

DM# 13756
PR# 0708-005



Alistair MacDonald
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre
Box 938, 5102-50th Ave
Yellowknife, NT X1A 2N7

January 11, 2007

Re: Project Description Summary - Crab Lake (EA0708-005)

Dear Mr. MacDonald:

As per your letter dated November 28, 2007, we are attaching to this e-mail a file containing our Project Description Summary Report for our Crab Lake Project. We are also attaching a 1:500,000 scale map showing the area we are planning on exploring, and a series of 1:50,000 maps showing the proposed camp location and drill targets.

Please let me know if you require any further information.

Regards,

A handwritten signature in black ink, appearing to read "G. Davidson".

Gordon I. Davidson
Vice President Exploration, Canada

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Bayswater Uranium Corp – South Thelon Project



Crab Lake Mineral Exploration Program

Project Description

January, 2008

1. INTRODUCTION

1.1. Company Overview

Bayswater Uranium Corp. is a relatively new company that is focused on exploring areas that have high potential to host uranium ore deposits. Uranium is the fuel for nuclear power stations, which generates electricity. Bayswater Uranium was formed in August 2006 when two pre-existing companies (Bayswater Ventures and Pathfinder Exploration) merged. In Canada, Bayswater is currently actively exploring properties in Nunavut, Saskatchewan, Newfoundland and Labrador in addition to the Northwest Territories. Internationally, Bayswater holds exploration projects in the USA (Wyoming, Montana and Nevada) as well as in West Africa (Niger and Mali).

Bayswater's senior management has a strong track record of directing successful mineral exploration projects while respecting the rights of aboriginal residents as well as operating in a manner that will have no ill effects on the environment. Bayswater strongly believes in working together with aboriginal residents in order to further their aspirations while respecting their traditions and culture.

This report briefly summarizes Bayswater Uranium's exploration plans to be carried out from the Crab Lake camp. The project location and the location of individual targets is shown on Figure 1 attached to this report. More detailed maps of these target areas at 1:50,000 scale are also included with this report.

1.2. Project History

The southern part of the Thelon Basin in the NWT has gone through several phases of uranium exploration since 1976. This area is prospective for uranium deposits due to its geological similarity to the Athabasca Basin in northern Saskatchewan, which hosts a number of high grade uranium deposits. All of Canada's current uranium production comes from the Athabasca Basin, and Canada is the world's largest uranium producer. Uranium mining has been safely mined in Northern Saskatchewan since the late 1940's. The area that Bayswater's land holdings currently cover have been explored by a variety of companies since 1976 including Urangesellschaft Canada Ltd. (now part of Areva Resources), Gulf Minerals, and PNC Exploration. Many of these companies have changed ownership and names since they were exploring in the NWT. Pathfinder Resources, one of Bayswater's predecessor companies, started exploring in the Thelon Basin in the NWT in 2006, when it acquired a number of prospecting permits. Bayswater has subsequently carried out extensive airborne geophysical surveying over all of its land holdings in 2006 and 2007. Minor ground prospecting was carried out in the summer of 2007 out of the Tukto fishing lodge situated at the south end of Mosquito Lake. To date, Bayswater has not established any camps or fuel caches in the south Thelon Basin.

2. ACTIVITY DESCRIPTION

2.1. Location

Exploration work to be carried out of the Crab Lake camp will be on lands within the Dubawnt River watershed. These lands include the following: Prospecting Permits optioned from Diamonds North Ltd. situated in NTS 65-L-6, 10, 11, 12, 13, 14, and 15; 65-M-2, and 3. In addition, work will be carried out on other claim groups situated in NTS 65-E-13, 65-H-16, 65-L-3, 4, 5, 6, 11, 12 and 14, 65-M-2, 75-I-1, 7, 8, 9 and 10. The Crab Lake camp will be located at

62° 45'N, 103 ° 14'W, and is the following distances and directions from the nearest communities (see Figure 1):

Lutsel Ke: 390 km (242 miles) E; Yellowknife: 577 km (358 miles) E;

Baker Lake: 388 km (241 miles) SW; Stony Rapids: 440 km (273 miles) NE

2.2. Project Leases and Claims

The camp will support early stage mineral exploration on the Prospecting Permits optioned from Diamonds North Ltd. (Permit numbers 5162, 5177, 5180 to 5187, 5189, 5191, 5201, 5203 and 5205). These permits are situated in NTS 65-L-6, 10, 11, 12, 13, 14, and 15; 65-M-2, 3, and 4; 75-I-16; and 75-P-1 and 8. In addition, work will be carried out on other claim groups as follows: THU-50 to 52, THU 64, THU 73 to 75, THU 104 to 109, THU 111 to 114, THU 116 to 137, THU 143 to 151, THU-162 to 170, THU-173 to 230, THU-393 to 526, AX-1 to 19, TC-1 to 89, and VB-1 to 29 collectively called the "South" claims. These claim groups are situated in NTS 65-E-13, 65-H-16, 65-L-3, 4, 5, 6, 11, 12 and 14, 65-M-2, 75-I-1, 7, 8, 9 and 10. All these claims are held by Bayswater Uranium Corp.

2.3. Camp

2.3.1. Camp Layout and Facilities

The Crab Lake camp will be built with either 2X4 wood frames covered by insulated tents, or with "Weatherhaven" style tubular aluminum frames and covers. A total of 9 tents will be erected including a cook / dining tent, office tent, a "dry", a core shack, an outhouse and 5 sleep tents. Each of these tents will be approximately 14' X 16' in size (except for the cook / dining tent, which will be about 14' X 32'), and will be constructed on plywood floors. All tents will be built at least 100 m from any water body. Core racks will be erected to store drill core.

2.3.2. Waste Management

All garbage will be incinerated on site with a portable diesel fueled incinerator. All burned residue and non-burnable waste will be flown to Yellowknife for disposal in the municipal dump. The quantities of waste to be sent to Yellowknife will be modest – less than 1 cubic meter per week. All sewage from the outhouse will be burned in the incinerator. Grey water will be disposed of in a natural sump.

2.3.3. Power Generation

Electricity for the camp will be provided by a small 12 kW diesel generator.

2.3.4. Water Sources and Volumes

Water source for the Crab Lake Camp will be Crab Lake. It is estimated that water use in the camp will be about 500 liters, or 0.5 cubic meters per day. For exploration during the winter and early spring when there is ice cover on the lakes, the total period of time the camp will be occupied over this time period is estimated to be no more than 90 days per year. The cumulative water withdrawn from Crab Lake would thus not exceed 45 cubic meters in any ice covered season. This amount is below the DFO threshold for winter withdrawal of lake water. The area of Crab Lake is 7.6 sq. km, and the average depth is conservatively estimated at 5 m. Thus, the estimated volume of water in Crab Lake is approximately 38,000,000 cubic meters, and the amount of water removed from this lake will be insignificant.

2.4. Transportation

2.4.1. Air Re-supply

The camp will be resupplied on a weekly basis by either float or wheel equipped aircraft (primarily Twin Otters) from Yellowknife. Wheel equipped aircraft would land either on lake ice in the winter, or on a sandy beach adjacent to the camp in the summer.

2.4.2. Winter Road

No winter road into the project area is planned.

2.4.3. Drill Moves

Drill moves for drilling carried out in the summer will be by helicopter. If drilling is carried out in winter or spring, a vehicle such as a Timberjack skidder will be used to move the drill overland. This would only be done if there is complete snow cover so there would be no impact on the tundra.

2.4.4. Within Camp Area

In summer, a quad all-terrain vehicle will be used on a restricted basis to transport freight around the camp. Its use would be restricted to a trail between the tents and the primary landing strip on the beach to minimize ground disturbance. In winter, snowmobiles would be used in the camp area.

2.5. Diamond Drilling

2.5.1. Drill Type

A drill similar to a Longyear LF-70 will be used to drill test the targets. This drill rig weighs about 3000 kg (6600 lbs), and associated pumps, shack & tower weigh about 5000 kg (11,000 lbs). This type of drill is easily dismantled for drill moves.

2.5.2. Drill Target Areas & Total Meters

A number of drill targets have been identified from previously completed airborne geophysical surveys. Many of these targets will require further ground geophysical surveys prior to drilling. The two targets to be evaluated are identified on the attached maps. A total of 5,000 meters of drilling is proposed in approximately 15 drill holes.

2.5.3. Drill Waste Management

Waste products from diamond drilling consist of cuttings, which are pulverized rock, and liquid waste, which consists of water mixed with whatever additives are added to the water, is pumped down the hole. The following steps will be taken to mitigate any environmental impacts:

- Drill mud cuttings with a uranium concentration of greater than 0.05% will be collected and then disposed of down the drill hole and sealed.
- Any drill hole that encounters mineralization with uranium content greater than 1% over a length of > 1 meter, and with a meter-percent concentration > 5.0, will be sealed by grouting over the entire length of the mineralization zone and not less than 10 meters above or below each mineralization zone.
- Liquid waste shall be contained in sumps, containers or natural depressions located as close to the drill site as possible.

- Where possible all efforts shall be used to prevent drill mud, return water, and cuttings from running uncontrolled from the drill site or to within 100 meters of a water body or watercourse.
- Drill additives to be used may consist of calcium chloride (necessary to penetrate permafrost), bentonite, and various gels and polymers (necessary to drill in difficult ground conditions). Wherever possible, biodegradable mud and non-toxic additives will be used. An adequate closed circuit system will be utilized for potentially harmful mud and other additives.

2.5.4. Winter Ice Drilling

It may be necessary to drill targets from lake ice in order to test targets. The procedures listed above will also be used for ice drilling in addition to the following:

- Fuel will be stored at a shore cache a minimum of 100 m from the high water mark. Fuel necessary for the operation of the drill will be stored in a secondary containment system. Absorbent matting or drip trays will be used where accidental spills may occur during refueling.
- Any water intake will be covered with 2.5 mm or less screening material. The water velocity at the screened face of the intake will not exceed 3.8 cm/sec.
- All attempts will be made to use a “closed loop” recycling system with no discharge to the water or ice. If necessary, return fluid will be pumped back to shore and into a natural or constructed sump located 100 m or greater from the water.
- Drill cuttings will be collected through a filter system and disposed of in a land-based sump placed 100 m from the high water mark.
- Drill holes will be sealed by cementing the upper 30 m of bedrock or the entire depth of the hole, whichever is less.

2.5.5. Water Sources and Volumes

The water sources for each of the drill targets are shown on the attached maps. Diamond drills generally use about 12 cubic meters of water in two 10 hour shifts. Typically, each drill hole takes no more than 6 days of drilling. The estimated volumes of lake waters used for water are shown on the following table. Lake depths are assumed to be 5m for smaller lakes (<2km²), and 10m for larger lakes.

Table 4.2: Proposed water sources and estimated volumes of lakes.

Target	Lake Area (km ²)	Estimated Lake Volume (millions m ³)	Daily Withdrawal Rate (m ³)	Daily Withdrawal as % of lake volume
C-1	0.83	4.15	12	0.0002892%
C-2	4	40	12	0.0000300%

2.5.6. Drill Core Management (transport and storage)

All drill core will be taken back daily from the drill sites to the Crab Lake camp by helicopter. Core will be stored in robust core racks in an area adjacent to the camp a minimum of 100 meters from the high waterline of all water bodies. Radioactivity of stored drill core will be monitored. Radioactive materials are regulated pursuant to the *Atomic Energy Control Act (Canada)*.

2.6. Fuel

2.6.1. Storage and Handling

All fuel will be stored in 205 liter (45 gallon) drums in a cache adjacent to the camp. This cache will be located at least 100 m from any water body or watercourse, 6 m from any building, and at least 30 m from any sleeping accommodation. The fuel cache will be equipped with secondary containment. Spill kits will be maintained at the cache. Bayswater Uranium's Spill Contingency Plan is give below:

Spill Contingency Plan

Company President: George Leary
Vice President Exploration: Gordon Davidson
Project Manager / Camp Supervisor: to be determined

When a spill is detected

The personnel detecting the spill will immediately notify the Camp Supervisor.

The Camp Supervisor will coordinate the spill containment by:

- Identify the source of the spill.
- Take appropriate action to prevent further spillage.
- Minimize the impact of the spill
- Initiate the clean-up with the equipment available.

Once the above procedures are followed, the Camp Supervisor will report the spill in accordance with Territorial regulations as follows:

- Call the **24 Hour Spill Report Line** (867) 920-8130 (reporting time and date of spill location; direction spill is moving; contact person information; cause of spill; status of spill; description of existing containment; action taken to contain, recover, clean-up and dispose of spill and name of person in charge at time of spill).
- Confirm with the Spill Report Line if further action and/or materials are needed.
- Report all spills to the Bayswater representative at (604) 687-2153.
- Supervise the completion of the clean-up
- Restore the affected area to its pre-spill state or the closest possible state.
- Contain any damaged equipment and materials used for clean-up until the Site Inspector provides approval of disposal.
- Prepare and submit a "Spill Report Form".

Inventory & Location of Response & Clean-up Equipment

Main fuel cache and fuelling stations will have:

- Personal Safety Equipment (disposable coveralls, gloves, goggles)
- Large and small spill kits
- Empty barrels
- Shovels
- Absorbent pads and materials
- Pumps
- Hazardous labels and stickers
- MSDS for every chemical on site

2.6.2. Fuel Requirements

The annual fuel requirements for the exploration program at Crab Lake are tabulated below:

Fuels	Number of containers	Capacity of containers	Location
Diesel	75	205 litres	Crab Lake camp
Gasoline	10	205 litres	Crab Lake camp
Aviation fuel	200	205 litres	Crab Lake camp
Propane	30	100 lb cylinders	Crab Lake camp

2.6.3. Fuel Transportation to Site

All the fuel will be flown into the Crab Lake camp and fuel cache using wheel equipped aircraft on an ice strip on Crab Lake.

2.7. Geophysical Surveys

Some ground geophysical surveys may be necessary on some of the target areas. Such surveys may include magnetic, electromagnetic and gravity surveys. These surveys will require the establishment of grids, which are constructed with wooden lathe (4' X ½"), placed at 50 m intervals on lines spaced 100 m or 200 m apart. If grids are established on frozen lakes, all lathes will be removed prior to breakup. None of these geophysical surveys will have any environmental impacts. No seismic surveys are planned.

2.8. Reclamation

Once the exploration program is complete, the Crab Lake camp and fuel cache will be dismantled and demobilized to Yellowknife. The only remaining structure will be the core racks containing drill core. The site will be completely reclaimed. All drill sites will be cleaned up prior to the completion of each year's exploration program.

3. PROJECT TIMETABLE

The timetable for the exploration program to be carried out of the Crab Lake camp is as follows:

- Summer – Fall 2008: Approval of program by MVEIRB
- November 2008: Approval of 2009 Program and Budget by Board of Directors of Bayswater Uranium
- February 2009: Purchase of Fuel & Camp Equipment
- March-April 2009: Mobilization of camp, fuel and drill into Crab Lake; camp construction
- April-May 2009: Ground geophysics on ice covered targets
- June-August 2009: Drilling on two targets
- September 2009: Demobilization of personnel from camp; camp closed for season
- November 2009: Approval of 2010 Program and Budget by Board of Directors of Bayswater Uranium
- April-May 2010: Ground geophysics and drilling on ice covered targets
- June-August 2010: Drilling on two targets

September 2010: Demobilization of personnel and equipment from camp; camp reclamation and closure

- The 2010 exploration program will be contingent on success in the 2009 exploration program. If it is felt that further work is not required, then reclamation of the camp will be done in September 2009.
- Bayswater is requesting a Land Use Permit to cover drilling on the identified targets for a five year period. If Bayswater wishes to carry out drilling in 2011 and 2012, the scheduling of this work will be similar to the above

4.0 EXISTING ENVIRONMENT

The project is in the Western Taiga Shield Ecozone and the Coppermine River Uplands Ecoregion. The descriptions of these two ecological classifications can be found below.

These two descriptions give a very general outline of environmental conditions in the areas of the proposed exploration. A review of the documents of the West Kitikmeot South Slave Study (WKSS), and other environmental assessments recently conducted in the area (Uravan Minerals Inc. - North Boomerang Lake Mineral Exploration - EA0708-003 [2007], Uravan Minerals Inc. - South Boomerang Lake Mineral Exploration - EA0708-002 [2007] and Ur Energy Inc. - Screech Lake - EA0607-003 [2006]) the Valued Ecosystem Components (VEC) chosen for further discussion are Eskers, Caribou and Species at Risk. Information is also presented on Wildlife Species present, Aquatic Systems, Archaeology and Present Land Uses.

4.1 Environmental Setting (Ecozone/ecoregion)

Western Taiga Shield Ecozone

This ecozone lies on either side of Hudson Bay. The eastern segment occupies the central part of Quebec and Labrador, and the western segment occupies portions of northern Manitoba, Saskatchewan, Alberta, and the Northwest Territories. The ecozone is largely defined by two very large biophysical features, the Taiga Forest and the Canadian Shield. The world's oldest rocks are found on the Taiga Shield north of Great Slave Lake.

Climate The sub arctic climate is characterized by relatively short summers with prolonged periods of daylight and cool temperatures, and winters that are long and very cold. Mean annual temperatures range from -8°C west of Hudson Bay to 0°C in parts of Labrador. In Quebec and Labrador mean annual temperatures usually range between -1°C to -5°C. The cold south flowing Labrador Current reduces the moderating effect of the Atlantic Ocean on the climate of the eastern Taiga Shield. Mean summer temperatures range between 6°C and 11°C, and mean winter temperatures range between -11°C and -24.5°C. Mean annual precipitation ranges 200-500 mm west of Hudson Bay. East of Hudson Bay it ranges 500-800 mm, except near the Labrador coast where it can locally exceed 1000 mm a year.

Vegetation The pattern is one of innumerable lakes, wetlands and open forests interwoven with shrublands and meadows more typical of the arctic tundra. The forest stands form lichen woodlands that merge into areas of open arctic tundra. It is along the northern edge of this ecozone that the latitudinal limits of tree growth are reached. Latitudinally, the central portion of the zone contains open, stunted black spruce and jack pine, accompanied by alder, willow,

and tamarack in the fens and bogs. Open, mixedwood associations of white spruce, balsam fir (in the Quebec portion), trembling aspen, balsam poplar, and white birch are found on upland sites and along rivers and streams.

Landforms and Soils Most of this ecozone consists of broadly rolling terrain composed of a mosaic of uplands and associated wetlands. It is dominated by Precambrian bedrock outcrops and discontinuous hummocky and ridged morainal deposits. Some lacustrine and marine deposits are also present. A characteristic of the ecozone is the largest concentration of long, sinuous eskers in Canada. Dominating the Precambrian landscape are thousands of lakes and wetlands in glacially carved depressions. Lowlands are covered with peatlands and are commonly waterlogged or wet for prolonged periods. Permafrost is discontinuous but widespread. Brunisolic and Humo-Ferric Podzolic soils are dominant in the southern portion and Cryosols in the northern portion with a mix of these in the latitudinal centre of the ecozone. Gleysols and Organic Cryosols occur mainly in the lowlands.

Wildlife Characteristic mammals include barren-ground caribou which migrate south to winter in the taiga forest and some woodland caribou, moose, wolf, snowshoe hare, arctic fox, beaver, black and grizzly bear, and lynx. There are about fifty species of mammals that inhabit the ecozone. The abundance of water in the Taiga Shield attracts hundreds of thousands of birds (e.g. ducks, geese, loons and swans) which come to nest or rest and feed on their way to arctic breeding grounds. Representative birds include arctic and red-throated loon, northern phalarope, northern shrike, tree sparrow, and gray-cheeked thrush. Along the marine coasts of the ecozone representative species include walrus and seal.

Land Use The total population of the ecozone is approximately 33 600. The major centres include Yellowknife, Labrador City, Uranium City, and Churchill Falls, all of which are associated with mining or hydroelectric developments. The ecozone is still an active exploration and development area for metals and diamonds. A little tourism, recreation, and forestry are the main activities. Despite almost a third of the population being found in resource towns, subsistence hunting, fishing, and trapping remain important land uses.

Coppermine River Uplands Ecoregion

This ecoregion extends from the McTavish Arm of Great Bear Lake to Howard Lake in the central District of Mackenzie in the Canadian Shield. It is marked by short, cool summers and very cold winters. The mean annual temperature is approximately 7.5°C. The mean summer temperature is 9°C and the mean winter temperature is 24.5°C. The mean annual precipitation ranges 200 to 300 mm. The ecoregion is classified as having a predominantly high subarctic ecoclimate. It is part of the tundra and boreal forest transition, where the latitudinal limits of tree growth are reached. The predominant vegetation consists of open, very stunted stands of black spruce and tamarack with secondary quantities of white spruce and a ground cover of dwarf birch, willow, ericaceous shrubs, cottongrass, lichen, and moss. Poorly drained sites usually support tussocks of sedge, cottongrass, and sphagnum moss. Low shrub tundra, consisting of dwarf birch and willow, is also common. This ecoregion includes the western half of the Bear Slave Upland, which consists mainly of massive Archean rocks that form broad, sloping uplands, plateaus, and lowlands. The surface is typical of the bare rock parts of the Shield. Numerous lakes fill the lowlands, and rounded rocky hills reach 490 m asl in elevation. Bare rock outcrops are common, and Dystric Brunisols with some Turbic, Static, and Organic Cryosols are the dominant soils in the ecoregion. The soils have formed on discontinuous

veneers and blankets of hummocky to rolling, sandy morainal, fluvioglacial, and organic deposits. Permafrost ranges from continuous in the east to extensive discontinuous in the west half of the ecoregion, with low to moderate ice content and sparse ice wedges. Characteristic wildlife includes caribou, moose, grizzly and black bear, snowshoe hare, fox, wolf, beaver, muskrat, osprey, raven, spruce grouse, and waterfowl. Land uses include hunting and trapping, fishing, and tourism. Diamond exploration is a more recent activity along the northern boundary of the region. Principal communities include Snare Lakes and Rae Lakes. The population of the ecoregion is approximately 500.

4.2 Geomorphology (Eskers)

The project area is in an area of tundra but includes several areas of transition ecotypes between the taiga forests to the west and south and the tundra to the north and east. These more wooded areas generally occur in the river and creek valleys and are critical to the survival of many of the wildlife species found in the area as discussed in the following section.

Another significant geomorphologic feature of the area is the esker. “Eskers are a glacially deposited ridge of stratified sands and gravels...rise[ing] above the low-lying tundra to create a dry, windswept environment” (Traynor, 2001). The presence of eskers provides habitat for many species of animals and humans.

Eskers produce a microclimate that significantly reduces insect abundance. Larger herbivores like caribou and musk ox are extensive grazers, and require larger areas to feed. Caribou are migratory animals spending their winters below the tree line. During migration, it is believed that caribou rely heavily on visual and olfactory markers and will actively seek a path of least energetic resistance when traveling (Banfield and Jakimchuk 1980). Eskers are often used as migratory paths because of their extensive length of uninterrupted, relatively clear windblown ridge tops. Eskers also create a path that avoids streams and bogs allowing the herds to travel long distances with little physical resistance (Traynor, 2001)

In a study commissioned by the WKSS eskers were documented to provide denning habitats of wolves and other arctic predators, such as the arctic fox and grizzly bear. In the WKSS study of wolf denning it was found that den sites must support many critical components. These components include: elevated areas, good drainage, well-drained soils, access to water, and availability of a food source. Esker habitats often provide these optimum environmental conditions for wolf dens (Cluff et al, 2002).

Barren ground Grizzly bear also use eskers to den. McLaughlin et al (1999) found that although dens were constructed in eskers only seven of 56 times, compared to the availability of esker habitat in the environment it is clear that esker habitat was selected for denning more than what was predicted by chance.

Although eskers make up less than five percent of the surface area, these landforms are prime locations for archaeological sites. It is believed that aboriginal people selectively choose areas of habitation based on their physical and cultural requirements Traynor (2001) found that repeatedly, in three years of field investigation, results indicated that larger, more continuous eskers have the greatest potential to yield archaeological sites, especially near medium and large lakes. The location of eskers is plotted on the 1:50,000 target maps.

4.3 Vegetation

Although the area of the project falls within the Taiga Shield Ecoregion it is at the northern limit of this ecoregion and the vegetation more closely resembles that of the Thelon Game Sanctuary.

This has been described as follows in the "Thelon Game Sanctuary Management Plan, 2002":

"Predominant vegetation consists of lichens, heath, and low shrubs. More than 120 species of lichen can be found in the Sanctuary. Variation in tundra vegetation in the Sanctuary is controlled largely by topography. Bare, exposed areas are covered by sparse black lichen cover or lichen/heath (dwarf shrub) mats. Less exposed sites, such as drainage ways and the lee sides of eskers and hills are home to low shrubs, lichens, mosses and sedges. Moist lowlands and flood plains commonly have tussock grass, low shrubs, moss, and willow thickets. While the tundra areas of the Sanctuary are not particularly rare or unusual, they are significant for the fact that they remain largely undisturbed.

"The Thelon River Valley ... is a unique sheltered oasis within the arctic tundra region. Black spruce and white spruce trees extend from the river valley far out onto the open tundra. This area is perhaps the largest community of spruce outliers on the barrens..."

The resulting forest areas in an area dominated by tundra results in an environment where wildlife species that would not generally exist can flourish and a much higher biological diversity than would exist in an area of tundra. The approximate area of forested areas associated with the river and creek valleys in the project area are shown in the respective target maps.

4.4 Wildlife

4.4.1 General Species Present

The mammalian and avian species to be found in the area of the development are:

Mammal Species

Arctic fox*	Muskox
Arctic ground squirrel	Porcupine
Arctic hare	Red fox
Barren-ground caribou	Red squirrel
Barren-ground grizzly Bear	Red-backed vole
Ermine	River otter
Lemming spp.	Shrew
Marten	Tundra wolf
Moose	Vole spp.
	Wolverine

Bird Species

American Golden-Plover	Common Merganser
American Pipit	Common Raven
American Robin	Common Redpoll
American Tree Sparrow	Golden Eagle
Bald Eagle	Gray-cheeked Thrush
Black Scoter	Greater Scaup
Canada Goose	Greater White-fronted Goose
Chipping Sparrow	Greater White-fronted Goose
Common Loon	Green-winged Teal
	Gyr Falcon

Harris's Sparrow	Rusty Blackbird
Herring Gull	Sandhill Crane
Horned Grebe	Savannah Sparrow
Horned Lark	Scoter Northern Hawk Owl
Lapland Longspur	Semipalmated Plover
Least Sandpiper	Semipalmated Sandpiper
Lesser Scaup	Short-eared Owl
Long-tailed Duck	Smith's Longspur
Long-tailed Jaeger	Snow Goose
Loon Blackpoll Warbler	Snowy Owl
Mallard	Song Sparrow
Merlin White-crowned Sparrow	Spotted Sandpiper
Northern Harrier	Stilt Sandpiper
Northern Pintail	Surf Scoter
Pacific Loon	Tundra Swan
Pectoral Sandpiper	White-winged
Peregrine Falcon	Willow Ptarmigan
Phalarope	Wilson's Snipe (Common Snipe)
Red-breasted Merganser	Yellow Warbler
Redhead Red-necked	Yellow-billed
Red-throated Loon	Yellow-rumped Warbler
Rough-legged Hawk	

Of the mammalian species the species of interest are caribou, musk ox and barren ground grizzly bear. The project is in the range of the Beverly Caribou herd. The herd was estimated to consist of around 265,000 animals in 1994. Although no data was available in the literature it is felt that the herd is decreasing in size. Caribou are discussed in more detail in section 4.4.2 below.

Muskoxen are year-round residents of the project area. The protection of the musk ox population was the reason for the formation Thelon Game Sanctuary in the 1920. This population appears to be stable and under little pressure from development activities.

The barren-ground grizzly bear population in the project area is not known, but sightings are regular. The eskers in the area provide important denning habitat for the species. Barren-ground grizzly bear can be attracted to exploration camps and encounters must be limited through strict waste management practices.

4.4.2 Caribou

The proposed exploration program is within the range of the Beverly Caribou herd. The activities proposed are not in the calving grounds, not in the post-calving areas, and the herd generally over-winters south of the development area. The area of the proposed exploration is on the spring migration route north to the calving grounds and the fall migration route south to the winter range for the Beverly caribou herd. Caribou will most likely be present in the period of early August to mid September and mid March to late May.

The documented water and ice crossings for the Beverly caribou herd are either to the south or the west of the proposed camps and drilling and all proposed activities are outside the 10 km buffer zone suggested for these crossings.

Mitigation measures for impacts on the Beverly caribou herd are outlined in section 5.0 below.

4.4.3 Species at Risk

Species in the NWT are classified in one of ten categories (Working Group on General Status of NWT Species, 2006):

- 1) At Risk**
- 2) May Be At Risk**
- 3) Sensitive**
- 4) Secure**
- 5) Undetermined**
- 6) Not Assessed**
- 7) Alien**
- 8) Extirpated/ Extinct**
- 9) Vagrant**
- 10) Presence Expected**

For the purpose of this report only species that are classified as at risk are considered for special attention. Species that are classified as May be at Risk are noted (See Table 4.1).

Notes for Table 4.1:

1) At Risk = species for which a detailed assessment has already been completed (e.g., by COSEWIC or jurisdictional status reports) that determined the species to be at risk of extirpation or extinction. This is a special category that may be used only for species that have been assessed as “Endangered” or “Threatened” according to COSEWIC, or according to a similar future committee in the NWT. Exceptions are noted.

2) May Be At Risk = species that may be at risk of extinction or extirpation, and are therefore candidates for detailed risk assessment. This is the highest rank that can be given to a species using the General Status Ranking system independent of a more detailed assessment as noted in the At Risk category. These species are ranked with the highest priority for a more detailed assessment by COSEWIC or a committee and process set up in the NWT.

Table 4.1: Species classified as At Risk or May be at Risk in the project area data from Working Group on General Status of NWT Species, 2006

Group	Common Name	Scientific Name	Order	Family	NWT General Status
Bird	Yellow Rail	<i>Coturnicops noveboracensis</i>	Grulliformes	Rallidae	May Be At Risk (2)
Bird	American White Pelican	<i>Pelecanus erythrorhynchos</i>	Pelecaniformes	Pelecanidae	May Be At Risk
Bird	Eskimo Curlew	<i>Numenius borealis</i>	Charadriiformes	Sclopacidae	At Risk (1)
Bird	Rusty Blackbird	<i>Euphagus carolinus</i>	Passeriformes	ICTERIDAE	May Be At Risk
Plant	Several Vein Sweetflag	<i>Acorus americanus (Acorus calamus)</i>	ARALES	Acoraceae	May Be At Risk
Plant	one-flowered Ironplant	<i>Pyrocoma uniflora (Haplopappus uniflorus, H. lanceolatus subsp)</i>	ASTERALES	Asteraceae	May Be At Risk
Plant	Water Lobelia	<i>Lobelia dortmanna</i>	Campanulales	Campanulaceae	May Be At Risk
Plant	Small-Flower Bitter Cress	<i>Cardamine parviflora</i>	Capparales	Brassicaceae	May Be At Risk
Plant	Thick-leaved Orache	<i>Atriplex dioica</i>	Caryophyllales	Chenopodiaceae	May Be At Risk
Plant	Swedish Dwarf Dogwood	<i>Cornus suecica</i>	Cornales	Cornaceae	May Be At Risk
Plant	Saltmarsh Bulrush	<i>Bolboschoenus maritimus (Schoenoplectus maritimus; Scirpus paludosus; Scirpus maritimus)</i>	CYPERALES	Cyperaceae	May Be At Risk
Plant	Northern Clustered Sedge	<i>Carex arcta</i>	CYPERALES	Cyperaceae	May Be At Risk
Plant	Few- Seeded Sedge	<i>Carex oligosperma</i>	CYPERALES	Cyperaceae	May Be At Risk
Plant	Three-seed Sedge	<i>Carex trisperma</i>	CYPERALES	Cyperaceae	May Be At Risk
Plant	Fresh Water Cord Grass	<i>Spartina pectinata</i>	CYPERALES	Poaceae	May Be At Risk
Plant	Velvetleaf Blueberry	<i>Vaccinium myrtilloides</i>	Ericales	Ericaceae	May Be At Risk
Plant	White Adder's mouth	<i>Mataxis monophyllos</i>	ORCHIDALES	Orchidoceae	May Be At Risk
Plant	Water Pigmy-weed	<i>Crassula aquatica</i>	Rosales	Crassulaceae	May Be At Risk
Plant	Yellow Owl's Clover	<i>Orthocarpus luteus</i>	Scrophulariales	Scrophulariaceae	May Be At Risk
Plant	Leafy Thistle	<i>Cirsium foliosum</i>	ASTERALES	Asteraceae	May Be At Risk
Plant	Broadleaf Gunweed	<i>Grindelia squarrosa</i>	ASTERALES	Asteraceae	May Be At Risk
Plant	Pinnate Tansy-Mustard	<i>Descurainia pinnata</i>	Capparales	Brassicaceae	May Be At Risk
Plant	Red Pigweed	<i>Chenopodium rubrum</i>	Caryophyllales	Chenopodiaceae	May Be At Risk

Group	Common Name	Scientific Name	Order	Family	NWT General Status
Plant	Sea Milkwort	<i>Glaux maritima</i>	Primulales	Primulaceae	May Be At Risk
Plant	Bristly Crowfoot	<i>Ranunculus pensylvanicus</i>	Ranunculales	Ranunculaceae	May Be At Risk
Plant	Richardson Alumroot	<i>Heuchera richardsonii</i>	ROSALES	Saxifragaceae	May Be At Risk
Plant	Spinulose Wood Fern	<i>Dryopteris carthusiana</i>	FILICALES	DRYOPTERIDACEAE	May Be At Risk
Plant	Western Stickseed	<i>Hackelia deflexa</i>	Lamiales	Boraginaceae	May Be At Risk
Plant	Prairie-Smoke	<i>Geum triflorum</i>	ROSALES	Rosaceae	May Be At Risk
Plant	Purslane Speedwell	<i>Veronica peregrina</i>	Scrophulariales	Scrophulariaceae	May Be At Risk

Although there are a total of 30 species listed in Table 1 only the Eskimo Curlew is classified 'At Risk'. Mitigation measures for impacts on this species are outlined in section 5.0 below.

4.5 Aquatic Systems (Lakes and Rivers)

Fish species in the project area include but are not limited to lake trout, round whitefish, and arctic grayling. These are the species that are most important for sport, commercial and the domestic fishery. The northern pike reaches the northern limits of its range in the general project area.

The water sources and estimated water use for the proposed camp and drill sites have been previously discussed.

4.6 Special Areas (Parks, reserves, cultural areas, etc)

The project area borders on the Thelon Game Sanctuary (Figure 1) which is an internationally recognized wildlife sanctuary that was established in the 1920's by the Canadian Government for the protection of musk ox. In the Thelon Game Sanctuary Management Plan(2002), the recommendation has been made for the creation of a special management area to the south west as follows:

“An extension of watershed protection to the southwest of the existing Sanctuary is proposed as a Special Management Area (SMA), rather than as a direct addition to the Sanctuary. This proposal reflects the importance of watershed values while at the same time recognizing the potential for other forms of land use and a different management regime in the area. It is critical in this special management area, referred to as the Tyrrell Lake SMA, that the values which are fundamental to the integrity of the Sanctuary, in this case the water quantity, natural flows and quality, are protected. The Tyrrell Lake SMA should be managed as a buffer area to the Sanctuary.”

At present no management structure is in place to manage either this extension of the Thelon Game Sanctuary as a whole.

Some of the proposed exploration activities would be in this SMA.

Part of the Akaitcho Land Claim process was a land withdrawal by the Government of Canada Order in council Pc 2007-1661 on November 1, 2007. The withdrawal area is shown on Figure 4.10. None of the proposed exploration activities are located within this area.

In the UR Energy environmental assessment (EA0607-003) the public hearing presentation by the Lutsel K'e First Nation it was stated that the area of the UR Energy Project had:

“Cultural/spiritual value —Entire Thelon basin Entire Thelon basin regarded as a birthplace, regarded as a birthplace, ‘the place where God began’”.

Although Bayswater’s proposed exploration activities are located in the same general area, the entire area covered by the Crab Lake application is within the Dubawnt River watershed, and is thus not part of the Thelon Basin.

4.7 Archaeology

Bayswater has received data from the Prince of Wales Northern Heritage Centre about the location of known archaeology sites in the area of the proposed exploration program. At the Heritage Centre’s request, Bayswater is keeping this data confidential. However, there are no known archeological sites within the camp site area or within any of the target sites as shown on the attached maps. If new sites are identified they will be avoided and registered as required by acts and regulations applicable to archaeology sites in the NWT.

4.8 Present Land Use

The list of existing or proposed land uses in the general area of the proposed exploration is found in Table 4.3. This includes both land use permits and applications and crown land disposals (leases and reserves).

The primary land uses permits in the area are for mining exploration. It should be noted two of the three applications are currently under environmental assessment by the MVEIRB (M2007C0009, M2007C0010) and one has been rejected after an environmental assessment by the MVEIRB (M2006C0019). Four of the land leases are related to commercial fishing lodges. The remainder is for government activities ranging from Game Sanctuaries to Water Survey of Canada Gauging Stations.

Land Use Permits

Application Number	LATITUDE	LONGITUDE	Status	Location	Designated Use
M2005C0007	62.7667	-104.6792	Inactive	THELON RIVER AREA	Mining (Exploration)
M2006C0008	62.0681	-104.8167	Open/Active	BOOMERANG LAKE	Mining (Exploration)
M2006C0019	62.6667	-104.4667	Inactive	SCREECH LAKE	Mining (Exploration)
M2007C0009	62.7714	-103.1872	Application	CRAB LAKE	Mining (Exploration)
M2007C0010	63.2583	-104.46	Application	EL LAKE	Mining (Exploration)
M2007C0038	62.8125	-104.4533	Application	BOOMERANG LAKE AREA	Mining (Exploration)
N1996C0563	63.5667	-105.9167	Inactive	MUNN LAKE	Mining (Exploration)
N1997C0821	63.05	-104.05	Inactive	GOODWIN LAKE	Mining (Exploration)
N1998C0852	62.6	-104.75	Inactive	BOOMERANG LAKE	Mining (Exploration)
N2003I0019	62.8139	-101.8528	Inactive	DUBAWNT LAKE	Campsites

Surface Dispositions

File	LAT.	LONG.	Type	Status	Location	Purpose	Use	Holder	Address
065L0600 1	62.4917	-103.2833	Lease	Open/Active	MOSQUITO LAKE	Commercial	Fishing Lodge	Dubawnt Camps Ltd.	c/o Mr. Robert Huitikha B ox 83, Vermillion Bay, ON, POV 2V0
065L1100 1	62.6389	-103.4797	Inactive	Inactive	MOSQUITO LAKE	Commercial	Fishing Lodge	Hammersmith Jerome Alvin	General Delivery, Yellowk nife, NT, X1A 2L8
065L1200 1	62.5414	-103.5214	Inactive	Inactive	MOSQUITO LAKE	Commercial	Airstrip	Dubawnt Camps Ltd.	c/o Mr. Robert Huitikha B ox 83, Vermillion Bay, ON, POV 2V0
075I0800 1	62.4611	-106.3025	Lease	Open/Active	LYNX LAKE	Commercial	Fishing Lodge	Wettlaufer Daniel	Box 3, Fort Smith, NT, X0E 0P0
065L1200 2	62.5603	-103.5219	Inactive	Inactive	MOSQUITO LAKE	Government	Fuel Cache	DIAND-NAP	BOX 1500, Yellowknife, N T, X1A 2R3
065M010 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
065M020 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3

**Bayswater Uranium Corp – South Thelon Project
Crab Lake Mineral Exploration Program**

Project Description

File	LAT.	LONG.	Type	Status	Location	Purpose	Use	Holder	Address
065M050 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
065M060 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
065M070 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
065M080 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
065M090 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M100 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M110 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M120 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M130 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M140 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M150 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065M160 01	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065N0400 1	63.2167	-102.9833	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
065N0400 2	63.2167	-101.7167	Reserve	Open/Active	DUBAWNT LAKE	Government	Stream Gauge	DOE-WS	123 Main Street Suite 150, Winnipeg, MB, R3C 4W2
065N0500 1	63.4167	-101.9833	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
075O0200 1	62.8667	-106.8333	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
075O0700 1	63.1167	-106.7833	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
075O0800 1	63.3667	-106.7667	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
075O0900 1	63.4667	-106.25	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
075O0900 1	63.6167	-106.25	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8

**Bayswater Uranium Corp – South Thelon Project
Crab Lake Mineral Exploration Program**

Project Description

File	LAT.	LONG.	Type	Status	Location	Purpose	Use	Holder	Address
07501600 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07505000 1	63.4667	-105.9833	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
07506000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07507000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07508000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07509000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07510000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07511000 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
07511000 2	63.5667	-105.15	Reserve	Open/Active	HAMBURG RIVER	Government	Stream Gauge	DOE-WS	Suite 301, 5204 - 50th Avenue, Yellowknife , NT, X1A 1E2
075P1200 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
075P1200 2	63.6167	-105.9167	Withdrawal	Open/Active	EAST ARM PARK EXPANSION	Government	Park - National	Parks Canada Agency	Box 1166, Yellowknife, NT , X1A 2N8
075P1300 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	10 Wellington Street Les T errasses de la Chaudiere, Ottawa,
075P1400 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
075P1500 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
075P1600 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0100 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0200 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0300 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0400 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3

**Bayswater Uranium Corp – South Thelon Project
Crab Lake Mineral Exploration Program**

Project Description

File	LAT.	LONG.	Type	Status	Location	Purpose	Use	Holder	Address
076A0500 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0600 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0700 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076A0800 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076B0100 1	63.2167	-102.25	Withdrawal	Open/Active	THELON GAME SANCTUARY	Government	Game Sanctuary	DIAND	Box 1500, Yellowknife, NT , X1A 2R3
076H0100 1	63.2167	-102.25	Withdrawal	Open/Active	UPPER BACK RIVER	Government	Other	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0
076H0200 2	63.2167	-102.25	Withdrawal	Open/Active	UPPER BACK RIVER	Government	Other	DIAND	P.O. Box 2200, Iqaluit, NU , X0A 0H0

5.0 POTENTIAL ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

5.1 Eskers

Eskers are a prominent feature of the environment in the project area. Bayswater recognizes these features as critical to the survival of the animal species inhabiting the area. To protect the integrity of the eskers Bayswater commit to:

1. Mapping the location of all eskers in the area of drill sites.
2. Not locating drill sites on eskers.
3. Limiting the use of eskers for camp activities as much as possible.

5.2 Vegetation

Drilling operations at the South Thelon Project are not anticipated to create significant long term impacts on vegetation. During the preparation of drill pads, site preparation will be by hand and may create a disturbance to the natural vegetation. It is anticipated that this disturbance will be much less significant than mechanical site preparation and will limit the impact. After abandoning a site, clean-up work will be designed to promote the restoration of the site compatible with the original undisturbed conditions. Re-vegetation will be conducted on sites that will require this type of mitigation. A log of all activities at each site will be maintained. This will include a photographic record of the site before and after drilling and a record of the activity during drilling.

5.3 Wildlife

General mitigation measures will be in place to reduce the impact of the proposed exploration activities on wildlife. They are:

1. All Bayswater exploration camps have a strict no hunting policy for all staff.
2. All Bayswater exploration camps have a strict policy of no feeding of wildlife.
3. Only one firearm is allowed in Bayswater exploration camps and it is under the direct control of the camp manager.

5.3.1 Barren Ground Grizzly Bear

Waste management is an effective tool to minimize encounters with carnivores and Bayswater enforces a strict regime to manage wastes. These plans are outlined in section 2.3.2 of this report. In addition all staff will be required to read and understand the document "Safety in Grizzly and Black Bear Country" produced by the GNWT Dept. of Environment and Natural Resources.

5.3.2 Caribou

To mitigate environmental impacts on the caribou Bayswater commits to the following measures for caribou protection. These specific conditions were adapted from the Keewatin Regional Land Use Plan (June 2000) but are equally applicable to the activities in the south Thelon area.

1. (a) In the event that caribou cows calve within the project area, the Permittee shall suspend operations within the area(s) occupied by cows and/or calves between May 15 and July 15.

- (b) In the event that caribou cows and calves are present, the permittee shall suspend:
- (i) blasting;
 - (ii) over flights by aircraft at any altitude of less than 300 meters above ground level; and
 - (iii) the use of snowmobiles and ATVs (all-terrain vehicles) outside the immediate vicinity of the camp.

In addition to the above Bayswater will implement the following caribou mitigation measures in relation to their operation:

- Caribou have the “right-of-way”, and will not be blocked or deterred from moving through the project area.
- For longer range transportation flights within the project area (e.g., movement of staff and equipment between the camp and remote permit areas), the normal practice will be to fly all aircraft at a minimum of 610 m above ground level, except during takeoff and landing, and when ceiling conditions do not permit.
- For relatively shorter transportation flights (e.g., movement of staff and equipment between camp and drills), normal practice will be to fly all aircraft at a minimum of 300 m above ground level, except during takeoff and landing, and when ceiling conditions do not permit.

During May15th to August 15th:

- Bayswater will monitor the presence of caribou cows and calves near exploration activities during the daily movement of staff to and from drill rigs. The monitoring will be performed by the helicopter pilot and or Bayswater Staff. The resulting data will be maintained at the camp.
- If calves and cows are present within 5 km of exploration activities (based on caribou monitoring surveys), then Bayswater will suspend the operation of ATVs, snowmobiles, and water craft.
- Bayswater will commit to not drilling within 10 km of designated caribou crossings, and not construct a camp, cache fuel, or operate ground, air, or water transportation equipment within 10 km of designated caribou crossings.

5.2.3 Species at Risk

The number of endangered species that may be encountered in the project area is limited to the Eskimo curlew. To reduce the impacts on this species Bayswater will ensure that posters outlining the identification features of the Eskimo curlew are posted in the dining area of the camp and that any observations of the species are noted in the wildlife log and reported to GNWT Environment and Natural Resources.

5.4 Aquatic Systems

There is little potential to impact fish habitat from the proposed program. Drilling operations will not use toxic additives and drill fluids will not be discharged into lakes or water courses. Careful location of drill sites, placement of petroleum products on sites and limited supplies on drill sites will minimize the potential for contamination from fuels. In conjunction with an effective spill contingency plan and an active training program, drilling activities will have little impact on fish habitat.

No discharge of contaminated water to surface waters is anticipated in the proposed exploration program. Water used in the drilling process will be collected or channeled away from lakes and water courses. Disposal of drill cuttings in natural catchments has the potential to drain excess water. These excess waters will not reach existing lakes or water courses, however, they will be closely monitored and water flow diverted or impounded if any potential discharge to lakes or water courses is identified.

5.5 Noise

There will be an increase in ambient noise levels associated with camp facilities, drilling activities and fixed wing and helicopter operations. These increased noise levels are typically short in duration and limited to small areas.

Past and ongoing operations in the area have not seemed to create an acoustic impact on wildlife. These operations are not expected to significantly change the existing situation. Periods of more extensive drilling activity, which could disturb wildlife, will be scheduled to minimize the impact on wildlife. Mitigation measures for possible impacts on caribou are outlined in section 5.3.2 above.

5.6 Archeology

The bulk of the archeological sites are found on eskers. These areas are not anticipated to be impacted by the proposed exploration activities. In the drilling program there will be latitude to adjust drill sites that could conflict with archeological sites and Bayswater is committed to minimizing its impact through re-locating drill sites where required.

6.0 LITERATURE CITED

Cluff, H.D., L.R. Walton, and P.C. Piquet. 2002. Movements and habitat use of wolves denning in the central Arctic, Northwest Territories and Nunavut, Canada. Final report to the West Kitikmeot/Slave Study Society, Yellowknife, NT Canada

Keewatin Regional Land use Plan. June 20, 2000

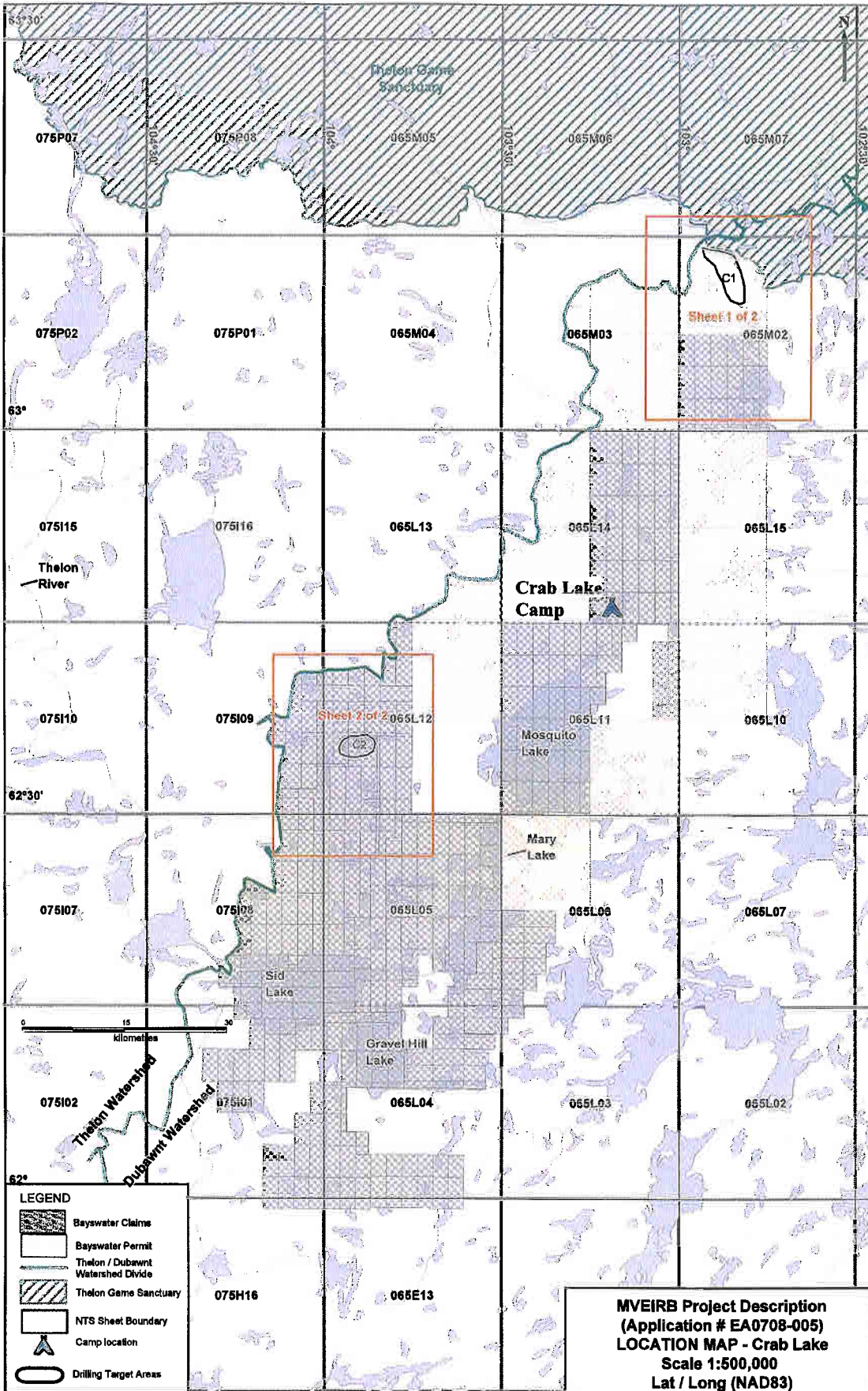
McLoughlin, Philip D., François Messie, Ray L. Case, Robert J. Gau, Robert Mulders, and H. Dean Cluff, 1999. THE SPATIAL ORGANIZATION AND HABITAT SELECTION PATTERNS OF BARREN-GROUND GRIZZLY BEARS (URSUS ARCTOS) IN THE NORTHWEST TERRITORIES AND NUNAVUT: FINAL REPORT TO THE WEST KITIKMEOT/SLAVE STUDY SOCIETY. Submitted by Philip D. McLoughlin and François Messier, Department of Biology, University of Saskatchewan 112 Science Place, Saskatoon, SK S7N 5E2 and Ray L. Case, Robert J. Gau, Robert Mulders, and H. Dean Cluff, Department of Resources, Wildlife, and Economic Development, Government of the

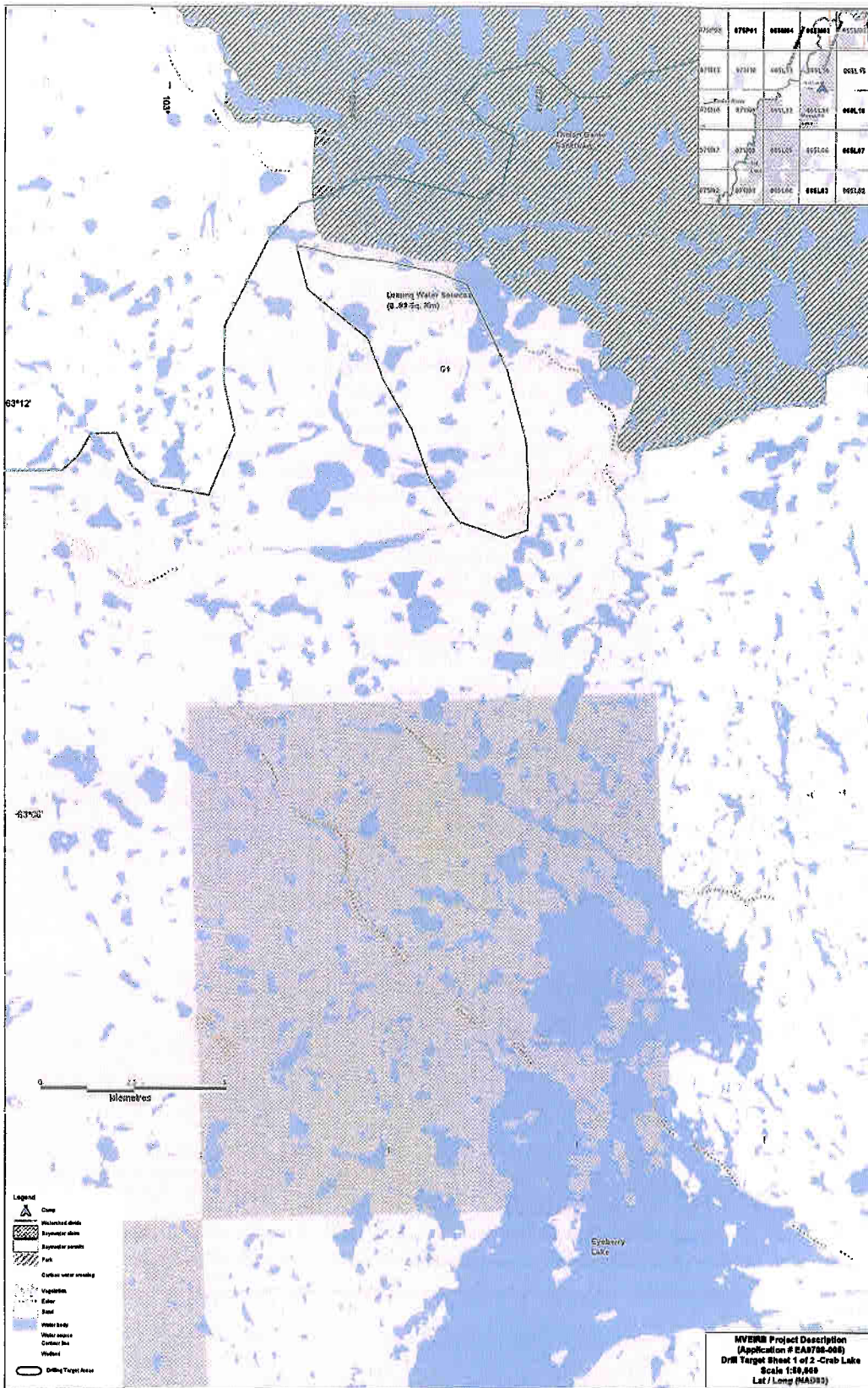
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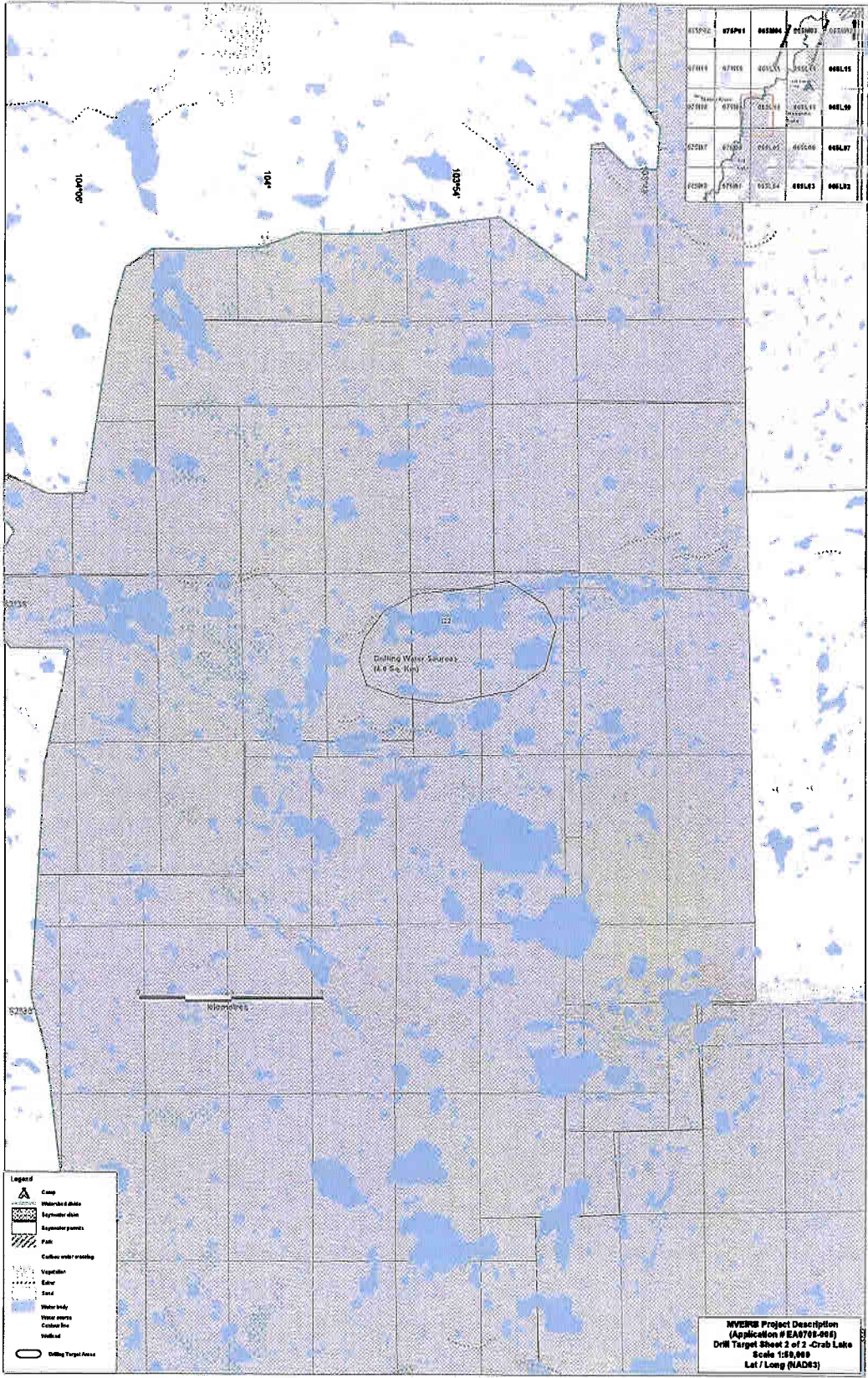
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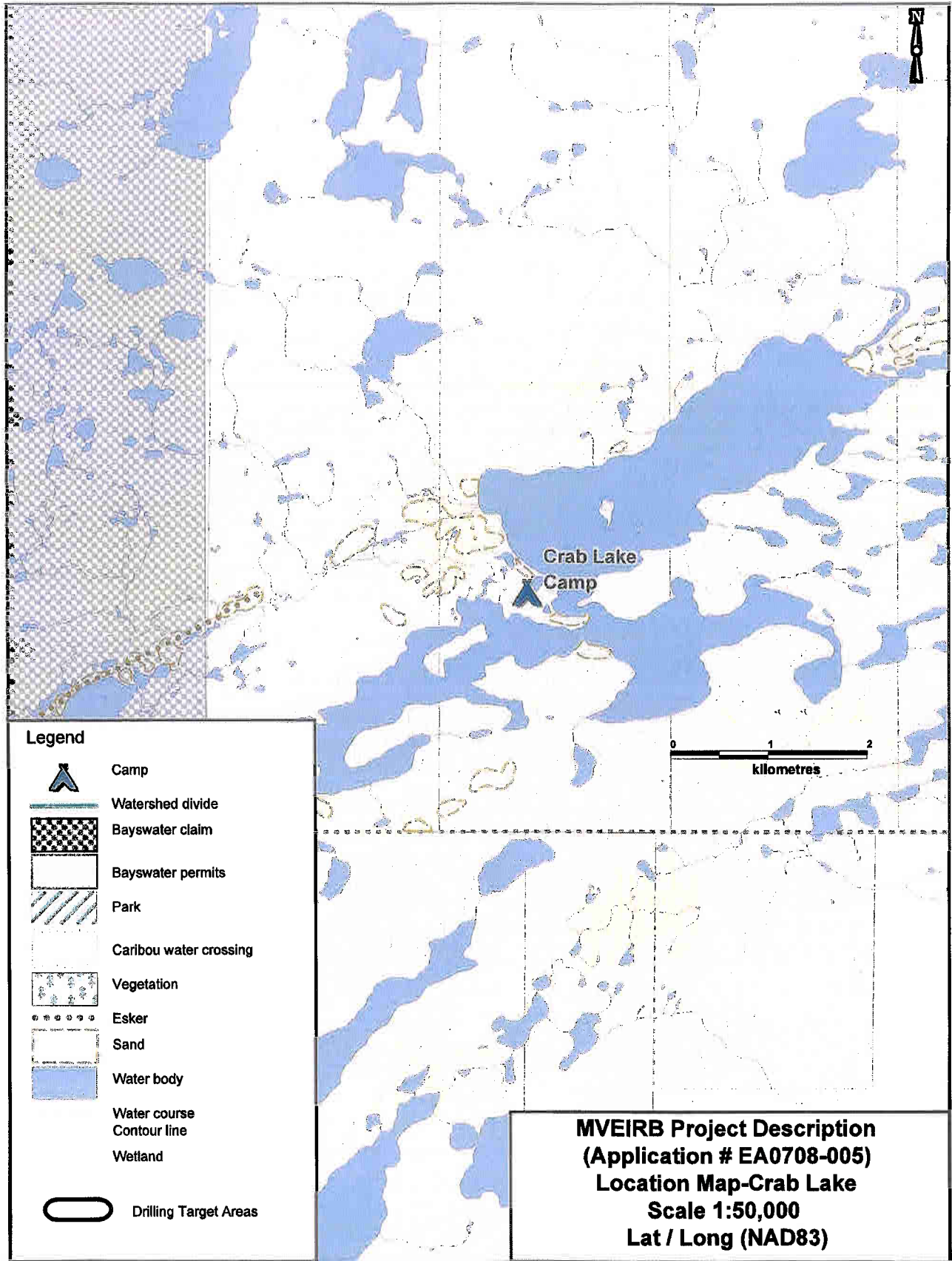


















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022008	070009	003014	003015	003016

- Legend**
- Camp
 - Wetlands & Shrub
 - Riparian areas
 - Pasture
 - Cultures under mapping
 - Vegetation
 - Edges
 - Soils
 - Water body
 - Wellhead
 - Drilling Target Area

MVERB Project Description
 (Application # EA0702-003)
 DrW Target Sheet 2 of 2 - Crab Lake
 Scale 1:50,000
 Lat / Long (NAD83)



Legend

-  Camp
-  Watershed divide
-  Bayswater claim
-  Bayswater permits
-  Park
-  Caribou water crossing
-  Vegetation
-  Esker
-  Sand
-  Water body
-  Water course
-  Contour line
-  Wetland
-  Drilling Target Areas

**MVEIRB Project Description
 (Application # EA0708-005)
 Location Map-Crab Lake
 Scale 1:50,000
 Lat / Long (NAD83)**