



መልቲ Γ ፪፻፲፭-፻፲፭፯፮ #125145

ArcticNet Project 1: The Northwest Passage at the end of the Last Glaciation. ArcticNet Project 2: River sampling during 2017 ArcticNet expedition

፳፻፲፭ ዓ.ም. ከዚህ በታች ስለመስጠት

New

አርብናዕስናዕስና

፭፻፲፷፯፻፯፻

Digitized by srujanika@gmail.com

5/29/2017 3:22:35 PM

Period of operation:

from 2017-07-13 to 2017-10-12

ԵՐԵՎԱՆԸ

from 2017-05-2

Anissa Merzouk

ArcticNet

1045, a

Quebec Quebec G1V0A6

۲۵۸۱ ۶۶۴

These two ArcticNet subprojects constitute an amendment to the ArcticNet ship-based scientific license (NIRB# 06YN071) for activities conducted from the Canadian research icebreaker CCGS Amundsen. The proposed activities include river and shore sampling. Descriptions of both sub-projects are attached as PDFs containing English, Inuktitut and Inuinnaqtun versions. Project 1: Project Title: The Northwest Passage at the end of the Last Glaciation ArcticNet Researcher: Dr. Mark Furze, MacEwan University Project Location: Maxwell Bay, Devon Island, Nunavut Planned activities: Beach surveys on foot and collection of a small number of empty beach shells (5-10) (no excavations required) for radiocarbon dating. Dates: 1 day between 30 July and 10 August 2017 Project 2 Project title: River sampling during 2017 ArcticNet expedition ArcticNet Researcher: Dr. Cara Manning, University of British Columbia Project location: Rivers in the Kitikmeot and Qikiqtaaluk regions, Nunavut (list of rivers provided in the attached proposal; A few (not all) of these sampling locations will be selected from this list during the ArcticNet research cruise, based on factors such as weather). Planned activities: Collection of river water samples for chemical analysis, including measurement of greenhouse gases. Dates: Depending on the Amundsen cruise track, between 30 July and 17 August 2017.

N/A

Διεύθυνση Απόδοσης και Επενδύσεων της Τράπεζας Ηλεκτρονικής Χρηματοδότησης (ΔΕΔΗΧ) ανέλαβε την προώθηση της πρότασης για την επένδυση στην ανάπτυξη της οικονομίας της Κύπρου μέσω της διαχείρισης της ένταξης της ΔΕΔΗΧ στην Ευρωπαϊκή Ένωση.

Personnel

Personnel on site: 2

Days on site: 10

Total Person days: 20

Period of operation: from 2017-07-13 to 2017-08-17

Proposed term of operation: from 2017-05-25 to 2017-10-12

Δε-ν-Δ-ν-Δ-σ-Δ-τ-Δ-

Δε-ν-Δ-ν-Δ-σ-Δ-τ-Δ-

Δ-Γ	‘-Δ-Δ-Δ-Δ-	Ρ-Δ- Δ-Δ-Δ-	Δ-Δ-Δ-Δ-Δ-Δ-Δ-	Δ-Δ-Δ-Δ-Δ-Δ-Δ-	‘-Δ-Δ-Δ-Δ-Δ-Δ-
River at Black Cliffs	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	Located in Sirmilik National Park on Bylot Island
Glacier River	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	Located in Sirmilik National Park on Bylot Island
Charles York River	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	Located in Sirmilik National Park on Bylot Island
Creswell River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Cunningham River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
River on Devon Island	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Ellice River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Freshwater Creek	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	Cambridge Bay
Garnier River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Jayko River, just upstream of weir	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Le Feuvre Inlet (East Side)	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Mecham River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	Resolute Bay
Pasley River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Saaqu River	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Simpson River	Sampling sites	Crown	Collection of river water samples for chemical analysis, including measurement of greenhouse gases.	N/A	N/A
Tingmeak River	Sampling sites	Inuit Owned Surface Lands	Collection of river water samples for chemical analysis, including measurement of	N/A	N/A

			greenhouse gases.		
Shore survey Maxwell Bay	Sampling sites	Crown	Beach surveys on foot and collection of a small number of empty beach shells (5-10) (no excavations required) for radiocarbon dating.	N/A	N/A

መርሃር ሰርዞች መርሃሪ በፌዴራል የሚገኘውን ስም ሰርዞች እና የሚገኘውን ስም ሰርዞች

መርሃሪ	ዓስት	በርካታውን በጥኑ	የአውጭነት በጥኑ
Information is not available			

ሁልኩ ለይፈልሰ የሚገኘውን ስም ሰርዞች
አጥቃዊያዊው ለመፈጸም ለማቅረብ በበኩል

Kitikmeot
North Baffin

ሁልኩ ለይፈልሰ የሚገኘውን ስም ሰርዞች

ሁልኩ ሰርዞች ፌዴራል የሚገኘውን ለመፈጸም ለማቅረብ አጥቃዊያዊው ለማቅረብ ሁልኩ ሰርዞች	የመፈጸም ሲሆን ሁልኩ ሰርዞች ለመፈጸም ለማቅረብ አጥቃዊያዊው ለማቅረብ	ለመፈጸም ሲሆን ሁልኩ ሰርዞች ለመፈጸም ለማቅረብ አጥቃዊያዊው ለማቅረብ	የመፈጸም ሲሆን ሁልኩ ሰርዞች ለመፈጸም ለማቅረብ አጥቃዊያዊው ለማቅረብ	የመፈጸም ሲሆን ሁልኩ ሰርዞች ለመፈጸም ለማቅረብ አጥቃዊያዊው ለማቅረብ
መፈጸም ሲሆን	ArcticNet multiyear license renewal 0601016-M	Applied, Decision Pending		2018-03-31
ከፍተኛ ተክኖሎጂ ለማቅረብ	3 rivers are located in Sirmilik National Park on Bylot Island	Applied, Decision Pending		
ከፍተኛ ተክኖሎጂ	3 river sampling sites are located in Queen Maud Gulf Migratory Bird sanctuary	Applied, Decision Pending		
ከፍተኛ ሰርዞች ርሱስ ሰርዞች	ArcticNet 2017 Scientific Licence S-17/18-1006-NU	Active	2017-05-23	2018-05-23
ዓመታዊያዊው	Nunavut Impact Review Board ArcticNet license #06YN071	Active		2018-03-31
ዓመታዊያዊው	NPC File # 148573	Applied, Decision Pending		

አዲር ፈቃጥናው ፍርማዎችን ማስተካከል የሚገኘውን አጭር በዚህ ስምምነት የሚያሳይ

፳፻፲፭ ዓ.ም. ፌርማ ማረጋገጫ ማስፈጸሚ	የኢትዮጵያ	፳፻፲፭ ዓ.ም. - የፌዴራል ማስፈጸሚ	የአንድ ማረጋገጫ
CCGS Amundsen Helicopter Bell 429	1	N/A	The helicopter of the Coast Guard research icebreaker CCGS Amundsen will be used to access the sampling sites

▷ ↵ C L ↵ D ↵ C D ↵ σ ↵ D ↵ C ↵	↑ b ↵ Δ Γ ↵ C ↵ b ↵ C ↵ σ ↵ D ↵ C ↵	¤ P ↵ Δ Γ ↵ C ↵ b ↵ C ↵ σ ↵ D ↵ C ↵
0		

◀ b C d c

$\Delta^b C_d \subset n \sigma \Delta^b \sigma^{ab}$

Information is not available

፭፻ሺሺሻ የ፪ሺሺሻ ማረሚያ

The landscape, flora, and fauna will not be altered in any way. No waste will be produced and no structures of any kind will be erected.

وَأَنَّهُمْ لَا يَرْجِعُونَ

Impacts

(P = $\Delta bD \Delta P \cap \Delta a^{\text{sh}} \Delta c$, N = $\Delta bD \Delta r \times \Delta C \Delta a^{\text{sh}} \Delta c$, S = $\Delta bD \Delta r \times \Delta b^{\text{sh}} \Delta c$, M = $\Delta bD \Delta r \times \Delta C \Delta b^{\text{sh}} \Delta c$, U = $\Delta b \Delta L \Delta a^{\text{sh}} \Delta c$)

Project Map

