



NIRB Application for Screening #125496

Ferguson Lake Project

Application Type: New

Project Type: Mineral Exploration

Application Date: 12/19/2019 3:19:51 PM

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

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

Project Proponent: Trevor Boyd
Canadian North Resources and Development Corp
299 Courtneypark Drive
Mississauga Ontario M5P 2E6
Canada
Phone Number:: 905 565 5968 ext. 232, Fax Number::

DETAILS

Non-technical project proposal description

English: DESCRIPTION OF PROPOSED 2019-2020 WINTER ACTIVITIES FOR THE FERGUSON LAKE PROJECT Canadian North Resources and Development Corp (CNRD) wishes to complete work on its Ferguson Lake camp and project during the winter of 2019-20. The camp is located approximately 250 km west of Rankin Inlet and 200 km south of Baker Lake. CNRD requests to transport over an ice and snow road/route from Baker Lake to the Ferguson Lake camp. Work is to be completed by Peter's Expediting Limited (PEL) out of Baker Lake which will entail the overland transport of 120 barrels of fuel in two trips into the camp which will be stored in the lined permitted berm at the camp. Peter's Expediting holds a ROW permit issued by the Kivalliq Inuit Association active until April 2021 for the route between Baker Lake and Ferguson Lake. During the undertaking, empty shipping containers as well will be towed into the camp to be loaded and used for the transport of waste materials stored at the camp out to Baker Lake at the request of INAC Land Administration Branch and the Kivalliq Inuit Association. The waste material will be shipped south the following summer. The scale of the project requires four overland trips using at least two full size snow tracked vehicles per trip. There will be no construction of new infrastructure and it will require approximately 4-6 personnel per trip. In addition during this work, under direction by INAC, the rock crusher which formally belonged to Starfield Resources and presently located about 100 kilometres west of Rankin Inlet will be retrieved and brought to the camp by PEL under as well LUP #N2013X0023 which has been extended to March 16, 2021. FERGUSON LAKE PROJECT AND PROPERTY DESCRIPTION The Ferguson Lake Project is an advanced Ni-Cu-Co-PGE exploration property 100% held by private Ontario incorporated company Canadian North Resources and Development Corp. (CNRD). Between the years 1949-57 the property area was explored by INCO then it was acquired by Starfield Resources Inc. in 1999 whereupon a number of different exploration methods were used to study and advance the project including airborne and surface geophysical surveys, surface geochemistry programs and diamond drilling. CNRD acquired the project from Starfield under bankruptcy protection in June, 2013. The Ferguson Lake property consists of 29 active mineral claims and 10 mining leases comprising an area of 28,128 hectares (69,476 acres) 100% held by Canadian North Resources and Development Corporation (CNRD). The property is located in the Kivalliq region of southern Nunavut Territory some 240 kilometres west of Rankin Inlet and 160 kilometres south-southwest of Baker Lake. Ferguson Lake, central to the large property area, is midway between Yathkyed and Qamanirjuaq Lakes. The property encompasses an area consisting of three contiguous claim blocks plus one block of contiguous mining leases extending across and south of Ferguson Lake between latitudes 62°30' and 62°55' North and longitudes 96°10' and 97°30' West in NTS map-areas 65I/10-16 (UTM coordinates 6945000-6978000N, 585000-625000E - Zone 14). The mining leases consist of 11,456 hectares (23,935 acres) and cover the Ni-Cu-Co-PGE Ferguson Lake Deposit which extends east-west for 12 km from seven km west to 2 km east of Ferguson Lake. The mining leases are located predominately on Kivalliq Inuit Association (KIA) surface rights owned land (RI-24, RI-25, RI-26 and RI-27). The following Commercial, Land Use and Right of Way permits, enabling work, water use, and travel to be conducted over the mining leases, claims, and Prospecting Permit areas, are issued by the Kivalliq Inuit Association (KIA), Indigenous and Northern Affairs Canada (INAC), and Nunavut Water Board (NWB). •KVCL305H27 Expires July 22, 2022 •KVCA08Q17 Expires September 11, 2020 •KVRW06F09 Expires October 17, 2019 (request for extension submitted) •2BE-FER1318 TYPE "B" Expires December 11, 2023 •N2013X0023 Expires March 16, 2021

French: DESCRIPTION DES ACTIVITÉS PROPOSÉES POUR 2019-2020 POUR LE PROJET DU LAC FERGUSON Canadian North Resources and Development Corp. (CNRD) souhaite achever les travaux sur son camp et son projet à Ferguson Lake au cours de l'hiver 2019-2020. Le camp est situé à environ 250 km à l'ouest de Rankin Inlet et à 200 km au sud de Baker Lake. Le CNRD demande le transport sur une route / route de glace et de neige de Baker Lake au camp de Ferguson Lake. Les travaux doivent être terminés par Peter's Expediting Limited (PEL) à partir de Baker Lake, ce qui entraînera le transport par voie terrestre de 120 barils de carburant en deux voyages dans le camp qui seront stockés dans la berme permise doublée du camp. Peter's Expediting détient un permis d'emprise délivré par la Kivalliq Inuit Association jusqu'en avril 2021 pour le trajet entre Baker Lake et Ferguson Lake. Au cours de l'engagement, des conteneurs d'expédition vides seront également remorqués dans le camp pour être chargés et utilisés pour le transport des déchets stockés dans le camp jusqu'à Baker Lake à la demande de la Direction de l'administration des terres d'AINC et de la Kivalliq Inuit Association. Les déchets seront expédiés vers le sud l'été suivant. L'ampleur du projet nécessite quatre voyages terrestres en utilisant au moins deux véhicules à chenilles de neige pleine grandeur par voyage. Il n'y aura pas de construction de nouvelles infrastructures et il faudra environ 4 à 6 personnes par voyage. De plus, au cours de ces travaux, sous la direction d'AINC, le concasseur de roches qui appartenait officiellement à Starfield Resources et actuellement situé à environ 100 kilomètres à l'ouest de Rankin Inlet sera récupéré et amené au camp par PEL sous le LUP n° N2013X0023 qui a été prolongé au 16 mars 2021. LA DESCRIPTION DE PROJET ET PROPRIÉTÉ DU LAC FERGUSON Le projet du lac Ferguson est une propriété d'exploration avancée de Ni-Cu-Co-PGE détenue à 100 % par une société privée de l'Ontario constituée en société, Canadian

[illegible]

Operations Phase: from 2020-02-01 to 2020-04-15

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
PEL Haul Route	Other	Inuit Owned Surface Lands	The Ferguson Lake Deposit was originally discovered in 1950 by Inco Limited and has been intermittently explored by a variety of operators including Starfield Resources until 2013 when it went into bankruptcy. The project was taken over by Canadian North Resources and Development Corp. the same year. The project and camp has since been under care and maintenance and predominantly closed.	Unknown	The Ferguson Lake Property is in the Kivalliq region of southern Nunavut Territory some 250 kilometres west of Rankin Inlet and 170 kilometres south-southwest of Baker Lake. The area lies within designated caribou calving grounds which is closed to exploration between May 1 and July 31.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Rankin Inlet	none, not applicable	none, not applicable	2019-12-20
Baker Lake	none, not applicable	none, not applicable	2019-12-20

Authorizations

Indicate the areas in which the project is located:

Kivalliq

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Kivalliq Inuit Association	KVCL305H27 Extension of Commercial Licence for Ferguson Lake Camp	Active	2017-07-22	2022-07-22
Kivalliq Inuit Association	KVCA08Q17 Extension of Quarry Permit for Ferguson Lake airfield	Active	2019-09-11	2020-09-11
Kivalliq Inuit Association	KVRW06F09 Extension of Right of Way permit for Ferguson Lake Project , expected dates shown below.	Applied, Decision Pending	2019-10-17	2021-10-17
Nunavut Water Board	2BE-FER1318 TYPE "B" Extension of Class B Water Use License for Ferguson Lake Camp	Active	2018-12-11	2023-12-11
Indigenous and Northern Affairs Canada	N2013X0023 Extension of Right of Way permit for overland winter travel between Rankin Inlet and Ferguson Lake camp	Active	2019-03-16	2021-03-16
Kivalliq Inuit Association	KVRW98F146 Right of Way permit for overland winter hauling between Baker Lake and Ferguson Lake camp issued to Peter's Expediting Limited	Active	2019-04-01	2021-04-01

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	none	
Water	none	
Land	Based upon the amount of snow cover and weather conditions four proposed overland round trips to the Ferguson Lake camp are to be completed out of Baker Lake by Peters Expediting Limited during the winter season. The first trip would scout and ice profile a new less rocky route from last winter from Baker Lake to the camp using the Bombardier snow track vehicle. The second trip would use the full-size Quad Trak and Challenger to bring in empty sea-cans, pack a good trail to the camp and crusher site, and then retrieve and tow the crusher using both the machines over to the Ferguson	

camp. For the third and fourth trips, the full-size Delta heavy vehicle would carry in the 120 barrels of fuel to the camp with the Quad Trak along for support. The sea-cans brought to the camp would be filled with the stored waste material at the Ferguson Lake camp and towed back to Baker Lake on return trips. The waste would then be shipped south.	
---	--

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
one Cat BL320 Evcavator, one Bobcat 287 Skid Steer, one Bombardier Snowcat, one Cat 950F Wheel Loader, one Cat 140G Motor Grader, two D250 haul trucks, one D4 Caterpillar Dozer, two Chev 2500 crew cabs, three diesel generators, 15 snowmobiles/ATVs	28	0.5m by 2m up to 3m by 5m in size	Equipment is stored and inactive. No equipment use is planned. The camp is presently closed.
Challenger 75D	2	2 by 15m	Tow crusher and containers from Baker Lake and crusher site to Ferguson Lake camp.
Foremost Delta	1	3 by 16m	Carry fuel and tow containers with waste between Baker Lake and Ferguson Lake camp
Case Quadtrac	1	3 by 12m	Tow containers and other equipment as needed
Various snow vehicles and sleds	4	1 by 2m	Carry personnel and provide support for main vehicles

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	1	5000	5000	Liters	Fuel to be used for powering heavy equipment for the overland travel.

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
1	No proposed water use at Ferguson Lake Camp since it will be closed. Water will be carried by personnel for their own use.	Baker Lake municipal water supply

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Dredging	Combustible wastes	0 (camp closed)	Burned in the incinerator at camp,	Unburnable materials flown out of camp to be disposed at legal dump site at Rankin Inlet
Camp	Combustible wastes	1 bag	Any waste generated will be carried back to Baker Lake.	No waste to be generated by Ferguson Lake camp since it will be closed during this operation.
Dredging	Greywater	0 (camp closed)	grey water disposed in sump and human waste in PAC toilets which is burned	none
Camp	Hazardous waste	30 tonnes	Camp waste and empty barrels to be placed into containers brought into camp and will be towed out to Baker Lake using the Challenger 75D and Case Quadtrac snow vehicles operated by Peter's Expediting.	Waste brought out to Baker Lake will be shipped south the following summer to be treated and disposed safely.
Dredging	Sewage (human waste)	0 (camp closed)	human waste in PAC toilets which is burned	none

Environmental Impacts:

Risk of hydrocarbon spill from fuels to the route surface and bodies of water along the way both from the hauling vehicles being utilized and the barrels being transported into the Ferguson Lake Camp from Baker Lake. Risk lessens once fuels are stored in lined permitted berm at the camp. Mitigation of impact based upon measures outlined in Ferguson Lake Project Spill Contingency Plan, 2015. No predicted significant mechanical environmental impacts from overland winter transportation between Baker Lake and Ferguson Lake camp and the crusher site because snow track vehicles will be used for the undertaking only if the snow layer is deep enough to not result in any significant damage to the tundra environment.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

Winter overland routes to Baker Lake and Rankin Inlet shown in uploaded map.

SECTION B1: Project Info

The Ferguson Lake Property consists of 9 mining leases in one block of contiguous mining leases that extends across and south of Ferguson Lake between latitudes 62° 30' and 62°55' North and longitudes 96°10' and 97°30' West in NTS map- areas 65I/10-16 (UTM coordinates 6,945,000 – 6,978,000N, 585,000 –625,00E – Zone 14).

SECTION B2: Exploration Activity

none at present

SECTION B3: Geosciences

none at present

SECTION B4: Drilling

none at present

SECTION B5: Stripping

none at present

SECTION B6: Underground Activity

none

SECTION B7: Waste Rock

none

SECTION B8: Stockpiles

none

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

The Ferguson Lake area is in the tundra. It is an area of low relief, featuring numerous smaller lakes and a few large river systems, notably Kazan and Ferguson Rivers. Yathkyed and Ferguson Lakes are 141 and 114 metres above sea level respectively, and maximum elevations in the general area range from 200 to 275 metres. Elevations within the current property area average less than 200 metres and range from slightly less than 100 metres at the property's eastern boundary to 290 metres north of Yathkyed Lake. The orientation of Ferguson and a number of smaller lakes reflects the dominant south-easterly glacial direction. Bedrock is fairly well exposed on numerous low hills and ridges; in lower areas bedrock may be obscured by between 6 and 25 metres of glacial debris, mainly till.

Description of Existing Environment: Biological Environment

The terrain is typical of the tundra barren grounds; tree line is 150 km south of Ferguson Lake and vegetation consists principally of moss, lichen, dwarf birch and Labrador tea. Wildlife includes caribou, Arctic foxes, muskoxen, arctic hare, sik sik, wolves, wolverines, barren ground grizzly bears and various species of birds.

Description of Existing Environment: Socio-economic Environment

There are no inhabitants in the area. Ferguson Lake is occasionally visited for hunting and fishing purposes by Nunavut citizens.

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

No impacts because the camp remains closed and exploration and development is on hold.

Cumulative Effects

The development of a mine at Ferguson Lake would result in major cumulative impacts in the area.

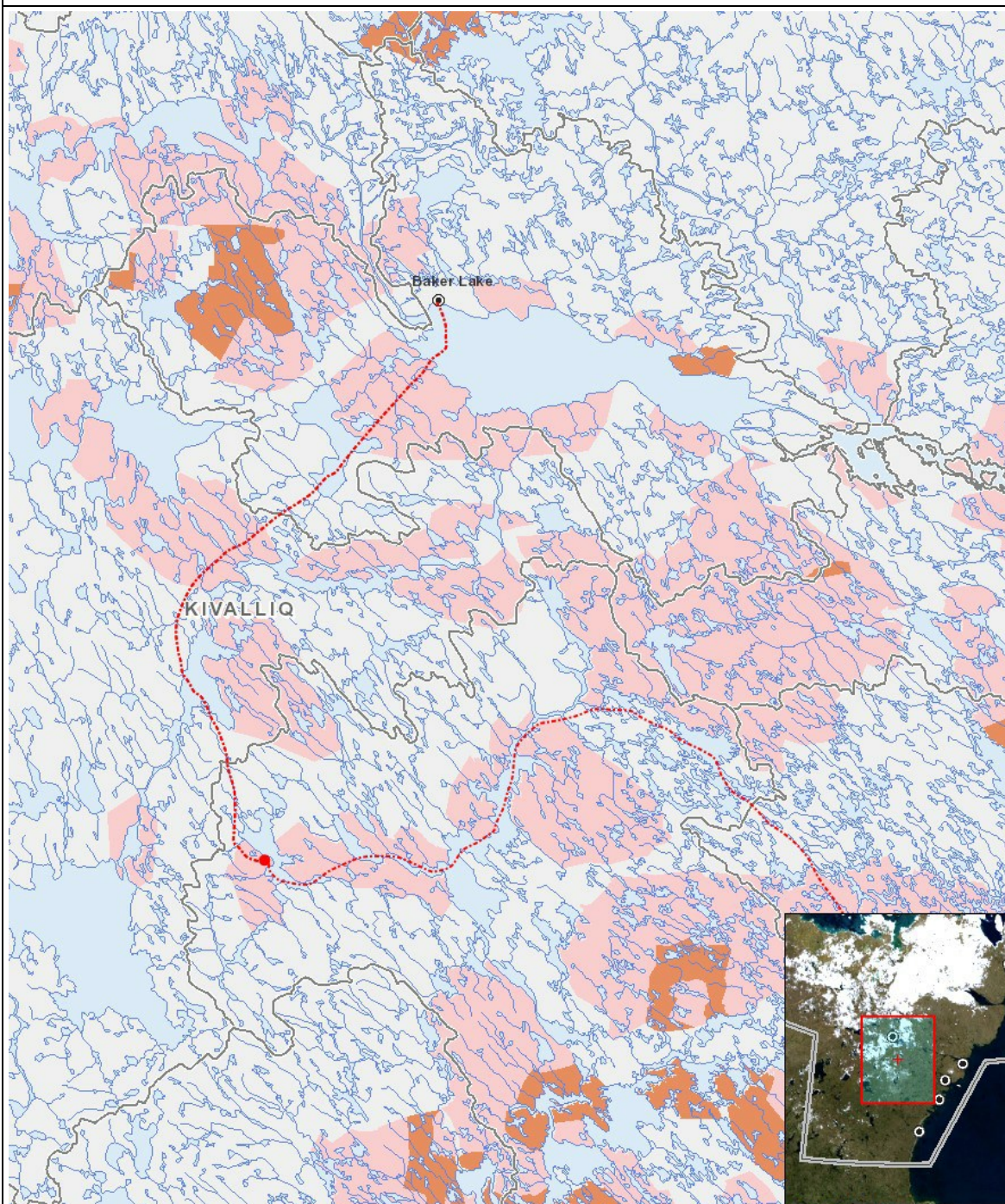
Impacts

Identification of Environmental Impacts

[illegible]

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

Project Location



List of Project Geometries

- | | | |
|---|----------|---|
| 1 | polyline | PEL Haul Route |
| 2 | polyline | Baker Lake to Ferguson Lake Overland Haul Route - Nov. 2019 |
| 3 | polyline | Ferguson Lake to Crusher Site |
| 4 | point | Ferguson Lake Camp |