



## **Demande de la CNER faisant l'objet d'un examen préalable #126196**

### **Sylvia Grinnell Geoscience Program**

**Type de demande :** New

**Type de projet:** Scientific Research

**Date de la demande :** Thursday, July 3, 2025

**Period of operation:** from 2025-08-13 to 2025-08-28

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## DÉTAILS

## Description non technique de la proposition de projet

Anglais: The Canada-Nunavut Geoscience Office is proposing a 16-day field program for August 2025, the Sylvia Grinnell Geoscience Program (SGGP). The SGGP program will be focused on a 30 km<sup>2</sup> area around Sylvia Grinnell Lake, approximately 50 kilometers northwest of Iqaluit, and will follow up on surficial geology work from 2015-16 which identified anomalous quantities of cassiterite and scheelite grains in stream sediment samples. Cassiterite is the primary ore mineral of tin, and scheelite is the primary ore mineral of tungsten. These minerals are often found in pegmatites. The project is to be based out of Iqaluit, Nunavut, supported by an helicopter, and the crew will consist of 6 personnel. Ten days of the program will be assigned to bedrock mapping and soil sampling, and six to thematic studies. A small camp consisting of three small tents will be erected for three days. The impact will be minimal and the sample sites will show little or no evidence of having been visited. Helicopter sampling will consist of 16 days of flying and will be at high elevation during transit flights. Wildlife will be avoided.

Français: Le Bureau Géoscientifique Canada-Nunavut propose un programme de recherche qui prendra place le 13-28 août 2025. Le projet sera ciblé sur une région de 30 kilomètres carrés, près du lac Sylvia Grinnell, autour de 50 km au nord-ouest d'Iqaluit. Le but du projet est d'identifier la source dans le substrat rocheux des grains de cassitérite et scheelite, qui ont été identifiés dans les échantillons du matériel surficiel après un programme de recherche en 2015-16. Cassitérite est une source majeure pour la production d'étain, et scheelite est une source majeure pour la production de la titane. Le projet sera basé à Iqaluit, et supporté par hélicoptère sans nécessité des caches de carburant. L'équipe de recherche comprendra 6 personnes. Dix jours du programme sera assigné à cartographie du substrat rocheux, et six jours pour les études thématiques. L'échantillonnage supporté par hélicoptère sera à haute élévation pendant des vols de transport. La faune sera évitée en tout cas.

[illegible]

Inuinnaqtun: As the project is located in the Qikiqtani region we do not have an Inuinnaqtun project description.

## Personnel

Personnel on site: 6

Days on site: 16

Total Person days: 96

Operations Phase: from 2025-08-13 to 2025-08-28

## Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
SGGP field area:	Scientific/International Polar Year Research	Crown	Geological research has taken place regularly in the area over the last two decades.	Undetermined.	Study area is approximately 60 kilometres northwest of Iqaluit.

### Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Iqaluit	Sally	Amaruq HTA	2025-05-14

## Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Affaires autochtones et Développement du Nord Canada	CIRNAC land use permit for Crown land	Applied, Decision Pending		
Hunters and Trappers Associations/Organizations	Amaruq HTA board supports our research activities	Active	2025-05-14	
Qikiqtani Inuit Association	Application for land lease for IOL surface lands access, application 320545	Applied, Decision Pending		
Affaires autochtones et Développement du Nord Canada	CIRNAC land use permit for Crown land - Project below threshold, permit not required	Active	2025-06-11	
Institut de recherche du Nunavut	Research permit, to be applied for following NPC-NIRB process	Not Yet Applied		

### Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Air	Helicopter-supported, helicopter based in Iqaluit	
Land	Hiking	

### Project accomodation types

Temporary Camp

Autre,

## Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
helicopter	1	1	Helicopter for transport between Iqaluit airport and field research area.
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Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Aviation fuel	fuel	10	40	400	Gallons	helicopter refueling

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
1	By hand, via filling bottles (during hikes/traverses)By hand, via filling bottles (at temporary camp)	Streams in project activity area; stream(s) near fly camp location

# Déchets

## Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Camp	Déchets non combustibles	minimal	Any noncombustible waste materials will be packed out and returned to Iqaluit at camp teardown.	none

## Répercussions environnementales :

Care will be taken to avoid unnecessary impacts on vegetation when landing helicopter, while on hike traverses, or while in temporary camp. Noise from helicopter will be mitigated by ensuring flight altitude is sufficient to avoid impacts on wildlife. Rock and sediment samples will be removed from the environment, but care will be taken to prevent unnecessary damage to outcrops when samples are taken from bedrock. Rock samples will consist of 0.5 to 5kg of rock material, either collected loose from the ground or removed from outcrop with a geological hammer and chisel. General practice when bedrock sampling is to remove as little rock as possible from an outcrop while ensuring sufficient fresh (e.g. unweathered) rock material for analysis. Sediment samples are expected to be up to 5 gallons of till collected in a grid pattern using shovels (the exact sample grid is not yet determined but spacing can be anywhere from 100 to 1000 m). Any surface vegetation present is removed from sample location and replaced after sample is collected.

# **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 de l'environnement existant : Environnement physique**

Low rolling hills, often flat-topped. Ground cover is mostly glacial till, occasionally patterned ground, with some bedrock outcrop. Creeks and streams are frequent in the area on hill slopes and valley floors. Permafrost is continuous through the study area.

### **Description de l'environnement existant : Environnement biologique**

Tundra with typical vegetation for the Northern Arctic ecozone - Arctic willow, Arctic heather, various flowering plants, mosses, and lichens.

### **Description de l'environnement existant : Environnement socio-économique**

Iqaluit is the nearest community to the study area and will be a source of logistical support and Inuit employment for wildlife monitor positions.

### **Miscellaneous Project Information**

### **Identification des répercussions et mesures d'atténuation proposées**

Minimal impact resulting from short-term ( <5 days) fly camp. Permanent removal of rock and till samples.

### **Répercussions cumulatives**

Permanent removal of rock and till samples.



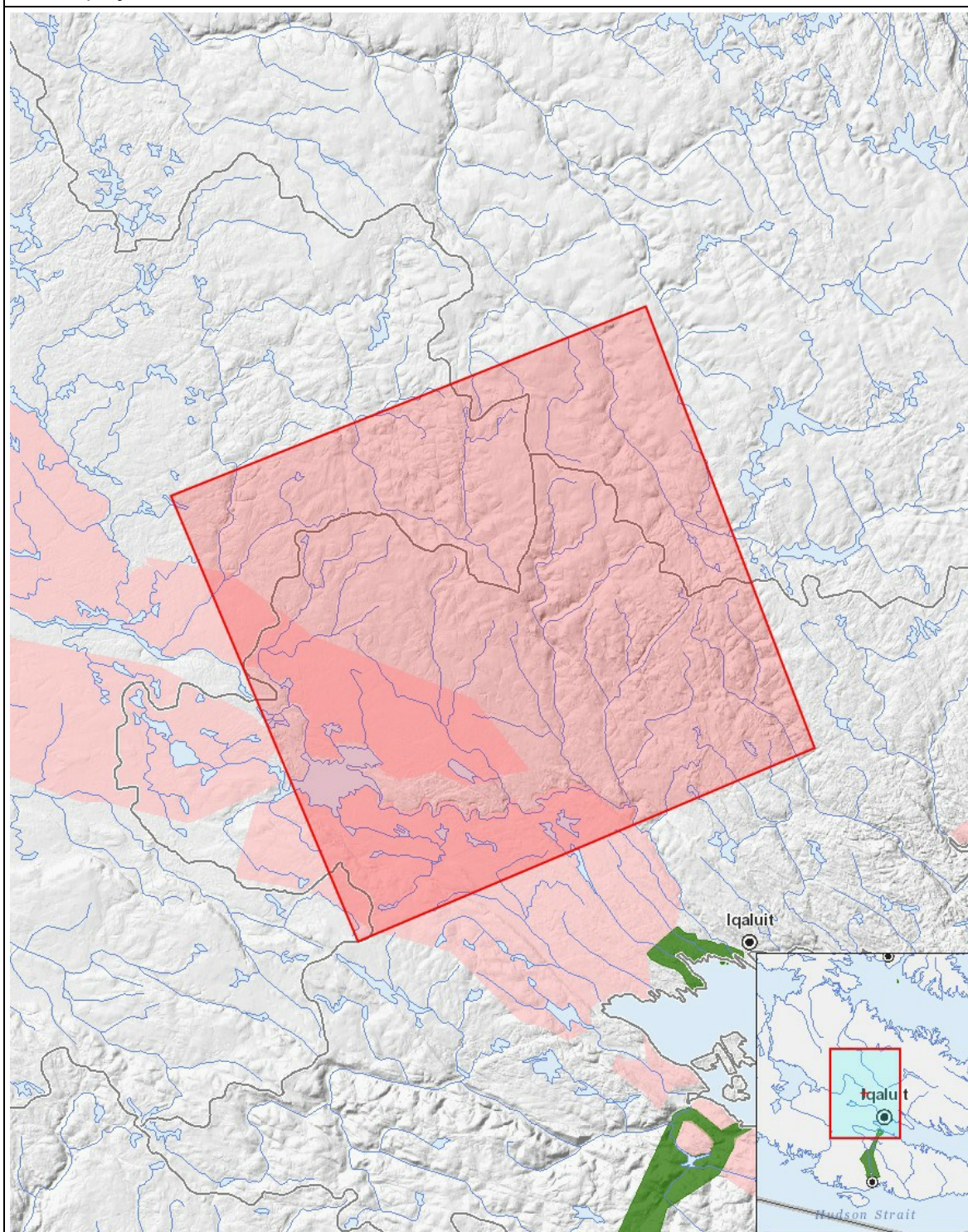
Impacts

Identification des répercussions environnementales

	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploitation																									
Scientific/International Polar Year Research	-	M	M	-	-	-	-	M	M	M	-	-	M		M	M	M	M	-		U	P	U	P	P
Désaffectation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

## Site du projet



## Liste des géométries de projet

1	polygon	SGGP field area:
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