox.

1. Is the area near the new deposit and proposed road route a good area for musk oxen?

Yes, muskox are frequently seen here.

2. Are they hunted in this area?

Yes, some hunting. Not as much as caribou, but some are hunted. There is a quota, and the HTO issues tags based on a draw.

Muskoxen were hunted heavily in the past, mostly by Inuit who were hired to acquire meat and hides for the whaling ships. The Thelon Game Sanctuary was established to protect the diminishing herds of muskoxen, and Inuit were told *not* to hunt them (by the government). As a result, they were hunted only during times when no other meat could be obtained.

3. Are they increasing in this area, or are there less than in the past?

Muskox seem to be increasing in the area around the Amaruq deposit. They used to be common in the Back River area, and not south of the river but are more common now than in the past. The elders felt that they might be moving into the area from the northwest.

4. Are people hunting more musk ox than they did 15 years ago? Using more muskox for food?

Yes, definitely. No details.

5. How does muskox meat compare to caribou meat in terms of quality and taste? Which do people prefer?

Caribou, without a doubt.

6. There are stories of white musk oxen in the area to the north and west of Baker Lake. Are you aware of any white musk oxen in the area near the new deposit and road?

Just did not get to this question.

7. Is anyone running sport hunts for musk oxen from Baker Lake in recent years? Successfully?

Yes, some sport hunts are occasionally run for muskox.

Moose.

1. Moose seem to be expanding their range into tundra areas of Nunavut. Comments:

Total agreement with this. Many more moose are being seen around Baker Lake. No one mentioned seeing moose in the area under consideration, but all the hunters had seen moose elsewhere, and many more than 20 years ago. They mentioned that more shrubs seem to be growing now, and that moose may be finding better forage in the area now.

2. Have you seen any moose in the area to the north of Baker Lake?

No one indicated that they had seen moose here. On the Back River, on the Thelon River, and to the south of Baker Lake, yes, but in the specific area of interest, no.

3. Would you say sightings are common now?

Yes, they said that moose are seen “pretty often”.

4. Are people hunting moose in this area?

They do hunt them, when seen and if they are equipped to handle them.

5. How acceptable is moose as a food source?

One fellow said, with enthusiasm, "They are the BEST!" Everyone thought they were an acceptable food source.

6. How about in the area near the new deposit/road – any seen there?

No one mentioned this area when discussing moose, unless I missed it in translation.

Carnivores.

1. What about bears and wolves in the area near the new deposit and planned road. Is this a good area for grizzlies?

Apparently grizzlies and wolves ARE frequently seen in this area of interest. They mentioned (several times) the fact that many more grizzlies are seen now. Had spoken earlier of the fact that there seem to be more wolverines around now, and that these get into caches and destroy stored food.

They mentioned that hunters used to be able to sleep outdoors without concern, but today they feel unsafe doing this due to the presence of grizzlies, and feel they need to have the protection of a tent when out hunting.

2. How about smaller carnivores like foxes, weasels, etc.

Arctic foxes are common in the area, though they are more common in some years than in others. They were not hunted much prior to the coming of the traders, but were trapped once there was a market for their fur. Red foxes (and the other colour phases of the red fox) are occasionally seen, but are still not as common in the Baker Lake area as the white foxes.

They also mentioned that river otters are sometimes seen, but that this is not new – they have been seen along the Back River in the past as well. When seen, these are hunted, as the fur is very good.

They also mentioned that some people have seen lynx and marten closer to Baker Lake, mostly to the east of town, close to the channel into the lake. Apparently marten are increasing in the area. (NOTE: We should have pursued this further, as there is a possibility that they are confusing martens with mink. Mink are recorded from Nunavut as far north as the arctic coast and into the Boothia and Melville peninsula areas. Marten are recorded from the southern Kivalliq north to the treeline but not beyond.) I asked Michael if he is sure they know the difference and he affirmed that they DO know the difference.)

Joedee Joedee: Mentioned that his grandparents told the young people that in their lifetimes they would see animals (in this area) that they had never seen before, and that this seems to be coming true now.

One elder's father told them that one should not aggressively pursue animals as that would result in the animals becoming more aggressive toward humans.

A couple people said that they do not think that the animals, especially the caribou, fear people like they used to – that sometimes they do not run at all, whereas in the past, if you came close to them, they ran.

They advised caution around all animals. One person mentioned that hikers and visitors coming from the south are used to domestic animals, and think that animals can be approached closely in safety, but that this is not true and care should be taken.

3. Are polar bears ever seen here?

Apparently, polar bears are occasionally seen far inland. Several people felt they follow Chesterfield Inlet inland away from the sea, and then wander north of the waterway. Mostly these wandering bears are killed and eaten.

No one mentioned seeing polar bears near the Meadowbank Mine or in the area of interest for this project.

4. What about wolves – is this a good denning area?

The Amaruq area is an important area for wolves (maybe not such a surprise as someone named the deposit "amaruq", for "amaroak/amagoak" or "wolf".) In doing the initial placenames on the maps, the Elders sketched in two main "wolf trails", one crossing below Meadowbank, and one heading NW to NE through the chain of lakes to the west of the Meadowbank deposit area.

5. There is a large esker system to the northeast of the planned road route. To your knowledge, is this a good denning area for wolves? Is it a migration route for caribou?

Then, later, they identified the esker to the NE of the proposed road route as a good wolf denning area, and mentioned that wolf pups are often seen in that area, so there are dens.

They emphasized that it will be important to check the entire esker area for denning areas, and that it would be advisable to take a local person along to help with this study.

They did not specifically say that this esker is a caribou migration area, but did say that caribou move freely throughout the entire area identified for this study. And that caribou frequently use eskers to travel through rough country.

6. Are wolves hunted in this area today?

Some people from Baker Lake hunt wolves, but none of these Elders seemed to be particularly involved in wolf hunting.

Raptors.

1. Is the area near the new deposit and road site an important nesting area for raptors like peregrine falcons, rough-legged hawks, gyrfalcons, or golden eagles?

They mentioned seeing peregrines, gyrfalcons, and rough-legs in the area. Not sure about golden eagles (interpretation was confusing here). Norman Singaqti mentioned gyrfalcons, peregrine falcons and rough-legs, specifically.

2. Can you indicate areas where these birds nest (on the map)?

They did not identify specific areas, said "on cliffs".

3. Are you seeing more bald eagles in the Baker Lake area in recent years? Are these nesting? Where are most nests located – on the tops of cliffs? Faces of cliffs? Isolated large rocks?

Yes, far more bald eagles are seen in recent years. Mature and immature birds are seen. I asked about nest sites, but too many people were talking at the time and I did not discern any specific answer.

4. Are you seeing more raptors now than about 15 years ago?

More raptors now, but they may be grouping ravens with raptors. Several Elders commented that there are many more ravens now.

Birds Important for Food.

1. Is the area near the new deposit and road an important nesting or staging area for any species of waterfowl (or other birds) that are important for food?

"There are lots of nests around all of the lakes." This statement was not further qualified. There is likely not the density of nesting that is seen in the Queen Maude Gulf area nor in the Maguse River area where there are colonies of snow geese.

"In general, there is no one major nesting area around Amaruq, but there are nests around each lake." (I'd assume this means there are no dense *colonies*, but that goose or duck nests are common.)

2. What bird species are important for food for people from the Baker Lake area?

Waterfowl, ducks (oldsquaw or long-tailed duck), Canada geese, white-fronted geese, snow geese, and swans. Ptarmigan. (I asked Michael -- did they mention any others? Do any people eat loons? How

about sandhill cranes, swans, pintails, other ducks? No response yet. Found confirmation of pintails, other ducks, but still not sure re loons or sandhill cranes. Using sandhill cranes for food varies across Nunavut. Some people would not eat them, others do.)

3. Is there any bird hunting done in the area near the new deposit and road route? When – what seasons?

Waterfowl hunting is done mostly when the birds are migrating and in larger flocks, mostly in the spring (easier access, by snowmobile). Some hunting in the fall, but access by ATV is much slower. (It is safe to assume that fall hunting may increase if access to the area is made easier due to the all weather road.)

Ptarmigan hunting done at any time, wherever the birds can be found. Norman Singaqti mentioned that there are hardly any ptarmigan between Meadowbank and Amaruq due to the many rocks in the area.

4. Are there any good goose hunting areas near this deposit or proposed road? Which species?

They did not delineate good goose hunting areas on the map, but did mention that there are many areas where they hunt geese.

Norman Singaqti mentioned that there are “lots of waterfowl” around the Amaruq area.

5. What changes have you seen in bird populations in the past 10 years? (Out on the land, not in Baker Lake community.)

There are fewer owls and small birds (songbirds) than in the past (James Kalluk). They do not know why this is, but figure climate change may be part of the cause.

In general, fewer birds. More ravens but fewer of the other species.

Some of the Elders felt there are more raptors around now than 20 years ago.

David Owningayak: Noticed ravens in the 1940s and 1950s, but now ravens are much more common, especially in Baker Lake. They have learned how to get into garbage, and also feed in the dump, so are around all year. He also commented that there used to be lots of nesting geese in the area around the Kazan River, but that this summer, there are few, and in places none at all.

Changes in weather and related effects.

1. What changes have you seen in the weather in the Baker Lake area in the past 15 years?

The elders felt that there is much more instability in the weather and more violent weather events today than in the past, even in the past 10 years. Weather used to come regularly from the north, but now sometimes comes in from the east or the west, bringing soft snow that drifts, but not in the same way as expected in the past.

David Owingayak: In the 1970s, he remembered that there was lots of good snow on the lakes. Lately, the inland lakes have practically no snow.

Barnabus Oosuaq: We used to make good snow shelters, but now there is often not enough snow or the right kind of snow to make shelters.

David O. agreed with Barnabus and also has noticed that the ice is not safe anymore, that there are many spots with open water and thin ice. It is dangerous travelling now, because they can't rely on safe ice.

Thomas Iksiraq: In the last 10 years, he has seen a lot of changes. Even the stars seem "displaced". In the past they were able to use the stars for guidance, but now they are in the wrong places, off by a considerable amount. Likewise, the sun doesn't rise and set in the same place anymore. Disturbing. (NOTE: This information from Inuit Elders has recently been documented in a new film by Zacharias Kunuk, *Inuit Knowledge and Climate Change*, released at the imagiNATIVE film festival in Toronto and on Isuma.tv.)

2. More snow, less snow?

General feeling was that Baker Lake gets less snow than in the past, when, even with the snow fence, huge drifts built up in the west end of town. This seldom happens today.

Thomas Iksiraq: When there's snow, it is not the same consistency as in the past. It is harder than usual, with more layers, not good for making snow blocks. It is not as easy to make iglus as in the past.

Barnabus agreed with this, stating that after about 1989 he has noticed changes in the snow, getting harder each year. It won't make proper blocks. He feels the weather changes in patterns.

Winnie Ikilinik agreed with all of this.

3. Earlier or later breakup?

DavId Owningayak: the spring thaw used to proceed at a slow and consistent pace. Now, it starts melting and happens very quickly. We used to be able to travel at night in the spring, when the snow was hard again. Now, we can't do this reliably because the snow often doesn't refreeze at night.

Norman Singaqti: He is in general agreement with David. He is sure that the consistency of the snow and the timing and character of the spring thaw is changing. There is less snow on the south sides of the hills and there is a change in the direction of the winds, which bring the snow. It is harder to make snow

blocks to build an iglu, and in some years there is hardly any snow. There is also a change in the colour of the sky – it is now hazy, not clear.

Winnie Ikinilik: She is in general agreement with all that David and Norman have said. She, too, has noticed the displacement of the stars, the fact that the moon does not seem to be where it used to be. She feels that changes are extreme and that there is much more uncertainty to the weather. She has noticed that in June, there are now periods of extreme cold, yet the season comes earlier.

David Owingayak: There are larger plants now growing on the land. The shrubs are growing more and are larger than in the past years. The shipping season seems to come later, also.

Hugh Avatituuq: The berries are not growing right today. They are not developing right and are not getting ripe when we expect them to ripen.

4. Earlier or later freezeup?

Winter is coming later, but sometimes winter seems to last longer. This thought was expressed but then they went on to other topics and did not return to this.

5. More rain in summer? Drought in summer?

There was a drought this last summer. Not nearly as much rain as usual in summer.

James Kalluk: Everyone was hoping for rain, but there was no rain. In earlier years we sometimes had real downpours with thunder. Today, the thunder is far away, not near people.

6. More crusting snow in springtime?

The melt is uneven, not dependable.

Joedee: There were real blizzards in the past, but these seem less now – not as severe, nor as many.

7. More thunderstorms with lightning? Are you seeing more tundra fires than in the past?

There was much smoke this last summer. So much smoke that you could smell it. Insects were dropping from the skies here.

No one commented re tundra fires.

8. Other comments regarding the weather or climate:

Thomas Iksiraq: He believes there have been changes in the weather. He has noticed changes in the timing of the moon, when the moon appears over the horizon. It how rises in a different place at a different time. It is displaced, as the sun and stars are displaced.

James Kalluk: He travelled to Gjoa Haven in the 1970s. “At that time we could make good igluit along the way. The wind was most often from the north then. Now, using the same route, we find the wind is from the northwest, so the snow is different. It is not as easy to make iglus now.”

Joedee Joedee: He mentioned that, in times past, when they travelled, they would sweat, but now, in recent years, people seem to sweat less. It is not normal. When you do natural work, there should be a true, natural sweat. But this is not so. Also, in the past, when hunters went out in the winter, could travel in the dark, as they were able to trust the ice. Now, in parts of the Thelon and other places, the ice is different, sometimes too shallow, so many rocks, in other places, the ice is thin and not to be trusted.

Thomas Iksiraq: In earlier times, the sky was clear blue. Now there are more cloudy days. It is sunny only a short time, then cloudy again.

Winnie Ikinilik: She has noticed changes in the temperature of the different seasons, and in the consistency of the weather. They are now abrupt, many changes, colder summers, then too hot. There are extremes. Winters are different, and temperatures are different. When it snows, seems like there is lots of soft snow, but then it blows away, and doesn’t pile up.

James Kalluk: I have noticed changes in fresh snow. We used to chink iglus with soft snow, could pack it into the cracks and it would stay. However, now it falls apart, won’t stay in the cracks.

David Owingayak: I have noticed another difference in winter travel – the snow that hits your face while travelling in winter is now much harder like bits of ice. It is almost painful when you are travelling.

James Kalluk: there are extreme changes. In the past, you could make an iglu in December. Now you can’t, it is much harder to find the good snow to make an iglu. It is harder to decide where to build one. Snow has more layers – the blocks do not hold together well.

At this point someone asked if we were going to put any more names on the map. We stopped for a while and they added a few more names. Michael took notes and tried to capture the names phonetically as best he could.

We then awarded prizes of pipsi, and smoked char from Kivalliq Arctic Foods. This went over extremely well – these Elders certainly appreciate country foods, even when presented in new ways.

Recommendations regarding new deposit site and planned road.

1. Do you have any recommendations for AEM regarding the use or management of the planned road?

NOTE: We should have asked this earlier – by the time we got to this, they were getting tired. Joedee Joedee was elected Mayor the night before our workshop, so he perhaps was speaking out of a need to support the needs of the community, but perhaps has not been properly briefed yet.

USE LOCAL PEOPLE for field studies along the road route, to identify denning areas and gravesites, other areas with signs of use in the past. Wildlife specialists should be accompanied by local people who know the land, not just young people hired to keep watch for bears. Archaeologists should have an elder with them all the time.

Joedee: He had a question regarding benefits to Baker Lake from the Amaruq project….. "There are sure to be royalties going to Rankin Inlet from this project – but these should go to Baker Lake as we are the nearest community."

John Witteman answered this concisely: That the royalties go to NTI, and the funds negotiated under the IIBA go to the regional Inuit organization, in this case KIA. That this is not something the company can control, it is legislated. John also mentioned that there are jobs and that many people in Baker Lake already work for Agnico Eagle or have worked for the company in the past. And that the Amaruq Project will extend the life of the Meadowbank Mine for what could be several years past when it was expected to close. People in Baker Lake need to consult with KIA as to what happens to the dollars paid to KIA or NTI. The best way to do this is to talk to your KIA Board Member and make sure that person takes your concerns to the board meetings.

David Owingayak: He commented that they have written letters to KIA, but have not received any answers.

No one could say who the Board Member from Baker was, so we suggested that they talk to Lorraine Niego, who works for KIA in the community. (Info obtained from Steve Hartman: Peter Tapatai is the Board Member.)

At this point, it was getting late and their fatigue was apparent.

We paid everyone, adjourned and went into the adjoining living room to take the group photos.

At the end, all were enthusiastic, honoured to have been a part of this consultation, and thankful for the payments, prizes, lunches, etc. We were thanked by almost everyone.

We deeply appreciate their participation. It is fascinating, and so important to capture this info NOW.

Page Burt
Outcrop Ltd.
Rankin Inlet

John Witteman's notes from the Traditional Knowledge Meeting

Ten elders born or raised in the Back River, Garry Lake and Chantrey Inlet area attended a two-day TK workshop. This area covers the proposed Amaruq Road area. Two maps were prepared, the first one by Agnico Eagle showing the road route with arch culverts, bridges and borrow pits. The second map was a 1:250,000 topographic map.

The purpose of the meeting was described as obtaining Traditional Knowledge for the Amaruq road area but the workshop in itself had nothing to do with any regulatory approval. The outcome could nonetheless be used in the environmental assessment of the road.

Introductions were made all-round. They are as follows:

Winnie Ikinilik: Born in the Garry Lake – Back River area. (The Back River runs through Garry Lake.) They moved to Baker Lake 50 years ago, as kids had to go to school. She worked off and on in Baker Lake, and is well renowned for wall hangings that were shown in the National Art Gallery in Ottawa.

Barnabus Oosuaq: Born north of Meadowbank. Hunted in the general area between Meadowbank and the Back River. He and his brother Thomas travelled extensively throughout the entire area but principally lived in the Meadowbank area. During the 1953 famine, moved towards Baker Lake and ended up in Meadowbank area. In 1969, he and family moved to Baker Lake.

Thomas Iksiraq: Brother to Barnabus. Moved in 1960 back to Baker Lake for school. In 1973 worked for the Arts Coop (Sanivik *sp?*) and since retired from printmaking.

Thomas Inirniq: born near Gjoa Haven. Hunted from Gjoa Haven. Afterwards moved to the Amaruq area and hunted in the Meadowbank area. In 1967 moved to Baker Lake. In 1970, labourer with the Hudson Bay company. !977 worked as a driver for the municipality. For 2 years in the 1980s spent it at an outpost north of Amaruq. In 1985 moved back to Baker Lake.

James Kalluk: Born north and lived around Garry Lake. Travelled up and down the Back River (known as Hanungajuq by Inuit). Hunted, wintered and summered in the general area of Amaruq but does not know it too well. The area hunted was quite extensive, which included between Meadowbank and Baker Lake. In 1960 moved to Baker Lake, likely because of school for the kids.

Norman Singaqti (married to Mary). Born way north of the Back River. Grew up and hunted in that general area with parents and himself. In 1965 moved to Baker Lake and continued to hunt in this area. Worked for a while for the municipality before working for Baker Lake housing as a carpenter.

Mary Singaqti: Also born in north of the Back River and grew up in the general area. In 1956 married Norman. In 1960 (Norman said 1965) moved to Baker Lake so son could go to school. Worked and continues to work as an artist – wall hangings and prints.

Joedee Joedee: Born near Chantrey Inlet. First activity was fishing the lakes in the area. In some places, one could grab a fish from the stream. In 1960, he and his sister were brought to school in Baker Lake. Recounted how he worked for 5 days for the Hudson Bay and made $3. In 1965, worked for the municipality. Elected to various boards, housing association, HTO, 1972 minister with NWT, 2006 got a deacon certificate. Hunted all around the Baker Lake area.

David Owingayak: Born in 1949, moved to Baker Lake when he was nine. Never went to school.

Michael Haqpi (translator): picked up by spirit plane in 1959 and brought to Baker Lake. (This being the first plane he saw and assumed it was a spirit.) Has lived in Baker Lake ever since.

There are three main routes to the Back River; not all could be shown on the maps at the meeting. (The maps provided at the meeting did not cover all the travel routes.) The reasons for passing through the area were to travel to Garry Lake area, to go to Gjoa Haven and to hunt caribou. During the famine, some walked from Chantrey Inlet to Baker Lake. In winter, they travelled the lakes through the Amaruq area, and the trails all joined up with the esker, which was then travelled.

Broad scale caribou hunting was carried out all around the large lakes near the Amaruq road. If the caribou were scarce around Baker Lake, Inuit travelled further north to hunt. The general area used north of Baker Lake encompassed the Amaruq road where caribou tend to be found year round. Caribou caches still are used occasionally but now there is a problem of wolverines and grizzly bears raiding the caches. If the plant growth looks good, the caribou are fatter. Caribou follow trails, even an ATV trail an elder has to her cottage.

Grizzly bears are much more numerous today than in the past. Although seen in the past, nowadays they are more common. In the old days, elders noted that one could fall asleep outdoors without worry but today with many more grizzlies around, Inuit are leery of sleeping outdoors without a shelter like a tent. Grizzlies have been noted along the big esker parallel the road. Caribou and fish caches are being raided by grizzly bears and wolverines

Moose are becoming more common in the region and two have been shot. This was supported by elders noting that shrubs are growing taller – a food for moose. Lynx and marten are being seen east of Baker Lake now, not in the past. Otters are occasionally seen in the Back River (Haningajug in Inuktitut) but this is not a new occurrence. Incidental observances were also made in the past. Otters are hunted for their fur.

There is muskoxen hunting in the area, as they are more plentiful now than earlier. Muskoxen are expanding their range all over Nunavut. Muskoxen are found around Wager Bay. The Baker Lake Hunters and Trappers Organization (HTO) carries out a draw for hunting muskoxen, not everyone can go out hunting muskoxen at will. Some sport hunters come north to hunt muskoxen out of Baker Lake. Before the Thelon Sanctuary was established to save the remaining muskoxen, Inuit shot muskoxen if

they came across them. After the establishment of the sanctuary, Inuit observed the government request that they not be hunted.

Wolves are common in the Amaruq area, especially on the esker running parallel to the proposed road. It is thought that the Amaruq esker is used for denning as wolf pups have been seen on the esker. The elders recommended that Agnico Eagle undertake den surveys on the esker areas to be used for borrow pits (and archeology). Arctic foxes are everywhere and were trapped for their fur in the past when the arctic fox fur was in fashion. Red foxes are not seen too often. When other animals are scarce so are foxes. Lynx and martens have been seen east of Baker Lake. As all the borrow pits are to be found on eskers, the areas should first be checked for dens.

Joedee Joedee, the mayor of Baker Lake, said that his grandparents told the young people that they would see animals here that they never saw before and now it is coming true. It is recognised by Inuit that the migration patterns of animals change, they migrate all around. An elder's father said that one should not aggressively go after animals, as it will only lead to them becoming aggressive. One needs to be aware of this all the time. Changes are seen in that animals are not longer scared and do not flee from humans all the time.

Hikers are coming from the south where there are domestic animals. The north has wild animals and they require special attention.

The Amaruq area has many songbirds but not as many as long ago. Gyr and peregrine falcons, rough legged hawks, and owls are frequently seen. Bald eagles are becoming much more common compared to earlier times. They seem to be expanding their range. Oldsquaw, swans and Canadian geese nest around the lakes and are widely dispersed, there is not any concentrated nesting areas. Water birds are more common north of Baker Lake area but again the numbers are down from earlier times. While there were nests at the mouth of the Kazan River long ago, this is no longer the case. Presently, skidoos are used to hunt ducks in the spring. Ravens are more plentiful than in the 1940s and 1950s. Ptarmigan are not found in the Amaruq area

The big lakes as shown on figure 1 have trout and char. Some may be landlocked char but this remains unknown at this time. Nets were used by some elders while other just jigged for fish. North of the Amaruq road, the Inuit used weirs built by Inuit many generations ago. The more elderly Inuit at the workshop had the most knowledge in how to use weirs. Besides trout and char, grayling were caught and possibly some cisco although this cannot be verified. There are many grayling and these were part of Inuit diet. Grayling are also used for dog food. Sculpins are also present and are only eaten when Inuit are hungry. Lamprey are seen in lower reaches of northern rivers draining to the sea. Inuit used fish caches but these were far north of the Amaruq road. Two elders remembered fish caches and ate frozen fish. Eating fish made on look younger. However, during the famine, if one ate too much fish from a cache, one got sick. You could only eat a mouthful at one time. Fish caches were used during the winter and early spring. The use of caches is falling off as the increased numbers of wolverines and grizzly bears

is leading to caches being raided more frequently. This happen in the past but not with the regularity today.

Great big fish, large enough to swallow a human and up to 22 feet large are remembered being in the larger lakes in the region (e.g. Schultz Lake, Dubawnt Lake). When Inuit see them, they go to shore, even though they do not bother humans.

Marine mammals were not used by the Inuit from this area.

Tool making from muskoxen horns was common before resettlement. They were used as ladles and fish hooks. One elder still knows how to make tools from muskoxen horns. Other tool making saw buckets for water made out of skins. Ditches that filled level with soft snow in winter were used to trap caribou and wolves. The animals sank in the soft snow and could not get out of the ditch. Caribou antlers were made into bows and spears. It took a lot of effort to make traditional tools. Fox and wolf traps were made out of boulders. A wolf trap saw the wolf enter, the trapdoor would close once triggered and the wolf could not back out. It has been a long time since stone traps were used. None of the elders remembered how the trigger worked on the stone traps. Before guns, bow and arrows were used. Spears were commonly used when caribou were hunted in the water.

Difficult Times (Famine)

The difficult times (famine) were unforgettable. This was a time when death from starvation was common, and game scarce. There were no animals, birds or fish. The spectre of facing death was haunting, the elders related this as the most difficult thing they ever did. Facing death was difficult as there was no future to visualize. One came out of the famine really stronger. Conventionally everything in traditional knowledge dwelt on survival techniques - learning the hard way. Traditional knowledge has significant importance under famine conditions and this is why it is important to Inuit.

Traditional Knowledge was relayed in keeping out of deep snow as it makes it harder to walk and one hungrier.

Dead ducks, dogs and skin were all eaten. Eating the dogs was a hard thing to do. This being the last thing a starving family did, it was very hard to eat dogs. They boiled the dog meat. Caribou bones from caches were boiled for soup. A decomposing dog pulled out of a lake what little good meat left on the carcass was eaten. One only ate small mouthfuls as eating too much lead to death.

One family had three dogs. The father gave food to the youngest first rather than eating himself. As a result, he died of starvation while travelling on the land. He was buried on the land. His mother killed one of the three dogs for food. They, mother and two brothers, ended up with only one dog. They found and old caribou carcass and this was eaten.

During the 1954 famine, she and other family members were rescued and flown to Bake Lake. A story was related where Inuit in Baker Lake insisted that there were Inuit that needed to be rescued north of

Bake Lake. The pilots reluctantly went out to look and found Inuit who were starving and flew then to Baker Lake.

Help came in various forms. Many families were relocated to Baker Lake. Families shared the little food that they had. The churches gave out small amounts of food. A plane brought moose meat one time to Baker Lake but it did not go far enough. After the famine, it took several years to recover. Social assistance did not go far enough; families went hungry between cheques. After each cheque, families still went out hunting for more food.

Spirits

Parents of the elders spoke of little people or spirits.

A shaman is buried with all their possessions placed on top of the grave. A curse will be on you if you take anything. One time a person took a telescope from a shaman's grave and was beat up. This showed that curses do come true.

One elder set up a tent within a tent ring and the ropes were always coming loose. In looking out the tent saw a wolf. Shot from close range at the wolf but missed. Ran after it up a hill, shot yet again and missed. Finally realised it was a spirit wolf. It is not a good idea to set up a tent within a tent ring.

An elder saw a caribou and went after it. However, it kept disappearing and popping up elsewhere. The elder got tired of chasing it and headed home but it continually showed itself. At that point realised it was a spirit caribou.

Weather

The local weather has changed and this is happening for unknown reasons. There was unanimous agreement among the elders on this. This has been most evident over the last ten years where more extreme events occur these days. It is more dangerous to travel these days due to open water as where there was ice of sufficient thickness in the past at the same locations. This year there is no snow to make shelters on the shore of Baker Lake. Snow seems to be coming from the east and west rather than the north as in the past and it remains soft and blows around. It is cloudier nowadays than in the past when it was clearer. The seasons used to be more consistent. When at the cabin she wears wind pants many more times, as the changes in the weather arrive unknown. Freeze up is later but the winter can be longer these days.

The nature of breakup has changed as well. In the past breakup happened slowly, nowadays the melting is rapid. Snow is melting earlier and more frequently leading to less being available for making snow shelters. One can no longer build igloos due to the snow today. Elders remembered when Baker Lake on occasion would be buried in snow, this no longer happens. Blizzards are not as intense; one gets just snow squalls more frequently. Snow is much harder these days

The consistency of snow is different now. It is more difficult to get snow that allows good snow blocks for igloos. The soft snow, which previously could be used to fills the holes between snow blocks no longer stays in place.

In 1970, one could travel to Gjoa Haven and make igloos along the way but now the predominate wind is from the NW and this results in snow that is not good for building igloos.

With the change in weather, willows are growing higher. (This would have a bearing on seeing more Moose who browse on small bushes – willows being one such bush.)

Recommendations

Agnico Eagle should protect graves and archaeological sites. The road should not go over them. Graves are hard to spot. You will see a spirit if a grave is disturbed.

Archaeologists and wildlife scientists should have a knowledgeable local person with them.

As all the borrow pits are to be found on eskers, the areas should be checked for dens first.

Images of annotated maps from the meeting

Image 1. Area south and west of the Amaruq Road

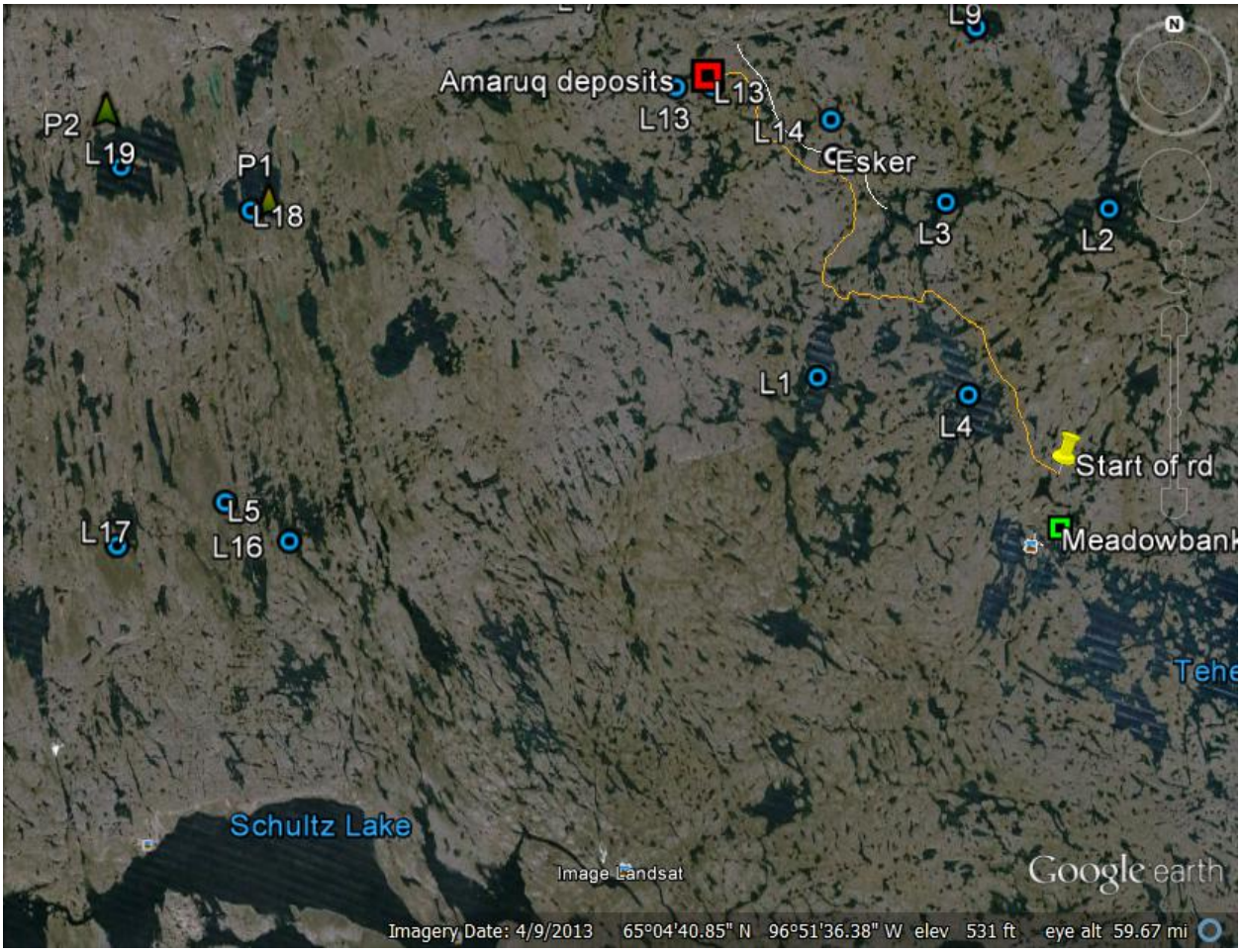


Image 2. Area north of Amaruq with locations noted

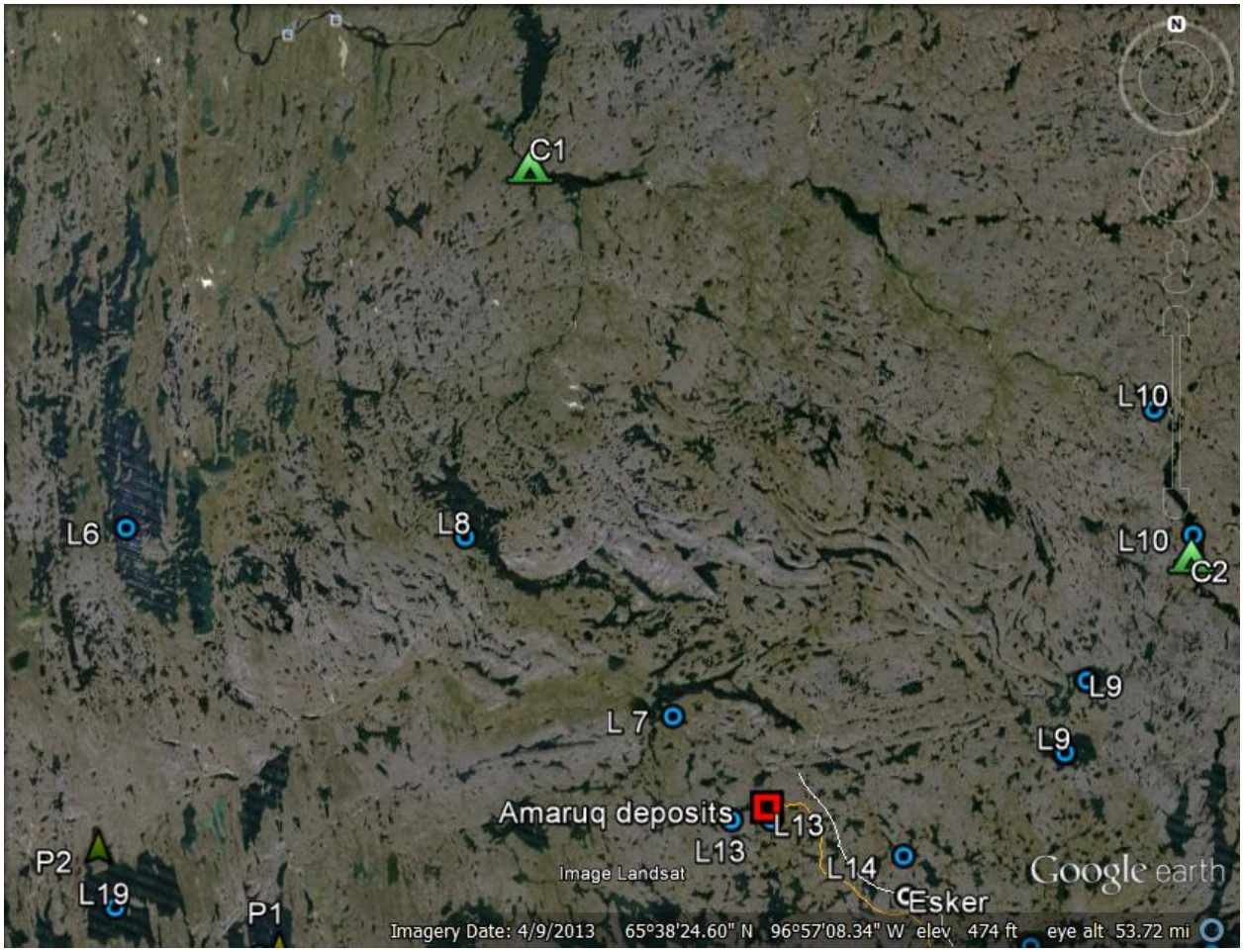


Image 3. Amaruq Road with lakes, camps and points of interest noted by the elders

Image 4. Southeast portion of Figure 1 as noted by the elders

Image 5. Annotated northern portion of Figure 1 with place names, camps and points of interest as described by the elders

Image 6. Annotated northern portion of Figure 1 with place names, camps and points of interest as described by the elders

Image 7. Northern half of 1:250000 map sheet

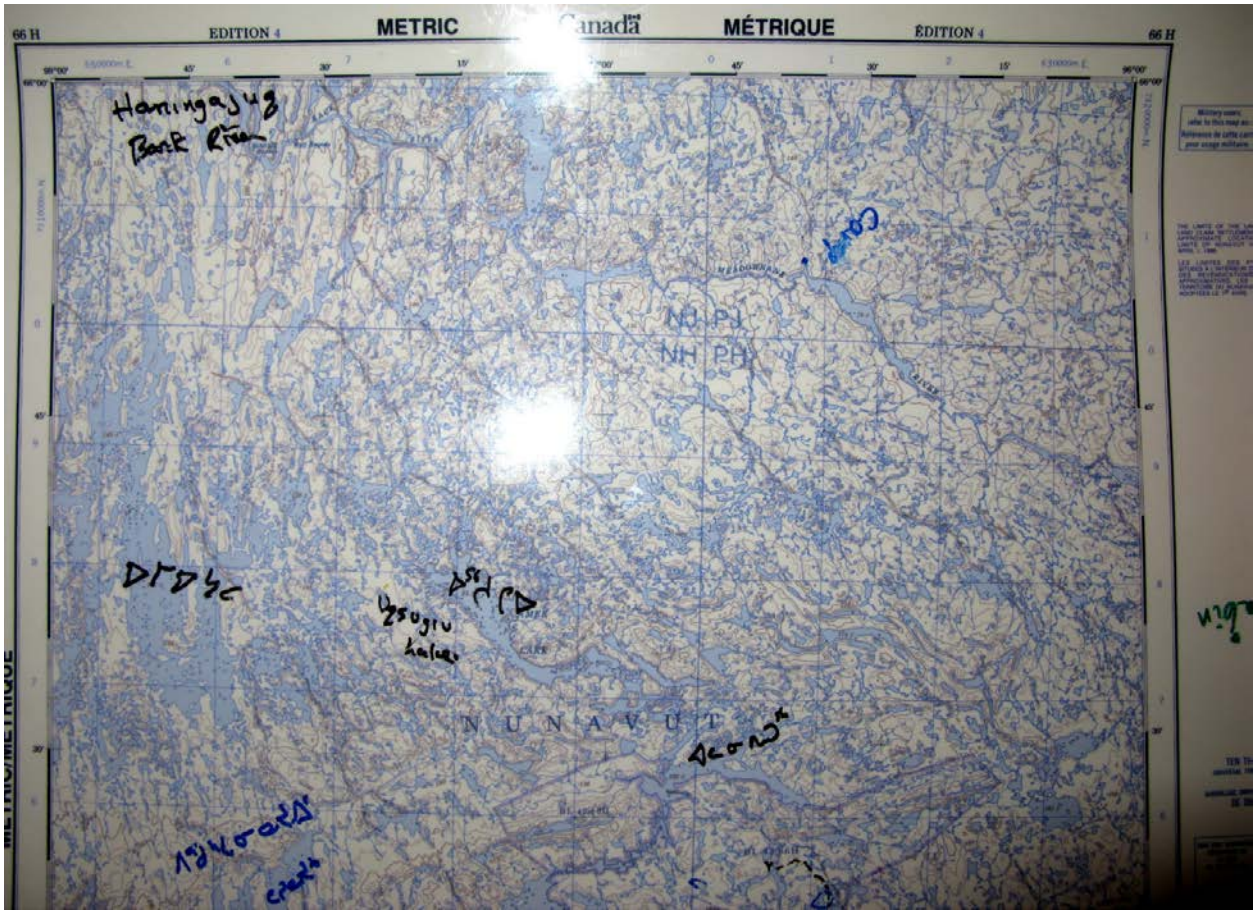
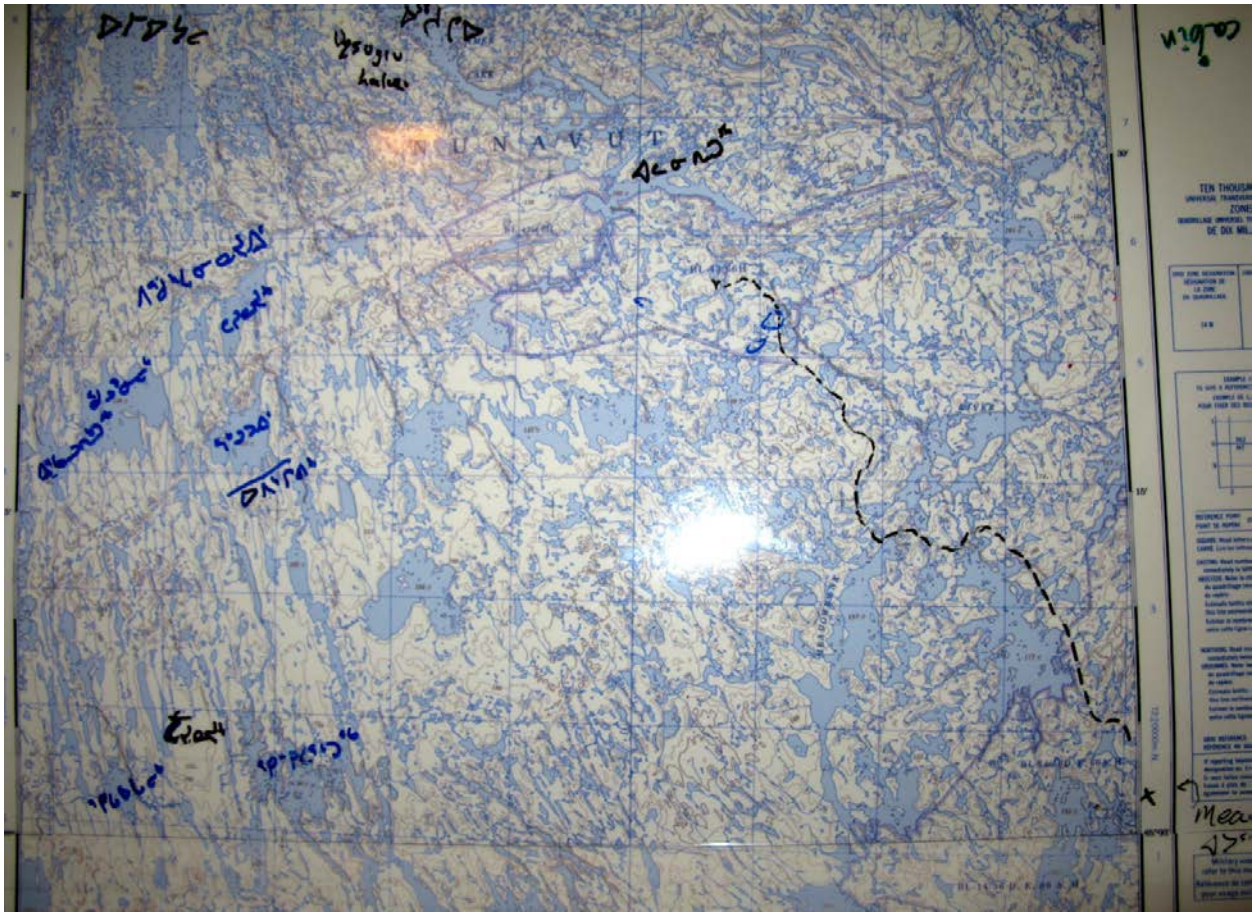


Image 8. Southern half of 1:250000 map sheet



Appendix 4. Photos from the workshop, including group photos

Appendix 4.

Agnico Eagle Amaruq Project, Traditional Knowledge Report

Workshop Photos

Group photo: Front row, l to r: Winnie Ikinilik, Joedee Joedee, Barnabus Oosuaq, David Owingayak, Norman Singaqti. Back row, l to r: Page Burt, Michael Haqpi, John Witteman, Thomas Inirniq, Hugh Avatituuq, James Kalluk, Thomas Iksiraq. Not present but in workshop: Mary Tatya Singaqti.

Working with map on wall, pointing out travel routes.

Michael Haqpi interpreting. ->

Stories of travel based on map.

James telling of experiences on the land.

David and Norman talking of route walked in famine time.

Michael delineating travel routes.

Hugh writing in lake names for Thomas and Barnabus.

Michael annotating map.