



## **NIRB Application for Screening #125937**

### **Bedrock Mapping at Uvauk Bay**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 4/11/2024 11:21:37 AM

**Period of operation:** from to

**Proposed Authorization:** from to

**Project Proponent:** Joshua Laughton  
Geological Survey of Canada  
601 Booth Street  
Ottawa Ontario K1A0E8  
Canada  
Phone Number:: 5195204931, Fax Number:: 5195204931

## DETAILS

## Non-technical project proposal description

English: This project will focus on bedrock mapping near Uvauk Bay along Chesterfield Inlet, in the eastern area of the Kivalliq region. According to western science, this area, which has only been briefly studied in the past, could provide critical information involving the initial assembly of North American continents. We aim for this project to take place between August 1st to 14th. This project is in collaboration with the Geological Survey of Canada and Canadian universities. A team of up to four geologists will focus their efforts on bedrock mapping and collecting small rock samples for laboratory analysis. A campsite will be set up on the shore near Uvauk Bay. We will be hiring a local Nunavut resident as a wildlife monitor during the project and will be hiring a local resident of Baker Lake to boat us to and from the campsite at the start and end of the project. The campsite will include up to seven tents for kitchen, bathroom and sleeping use. Water for the camp will be collected from a nearby stream/river and a small generator will be used for power. Field methods will include daily hiking excursions and possible use of the small local boat along the coast. Geologists will hike across the land and collect field observations in the form of notes, photographs, and rock samples by hammer. All camp waste will be incinerated and/or stored in bear safe containers for removal and disposal upon project completion. Team members will give a wide berth of at least 100 m to large mammals and we will have safety protocols in place for predatory wildlife. The data will be stored in the Geological Survey of Canada's database. The data generated will be used for a graduate student thesis, published in scientific articles and presented at geologic conferences. Any possible archeological findings will be photographed and coordinates noted; this data will be sent to the Inuit Heritage Trust for their management. We travelled to Rankin Inlet and Baker Lake in February 2024 to present this proposed project to the communities and we plan on travelling to these communities next year to present the results of our proposed project.

French: N/A

[illegible]

Inuinnaqtun: N/A

**Personnel**

Personnel on site: 6

Days on site: 14

Total Person days: 84

Operations Phase: from 2024-08-01 to 2024-08-14

# Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
mapping area	Scientific/International Polar Year Research	Inuit Owned Surface Lands	According to western science, this area, which has only been briefly studied in the past, could provide critical information involving the initial assembly of North American continents.	Any crew member who discovers an archaeological object or a fossil will be instructed not touch or remove it from the location where it was found and report the discovery immediately to the Territorial Archaeologist.	About 110 km west of Chesterfield Inlet.

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Baker Lake	Sheldon Dorey	Hamlet of Baker Lake	2024-02-28
Baker Lake	Angel Awksawnee	Baker Lake Hunters and Trappers Organization	2024-02-28
Chesterfield Inlet	Venissa Mimialik	Aqigiq Hunters and Trappers Organization	2024-03-21
Chesterfield Inlet	Paul Bosetti	Hamlet of Chesterfield Inlet	2024-03-21
Rankin Inlet	Luis Manzo	Kivalliq Inuit Association	2024-02-10

# Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Kivalliq Inuit Association	Applied for access to Inuit-owned lands.	Applied, Decision Pending	2024-04-08	
Nunavut Water Board	Applied for APPROVAL FOR THE USE OF WATER OR DEPOSIT OF WASTE WITHOUT A LICENCE	Applied, Decision Pending	2024-03-26	
Government of Nunavut, Nunavut Research Institute	Applied for a Scientific Research Licence Application - Physical / Natural Sciences Research Application	Applied, Decision Pending	2024-04-01	

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	Transported to and from camp by local boat from Baker Lake or Chesterfield Inlet at the beginning and end of the project	

## Project accomodation types

Temporary Camp

## Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
generator	1	2000 W	generator electricity for the camp
refrigerator	1	75 lbs	food storage

## Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Propane	fuel	2	20	40	Lbs	stove and refrigerator
Gasoline	fuel	2	25	50	Liters	generator

## Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
1	Water bucket/jug	Nearby stream/river

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Greywater	5 L daily	greywater pit	N/A
Camp	Non-Combustible wastes	100 lbs	Transported back to town for proper disposal.	N/A
Camp	Sewage (human waste)	10 lbs	outhouse/burial	N/A

## Environmental Impacts:

The predicted environmental impacts (physical, biological, socioeconomic) are expected to be minimal. A small temporary camp will be set up with everything to be removed at the end of the project, including waste. Noise will be limited to a small generator used in camp during the morning and evening hours. Wildlife will be avoided and monitored by a local wildlife monitor.

# **Additional Information**

**SECTION A1: Project Info**

**SECTION A2: Allweather Road**

**SECTION A3: Winter Road**

**SECTION B1: Project Info**

**SECTION B2: Exploration Activity**

**SECTION B3: Geosciences**

**SECTION B4: Drilling**

**SECTION B5: Stripping**

**SECTION B6: Underground Activity**

**SECTION B7: Waste Rock**

**SECTION B8: Stockpiles**

**SECTION B9: Mine Development**

**SECTION B10: Geology**

**SECTION B11: Mine**

**SECTION B12: Mill**

**SECTION C1: Pits**

**SECTION D1: Facility**

**SECTION D2: Facility Construction**

**SECTION D3: Facility Operation**

**SECTION D4: Vessel Use**

**SECTION E1: Offshore Survey**

**SECTION E2: Nearshore Survey**

**SECTION E3: Vessel Use**

**SECTION F1: Site Cleanup**

**SECTION G1: Well Authorization**

**SECTION G2: Onland Exploration**

**SECTION G3: Offshore Exploration**

**SECTION G4: Rig**

**SECTION H1: Vessel Use**

**SECTION H2: Disposal At Sea**

**SECTION I1: Municipal Development**

**Description of Existing Environment: Physical Environment**

**Description of Existing Environment: Biological Environment**

**Description of Existing Environment: Socio-economic Environment**

**Miscellaneous Project Information**

**Identification of Impacts and Proposed Mitigation Measures**

**Cumulative Effects**

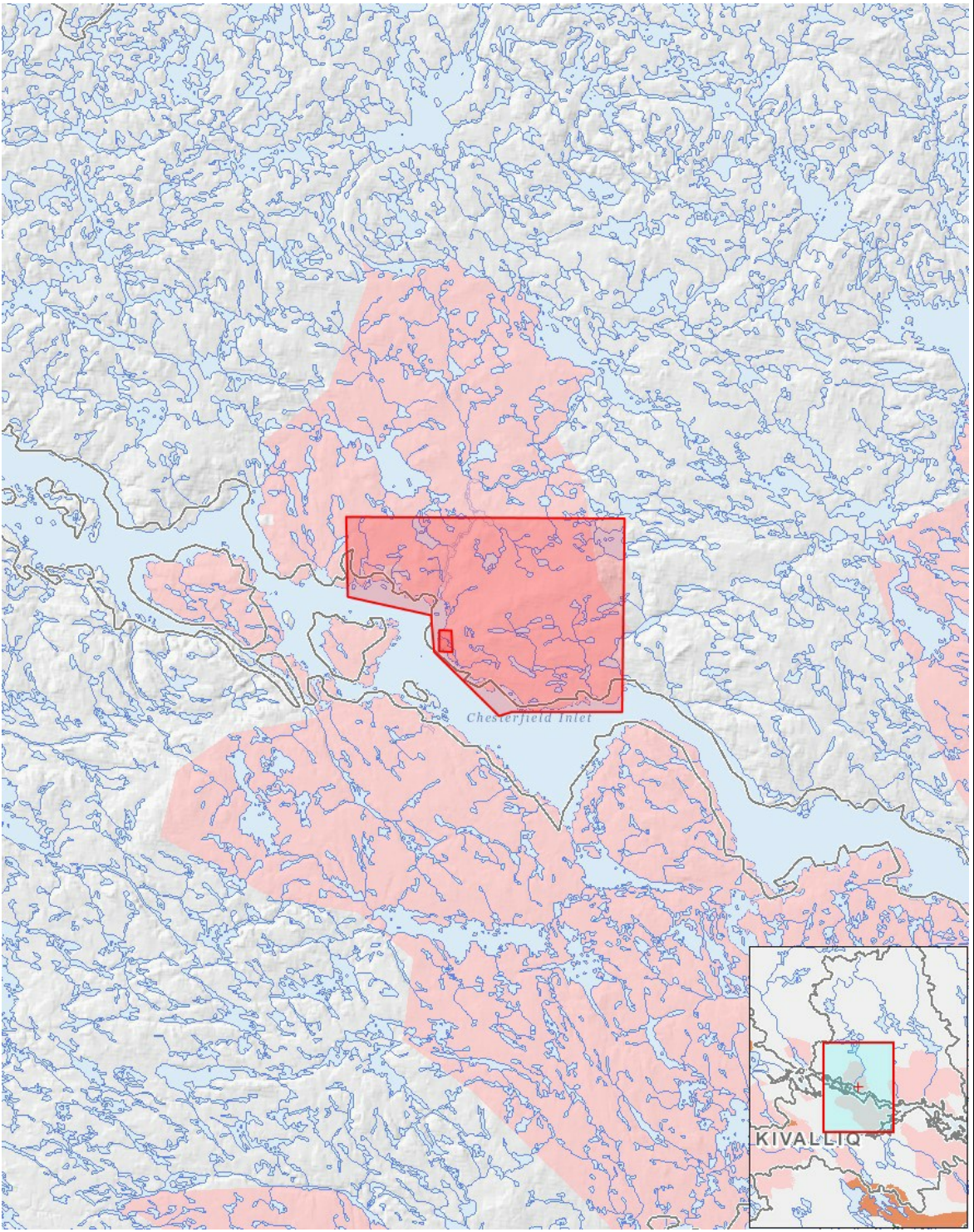
Impacts

Identification of Environmental Impacts

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	polygon	mapping area
2	polygon	camp location