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~~08YN005~~

Land Administration
P.O. Box 100
Iqaluit, NU X0A 0H0
Phone: 867-975-4275
Fax: 867-975-4286

September 30th, 2011

Scott Lamoureux
Queen's University – Department of Geography
MC D201
Kingston, ON
K7L 3N6

Dear Scott Lamoureux:

Re: Land Use Permit # N2003J0007
Type of Operation: Campsite
Location: Melville Island, Baffin, NU

The above noted permit has now been closed and all obligations held under this permit have been transferred to Land Use Permit N2011N0019 issued on September 9th, 2011.

No land use fees are owing or refundable for file N2003J0007.

Sincerely,

Tracey McCaie
Land Administrator Specialist

cc: Manager, Field Operations
RMO – Baffin
CIDMS #485313



034N010

**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

N2011N0019

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:

QUEEN'S UNIVERSITY - DEPARTMENT OF GEOGRAPHY

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 Scott Lamoureux	Date September 9th, 2011
Type of Land Use Operation - Genre de travaux d'exploitation des terres Research Project	
Location - Emplacement Melville Peninsula, North Baffin, NU, NTS 78F	

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 9th Day of September, 2011

Commencement Date

Date du début des travaux September 9th, 2011

Expiry Date

Date d'achèvement September 8th, 2013

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.

Canada

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**CONDITIONS ANNEXED TO AND FORMING PART
OF LAND USE PERMIT NUMBER N2011N0019**

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 locate all camps on gravel, sand or other durable land.	CAMP 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 Department of Indian Affairs and Northern Development, phone number (867) 975-4296 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 shall complete all clean-up and restoration of the lands used prior to the expiry date of this permit.	CLEAN-UP
6	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

7	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
8	The Permittee shall use a forced-air fuel-fired incinerator to incinerate all combustible garbage and debris.	INCINERATORS
9	The Permittee shall burn all combustible garbage and debris in a container acceptable to a Land Use Inspector.	INCINERATION
10	The Permittee shall keep all garbage and debris in a covered metal container until disposed of.	GARBAGE CONTAINERS



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31 (1) (e) - Type, Location, Capacity and Operation of Facilities

11	The Permittee shall not locate any sump within 31 metres of the normal high water mark of any stream.	SUMPS FROM WATER
12	The Permittee shall backfill and restore all sumps prior to the expiry date of this permit.	BACKFILL SUMPS
13	The Permittee shall ensure that the land use area is kept clean and tidy at all times.	CLEAN WORK AREA

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

14	The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.	PREVENTION OF RUTTING
15	The Permittee when clearing land shall: (a) save all vegetation removed from the land use area. (b) place the vegetation over the land use area prior to expiry of the land use permit.	SAVE VEGETATION
16	The Permittee shall save the organic soil stripped from the excavation area.	SAVE ORGANIC SOIL
17	The Permittee shall place the organic soil over the disturbed area prior to the expiry date of this permit.	PLACE ORGANIC SOIL

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

18	The Permittee shall deposit all sewage into a sump.	SEWAGE DISPOSAL
19	The Permittee shall burn all garbage and debris at least daily.	GARBAGE DISPOSAL
20	The Permittee shall remove all non-combustible garbage and debris from the land use area to a disposal site approved in writing by a Land Use Inspector.	REMOVE GARBAGE
21	The Permittee shall dispose of all combustible waste petroleum products by incineration or removal.	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
23	The Permittee shall have a spill clean up kit located on site including equipment such as absorbent pads, shovels, etc.	SPILL CLEAN UP KIT



The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atomic nucleus. It is shown that the structure of the nucleus is determined by the interaction of the nucleons, which are the particles that make up the nucleus. The interaction is described by the strong interaction, which is the most powerful of the four fundamental interactions. The strong interaction is responsible for the binding of the nucleons together in the nucleus.

The second part of the paper is devoted to a discussion of the experimental results on the structure of the atomic nucleus. It is shown that the experimental results are in good agreement with the theoretical predictions. The experimental results show that the nucleus is a compact object, with a radius that is proportional to the cube root of the mass number. The experimental results also show that the nucleus is a stable object, with a lifetime that is much longer than the lifetime of the individual nucleons.

The third part of the paper is devoted to a discussion of the applications of the theory of the structure of the atomic nucleus. It is shown that the theory can be used to calculate the binding energy of the nucleus, which is the energy that is required to break the nucleus apart into its constituent nucleons. The theory can also be used to calculate the cross-sections for the various nuclear reactions, which are the probabilities that a given reaction will occur.

The fourth part of the paper is devoted to a discussion of the future prospects for the theory of the structure of the atomic nucleus. It is shown that there are many interesting problems that remain to be solved. These problems include the calculation of the binding energy of the nucleus for large mass numbers, the calculation of the cross-sections for the various nuclear reactions, and the calculation of the lifetime of the nucleus. It is hoped that the theory will be able to provide answers to these problems in the future.

The fifth part of the paper is devoted to a discussion of the conclusions of the paper. It is shown that the theory of the structure of the atomic nucleus is a very powerful tool for understanding the structure of the nucleus. The theory can be used to calculate the binding energy of the nucleus, the cross-sections for the various nuclear reactions, and the lifetime of the nucleus. It is hoped that the theory will be able to provide answers to many of the interesting problems that remain to be solved.

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

24	The Permittee shall not unnecessarily damage wildlife habitat in conducting this land use operation.	HABITAT DAMAGE
25	The Permittee shall not obstruct the movement of fish while conducting this land use operation.	FREE FISH MOVEMENT
26	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.	BEAR/MAN CONFLICT

31 (1) (i) - Objects and Places of Recreational, Scenic and Ecological Value

27	The Permittee shall not feed wildlife.	NO FEEDING WILDLIFE
28	<p>"archaeological site" means a place where an archaeological artifact is found.</p> <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.</p> <p>"fossil" includes:</p> <ul style="list-style-type: none">(a) natural casts(b) preserved tracks, coprolites and plant remains; and(c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.	DEFINITIONS
29	The Permittee shall avoid any known or suspected archaeological and/or paleontological sites.	AVOIDANCE OF ARCHAEOLOGICAL AND/OR PALEONTOLOGICAL SITES
30	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 SITE



31	<p>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 Indian and Northern Affairs Canada at (867)975-4283 or (867)975-4285 or (867)975-4280 as well as the Department of Culture, Language, Elders and Youth at (867)934-2046 or (867)975-5500 or 1(866)934-2035.</p> <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> <ul style="list-style-type: none"> (a) Survey (b) Inventory and documentation of the archaeological or paleontological resources of the land use area (c) Assessment of potential for damage to archaeological or paleontological sites (d) Mitigation (e) Marking boundaries of archaeological or paleontological sites (f) Site restoration 	CEASE OPERATION OF LAND USE ACTIVITY
32	<p>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.</p>	KNOWLEDGE OF ARCHAEOLOGICAL AND PALEONTOLOGICAL TERMS AND CONDITIONS

31 (1) (k) - Petroleum Fuel Storage

33	The Permittee shall report in writing to a Land Use Inspector the location and quantity of all petroleum fuel caches within ten (10) days after the establishment.	REPORT FUEL LOCATION
34	The Permittee shall not place any petroleum fuel storage containers within thirty-one (31) metres of the normal high water mark of any stream.	FUEL BY STREAM
35	The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies.	FUEL CONTAINMENT
36	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
37	The Permittee shall line the dyke and area enclosed by the dyke with a type of plastic film liner approved by the Engineer.	LINE DYKE
38	The volume of the dyked area shall be 10% greater than the capacity of the largest fuel container placed therein.	CAPACITY

39	The Permittee shall ensure that the dyke and the area enclosed by the dyke shall be impermeable to petroleum products at all times	IMPERMEABLE DYKE
40	The Permittee shall: a) examine all fuel storage containers for leaks a minimum of once every day. b) repair all leaks immediately.	CHECK FOR LEAKS
41	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
42	The Permittee shall seal all container outlets except the outlet currently in use.	SEAL OUTLET
43	The Permittee shall mark all fuel containers with the Permittee's name.	MARK CONTAINERS

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

44	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
45	The Permittee shall keep on hand, at all times during this land use operation, a copy of the Land Use Permit.	COPY OF PERMIT
46	The Permittee shall provide in writing to the Engineer, at least forty-eight (48) hours prior to commencement of this land use operation, the following information: a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served; b) alternates; c) all the indirect methods for contacting the above person(s).	IDENTIFY AGENT
47	The Permittee shall conspicuously display the land use permit number on all vehicles and equipment.	DISPLAY PERMIT NUMBER
48	The Permittee shall submit to the Engineer a contingency plan, for chemical and petroleum spills, for use during the construction and operation of the winter road.	CONTINGENCY PLAN



1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a presentation of the results of the study. It includes tables, figures, and text describing the findings of the research.

4. The fourth part of the report is a discussion of the results and their implications. It includes a comparison of the findings with previous research and a discussion of the limitations of the study.

5. The fifth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study, and the references list the sources of information used in the research.

6. The sixth part of the report is a list of appendices. These include additional data, tables, and figures that are not included in the main body of the report.

7. The seventh part of the report is a list of footnotes. These provide additional information about the study and the authors.

8. The eighth part of the report is a list of acknowledgments. These thank the individuals and organizations that provided support and assistance during the study.

9. The ninth part of the report is a list of abbreviations. These define the acronyms and symbols used in the report.

10. The tenth part of the report is a list of symbols. These define the mathematical symbols used in the report.

11. The eleventh part of the report is a list of tables. These provide a summary of the data presented in the report.

12. The twelfth part of the report is a list of figures. These provide a visual representation of the data presented in the report.

13. The thirteenth part of the report is a list of references. These list the sources of information used in the research.

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20. The twentieth part of the report is a list of figures. These provide a visual representation of the data presented in the report.

49	<p>a) During migration of caribou, the Permittee shall not locate any operation so as to block or cause substantial diversion of migration.</p> <p>b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed</p>	<p>CARIBOU PROTECTION MIGRATION</p>
50	<p>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.</p>	<p>ADHERENCE TO LAWFUL RULES, ACTS, REGS & BYLAWS</p>

CIDM 478742

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
1155 EAST 58TH STREET
CHICAGO, ILLINOIS 60637

PROFESSOR J. H. HARRIS
1155 EAST 58TH STREET
CHICAGO, ILLINOIS 60637

Dear Professor Harris:
I am writing to you to inform you that I have received your letter of the 10th of this month regarding the matter of the transfer of the property of the University of Chicago to the Department of Chemistry. I am sorry that I cannot give you a more definite answer at this time, but I am sure that you will understand my position.



Land Administration
P.O. Box 100
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September 9th, 2011

Scott Lamoureux
Queen's University – Department of Geography
MC D201
Kingston, ON
K7L 3N6

Dear Scott Lamoureux:

Re: Land Use Permit #N2011N0019
Type of Operation: Research Project
Location: Melville Peninsula, North Baffin, NU, NTS 78F

Enclosed is your copy of Land Use permit number N2011N0019 authorizing your project as described in your application dated May 9th, 2011, received by this office May 17th, 2011.

Your application has received a wide distribution to other Federal departments, Government of the Nunavut departments, communities in the area of your operation and concerned Inuit groups. In distributing your application the Nunavut Impact Review Board (NIRB) sought comments from these various agencies based on their area of expertise that will help ensure minimum negative impact on the environment. The issuance of this permit indicates that as a result of the NIRB environmental screening process it was decided that the potentially adverse environmental effects that may be caused by your proposal are mitigable 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. Should you have any questions regarding any conditions of this permit, please contact Tracey McCaie at (867) 975-4283 or email landsmining@inac.gc.ca.

Sincerely,

Jeff Mercer
Manager, Land Administration
cc: Manager, Field Operations
RMO - Baffin
NIRB
NPC
CIDMS #478764

