



## NIRB Uuktuutinga Ihivriughikhamut #125875

### Somerset Trough Project

**Uuktuutinga Qanurittuq:** New

**Havaap Qanurittunia:** Mineral Exploration

**Uuktuutinga Ublua:** 1/30/2024 5:31:04 PM

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

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

**Havauhikhaq Ikayuqtinga:** Samuel Robb  
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Canada  
Hivayautit Nampanga:: 6474027356, Kayumiktukkut Nampanga::

# QANURITTUT

## Tukhiannaqtunik havaariyaumayumik uqauhiyun

Qablunaatitut: The Somerset Trough Project is an early exploration program that will include the following activities: airborne and ground-based geophysical surveys, prospecting, sampling, and geological mapping. The program will be based out of an exploration camp constructed on Crown Land in the Western Somerset Island Watershed and will include a spring program to be conducted March to May, as well as a summer program to be conducted from July to early September. No drilling equipment or heavy machinery will be used for the 2024 program. Only hand tools and a power saw will be used to complete ground-based tasks. Helicopters and fixed-wing aircraft will be used to move personnel to and from field locations and to collect airborne geophysical data. Helicopter operations will be based mainly at the camp, but fixed-wing aircraft will be based off site and called in, as required, to conduct surveys and support operations. The camp will include a series of Weatherhavens for accommodations, dining, camp dries, storage, sample processing, and first aid as well as a small generator building and a small metal building to enclose the camp incinerator. The Weatherhavens will be heated with diesel heaters complete with spill protection. Any fuel caches associated with the program will be reported to the territorial engineer in accordance with the Territorial Land Use Regulations. Minimal water will be used for this exploration program. Surface water will be collected from a nearby water body with a pump or portable containers and used for cooking, drinking, and washing in camp. It is anticipated that 10 m<sup>3</sup> or less of water will be used each day to accommodate the staff members. Greywater will be deposited to a sump located more than 31 m from the ordinary high-water mark of any body of water. Human waste will be collected using Pacto toilets and the waste will be incinerated daily along with domestic waste. All water use and waste deposition will be documented and available for review as per requirements of the Nunavut Water Regulations.

Uiviititut: Le Somerset Trough Project est un programme d'exploration précoce qui inclura les activités suivantes : les levés géophysiques aériens et terrestres, la prospection, l'échantillonnage et la cartographie géologique. Le programme se basera à un camp d'exploration construit sur les terres de la Couronne dans le bassin ouest de l'île Somerset et inclura un programme de printemps réalisé entre mars et mai, ainsi qu'un programme d'été réalisé entre juillet et le début de septembre. Aucun équipement de forage ni de machinerie lourde sera employé pendant le programme de 2024. Seulement les outils à main et une scie mécanique vont être utilisés pour compléter les tâches sur le sol. Les membres du personnel utiliseront des hélicoptères et des aéronefs à voilure fixe pour se déménager sur le terrain et pour recueillir les données de levés géophysiques aériens. L'exploitation d'hélicoptères se fera surtout au camp, alors que les aéronefs à voilure fixe se baseront à l'extérieur du site et seront appelés pour compléter les levés et pour supporter les opérations. Le camp va contenir une série de Weatherhavens pour l'hébergement, l'espace repas, les vestiaires, le stockage, le traitement des échantillons et premiers secours, ainsi qu'un petit bâtiment pour la génératrice et un petit bâtiment en métal pour contenir l'incinérateur du camp. Les Weatherhavens seront chauffés avec des chauffages au diesel avec protection de déversement. Tous les dépôts de carburants seront portés à la connaissance de l'ingénieur territorial, conformément au Règlement sur l'utilisation des terres territoriales. Le programme d'exploration utilisera un minimum d'eau. L'eau de surface sera recueillie d'une masse d'eau avoisinante par pompe ou par un réservoir portatif et sera utilisée pour la cuisine, l'eau à boire et le lavage au camp. Il est anticipé que 10 m<sup>3</sup> ou moins vont être utilisés à chaque jour par les membres du personnel. L'eau usée sera déposée dans un puisard à une distance de plus de 31 m de la laisse des hautes eaux ordinaires de la masse d'eau la plus proche. Les déchets humains seront collectés par des toilettes Pacto et les déchets seront incinérés quotidiennement avec les déchets domestiques. Tous les utilisations d'eau et les dépôts de déchets vont être documentés et disponibles pour consultation, conformément aux exigences du Règlement sur les eaux du Nunavut.

[illegible]

Inuinnaqtun: Somerset Trough-mik Havaaq atulihahqimayuuq nalvaqhiuqvikmik havaamik ilaqaqniaqtumik ukuniga hulijutinik: hilainakmik nunamiklu pijutiaqtut qanurininiginik naunaiyautit, qiniqhianik uyaraktaqvikhanik, ilituqhaujutit uyaqanik, uyaraktaakhaniklu nunaiyiurutini. Havaaq iniaqniaqtuq qiniaqhiayunit hiniktaqvianit hanahimayumik Kuin Nunagiyani Ualiqhiani Somerset-mi Qigigtami Immaqaqnigani ilaqaqniaqhunilu upinaami havaamik atuqtukhamik March-mit May-mut, auyamilu havaamik atuqtukhamik July-mit atulihagniganut September. Ikutaqnik agiyunikluniit igniquutiliknik atulimagitut 2024-mi havaami. Algaknut hanalrutinik kihiani alruyaqtuqtumiklu uluunmik atuqtauniaqtut iniqtiriagani maniqami havaakhat. Halikaptat tikmijalu atuqtauniaqtut akyariagani havaktut talvuga talvangalu maniqami inigiyauyunit katitiriyaaganilu hilainaguutut nunamiutanik naunaipkutinik. Halikaptanik atuqnig it igluqpaqaqvikmilua atuqtauniaqtut, kihiani tikmijat anianiiniaqtut inigiyauyup tikiqyaulutiklu, piyariaqaliraagat, naunaiyaiyaagani havaktut ikayuqlutiklu aulaniginik. Inigiyauyuq maniqami ilaqaqniaqtuq Anurailrumiuvikmik hinikhaqvikhanik, nirivikhani, paniqhiivikmik, tamayaqaqvikmik, ilituqhaivikmik, munaqhivikmiklu aniaqtuqaqat ila mikiyuqlu igniquitinuaq alruyaqtuutiaqvik igluqpak mikiyuqlu havigalik igluqpak iluaniitaagani ikulatativikmik iqagunik. Uquaqmivuit unaqutiqaqniaqtut uqhuqyuanik uunaqutinit kuviiyuqaqat akiutaqaqtunik. Kituliqaa uqhuqyuaqaqvuit ilagiyauyut havaami uqautauniaqtut ukiuqtaqtumi hanayakhanik ihuaqhaiyut atuqlugit Ukiuqtaqtumi Nunanik Atuqniginik Maliruaguyuq. Mikiyuq immaq atuqtauniaqtuq uvani nalvaaqhiuqvikmi havaami. Qaganit immaq katitiqtauniaqtuq qanitanit immaqmit papautikut immiqtautinuluniit atuqtaulutiklu igayutikhani, immigakhanik, uaqtirutikhanik igluqpaqaqvikmi. Nahuriyauyuq 10 m<sup>3</sup> -mik mikitqiyamiluniit immaqmik atuqtauniaqtuq ublutuaraagat atuqtakhaenik havaktuni ilauyut. Atagut kuviyauniaqtut immarikhitiivikmi iniaqqluni uganitqiyamik 31-miitanik imaukagniganit kituliqaa immaqaqniganit. Inuit annaguit/quvaluit katitiqtauniaqtut Pacto-nik quivikmik atuqlutik ikulatiyaulutiklu ublutuaraagat ukualu iqaguvaluit inuknit. Tamaita immaqnik atuqnig it atagulu titiraqtauniaqtut qahaklutiklu ihivriuqtauyaagani aturiaqaqniganit ukua Nunavumi Immaliqiyit Maliruagini.

Personnel on site: 14  
Days on site: 120  
Total Person days: 1680  
Operations Phase: from 2024-03-15 to 2024-09-01

# Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaiiyainnit nuna
Somerset Trough Project Area	Mineral Exploration	Crown	A small exploration program was completed by Bronzite in 2023 on Somerset Island (the Crowberry Project), but the Somerset Trough Project will cover a more expansive area.	To be determined prior to any high-impact activities such as drilling.	The closest communities are Resolute Bay to the north and Taloyoak to the south of the project. Part of the project area overlaps with IOL in the QIA territory, but the QIA has determined that Bronzite does not require an authorization from QIA because no ground based work, fuel caches, or camps will be located on IOL.
Camp location	Camp	Crown	Area ground-truthed during the 2023 Bronzite Crowberry Project	To be determined prior to any high impact activities such as drilling. All findings will be reported to the proper authorities.	The closest communities are Resolute Bay to the north and Taloyoak to the south of the project. The camp is not located on a sensitive or protected area as defined by the North Baffin Land Use Plan or the Draft Nunavut Land Use Plan.

## Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Iqaluit	Joel Fortier	QIA	2023-12-11
Qausuittuq	Aziz Kheraj	Hamlet Mayor	2023-09-29
Qausuittuq	Administrator	HTO	2024-01-31
Taloyoak	Administrator	HTO	2023-12-11
Kugluktuk	Tannis Bolt	KitIA	2023-12-11

# Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Nunaqaqqaaqhimayuliriyikkut Ukiuqtaqtumi Pivallianiq Kaanata	Class A Land Use Permit	Applied, Decision Pending	2024-01-12	
Nunavut Imaligiyyit Katimayit	NWB Authorization	Not Yet Applied		

## Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	2 A-Star Helicopters will be used to transport personnel to field sites and for airborne surveys	
Land	1 ATV and 1Snowmobile will be used to transport personnel to nearby field sites and for transporting supplies	

## Project accomodation types

Temporary Camp

Alaanut,

## Ihuaqutivaluin Atuqtauyukhan

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

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
ATV	1	211 x 120 x 122 cm	Transporting personnel to nearby field sites, transporting supplies
Snowmobile	1	185 x 91 x 86 cm	Transporting personnel to nearby field sites, transporting supplies
A-Star B3 Helicopter	2	12.94 x 10.69 x 3.14 m	Transporting personnel, conducting airborne surveys

### Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Aviation fuel	fuel	400	205	82000	Liters	Aircraft fuel
Diesel	fuel	95	205	19475	Liters	Heating and incinerator fuel
Gasoline	fuel	5	205	1025	Liters	Generator fuel
Liquid nitrogen	hazardous	2	20	40	Liters	Used during ground geophysical surveys during Summer Program

### Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqittagaani qanuq	Atulirumayain imavaluin utiqittagani humi
10	Pump or portable containers	From a nearby watercourse

# Iqqakuq

## Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Camp	Ikulalaaqtun iqqakuuvaluin	<1 cubic meter/day	Incinerated using a dual-chamber, diesel- fired incinerator	See attached Waste Management Plan appendix for incinerator Information Sheet
Camp	Qirnarivyaktuq imaq	<1 cubic meter/day	Sump located more than 31 m from the ordinary high water mark of any water course	Kitchen greywater will pass through a grease trap prior to being deposited to a sump
Camp	Hivuuranaqtun iqqakuuvaluin	>10 kg	Waste fuel products, contaminated snow/ice, incinerator ash, and contaminated soil will be packaged in appropriate containers, labelled, and shipped off site	Please see attached Waste Management Plan for complete details.
Camp	Ikulalimanngittun iqqakuuvaluin	<1 cubic meter/day	Non-combustible waste such as construction debris and plastics will be bagged and shipped off site.	Please see attached Waste Management Plan for complete details.
Camp	Anaagun (inuin anaaguin)	<1 cubic meter/day	Pacto toilets	Waste will be incinerated. Please see Waste Management Plan for further details.

### Avatiliriniqmut Ayurhauingit:

Please see attached Environmental Protection Plan, Spill Contingency Plan, Waste Management Plan, and Wildlife Management Plan for complete details. Bronzite and its consultants are planning future baseline environmental studies to understand the biophysical and socio-economic components of the project area.

# **Additional Information**

## **SECTION A1: Project Info**

## **SECTION A2: Allweather Road**

## **SECTION A3: Winter Road**

## **SECTION B1: Project Info**

Copper exploration

## **SECTION B2: Exploration Activity**

Please see attached Project Description for details.

## **SECTION B3: Geosciences**

Please see attached Project Description for details.

## **SECTION B4: Drilling**

N/A

## **SECTION B5: Stripping**

N/A

## **SECTION B6: Underground Activity**

N/A

## **SECTION B7: Waste Rock**

N/A

## **SECTION B8: Stockpiles**

N/A

## **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**

Bronzite is aware of sensitive areas on Somerset Island that have been proposed as limited use areas in the Draft Nunavut Land Use Plan, including caribou calving grounds and key migratory bird habitats which are north of the project camp site. The QIA has indicated that Creswell Bay is also a sensitive area due to the abundance of Beluga Whales. Bronzite will pursue archaeological surveys of the project area prior to any higher impact work such as drilling, and will report all archaeological findings. See Environmental Protection Plan for further details. Bronzite and its consultants are planning future baseline environmental studies to better understand the physical elements in the project area.

## **Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

Please see attached Wildlife Management Plan

## **Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga**

The project camp is located on QIA territory, and the full project boundaries cover QIA and KIA territory. The closest communities to the project camp site are Taloyoak and Resolute Bay, both of which are roughly 300 km away. Bronzite will pursue archaeological surveys of the project area prior to any higher impact work such as drilling, and will report all archaeological findings. See Environmental Protection Plan for further details. Bronzite has been in communication with QIA and KIA about the project, and has reached out to the Resolute Bay Hunters and Trappers Organization to arrange a meeting to discuss how the land is used, issues of concern, and how the company can minimize impacts on wildlife and traditional activities in the area. Bronzite understands through engagement with QIA that the Inuit Owned Lands (IOL) on

Somerset Island are particularly sensitive and sacred. Bronzite is not planning any ground-based work, fuel caches, or camps on IOL in 2024, but understands the process for applying with QIA in the future should that work become necessary.

### **Miscellaneous Project Information**

Bronzite understands from engagement with QIA that Creswell Bay is a particularly sensitive area due to the abundance of Beluga Whales. Bronzite is not planning any high-impact work in the Creswell Bay area in 2024, but will continue to engage with QIA and the HTO to understand how best to mitigate risks in the area.

### **Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit**

Please see attached Environmental Protection Plan, Waste Management Plan, Spill Contingency Plan, and Wildlife Management Plan.

### **Tamatkiumayunik Ihuikgutivaktunik**

Bronzite will monitor cumulative impacts as the project progresses into more advanced mineral exploration (ie. drilling) and mine development. For 2024, the project remains a low-impact reconnaissance operation with ground-based mapping and surveys and airborne surveys.

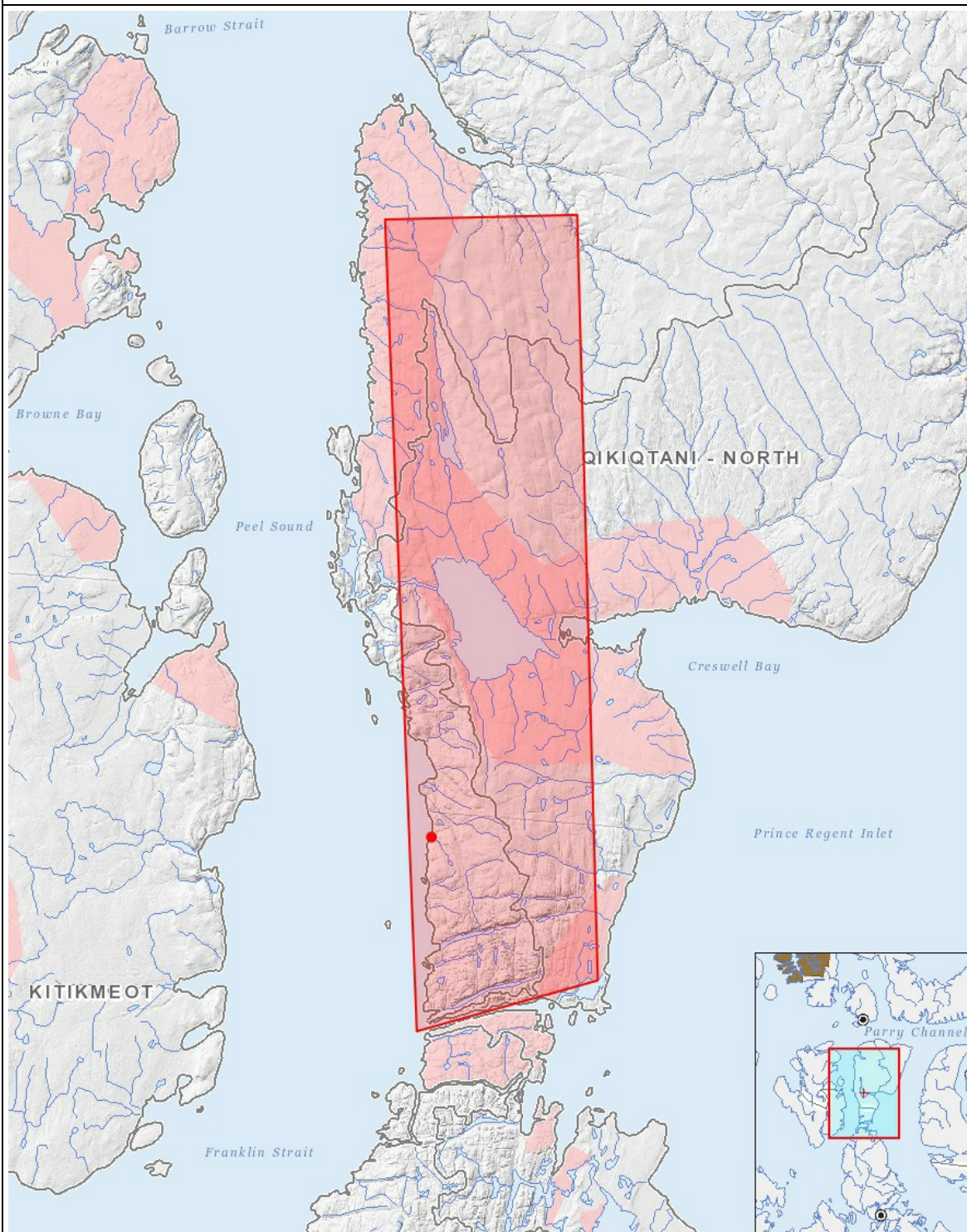
# Impacts

## 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																										
Camp		U	U	U	-	U	U	U	U	U	U	U	M	M		U	M	M	U	U		U	P	P	U	U
Mineral Exploration		U	U	U	-	U	U	U	U	U	U	U	M	M		U	M	M	M	U		U	P	P	U	U
Piiqtauniq																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

# Havaariyauyukhamut Nayugaa



## List of Project Geometries

1	polygon	Somerset Trough Project Area
2	point	Camp location