

▷<sup>9</sup>ḅ<sub>ḥ</sub>▷<sup>ḥ</sup>Ḥ<sup>ḥ</sup>: 5148062394, ḥḅḥ<sup>ḥ</sup>ḍ<sup>ḥ</sup>:

$\gamma_b \Delta^c \dot{\bar{O}} \Pi \sigma^b \quad \Lambda_{C-} n \nabla^{\gamma_b} \gamma_{\sigma} \nabla n \nabla^a l^a \sigma^b$

The proposed project is part of a PhD project at UQAR, partly funded by the Northern Scientific Training Program of Polar Knowledge Canada. The PhD project is an assessment of trace metals contamination in marine sediment from the Canadian Arctic Archipelago (CAA), with a special interest for areas close to northern communities. It will provide baseline information on the CAA seafloor chemical composition and will help to determine the ecological risk associated to trace metals contamination. Data collected for the proposed project and resulting information will provide baseline geochemical data for coastal surface sediments from Kugluktuk, which will help to distinguish between natural concentrations of potentially toxic elements and anthropogenic contamination. In the future, these geochemical data can then help federal government agencies with assessing environmental risk and setting regulatory levels of pollutants in coastal areas near Kugluktuk. Rest of the description is an attached file.

**Déclaration:** Le projet proposé fait partie d'un projet de doctorat qui s'intéresse à la présence de métaux traces dans les sédiments marins de l'Arctique canadien. Le volet présenté dans le cadre du projet proposé s'intéresse spécialement à la contamination à proximité de communautés.

Δωβηδ: The project is taking place in Kitikmeot, therefore the description is in English and Inuinnaqtun. Short description is provide in french.

Inuinnaqtun: Tamna havakhautit havakhikpaktunik havakatigikpaktunik ilauyuk aah pHd Ilihakhimakpaktunik Iniktikhutik Havakhutik havakhautait UQAR ILIHAKVIKYUAKVIK ILIHAKHIMAKPAKTUNIK INIKHUUTIK IHILHAKVIK, ilangalu tuutkikhaktauvuktunik talvunakukhugit havkahautit Tunungani Havakvit Ihiviuktit Nalukhunginamik Naunaitkutakhunik Havagiblugit Hilamiutanit Ilihaktithimakpaktunik Ilihautinik Ilihaktitaiyut Havakhautit talvani havakvit Tunungani Kauhimagauvuktunik Pitkuhiktukpaktunik Kanatami. Tamna havakhautit pHd Ilihakhimakpaktunik Iniktikhutik Havakhutik havakhautait havakhimayunik tuutkikhaiblutik nalvukhiukhuugit huvikakgiakhaniklu imak pikariakaagiakhaniklu huluumailgunik hinaanit iihiviuktauvuktuk havagiblugit naunaitkutakhunik imaakaknit ataanitlu ikaalguinit taryuup naunaitkutakhunik havakpaktunik talvunga Kanatami Taryumi Tunungani Hilaryuami Hingnaanginiklu (CAA), pinging aah aliagibluugit havagiyauvuktunik nunaani talvani tunungani nunalingnilu. Pilugit havagilugit ikayutikhunik tuukihigiarutikhunik tahapkunani Taryumi Tunungani Hilaryuami Hingnaanginiklu CAA taryumi ataanginit huluumailgukakgiakhainik ikaakukariakhaniklu tahapkunani havagiyauyunik ikayutauhunguyunik nalautakgutauvuktunik hilaamiutanik hila haluumaikpagiakhanik havagiblugit naunaiyainikmun kayaknaktunik atadjuutauvuktunik nalvukhiunikmun ihiviukhugit huvilhukariakhainik haalumailgunit. Havakpaktunik naunaitkutakhunik titikgaktauvuktunik katitiktavuktunik havagiyauvuktuukhunik naunaitkutakhuniklu tukhigiarutinik havagiblugit tuutkikhaiyukhunik havakviuvuktuukhunik hilaamiutanik humi kanukgilidjutivuktunik nunaani imakmiutaniklu naunaitkutakhunik hignaanginik taryumi kanginit taryuup imaa ataanginiklu taryuup nunaanit kangnitaungani kangnilguani Kugluktuk, ikayutaulutik ilitukgiyauvuktuukhunik ilidjuhinik hliaamiutanik nauvuktunik ilaani haluumaikpakmut imakaknit ilingukpaktuniklu ilaani nauyungnaikpaktunik nunaani haluumailgunit haluumailgunit ikaakunitlu. Kakugu ilaani, tapkuat havagiyauvuktunik hliaryuami ihiviukhuugit naunaitkutakhunik ikayutauhunguuyut tahapkunani atanguyauluaktunik atanit havakvit kavamait havakviuvuktunik pihimayunik tuutkikhaiblutik hilryaumi hilmamiutanik kayaknaktunik pivuktuniklu havagiblugit kakungukgaangut nalautakgutauvuktunik havagiblugit haluumaigunit haalumailguit taryumi hingnaanginik kungituangani Kanilgumi Kugluktumi. Rest of description is an attached file.

## Personnel

Personnel on site: 2

Days on site: 3

Total Person days: 6

Operations Phase: from 2022-08-08 to 2022-08-11

ΛϵηΔη↳▷σΔ<sup>9b</sup>▷<sup>c</sup>

ᐱ ᑦ	ᖃᓄᐃᑦᑐᑦᑦ ᐱᑕᐢᐊᖃᑦᓂᐊᖃᑕ	ᑭᖅᑦ ᓄᐱᑦᑦᑦ	ᑐᔨᑐᒪᓴᖅᑕ ᓄᐱᑦᑕ ᖃᓄᖃ ᐊᑐᒪᑐᑕᐊᖃᑦ ᑭᒪᓴᐢᐊᖃᑕᓂᖅ	ᐃᑕᔨᑦᓂᑕᖃᑦᐱᑐᑕᑕᐊᖃᑕ ᐃᓄᖃᑕ ᐱᑦᑕᑐᐊᖃᑕᑕᑦᓂᐊᑦᑕ ᑕᐃᑕᑭᒪᓂᑐᖃᑐᑕᖃᑕᓂᖅ	ᖃᓂᓂᓂᖃᑕ ᑕᖅᑕ ᓄᐱᑕᑭᓴᑐᐊᖃᑕ ᐊᑦᒪᑐ ᔨᑐᒪᑭᖅᑕᐱᑐᑕᑕ ᑭᓄᑕ
New project geometry	Scientific/International Polar Year Research	Crown	Not relevant	Not relevant	Sampling marine sediment near Kugluktuk community. The sampling will take place along Kugluktuk coast.

መረጃ ለረዕሰ ምክር ቤቱ ለሚገኝ ለግብርና ሚኒስትር ለሚሰጥ ለጥያቄው ለሚያስፈልግ ለሆኑ ሰነዶች

ᓄᓇᑦᑲᓪᓴᐅᓂᓪᓴ	ᐱᓂᓪᓴ	ᓴᕐᓴᐅᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ	ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ
ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ	Kimberley Young	Hamlet of Kugluktuk	2022-04-28
ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ	Ralph Kownak	Inuit Heritage Trust	2022-05-02
ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ	Sylvie Leblanc	Government of Nunavut- Culture and Heritage	2022-05-09
ᓂᓪᓴᐅᓂᓪᓴᐅᓂᓪᓴ	NA	Hunters and Trappers Organization of Kugluktuk	2022-05-18

[illegible]

$a^b r^c \Lambda_{\sigma} n^e \Delta_{\tau} d^{fb} c$  በበፍጋሪ:

## Kitikmeot

[illegible][illegible]

## Project transportation types

Transportation Type	Frequency of Use	Length of Use
Air	Plane	

## Project accomodation types

96 17-0000

## ᐃᐱᓚᐅᓂᐱᖃᐅᖃ

ᐱᖃᐱᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐃᓚᖃᓚᐅᐱᐅᓚᓚᓚᓚ ᐃᐱᐱᐱᐱᖃ, ᓚᓚᐱᐱᐱᖃ, ᖃᖃᓚᐱᖃ, ᓂᓂᓚᓚᓚ ᐱᓚᓚᓚᓚ

ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᖃᓂᐃᐱᐱᖃ	ᖃᓂᓚᓚᓚᓚ	ᐱᖃᓚᐅᓂᐱᖃ - ᐱᖃᓚᐅᓂᐱᖃ	ᓚᓚᓚᓚ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ
Van Veen grab sampler	1	35 x 20 x 20 cm	Collect surface sediment samples
Boat	1	18'	To reach sampling stations from Kugluktuk

ᐱᐱᐱᐱᓚᓚᓚᓚᓚᓚᓚᓚ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ

ᓚᓚᓚᓚ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ	ᖃᓂᐃᐱᐱᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ	ᖃᓂᓚᓚᓚᓚ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ	ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ	ᓂᐱᓚᓚᓚ	ᐱᖃᓚᐅᓂᐱᖃᐅᖃ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ	ᓚᓚᓚᓚ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ
Diesel	fuel	1	1	1	Liters	Diesel for the boat, quantity depending on the boat

ᐃᐱᓚᓚ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ

ᐱᓚᓚ ᐱᖃᓚᐅᓂᐱᖃᐅᖃ	ᖃᓂᓚᓚ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ	ᓂᐱᓚᓚᓚ ᐃᐱᓚᐅᓂᐱᖃᐅᖃ
0		

$\triangleleft^b C d^c$ 
$$\Delta^b C d_C \sim \sigma \Delta^a \sigma^a$$

<p>Λ&lt;ΛΔΛ&amp;Δ&amp;Δ&amp;Δ&lt;<sup>c</sup></p> <p>Λ&lt;ΛΔΛ&amp;ΔσΔ&lt;<sup>b</sup>&lt;<sup>c</sup></p>	<p>ⁱbΔ&lt;ⁱb</p> <p>Δ&lt;Δ&lt;<sup>b</sup></p>	<p>ⁱbΔΠΓ Δ&lt;Δ&lt;<sup>c</sup></p> <p>ⁱbΠΔσΔ&lt;<sup>b</sup>&lt;Δ&amp;Δ&lt;<sup>c</sup></p>	<p>ⁱbΔⁱb</p> <p>Δ&lt;Δ&lt;ΔσΔ&lt;<sup>b</sup>&lt;</p>	<p>ⁱΔ&amp;ΔⁱbΔΠ&lt;ⁱb&lt;ΔσΔ&lt;<sup>b</sup>&lt;<sup>c</sup></p>
Information is not available				

$$\triangleleft \triangleleft \cap \Gamma \triangleright C \div^c \supset^c \quad \triangleleft^b \supset^{fb} C \triangleright \neg L \neg^c$$

There will be no resulting risks to the health, safety or livelihoods of Nunavut residents and there will be no impacts on the environment.

# **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 11: Municipal Development

[illegible]

**ᐱᓪᑦ ᐃᑲᐅᑦ ᖃᓄᐃᑦᑐᓚᐅᓂᖅ; ᐅᐤᐳᖃᑕᖃᖃᓂᖅ**

**L<sup>a</sup> d'el Nid<sup>c</sup> 'be Δ<sup>c</sup>)<sup>c</sup> e n d's<sup>b</sup>: Δ<sup>c</sup> e n s'<sup>i</sup> j<sup>b</sup> l r<sup>c</sup>-A<sup>c</sup> e d r<sup>c</sup> e n s'<sup>i</sup> j<sup>b</sup> l r<sup>c</sup>**

### Miscellaneous Project Information

$\Delta^b CD\sigma^b \Gamma^c \quad \Delta^b CD\Gamma^c L^c \quad \Delta^c \sigma^b \Gamma^c \quad \Delta^c \Gamma^c L^b CD\sigma^c \Delta^b \sigma^b \Gamma^c$

## Cumulative Effects

## Impacts

$\mathcal{L}(\mathcal{A}) \cap \mathcal{L}(\mathcal{B}) = \mathcal{L}(\mathcal{A} \cap \mathcal{B})$

[illegible]
$$(P = \langle \text{b d} \bar{\text{a}} \text{p} \bar{\text{n}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \rangle^{\text{c}}, N = \langle \text{b d}^{\text{b}} \bar{\text{r}}^{\text{c}} \bar{\text{r}}^{\text{c}} \bar{\text{d}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \rangle^{\text{c}} \langle \bar{\text{e}} \bar{\text{d}} \bar{\text{r}}^{\text{c}} \bar{\text{r}}^{\text{b}} \rangle^{\text{b}} \langle \bar{\text{d}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \bar{\text{r}}^{\text{c}} \rangle^{\text{c}}, M = \langle \text{b d}^{\text{b}} \bar{\text{r}}^{\text{c}} \bar{\text{r}}^{\text{c}} \bar{\text{d}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \rangle^{\text{c}} \langle \bar{\text{e}} \bar{\text{d}} \bar{\text{r}}^{\text{c}} \bar{\text{r}}^{\text{b}} \rangle^{\text{b}} \langle \bar{\text{d}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \rangle^{\text{c}}, U = \langle \text{b d} \bar{\text{r}} \bar{\text{r}}^{\text{a}} \bar{\text{e}}^{\text{b}} \bar{\text{r}}^{\text{c}} \rangle^{\text{b}})$$

1	polygon	New project geometry
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