NWB Annual	Report	Year being reported: 2009 ▼						
License No:	3BC-PRO0914	Issued Date: 17th June 2009						
		Expiry Date: 30th November 2014						
	Project Name:	Provenance of Clastic Sediments in the Sverdrup Basin, Canadian						
	Licensee: Camb	oridge Arctic Shelf Programme, University of Cambridge						
	Mailing Address:	Dr.Helen Smyth, CASP, 181A Huntingson Road, Cambridge, CB30DH, United Kingdom						
	Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):							
	n/a							
General Bacl	kground Information	on the Project (*optional):						
	Please note in 2009 CASP did not work within or travel to the areas covered by this water license.							
	In 2009 the CASP team had the opportunity to travel to Quttnirpaaq National Park, all water and sewage requirements covered by Parks Canada regulations and not NWB. The expedition which was planned for 2009 will now take place in 2010.							
Licence Requirements		see must provide the following information in accodance						
	'							
	ter; sewage and gre	nd waste disposal activities, including, but not limited to: methods of ywater management; drill waste management; solid and hazardous						
	Water Source(s): Water Quantity:	Lake Hazen, Cuesta Creek, Mesa Creek, Gilman River  100						
	Waste Management a Solid Waste Disp Sewage Drill Waste Grey water Hazardous Other: Additional Details:	•						

All sewage waste was disposed of as per Parks Canada guidelines = packed out. All other waste was managed as per the park regulations.

A list of una	uthorized disc <u>harges and a summ</u> ary of follow-up actions taken.
	Spill No.: (as reported to the Spill Hot-line)
	Date of Spill:
	Date of Notification to an Inspector:
	Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)
Revisions to	the Spill Contingency Plan
	SCP submitted and approved - no revision required or proposed
	301 Submitted and approved - no revision required or proposed
	Additional Details:
	Additional Dotallo.
Pavisions to	the Abandonment and Restoration Plan
Kevisions to	
	N/A - not applicable   ▼
	Additional Details:
	Additional Details.
Progressive	Reclamation Work Undertaken
riogiessive	Additional Details (i.e., work completed and future works proposed)
	Additional Details (i.e., work completed and future works proposed)
Results of th	ne Monitoring Program including:
	The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each
	location where sources of water are utilized;
	Details described below   ▼
	Additional Details:
	In 2000, the CACD field to an travelled to Lake Heavy within Outtringer National
	In 2009, the CASP field team travelled to Lake Hazen within Quttnirpaaq National
	Park and in accordance to Parks Canada licensing did not require a water license
	permit to cover the expedition.
	The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each
	location where wastes associated with the licence are deposited;
	Not Applicable (N/A)   ▼
	itot rippinaano (itiri)
	Additional Details:

Results of	any additional sampling and/or analysis that was requested by an Inspector
No additional	sampling requested by an Inspector or the Board
Additional I	Details: (date of request, analysis of results, data attached, etc)
Any other details on wa being reported.	ter use or waste disposal requested by the Board by November 1 of the year
No additional	sampling requested by an Inspector or the Board
Additional I	Details: (Attached or provided below)
-	v-up actions on inspection/compliance reports
	and/or compliance report issued by INAC   ▼
Additional I	Details: (Dates of Report, Follow-up by the Licensee)
Any addition <u>al commen</u>	ts or information for the Board to consider
Date Submitted: Submitted/Prepared by: Contact Information:	18th January 2010  Helen Smyth  Tel:

## **GPS Coordinates for water sources utilized**

	Latitude			Longitude			
Source Description	o Deg	Min	, Sec	o Deg	Min	, Sec	
Lake Hazen @ Camp Hazen	81	49	28	71	19	15	
Cuesta Creek	81	52	50	70	12	51	
Mesa Creek	81	56	39	69	55	18	
Gilman River tributary	82	1	15	70	11	52	

## **GPS Locations of areas of waste disposal**

Location Description (type)	Latitude			Longitude			
	o Deg	, ni	, Sec	o Deg	Min	, Sec	



# PARKS CANADA AGENCY RESEARCH AND COLLECTION PERMIT (NOT TRANSFERABLE)

**PERMIT No.:** QUT-2009-2516

**START DATE:** 2009-06-24 **EXPIRY DATE** 2009-08-02

Project Title: Provenance of clastic sediments in the Sverdrup Basin, Canadian

Arctic Islands

Principal Investigator Name: Scott, Robert A. (Dr.)

Address: CASP, University of Cambridge 181a Huntingdon Road Cambridge CB3

**ODH United Kingdom** 

**Telephone:** +44 1223 277586

Email: robert.scott@casp.cam.ac.uk

Affiliation: CASP University of Cambridge, UK

Is hereby authorized to conduct the research project entitled "Provenance of clastic sediments in the Sverdrup Basin, Canadian Arctic Islands", Research and Collection Permit Application Number 2060, In Quttinirpaaq National Park of Canada, subject to the terms and conditions set out below and/or attached to and forming part of this Research and Collection Permit.

### **Members of Research Team:**

- 1. Kelly, Simon R.A. (Dr.); CASP, University of Cambridge; 181a Huntingdon Road Cambridge; CB3 ODH; United Kingdom; +44 1223 277586; simon.kelly@casp.cam.ac.uk
- 2. Rippington, Steven (Dr.); CASP, University of Cambridge; 181a Huntingdon Road Cambridge; CB3 ODH; United Kingdom; +44 1223 277586; steve.rippington@casp.cam.ac.uk
- 3. Smyth, Helen (Dr.); CASP, University of Cambridge; 181a Huntingdon Road Cambridge; CB3 ODH; United Kingdom; +44 1223 27758;6 helen.smyth@casp.cam.ac.uk
- 4. Pease, Victoria L. (Dr.); Department of Geology & Geochemistry; Stockholm University; SE-106 91 Stockholm Sweden; +46 8 674-7321, vicky.pease@geo.su.se







### **Issuing Authorities and Terms and Conditions:**

Permit issued pursuant to:

National Parks General Regulations: Section(s) 7(5), 11(1);

Project proposals within National Parks in Nunavut are subject to the NLCA and screening by the Nunavut Impact Review Board (NIRB) in accordance with Section 8.2.11. Schedule 12-1 of the NLCA exempts certain types of activities from screening by the NIRB. Under an agreement through 12-1(7) the NIRB and Parks Canada have agreed to exempt Research and Collection Permits from screening by the NIRB for a period of three years commencing October 21, 2008 and ending October 21, 2011.

#### National General Conditions:

Failure to comply with applicable Heritage Area regulations or the conditions of the permit may constitute grounds to cancel or suspend the permit, refuse to issue future permits, and may be considered as grounds for prosecution under the applicable Act(s) or Regulation(s).

All permit holders must be in possession of a valid permit before the fieldwork commences and at other periods as stated on the permit.

Permits are not transferable and each member of the field work team must have a copy of the valid permit in their possession.

The permit is valid only for the geographic location, the time period, the activities, and under the terms and conditions described on the permit, unless amended and revalidated by the Superintendent.

#### Restrictions:

The Superintendent may suspend, cancel, or restrict the scope of the permit.

The permit shall cease to be valid if the fieldwork is not started within six months of the date of issue.

Other Acts and Regulations:

The Principal Investigator must abide by applicable regulations and all other federal, provincial, territorial or municipal regulations applying to the Heritage Area.

If requested by the Superintendent, an authorized Heritage Area staff member, or police constable, the Principal Investigator or any team member will identify themselves and show the permit.

Principal Investigator Responsibilities:

A site, or site component(s) that has been excavated or disturbed shall be restored or conserved by the Principal Investigator to the satisfaction of the Superintendent.









The Principal Investigator must advise the Research Coordinator of any adjustments in work location, research plan and methodology, implementation schedule, or main personnel, etc., during the course of the research.

Unless otherwise negotiated, Researchers working in a Heritage Area are required, as a condition of their permit, to submit:

- a) A report of progress sixty (60) days following the completion of the field season, unless otherwise agreed with the Research Coordinator;
- b) A final report, one (1) electronic copy and three (3) hard copies, no later than eight (8) months following the completion of the field season, unless otherwise agreed with the Research Coordinator;
- c) Submission of an online Investigator's Annual Report (IAR) within one year of signing the permit. In the case of a multi-year permits, the principal investigator will submit an IAR for each year of the research.

The reporting requirements above do not replace any reporting requirements set out in any contract between Parks Canada and the Principal Investigator.

The Principal Investigator will be responsible for all members of their party. All field assistants must observe any general or specific conditions of the permit.

The Principal Investigator shall at all times indemnify and save harmless the Crown from and against all claims, demands, loss, costs, damages, actions, suits, or other proceedings, by whosoever made, sustained, brought or prosecuted, in any manner based upon, occasioned by, or attributable to, anything done or omitted by the Principal Investigator or the project personnel in the fulfillment or purported fulfillment of any of the conditions of the Permit.

General Conditions Governing Natural Science Research:

Any natural objects collected under authority of this permit remain the property of the Crown (Canada) and are considered on loan to the permit holder. Final disposition of natural objects must be as shown in the project proposal unless amended by the Superintendent. Export of objects or specimens require approval by the Superintendent and is subject to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Cultural Property Export and Import Act and the Export and Import Permits Act. Intention to export specimens must be indicated in the project proposal.

Only the natural objects or categories of natural objects indicated on the permit may be collected.

A detailed inventory of material collected will be provided to the Heritage Area prior to its removal by the researcher.

When fossils or evidence of previous human occupation are found, they should be reported to the Superintendent and must be left undisturbed until inspected by a Parks Canada palaeontologist or archaeologist.

#### **Special Conditions:**

The following conditions apply to Research & Collection Permits issued for Quttinirpaaq National Park and are in addition to those outlined above.









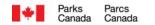


- \_X\_ The Permit holder(s) are required to check in at the Tanquary Fiord Warden Station prior to the commencement of their field activities.
- \_X\_ Radio confirmation of arrival and departure from field research camp to the Tanquary Fiord and Hazen Camp Warden Stations.
- \_X\_ The Research & Collection Permit will also serve as an Aircraft Landing Permit authorized by the Superintendent as per Section 15(6) of the National Parks General Regulations subject to the following provisions:
- List of all aircraft use is provided to the Superintendent and Park Manager prior to commencement of fieldwork. This list must include: date, time, location, and type of aircraft for all landings and take offs
  - Conflict with wildlife, wildlife habitat and park visitor use is minimized
- Minimum flying height of 300 meters is adhered to except during landing, takeoff or as part of the approved research methods
- \_X\_ A list of all fuel caches must be provided to the Superintendent and Park Manager prior to commencement of field work and must include: location, amount, and the type of fuel at each cache
- All fuel caches and empty drums are to be clearly and indelibly marked with the project leader's name, year that fuel was cached, and PCSP project number if applicable
- All fuel drums are to be removed from the park at the end of the field season unless otherwise agreed upon
- \_X\_ All garbage is to be removed from the park in accordance with the National Park Regulations.
- \_X\_ Solid Human waste: in field camp situations, human waste is to be collected in sealable metal or plastic containers. The project leader is responsible for ensuring that all containers of human waste must be removed to Resolute Bay or Eureka and disposed of at the appropriate facility. The cost of this disposal is the project leader's responsibility. In base camp (Tanquary Fiord, Lake Hazen and Ward Hunt) situations, provided facilities will be used.
- \_X\_ The project leader will ensure that all party members understand and comply with the National Park Act and Regulations.
- \_X\_ Nunavut Land Claim beneficiaries employed by the research project are not permitted to use research or Parks Canada chartered aircraft and vessels to transport any materials gathered, fished or hunted while working under the supervision of the project leader.
- \_X\_ Possession of a firearm is not permitted for this research project.
- \_X\_ The Park Superintendent will allow members of the research group to possess firearms as per Section 3(2) of the National Parks Wildlife Regulations for personal protection against polar bears in life threatening situations.
- 12-gauge shotgun is the ONLY type of firearm permitted
   Make, model and serial number of firearm: Two 12 gauge Remington 870 express magnum, serial numbers D607437M and D921761M

The following people will be authorized to handle the firearm:

Helen Smyth, Possession and Acquisition License #

Stephen Rippington, Possession and Acquisition License #







(NOTE: the information on firearm licences will be must be provided to Park Manager and Research Coordinator BEFORE entering the park)

- The project leader will be responsible to ensure that persons entrusted with firearms have valid Possession and Acquisition Licenses and are thoroughly trained in safe firearm use. Any necessary firearm familiarization exercises must be done prior to arrival in the park
- All reasonable attempts to deter polar bears which represent a threat to human life must be made
- In the event that a polar bear is destroyed, the project leader must advise the Park Manager of the occurrence immediately and make a full written report of the incident as soon as possible
- Researchers from outside of Canada should consult with the Royal Canadian Mounted Police and Canada Customs and Excise personnel prior to importing firearms into Canada.
- LAKE HAZEN SPECIAL CONDITIONS This is a high use area for aircraft, visitors, staff, and researchers. As such, NO firearms will be carried in plain view, they must be carried inside a backpack. Firearms must be unloaded at all times. All firearms must be stored out of view (eg. Inside tent), not in a public area, and be locked if left unattended.
- \_X\_ The project leader is responsible to ensure that all party members read available polar bear safety information
- \_X\_ All polar bear observations and encounters must be reported to the Park Manager
- \_X\_ The permit holder(s) shall not remove, disturb or displace any archaeological artifact or site.
- \_X\_ Should an archaeological site or specimen to be encountered or disturbed by any land use activity. The permit holder(s) shall immediately contact Parks Canada Lynn Cousins, Cultural Resource Management Officer 867-975-4796 or Margaret Bertulli, Archaeologist, 204-984-0309.
- \_X\_ The permit holder(s) shall immediately cease any activity that disturbs an archaeological site encountered during the course of a land use operation, until permitted to proceed with the authorization of Parks Canada.
- \_X\_ The permit holder(s) shall avoid the known archaeological sites listed in Attachment A.
- \_X\_ If Park visitors are present on site at the same time as the permit holder(s), the permit holder(s) shall use this event as an opportunity to enhance the visitors' Park experience by educating the visitors about their research project.
- \_X\_ A field season summary report must be submitted to Parks Canada by 30th October each year that the permit is valid (email: NunavutParks.Research@pc.gc.ca) and to the following community groups: Hamlet Councils of Resolute Bay and Grise Fiord, Resolute Bay HTO, & Iviq HTO.
- \_X\_ The project leader or designate must present the research project and results to Parks Canada staff in Iqaluit at mutually agreed upon time.
- \_X\_ The project leader or designate must present the research project and results to the communities of Resolute Bay &/or Grise Fiord at a mutually agreed upon time.
- \_X\_ Copies of all reports, scientific papers, and posters must be provided to the Parks







### Canada office in Iqaluit.

- \_X\_ Data files will be provided to Parks Canada upon request.
- \_X\_\_ The Joint Park Management Committee for Quttinirpaaq National Park will review annually the terms and conditions of this permit. The permit may be revoked if terms and conditions are not adhered to.
- \_X\_ The following are the approved collections & procedures that can be made in Quttinirpaaq National Park during each field season (For methodology details refer to Application #2060):
- 1. Researchers will set up at the base camp at Lake Hazen and will establish a temporary field camp near the Abbe River. The field camp will be completely dismantled on leaving the area.
- 2. Working in groups of two or three people on foot, examine rock outcrops exposed at the surface, collect small rock samples using a geological hammer from the surface where appropriate. Estimated total sample weight: 100 kg.
- 3. Take measurements of orientations and dimensions using a compass clinometer and tape measure respectively.
- 4. Samples will be removed to University of Cambridge for analysis.







Principal Investigator Signature

I, Scott, Robert A. (Dr.), the Project Principal Investigator, accept all the stated Research and Collection Permit terms and conditions.

Signature

2009/06/17 Date (yyyy/mm/dd)

Approval:

Permit issued/approved by:

Superintendent Name (Please Print)

Superintendent Signature

Date (yyyy/mm/dd)

Parks Canada Contact

Jane Chisholm Nunavut Field Unit GOC Building, Bldg 969, Federal Road PO Box 278 Iqaluit, Nunavut, X0A 0H0 (867) 975-4762 Jane.Chisholm@pc.gc.ca