



NIRB Uuktuutinga Ihivriughikhamut #125764

Helicopter-based radar survey of Devon Ice Cap

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Scientific Research

Uuktuutinga Ublua: 1/9/2023 12:44:22 PM

Period of operation: from 0001-01-01 to 0001-01-01

Piumayaat Angirutinga: from 0001-01-01 to 0001-01-01

Havauhikhaq Ikayuqtinga: Mark Skidmore
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Hivayautit Nampanga:: 406 994 7251, Kayumiktukkut Nampanga::

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunangga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurningga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaliyainnit nuna
Devon Ice Cap survey region	Scientific/International Polar Year Research	Crown	Remnant Ice from last ice age. Previous aerial radar surveys have been completed over parts of this region.	N/A	Closest community is Grise Fiord, 75 km away.
Gascoyne Inlet - Fuel Cache	Fuel and chemical storage	Crown	Established fuel caching location, previously used as a field camp for Defence Research and Development Canada	N/A	Closest community is Resolute Bay, 100 km away.
Test flight region: glacier ice west of Maxwell Bay	Scientific/International Polar Year Research	Crown	N/A	N/A	Closest community is Resolute Bay, 150 km away.
Truelove Lowlands - Fuel Cache	Fuel and chemical storage	Crown	Established fuel caching location, former site of the Arctic Institute of North America field camp.	N/A	Closest community is Grise Fiord, 95 km away.

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Ausuittuq	Daniel	North Inn	2022-12-12
Qausuittuq	Ian Dudla	Municipality of Resolute Bay	2022-05-26
Ausuittuq	Etuk	Siku Services	2023-02-10
Qausuittuq	Chantell	ATCO	2023-02-10
Qausuittuq	Nancy Amarualik	Resolute Bay Hunters and Trappers Association	2022-05-26
Ausuittuq	Iviq Hunters and Trappers Organisation	Iviq Hunters and Trappers Organisation	2023-02-24
Qausuittuq	Nancy Amarualik	Resolute Bay Hunters and Trappers Association	2023-02-24

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

North Baffin

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Nunavunmi Ihivriuqniqmut Timiqutigiyanga	NRI Application will be submitted shortly	Not Yet Applied		

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Transiting from Resolute to Grise Fiord	

Project accomodation types

Nunauyuq

Ihuaqtivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutininik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
AS350 B2 Helicopter	1	-	Survey Aircraft
Bell 206 LR Helicopter	1	-	Search and Rescue Capacity
Twin Otter	1	-	Transportation of personnel, fuel caching

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Aviation fuel	fuel	10	200	2000	Liters	For helicopter refueling at Gascoyne Inlet.
Aviation fuel	fuel	15	200	3000	Liters	For helicopter refueling at Truelove Lowlands. Fuel would be staged in increments. As fuel is used, new barrels would be flown out in replacement, with the empty barrels being removed and returned to PCSP in Resolute Bay. Maximum number of fuel barrels used at Truelove Lowlands would be 25.

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
0	No water retrieval, since no camp and no water use	No water retrieval, since no camp and no water use

Iqqakuq

Ikkakunik Munakgiyayunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyayuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Fuel and chemical storage	Other, Fuel barrels	Thirty five barrels total for the project	Empty barrels would be returned to PCSP in Resolute Bay	N/A

Avatiliriniqmut Ayurhautingit:

The project has no field camp and would have no water use and would not generate solid, liquid or hazardous waste. The project involves caching fuel and helicopter refueling using that fuel. We would employ mitigation measures to prevent and reduce any impact of a spill. Fuel caching would occur in established locations at Gascoyne Inlet and Truelove Lowlands and fuel drums at those locations would be placed within containment berms. The fuel would be staged in increments to limit the amount of fuel at a cache. As fuel is used, new barrels would be flown out in replacement, with the empty barrels being removed and returned to Resolute Bay. We are aware of the requirements to notify CIRNAC within 30 days of establishing a fuel cache and would send the appropriate information on the fuel caches to the general CIRNAC land administration email: landsmining@rcaanc-cirnac.gc.ca. Helicopter refueling at the fuel caches would follow standard industry procedures implemented by Canadian Helicopters, who also carry spill kits on the helicopters, in the case of a fuel spill. We are aware of the requirements regarding fuel spillage reporting, should one occur and would follow the guidance as outlined at <https://www.gov.nu.ca/environment/documents/spill-response>. All fuel barrels would be returned to PCSP in Resolute Bay following fieldwork.

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

The fuel caching location at Truelove Lowlands is at a well-established site using for caching fuel, the former site of the Arctic Institute of North America field camp. There is an existing airstrip at this location. The fuel caching location at Gascoyne Inlet is at a well-established site for caching fuel, for the field camp for Defence Research and Development Canada. There is an existing airstrip at this location. The survey region of the Devon Ice Cap is between 75 and 140 km away from the closest community, Grise Fiord. The test survey region on the glacier west of Maxwell Bay is 150 km away from the closest community, Resolute Bay.

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

There is no vegetation on the Devon ice cap or glacier to the west of Maxwell Bay that would be surveyed from the helicopter. It is possible that animals may migrate across the Devon ice cap or this glacier but these locations are not known animal migration corridors.

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

The fuel caching location at Truelove Lowlands is 95 km away from the closest community, Grise Fiord. The survey region of the Devon Ice Cap is between 75 and 140 km away from the closest community, Grise Fiord. The fuel caching location at Gascoyne Inlet is 100 km away from the closest community, Resolute Bay. The test survey region on the glacier west of Maxwell Bay is 150 km away from the closest community, Resolute Bay.

Miscellaneous Project Information

Not applicable

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikkliyuumiutinahuarutit

The scientific research project would have a positive economic benefit for the local communities as it would rely upon local services in Grise Fiord; including lodging at the Grise Fiord Lodge - Inns North, some supplies from the Co-op and aviation fuel through Siku Services and in Resolute Bay, aviation fuel through ATCO. The optimal elevation for the radar survey of the Devon Ice Cap and glacier to the west of Maxwell Bay would involve the helicopter flying at an elevation of 1600 feet above the ice surface. The ground level noise from the helicopter flying at this elevation would be limited and thus would have a minimal impact on any wildlife if they were on the ice surface. However, to mitigate the impact of helicopter noise on wildlife, if animals were observed on the ice surface on a given day, then the survey location for that day would be changed to move away from the location of the animal(s). Fuel caching would occur in established locations at Gascoyne Inlet and Truelove Lowlands, where there are existing airstrips. The fuel drums at those locations would be placed within containment berms. The fuel would be staged in increments at Truelove Lowlands and as fuel is used, new barrels would be flown out in replacement, with the empty barrels being removed and

returned to Resolute Bay. Helicopter refueling at the fuel caches would follow standard industry procedures implemented by Canadian Helicopters, who also carry spill kits on the helicopters, in case of a fuel spill. All fuel barrels would be returned to PCSP in Resolute Bay following fieldwork. The footprint of the berm for the fuel cache at each location would be small (10' x 15') but the fuel cache may result in some minor compaction of the soil and vegetation beneath. This impact would be limited due to the relatively short duration for the fuel cache and the likelihood that the ground would be frozen during this time. Caching fuel and refueling the helicopter would produce minor and short-term elevated noise levels at the fuel caching location when aircraft land and take-off. This effect is mitigated by the infrequent and short duration of these noise disturbances.

Tamatkiumayunik Ihuikgutivaktunik

No cumulative effects are anticipated.

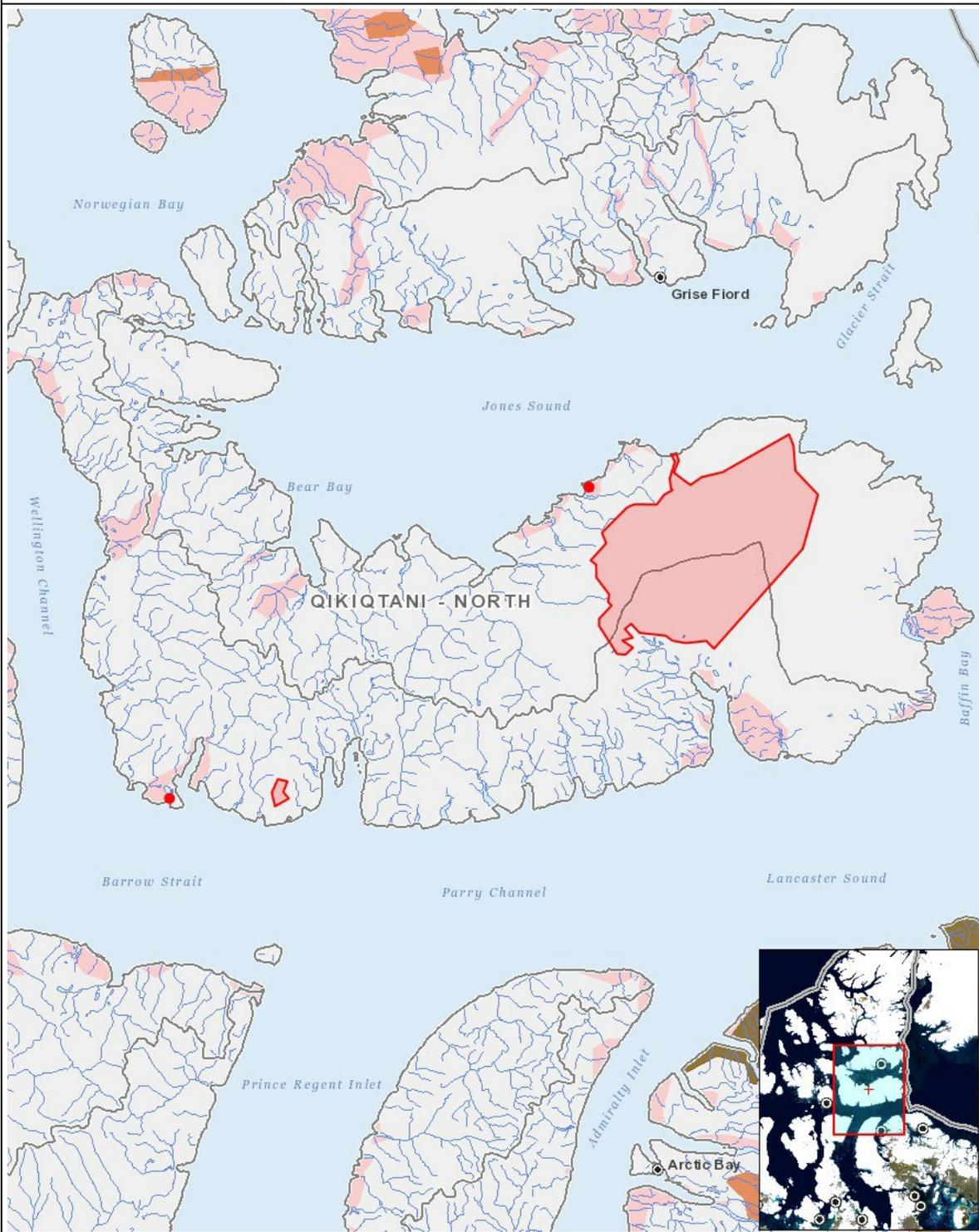
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

	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
Havakvinga																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aulapkaininnga																									
Fuel and chemical storage	-	-	-	-	-	-	-	-	-	-	-	-	M	M	-	-	-	-	-	-	P	-	-	-	-
Scientific/International Polar Year Research	-	-	-	-	-	-	-	-	-	-	-	-	M	-	M	M	-	-	-	-	P	-	-	-	-
Piiqtauniq																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyayuq)

Havaariyauyukhamut Nayugaa



List of Project Geometries

- | | | |
|---|---------|---|
| 1 | polygon | Devon Ice Cap survey region |
| 2 | polygon | Test flight region: glacier ice west of Maxwell Bay |
| 3 | point | Gascoyne Inlet - Fuel Cache |
| 4 | point | Truelove Lowlands - Fuel Cache |