



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::

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyayuq 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, akhaluutinik, 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 utiqittagaani qanuq	Atulirumayain imavaluin utiqittagani humi
49	Pump fitted with a screened intake	Adjacent lakes

Iqqakuq

Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Camp	Ikulalaaqtun iqqakuuvaluin	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Camp	Qirnarivyaktuq imaq	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Access Road	Hivuuranaqtun iqqakuuvaluin	Unknown	Backhaul to suitable facility offsite	Recycle or disposal
Camp	Hivuuranaqtun iqqakuuvaluin	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 Ayurhauingit:

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 Conwoyto 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.

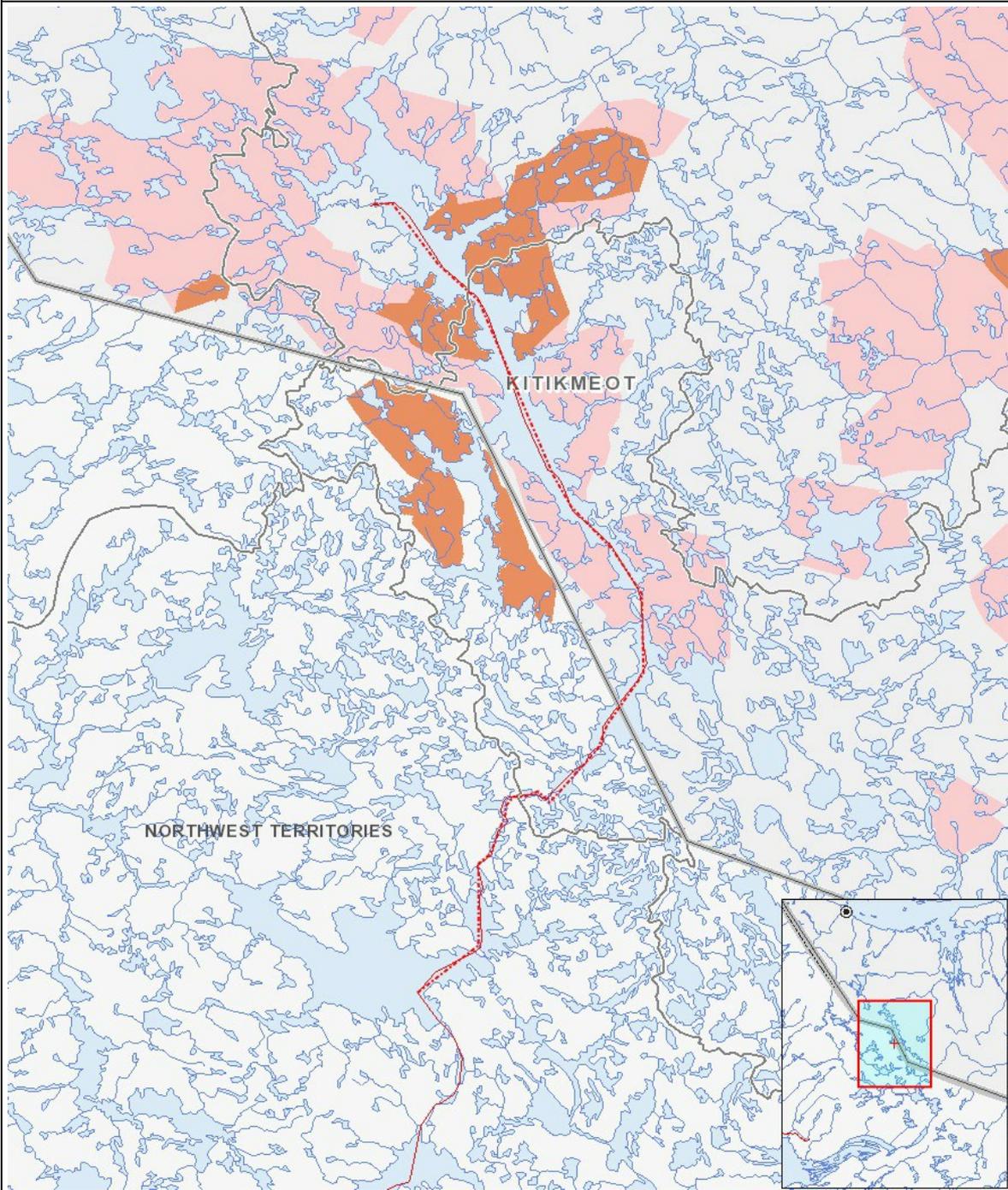
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhauingit

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

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

Havaariyauyukhamut Nayugaa



List of Project Geometries

1	polyline	Winter road route
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