



## **NIRB Uuktuutinga Ihivriughikhamut #125435**

### **Lupin Mine Winter Access**

**Uuktuutinga Qanurittuq:** New

**Havaap Qanurittunia:** Winter Road / Winter Trail

**Uuktuutinga Ublua:** 1/14/2019 10:40:55 AM

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

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

**Havauhikhaq Ikayuqtinga:** Kenny Ruptash  
Nahanni Construction Ltd.  
Box 2070 100 Nahanni Drive  
Yellowknife NT X1A 2P6  
Canada  
Hivayautit Nampanga:: 867-873-2975, Kayumiktukkut Nampanga::

### Post-Closure Phase: from to

## Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaliyainnit nuna
Winter road route	Access Road	Crown	See attached Regulatory History	Route in Nunavut is almost entirely on lakes therefore limited potential to interact with archaeological sites	300 km southwest of Kugluktuk
Winter road route	Camp	Crown	See attached Regulatory History	Route in Nunavut is almost entirely on lakes therefore limited potential to interact with archaeological sites	300 km southwest of Kugluktuk

### Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Kugluktuk	See attached Engagement Summary	HTO, KIA, Landusers	2018-11-13

# Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Transboundary  
Kitikmeot

## Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Alaanut	Land Use permit from the MVLWB	Applied, Decision Pending		
Aboriginal and Northern Affairs Canada	Land Use permit	Applied, Decision Pending		
Nunavut Imaligiyyit Katimayit	Approval without a licence	Not Yet Applied		
Iqalukhiurniqmut Tariuqmilu Kaanata	Letter of Advice 18-HCAA-01591	Active	2019-01-09	

## Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Construction crews may be mobilized to the Lupin Mine by air.	
Land	Crews will access the road via the existing Tibbitt to Contwoyto Winter Road, from Yellowknife to the Ekati turnoff.	

## Project accomodation types

Temporary Camp  
Alaanut,

# Ihuaqutivaluin Atuqtauyukhan

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

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Loader	2	various	Snow clearing
Ice profiler	2	tbd	Determine ice thickness
Pumps	8	various	winter road construction
Dozer	2	D6	Portage construction
Haglund	1	various	Snow compaction
Water truck	2	various	Road construction
snow cat	2	various	snow clearing
temporary, mobile camp on sled	1	tbd	Emergency shelter for construction crew
grader	3	various	snow clearing
pickup	8	various	snow removal, crew, supplies and fuel (in a tidy tank) transport
side by side	1	tbd	crew transport
Super B	40	tbd	Fuel and lubricant transport
end dump truck	10	tbd	transport parts and tires
drill rig	1	tbd	transport for use at Lupin
B train	2	tbd	transport supplies
flat deck	4	tbd	transport supplies
snowmobile	6	tbd	Transport people and supplies, routing.

## Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Gasoline	fuel	10	50	500	Liters	Pump fuel
Diesel	fuel	6	4560	27360	Liters	Fuel for trucks and equipment-tidy tanks
Propane	fuel	5	100	500	Lbs	Fuel for emerg shelter
Diesel	fuel	5	210	1050	Liters	Fuel for emergency shelter
Diesel	fuel	38	40000	1520000	Liters	Transport for use at Lupin
Lubricants	hazardous	5	5	25	Liters	vehicle operation and maintenance
ANFO	hazardous	1	10400	10400	Kg	Transport for use at Lupin. Bags or sticks, to be confirmed
Lime	hazardous	1300	70	91000	Lbs	Transport for use at Lupin
Lubricants	hazardous	2	40000	80000	Liters	Transport for use at Lupin

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
49	Pump fitted with a screened intake	Adjacent lakes

# Iqqakuq

## Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtitarnirutikhan piyutin
Camp	Ikulalaaqtun iqqakuuvaluin	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Camp	Qirnarivyaktutq imaq	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Access Road	Hivuuranaqtun iqakuuvaluin	Unknown	Backhaul to suitable facility offsite	Recycle or disposal
Camp	Hivuuranaqtun iqakuuvaluin	unknown	Backhaul to suitable facility off site	Recycle or disposal
Camp	Ikulalimanngittun iqqakuuvaluin	Minimal	Backhaul to offsite waste receiver	Recycle
Camp	Anaagun (inuin anaaguin)	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities

### Avatiliriniqmut Ayurhautingit:

See the attached effects assessment, Environment and Heritage Resources Protection Plan, the Wildlife Protection Plan, the Abandonment and Restoration Plan and the Spill Contingency Plan.

# **Additional Information**

## **SECTION A1: Project Info**

The proposed road route is existing and has been used to supply the Lupin Mine in the past. There is 1 portage identified in Nunavut, occurring in the same location as for past road construction, at the south end of Contwoyto Lake near the NWT border. The road route largely occurs on Contwoyto Lake. Exact routing along the lake will occur based on existing conditions experienced at the time of construction. The road will generally be single lane up to 50 wide, with low sloped snow banks to manage snow drifting and to support wildlife crossing. At the portage, a combination of snow fill and ice may be used to construct the road surface, depending on conditions observed at the time of construction. Road maintenance will occur as needed and may include grading, flooding, and snow removal. The road is private, and only project related traffic is planned. Project related traffic during operations is identified in the Equipment Use tab of this application, and cargo is listed under the Materials Use tab. It is expected that approximately 40 super b trains of fuel will go north full and south empty as well as 5 pick up trucks, 10 rock trucks/end dumps and approximately 5 flat beds of supplies. Similar traffic use is expected in the second year. Trucks typically travel along the road in convoys of 3 vehicles. The road route is located entirely within the Nunavut Settlement Area. Other regulatory requirements are as listed within this Application.

## **SECTION A2: Allweather Road**

## **SECTION A3: Winter Road**

Surface preparation includes snow clearing, and if needed, flooding to increase ice thickness. Snow berms may be constructed and compaction may be employed at the portage and other areas where needed, depending on the conditions encountered on site at the time of construction. As the majority of the road route in Nunavut traverses Contwoyto Lake, Contwoyto Lake will be the water source for any flooding that may need to occur. Traffic speeds will occur in accordance with those in place for the Tibbitt to Conwayto Winter Road, as follows for haul trucks: -Driving on Lakes: 25 km/hr loaded, 35 km/hr empty; -Driving on Portages: 30 km/hr loaded and empty; -Traveling through flood zones: 10 km/hr; -Traveling on and off lakes: 10 km/hr loaded, 25km/hr empty; Pickup trucks may travel up to 80 km/hr. There will be a 24 hr security patrol on the road in a pick up truck at all times to monitor road safety, conditions and wildlife. Contwoyto Lake is a fish bearing water course.

## **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**

**Qanurittuq Ittunik Avatinga: Avatingalluanga**

Refer to the Environment and Heritage Resources Protection Plan, attached.

**Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

Refer to the Environment and Heritage Resources Protection Plan and the Wildlife Protection Plan, attached.

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

Refer to the Environment and Heritage Resources Protection Plan and the Community Engagement Plan, attached.

**Miscellaneous Project Information**

The following additional documents are attached: Abandonment and Restoration Plan; Spill Contingency Plan; Waste Management Plan.

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

See the attached effects assessment, Environment and Heritage Resources Protection Plan and the Wildlife Protection Plan.

### **Tamatkiumayunik Ihuikgutivaktunik**

It is expected that there will be a positive cumulative effect arising from the project as works are in support of ongoing reclamation efforts at the Lupin Mine and progressive reclamation is considered to be beneficial to the physical and biological environment as well as to land users.

## Impacts

### Ilitariyauniq Avatiliriniqmut Ayurhautingit

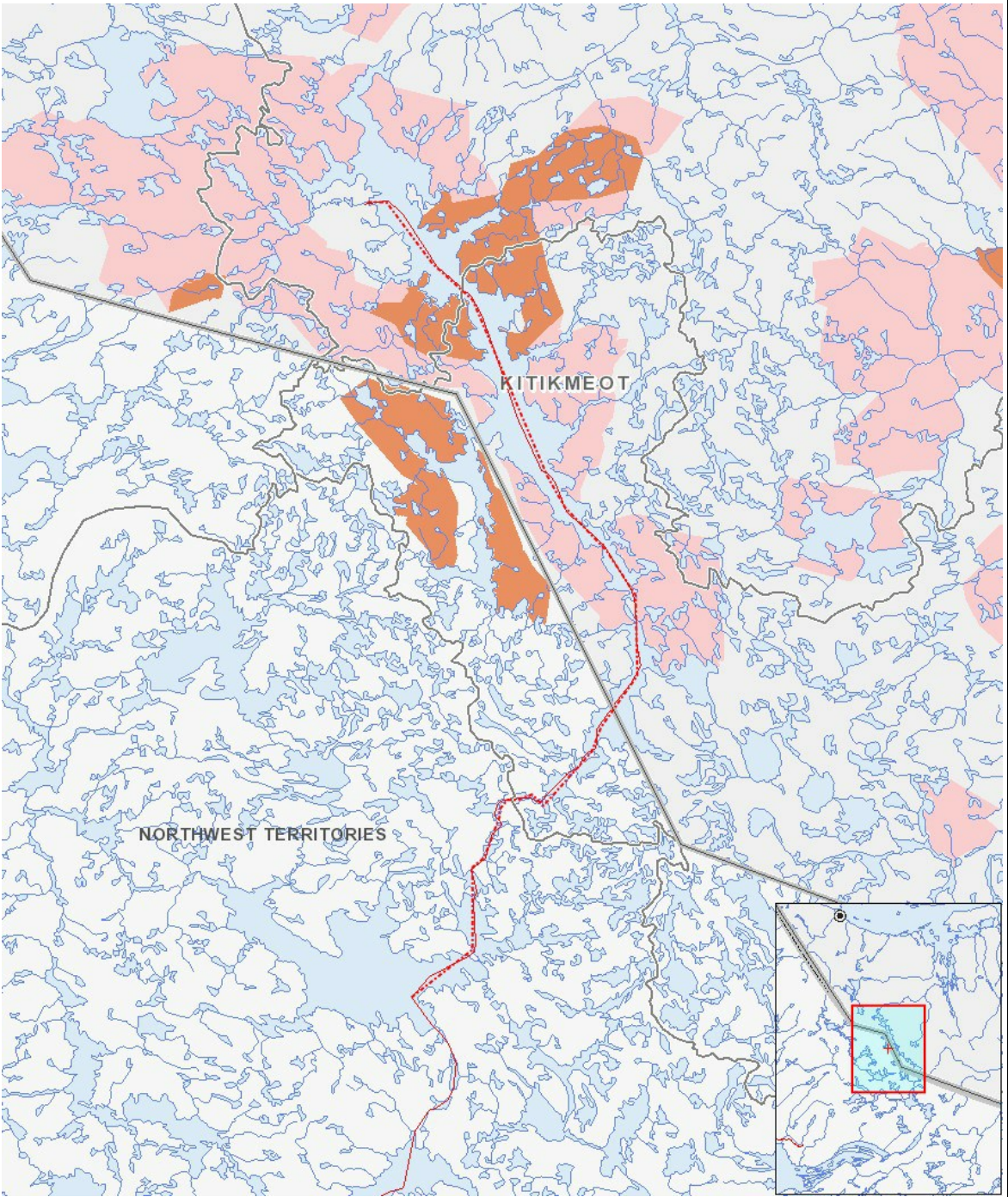
		PHYSICAL																							
		Designated environmental areas																							
		Ground stability																							
		Permafrost																							
		Hydrology / Limnology																							
		Water quality																							
		Climate conditions																							
		Eskers 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																									
Camp		-	-	-	-	N	-	-	-	-	-	N	N		-	N	-	-	-		-	-	-	-	-
Access Road		-	N	-	-	N	-	-	-	-	-	N	N		N	N	N	N	-		N	-	-	-	-

Aulapkaininnga																									
Access Road		-	N	-	-	N	-	-	-	-	-	N	N		N	N	N	-	-		P	-	-	-	-

Piiqtauniq																									
Access Road		-	N	-	-	N	-	-	-	-	-	N	N		N	N	N	-	-		P	-	-	-	-

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



List of Project Geometries

1	polyline	Winter road route
---	----------	-------------------