



Land Administration  
P.O. Box 100  
IQALUIT, NU X0A 0H0  
Phone: 867-975-4283  
FAX: 867-975-4286

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September 1, 2016

Advisian  
600-4321 Still Creek Drive  
Burnaby, BC  
V5C 6S7

Dear Marie Cardona,

**Re: Land Use Permit #N2016N0010**  
**Type of Operation: Research Project**  
**Location: Iqaluit Area, Baffin, NU, NTS 25N**

Enclosed is your copy of Land Use permit number N2016N0010 authorizing your project as described in your application dated, July 11, 2016.

Your application has received a wide distribution to the Nunavut Planning Commission, the Nunavut Impact Review Board, other Federal departments, Government of the Nunavut departments, communities in the area of your operation and concerned Inuit groups.

The issuance of this permit indicates that as a result of Nunavut's environmental screening process, the potentially adverse environmental effects that may be caused by your proposal are mitigatable with known technology and are not significant. The terms and conditions in the permit will, in our opinion, provide the necessary protection to the environment.

Please ensure that you adhere to the operating conditions, along with the Archaeological Palaeontological terms and conditions, annexed to your permit. If you have any questions or require further clarification, please contact our office.

Sincerely,



Lee Ann Pugh  
A/Land Administrator Specialist

cc: Manager, Field Operations  
RMO - Baffin



**LAND USE PERMIT**  
**NORTHERN AFFAIRS PROGRAM**

**PERMIS D'UTILISATION DES TERRES**  
**PROGRAMME DES AFFAIRES DU NORD**

Permit Class - Permis Catégorie

**A**

Permit No - NE de permis

**N2016N0010**

Subject to the Territorial Land Use Regulations and the terms and conditions in this permit, authority is hereby granted to:

Sous réserve du Règlement sur l'utilisation des terres territoriales et des conditions de ce permis:

**Advisian**

Permittee - Détenteur de permis

To proceed with the land use operation described in the application of:

Est autorisé à entreprendre les travaux d'exploitation des terres décrits dans la demande de permis du:

Signature	Date
<b>Marie Cardona</b>	<b>July 11<sup>th</sup>, 2016</b>
Type of Land Use Operation - Genre de travaux d'exploitation des terres	
<b>Research Project</b>	
Location - Emplacement	
<b>Iqaluit Area, Baffin, NU, NTS 25N</b>	

The conditions attached to this permit are incorporated into and form an integral part of the permit.

Les conditions attachées à ce permis en font partie intégrante.

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Territorial Land Use Regulations.

Ce permis peut faire l'objet d'une cession, d'une prolongation d'une cessation d'une suspension ou d'une annulation, en vertu du Règlement sur l'utilisation des terres territoriales.

Dated at

Date à **Iqaluit**

Engineer  
Ingénieur

This

Ce **1<sup>st</sup>** Day of **September**, **2016** jour de

Commencement Date

Date du début des travaux **September 1<sup>st</sup>, 2016**

Expiry Date

Date d'achèvement **August 31<sup>st</sup>, 2021**

**NOTE**

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE BY - LAW OR ORDER DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

**REMARQUE**

LE DÉTENTEUR DU PRÉSENT PERMIS DOIT SE CONFORMER À TOUT AUTRE RÈGLEMENT, LOI, DÉCRET RÈGLEMENT MUNICIPAL OU ARRÊTÉ APPLICABLE. LE MANQUEMENT À CETTE OBLIGATION POURRAIT DONNER LIEU À LA SUSPENSION OU À L'ANNULATION DU PERMIS.

**CONDITIONS ANNEXED TO AND FORMING PART  
OF LAND USE PERMIT NUMBER N2016C0010**

Failure to comply with any term and condition issued as part of this permit is an offence under the Territorial Lands Act. Every person who commits an offence is liable, on summary conviction, for a first offence, to a fine not exceeding \$100 000, and for a second or subsequent offence, to a fine not exceeding \$200 000. Please note that an offence that is committed on more than one day constitutes a separate offence for each day on which it is committed or continued.

**31 (1) (a) - Location and Area**

1.	The Permittee shall not conduct this land use operation on any lands not designated in the accepted application, unless otherwise authorized in writing by the Engineer.	PLANS
2.	The Permittee shall not conduct any trenching activities within the thirty-one (31) meters of the normal high water mark of any water body.	TRENCHING LOCATION

**31 (1) (b) - Time**

3.	The Permittee's Field Supervisor shall contact or meet with a Land Use Inspector at the Iqaluit office of the Indigenous and Northern Affairs Canada, phone number (867)975-4517, at least 48 hours prior to the commencement of this land use operation.	CONTACT INSPECTOR
4.	The Permittee shall advise a Land Use Inspector at least 10 days prior to the completion of the land use operation of;  (a) his plan for removal or storage of equipment and materials, and  (b) when final clean-up and restoration of the lands used will be completed.	REPORTS BEFORE REMOVAL
5.	The Permittee's Field Supervisor shall provide notification of commencement of the land use operation to the Engineer at the Iqaluit office of the Department of Indigenous and Northern Affairs Canada either by emailing <a href="mailto:landsmine@aadnc.gc.ca">landsmine@aadnc.gc.ca</a> or by telephone at (867)975-4283.	NOTICE TO ENGINEER
6.	The Permittee shall submit an annual report to the Engineer by March 30 <sup>th</sup> of each year of permitted activities. The annual report must contain, but not limited to, the following information:  (a) A summary of activities undertaken for the year including  (b) A map showing the following items with exact coordinates (degrees/min/sec, in NAD 83):  i. All drilling locations; ii. All fuel caches; iii. Any other location where activities were conducted.  (c) A work plan for the following year, including any progressive reclamation work undertaken.	ANNUAL REPORT

7.	The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of this permit.	CLEAN-UP
8.	The Engineer reserves the right to impose closure to any area to the Permittee in periods when dangers to natural resources are severe.	CLOSURE

### **31 (1) (c) - Equipment**

9.	The Permittee shall not use any equipment except of the type, size and number that is listed in the accepted application, unless otherwise authorized in writing by the Land Use Inspector.	ONLY APPROVED EQUIPMENT
10.	The Permittee shall keep all garbage and debris in a covered metal container until disposed of. All wastes shall be kept inaccessible to wildlife at all times.	GARBAGE CONTAINERS

### **31 (1) (d) - Methods and Techniques**

11.	The Permittee shall ensure that drill muds and additives are not used in connection with holes drilled through marine ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.	DRILL MUDS AND ADDITIVES
12.	The Permittee shall ensure that all drill cuttings are removed from ice surfaces daily.	DRILL CUTTINGS
13.	The Permittee shall plug all bore holes as the land use operation progresses.	PLUG HOLES
14.	The Permittee shall refill and restore bore hole craters as the land use operation progresses.	REFILL CRATERS
15.	The Permittee shall stockpile all overburden/topsoil generated during trenching using proper prevention measures.	STOCKPILING

### **31 (1) (f) - Control or Prevention of Flooding, Erosion and Subsidence of Land**

16.	The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.	PREVENTION OF RUTTING
17.	The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.	VEHICLE MOVEMENT FREEZE-UP
18.	The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.	SUSPEND OVERLAND TRAVEL

**31 (1) (g) - Use, Storage, Handling and Disposal of Chemical or Toxic Material**

19.	The Permittee shall not use chemicals in connection with the land use operation without the prior approval of the Engineer.	APPROVAL OF CHEMICALS
20.	The Permittee shall not allow any drilling waste to spread to the surrounding lands.	DRILL WASTE CONTAINMENT
21.	The Permittee shall backhaul and dispose all combustible waste petroleum products and hazardous wastes at an approved facility unless there is an approved waste oil burner on site.	WASTE PETROLEUM DISPOSAL
22.	The Permittee shall report all spills immediately in accordance with instructions contained in "Spill Report" form NWT 1752(05/93). Twenty four (24) hour spill report line (867)920-8130.	REPORT CHEMICAL AND PETROLEUM SPILLS

**31 (1) (h) - Wildlife and Fisheries Habitat**

23.	The Permittee shall not unnecessarily damage wildlife habitat in conducting this land use operation.	HABITAT DAMAGE
24.	The Permittee shall not harass wildlife. This includes persistently worrying or chasing, or disturbing large groups of animals.	NO HARASSING WILDLIFE
25.	The Permittee shall not obstruct the movement of fish while conducting this land use operation.	FREE FISH MOVEMENT
26.	The Permittee shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Permittee shall take precaution to avoid further interaction and/or disturbance.	NO DISTURBING NESTS
27.	The Permittee shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as airborne geophysics surveys, drilling, or movement of equipment or personnel until such time as the caribou have passed.	CARIBOU MIGRATION
28.	The Permittee shall not feed wildlife.	NO FEEDING WILDLIFE
29.	Your operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures will lessen the likelihood of bears being attracted to your operation. Information about the latest bear detection and deterrent techniques can be obtained from the Department of Environment, Government of Nunavut in Iqaluit, Nunavut.	BEAR/MAN CONFLICT

**31 (1) (k) - Petroleum Fuel Storage**

30.	The Permittee shall locate mobile fuel facilities on land when stationary for any period of time exceeding twelve (12) hours.	FUEL ON LAND
31.	The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies.	FUEL CONTAINMENT
32.	The Permittee shall use secondary containment or a surface liner (drip pans, fold-a-tanks, etc.) at all refuelling stations. The Permittee shall ensure that appropriate spill kits are located at every fuel cache.	SECONDARY CONTAINMENT
33.	The Permittee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.	FUEL EXTRA CONTAINER
34.	The Permittee shall mark all stationary petroleum products storage facilities with flags, posts or similar devices so that they are at all times plainly visible to local vehicle travel.	MARK FUEL LOCATION
35.	The Permittee shall:  (a) examine all fuel storage containers for leaks a minimum of once every day;  (b) repair all leaks immediately; and  (c) examine all fuel storage containers for leaks immediately upon delivery.	CHECK FOR LEAKS
36.	The Permittee shall seal all container outlets except the outlet currently in use.	SEAL OUTLET
37.	The Permittee shall mark all fuel containers with the Permittee's name.	MARK CONTAINERS

**31 (1) (m) - Matters Not Inconsistent with the Regulations**

38.	The Permittee shall display a copy of this permit in a conspicuous place in each campsite established to carry out this land use operation.	DISPLAY PERMIT
39.	The Permittee shall keep on hand, at all times during this land use operation, a copy of the Land Use Permit.	COPY OF PERMIT
40.	<u>Part 1</u> - In this Permit:  "drill waste" means all materials or chemicals, solid or liquid, associated with the drilling of bore holes and includes bore hole cuttings.	
41.	The Permittee shall abide by and comply with all applicable lawful rules, acts, regulations, and by-laws of Canada, Nunavut, any Municipal or regulatory body or authority having jurisdiction, the Nunavut Land Claim Agreement, and all other agreements, permits, licenses, and other instruments whatsoever related to the project.	ADHERENCE TO LAWFUL RULES, ACTS, REGS & BYLAWS

## ARCHAEOLOGICAL & PALEONTOLOGICAL TERMS & CONDITIONS

42.	<p>“archaeological site” means a place where an archaeological artifact is found.</p>	DEFINITIONS
	<p>“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.</p> <p>“paleontological site” means a site where a fossil is found.  “fossil” includes:</p> <ul style="list-style-type: none"> <li>(a) natural casts</li> <li>(b) preserved tracks, coprolites and plant remains; and</li> <li>(c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.</li> </ul>	
43.	The Permittee shall avoid any known or suspected archaeological and/or paleontological sites.	AVOIDANCE OF ARCHAEOLOGICAL AND/OR PALEONTOLOGICAL SITES
44.	The Permittee shall not remove, disturb, or displace any archaeological artifact or site, or any paleontological site or fossil.	DISTURBANCE OF ARCHAEOLOGICAL AND/OR PALEONTOLOGICAL SITES
45.	The Permittee shall ensure that all persons working under the authority of the permit are aware of these conditions pertaining to archaeological sites and artifacts as well as paleontological sites and fossils.	KNOWLEDGE OF ARCHAEOLOGICAL AND PALEONTOLOGICAL TERMS AND CONDITIONS
46.	The Permittee shall immediately cease any activity should a suspected archaeological, paleontological, or burial site be discovered during the course of a land use operation. The Permittee is required to immediately contact the Land Administration division at Indigenous and Northern Affairs Canada at (867)975-4283 or (867)975-4285 or (867)975-4280 as well as the Department of Culture and Heritage at (867)934-2046 or (867)975-5500 or 1(866)934-2035.	CEASE OPERATION OF LAND USE ACTIVITY

	<p>Permission to resume land use operations must be obtained from the Engineer. At such time the Engineer may, at his/her discretion, require that you have an archaeologist or palaeontologist perform the following functions:</p>	
	<p>(a) Survey,</p>	
	<p>(b) Inventory and documentation of the archaeological or paleontological resources of the land use area,</p>	
	<p>(c) Assessment of potential for damage to archaeological or paleontological sites,</p>	
	<p>(d) Mitigation,</p>	
	<p>(e) Marking boundaries of archaeological or paleontological sites,</p>	
	<p>(f) Site restoration.</p>	



## Species At Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- a) Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- (b) Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- (c) Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry ([www.sararegistry.gc.ca](http://www.sararegistry.gc.ca)) to get the current status of a species.

Terrestrial Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon	Special Concern ( <i>anatum-tundrius</i> complex)	Schedule 1 ( <i>anatum</i> ) Schedule 3 ( <i>tundrius</i> )	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Peary Caribou	Endangered	Schedule 1	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	Government of Nunavut
Polar Bear	Special Concern	Schedule 1	Government of Nunavut
Red Knot ( <i>rufa</i> subspecies)	Endangered	Pending	EC
Red Knot ( <i>islandica</i> subspecies)	Special Concern	Pending	EC
Porsild's Bryum	Threatened	Pending	GN
Horned Grebe (Western Population)	Special Concern	Pending	EC
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut
Atlantic Cod, Arctic Lakes	Special Concern	No Schedule	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO

Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

Updated: January 2012