



NIRB Application for Screening #125523

Hope Bay and Elu greenstone belt mapping project

Application Type: New

Project Type: Scientific Research

Application Date: 5/19/2020 6:18:10 PM

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

Proposed Authorization: from 0001-01-01 to 0001-01-01

Project Proponent: Lorraine Lebeau
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DETAILS

Non-technical project proposal description

English: The Hope Bay and Elu greenstone belts are known gold and base metal endowed areas located in the Slave craton of western Nunavut (Kitikmeot Region). Both greenstone belts are largely claimed by TMAC Resources, where gold is produced at the Doris and Madrid properties. Although they have been explored by industry since the 1960's, and mapped regionally by the GSC, detailed work is warranted in many targeted prospective areas. The purpose of this initiative is to collaborate with TMAC and conduct research in a targeted area with suspected extensions of a known gold deposit. This endeavour will expand our understanding of the economic potential of the Hope Bay and Elu greenstone belts, and by extension of other greenstone belts in Slave craton. The project will have field work from Jul 21st – August 4th at the Doris camp, summer 2020. The field crew will be transported by helicopter daily to the field area. Timing may vary due to weather and camp availability. Field work will continue in 2021 for 3-4 weeks, exact dates are to be determined. The goal of this project is to create a targeted 1:10 000 – 1:15 000 geologic map on the Hope Bay greenstone belt property. This geologic map should include items of mineral exploration interest (e.g., economic mineral showings, alteration, major structures, volcanic stratigraphy).

French: N/A

Inuktitut: N/A

Inuinnaqtun: N/A

Personnel

Personnel on site: 6

Days on site: 14

Total Person days: 84

Operations Phase: from 2020-07-19 to 2020-08-02

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
New project geometry	Researching	Inuit Owned Surface Lands	N/A	N/A	N/A

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

Authorizations

Indicate the areas in which the project is located:

Kitikmeot

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Information is not available				

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Helicopter	

Project accommodation types

Temporary Camp

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Scientific equipment	1	30X10 cm	handheld instruments: portable X-Ray Fluorescence (pXRF), Laser Induced Breakdown Spectroscopy (LIBS), Magnetic susceptibility meters. (all devices to measure characteristics of rocks)

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	1900	1	1900	Liters	Jet A use in helicopter. - bulk fuel from Doris (no drums). 1 hr use of helicopter/dayfuel consumption 135 litres/hr135 litres * 14 = ~1900 litres

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
1	Doris mining camp facilities	Doris Camp (owned by TMAC)

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Researching	Greywater	26,600 litres	Doris mining camp facilities (shower, toilet, kitchen)average 329 litres per day per person	N/A
Researching	Sewage (human waste)	74 lbs	toilets in camp (average person has 400g of waste per day)	N/A

Environmental Impacts:

This is a minimalistic project that will be based out of current infrastructure at the Doris mining camp owned by TMAC Resources Inc. Only 6-8 people will participate (geologists and pilots+engineers). All waste disposal in the camp will follow TMAC Resources Inc.'s protocols and regulations. Waste that is made in the field (lunch wrappings) will be packed and disposed of at the Doris camp facilities. There will be no waste left in the field. The noise from helicopters can cause impacts on wildlife. We will assure that if any large mammals such as polar bears, caribou, muskox and wolves are seen , we will vacate the area and work somewhere else for the day. The helicopter will fly at an appropriate altitude to reduce the stress on animals below.

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 of Existing Environment: Physical Environment

Description of Existing Environment: Biological Environment

Description of Existing Environment: Socio-economic Environment

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

Cumulative Effects

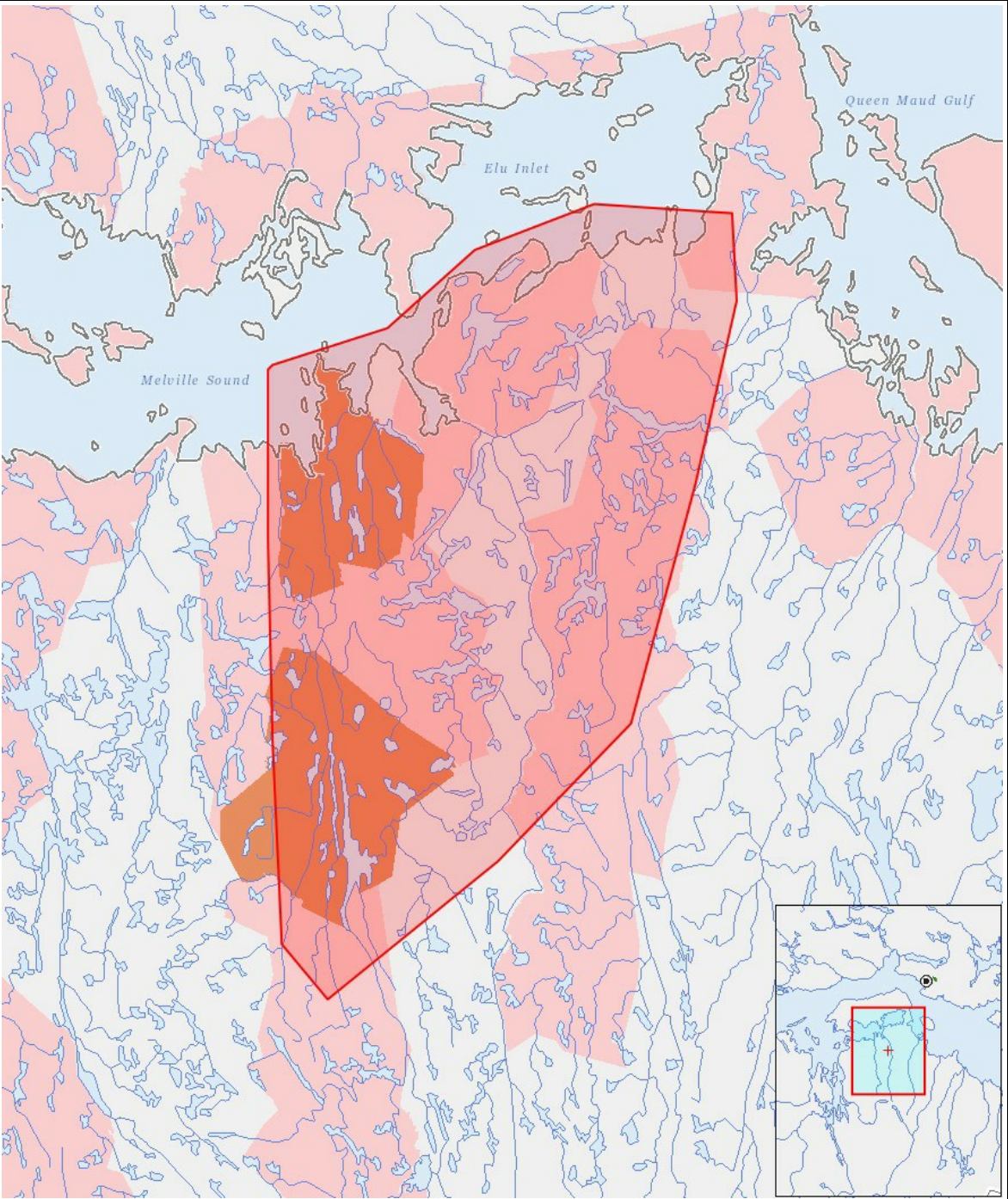
Impacts

Identification of Environmental Impacts

		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																										
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Operation																										
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Decommissioning																										
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(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	polygon	New project geometry
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