



Scientific Research

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

ᐱᓕᓂᑦᐳᓪᓴᓄᓐ: Lorraine Lebeau
Canada-Nunavut Geoscience Office
1106 Ikaluktuutiak
Iqaluit Nunavut X0A 0H0
Canada
ᐃᓪᓴᓂᐅᓇᓐ: 8672221232, ᓪᓴᓲᓪᓴᓐ:

$\gamma_b \Delta^c \dot{\bar{N}}_0 \sigma^b \quad \Lambda_{\text{C-L}} \nabla^b \gamma_\sigma \nabla_{\text{L}} \nabla^a \bar{L}^a \sigma^b$

▷ΔΛΠΩ^c: n/a

 $\Delta \mathcal{D}^b \cap \mathcal{D}^c$: n/a

Inuinnaqtun: currently being translated, to be submitted

Personnel on site: 4

Days on site: 15

Total Person days: 60

Operations Phase: from 2022-07-26 to 2022-08-09

$\Lambda \subset \mathbb{N} \triangleleft \mathbb{N} \hookrightarrow \mathbb{D} \sigma \triangleleft^{\text{qb}} \mathbb{D}^c$

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Izok Lake camp (location of project camp)	Camp	Inuit Owned Surface Lands	The crew for this project will sleep here, and perform 12/15 days of work here. This area has an established infrastructure with several weather havens installed by MMG Resources Inc. MMG has left drill core on site for the exploration of zinc-copper-lead and silver	none	~275 km southeast from Kugluktuk~500km southwest of Cambridge Bay~370 km north-northeast of Yellowknife
Izok Lake greenstone belt	Researching	Inuit Owned Surface Lands	This area will be hiked from the Izok camp site. This area has received mineral exploration attention since the 1970's by prospectors, government surveys, and larger exploration and mining companies. This is an area of caribou migration.	Not indicated as area of archeological/paleontological interest by NPC community priorities and values map	~275 km southeast from Kugluktuk; ~500km southwest of Cambridge Bay; ~370 km north-northeast of Yellowknife
Gondor property	Researching	Inuit Owned Sub-Surface Lands	This area will be visited by helicopter for 1-2 days for this project. Area has been drilled and explored for mineral potential, property owned by MMG Resources.	Not indicated as area of archeological/paleontological interest by NPC community priorities and values map	~300 km from Kugluktuk~500km from Cambridge Bay~370 km from Yellowknife
Hood property	Researching	Inuit Owned Sub-Surface Lands	This area will be visited by helicopter for 1-2 days for this project. Area has been drilled and explored for mineral potential, property owned by MMG Resources.	This area intersects an area with known artifacts. indicated by NPC interactive map of community priorities and values.	~275 km southeast from Kugluktuk; ~500km southwest of Cambridge Bay; ~370 km north-northeast of Yellowknife

[illegible]

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ᓁᓄᑦᐅᓈᓄᓊᓄᓉ	There is no community involvement with such a small scale project	n/a	2022-02-03

Kitikmeot

[illegible]

Transportation Type	How to Get to the Site	Length of Use
Air	Twin Otter charter plane, Bell206LR helicopter	
Land	walking	

Temporary Camp

◀▷↳◀⁹⁶▷⁹⁶

Λ⁹Δ^c Δ^aΓ²Δ⁵ Δ⁵CDσD⁴Δ⁵ Δ^cΔ⁵ΓDΠ³Γ^c Δ^jCD^c, Γ^cΔ⁴P¹Δ^c, Δ⁵Δ⁵LC²Δ⁵, Δ^cΔ⁵Δ^c Δ⁵Δ⁵Δ^c

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generator	1	2000kw	power electronics (computers, gps et.c)
Bell206LR helicopter	1	12.92 x 3.14 m	3 days transport accross Izok greenstone belt, to Gondor and Hood properties
Charter Plane Twin Otter	1	15.77 x 19.8 m	transport crew, equipment, fuel to and from Izok camp from Yellowknife
Fire arms (12 gauge shot gun)	2-3	n/a	Emergency use only (wildlife self defense)

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Aviation fuel	fuel	8	45	360	Gallons	helicopter use
Gasoline	fuel	10	5	50	Gallons	generator
Propane	fuel	2	20	40	Lbs	heater and Coleman stove

ΔL^{9b} ΔD^{9b} CD^{9b} ΔL^{9b} ΔD^{9b}

$\Delta^c \rightarrow C\dot{I}^{fb} \Delta D^{fb} CD_{\sigma} \Delta^{fb} D^{fb}$	$^{fb}\omega^{fb} \Delta \Gamma^{fb} C^{fb} C^{\dagger} \sigma \Delta^{fb} <^c$	$aP^c \Delta \Gamma^{fb} C^{fb} C^{\dagger} \sigma \Delta^{fb} <^c$
0	manually by bucket	Itchen Lake (lake next to camp)

$\langle^b C d^c$
$$\Delta^b C d_{\sigma} \sim \Delta^q \sigma^q$$

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Researching	ᐳᖅᑕᐳᖅ ᐃᐳᐳᑕᑕᐅᒃᓇᖅᑐᖅ ^c	~20 lbs	small contained burning	n/a
Researching	ᐃᓴᐃᑦ ᐳᖅᑕᐅᔭᓚᖅᓯᓴᒃᑕ	<0.15m3 daily	small amounts will be disposed in sandy land areas for easy infiltration into the earth. Biodegradable soaps will be used.	n/a
Researching	ᐳᖅᑕᐳᖅ ᐃᐳᐳᑕᑕᐅᒃᓇᖅᓯᑦᑐᖅ ^c	~20 lbs	to be sealed in an animal proof container and transported back to Yellowknife for disposal. e.g., plastics, metals	n/a
Researching	ᖅᐳᖅᑕᑕᓇᓂᖅ	~50 lbs	burial with shovel	n/a

4^a 0 7 2 C 5^c 3^c 4^b 3^{6b} C 2 7 L 2^c

The land will be left in the state it was before this project. All temporary structures (i.e., sleeper tents), field equipment, garbage, and fuel (empty or full drums) will be returned to Yellowknife. The helicopter (only 3 days) creates noise that can be alarming to wildlife. When the cloud ceiling allows, the helicopter will fly high above the land as to not stress out the wildlife below. If large mammals are spotted (e.g., polar bear, muskox, caribou heard) the helicopter will reroute or fly away from the wildlife to avoid stressing the animals.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

Mineral exploration is for research only. We will be research the mineralization of zinc-copper-lead and silver.

SECTION B2: Exploration Activity

logging old drill core left by MMG Resources Inc. Geological mapping of the surrounding Izok Lake greenstone belt. 1-2 day visits to Hood and Gondor properties (which have the same minerals).

SECTION B3: Geosciences

A substantial amount of drill core has been left on the Izok Lake property that is available for observation. This project involves core logging of mineralized zones that will build on previous years of bedrock mapping projects in the greenstone belt from the NTGS, and will act as a baseline for VMS mineralization in greenstone belts of the Slave craton in Nunavut. This work will help evaluate the tectonic setting, volcanic architecture, and facies distribution in volcanogenic massive sulfide (VMS) deposits within the belt. Understanding the fundamental geological processes of the belt will aid in the understanding of the evolutionary processes responsible for mineral endowment across the Slave craton. In addition, this work will assist in the scientific understanding of those involved in policy decisions, including local stakeholders. This work will also build on 3D inversions completed following a 65,000 line-km high-resolution aeromagnetic survey that was flown in 2019 that has provided for the first time, detailed magnetic data of the greenstone belt and surrounding granitoid basement complex.

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

Kugluktuk and Cambridge Bay are the closest communities, Kugluktuk is ~274 km and Cambridge Bay is ~500 km distance from the Izok Lake camp site. Considering the areas of community priorities and values, the

Rocking Horse Lake, Contwoyto Lake, Napaktulik Lake, and Itchen Lake are considered areas for fishing, camping, and hunting for caribou, muskox, wolves, and grizzlies. Artifacts have been located around the Napaktulik Lake and Contwoyto Lake areas. There is approximately a 20 km buffer zone around the Contwoyto Lake in which there are outpost camps and historic sites.

Miscellaneous Project Information

n/a

[illegible]

The land will be left in the state it was before this project. All temporary structures (i.e., sleeper tents), field equipment, garbage, and fuel (empty or full drums) will be returned to Yellowknife. The helicopter creates noise that can be alarming to wildlife. When the cloud ceiling allows, the helicopter will fly high above the land as to not stress out the wildlife below. If large mammals are spotted (e.g., polar bear, muskox, caribou heard) the helicopter will reroute or flying away from the wildlife to avoid stressing the animals. - The camp will be left as we found it.

Cumulative Effects

It is only a 15 day project for one summer (2022).

Impacts

$\Delta^{\epsilon_b} C D \sigma^{-\epsilon_c} r^c$ $d e n f d c \dot{c}^c d^c$ $d^b d^{\epsilon_b} C D r L \dot{r}^c$

[illegible]
$$(P = \langle b \rangle \dot{a} \cdot p \cap \langle a \rangle \dot{b} \rangle^c, N = \langle b \rangle \dot{b} \cdot p \cdot \langle \langle \langle a \rangle \dot{a} \rangle \dot{b} \rangle^c \langle \langle \langle a \rangle \dot{b} \rangle \dot{p} \rangle \dot{b} \rangle \langle \langle \langle a \rangle \dot{b} \rangle \dot{p} \rangle^c \rangle, M = \langle b \rangle \dot{b} \cdot p \cdot \langle \langle \langle a \rangle \dot{a} \rangle \dot{b} \rangle^c \langle \langle \langle a \rangle \dot{b} \rangle \dot{p} \rangle \dot{b} \rangle \langle \langle \langle a \rangle \dot{b} \rangle \dot{p} \rangle \dot{b} \rangle \langle \langle \langle a \rangle \dot{b} \rangle \dot{p} \rangle^c \rangle, U = \langle b \rangle \dot{p} \cdot \langle \langle \langle a \rangle \dot{a} \rangle \dot{b} \rangle^c)$$

1	polygon	Gondor property
2	polygon	Izok Lake greenstone belt
3	polygon	Hood property
4	point	Izok Lake camp (location of project camp)

- | | | |
|---|---------|---|
| 1 | polygon | Gondor property |
| 2 | polygon | Izok Lake greenstone belt |
| 3 | polygon | Hood property |
| 4 | point | Izok Lake camp (location of project camp) |

