

March 30, 2026

**RE: Lupin Mine Winter Access
Land Use Permit N2019F0001 – Annual Reporting**

To whom it may concern,

Nahanni Construction Ltd. completed winter road construction activities during the 2019/2020 season and reported them in accordance with applicable regulatory requirements.

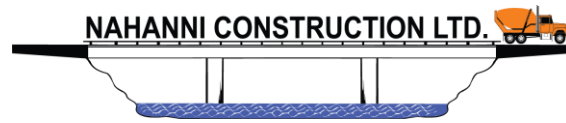
No winter road construction activities were undertaken under Land Use Permit N2019F0001 during the winters of 2020/2021, 2021/2022, 2022/2023, 2023/2024, or 2024/2025.

Please find attached in Appendix A, the previously submitted annual report for the 2019/2020 construction season.

Should you require any additional information or clarification, please do not hesitate to contact us.

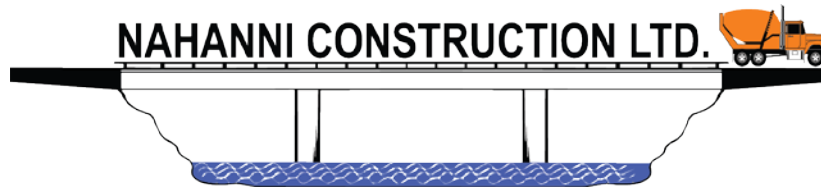
A handwritten signature in black ink, appearing to be 'J. Buchko', is located below the main body of the letter.

Jared Buchko, P. Eng.
Nahanni Construction Ltd.



APPENDIX A

Lupin Mine Winter Access Project March 2020



LUPIN MINE

WINTER ACCESS PROJECT

WATER LICENSE ANNUAL REPORT

100 NAHANNI DRIVE, YELLOWKNIFE, NT, X1A 2P6
(867) 873-2975 | CORPORATE@NAHANNINCL.COM



TABLE OF CONTENTS

1. TECHNICAL SUMMARY	3
2. MAP OF WATER USE ACTIVITIES.....	7
3. MAP OF LAND USE ACTIVITIES	12
4. LOG OF ENCOUNTERS WITH LAND USERS.....	18
5. WILDLIFE ENCOUNTERS AND MITIGATIONS SUMMARY	19
5.1 Cease-Work Orders Required as a Result of Proximity to Caribou or any Other Wildlife..	19
5.2 Mitigation Actions Undertaken and Analysis of their Effectiveness.....	19
6. ENCOUNTERED HERITAGE SITES	20
7. LOCAL AND INUIT HIRES	21
8. SITE PHOTOS.....	22
9. FOLLOWING YEAR WORK PLAN.....	27
10. COMPLIANCE – TERMS AND CONDITIONS OF ALL AUTHORIZATIONS	28
11. MANAGEMENT PLANS	29
12. UNAUTHORIZED DISCHARGES & FOLLOW-UP ACTION	30

1. TECHNICAL SUMMARY

Prior to commencing the construction of the ice road from Lac De Gras to Lupin Mine, Nahanni Construction Ltd. (Nahanni) conducted ice profiling and a reconnaissance trip of the alignment to investigate the following:

- Ice thicknesses on lakes
- Pressure ridge activity
- Snow accumulation on land and ice
- GPS coordinates of preferred route on lakes and portages
- Wildlife activity

The aerial inspection of the alignment was conducted by Nahanni's Site Superintendent with the use of a Turbo Otter aircraft on February 22nd, 2020. We ensured that the preferred route would follow the alignment set out in the land use permit. It was confirmed that Nahanni would be able to construct the entire road along the historical alignment approved under the existing permits. Nahanni kept the Northwest Territories (NT) and Nunavut (NU) inspectors informed of all land use operations.

Mobilization of Nahanni's ice road construction fleet and camp commenced on February 8th, 2020, following opening of the Joint Venture Winter Road (JVWR). Nahanni provided notifications to the NT and NU land-use inspectors 72 hours in advance of operations. Approval to proceed was granted by both inspectors prior to mobilization.

Nahanni mobilized construction equipment and supplies with use of flat deck trailers and small hot-shot delivery supply runs within the approved JVWR ice loading limitations. **Table 1-1** displays the items mobilized for ice road construction.

Table 1-1: Ice Road Construction Equipment and Supplies

FREIGHT	WEIGHT KG	NUMBER OF LOADS
Snow Cats – 2	8,420	2
143H CAT Graders – 2	22,900	1
872G JD Grader – 1	22,480	1
*872D JD Grader – 1	22,480	1
Peterbilt Tri Drive Sleeper Water truck – 1	17,860	1
Tandem Dump Truck – 1	9,220	1
950H CAT Wheel Loader – 1	18,340	1
Ford Fuel Truck (15,000-liter capacity) – 1	9,450	1
Peterbilt Fuel Truck (15,000-liter capacity) – 1	11,710	1
Pick-up Trucks – 4	3,000	
Haglunds – 2	8,240	2
Ice Road Camp Sleeper Trailer	13,940	1

Ice Road Camp Kitchen Trailer	11,680	1
F550 Service Truck	7,340	
Fuel Trans Cubes for Diesel (2,000 liter) – 4	9,000	2
Gasoline Drums – 10	2,050	1
Miscellaneous Supplies	10,000	2

*The 872D JD Grader was replaced with a CAT 160M Grader during the ice road construction program.

Nahanni began with profiling the ice on the lakes with the use of a tracked aquatic vehicle (Haglund), pulling a profiler with GPS tracking capability. It was identified that the entire ice road route had sufficient ice for our construction fleet. Nahanni profiling continued during the ice road construction and certification phases. Ice profiling is used to identify ice thickness along the entire road. The initial ice profiling was used to identify areas along proposed route that had poor ice conditions. It is possible that currents could be encountered and an alternate spur route may require investigation to access the site. Ice information was collected and analyzed prior to pushing snow off the ice. Ice profiling and certification continued through the construction phase until the ice could be certified by a third-party engineer (Norex Engineering).

Once verified that the ice could support the construction fleet, ice road construction was initiated with the profiling of three lines along the alignment of the ice road. Profile and certification activities were completed by Norex so Nahanni could begin light-load delivery to assist with ice growth. Ice profiling identified one thin area where minimal flooding was required.

The load bearing capacity of the ice road is determined when profiling the ice. The ice routes were profiled and visually assessed prior to ice road construction to ensure sufficient ice thickness to support the construction equipment. Following construction of the ice road sections, the ice was profiled and certified by a professional engineer for load capacity (Norex Engineering).

The capacity of an ice road depends on the ice thickness and type of ice formed: blue or white. The Gold Formula, developed by Dr. Lorne Gold, gives an estimation of ice capacity:

$$C = 4 H^2$$

where C = Capacity (kg)

H = Ice thickness (cm)

The following figures are from: "A Field Guide to Ice Construction Safety – November 2007" issued by the Department of Transportation of the Government of the Northwest Territories, which shows a graphical representation of Gold's Formula, as well as a capacity chart.

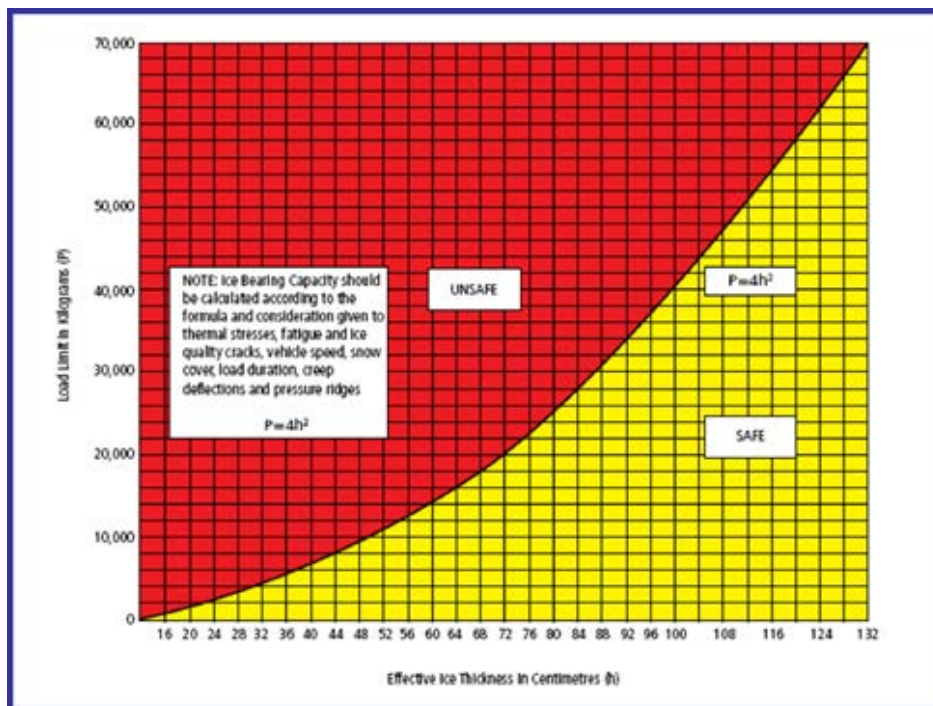


Figure 1-1: Graphical Representation of Gold's Formula

Gold's Formula (Capacity = $4 \times h^2$) (Height in centimetres – Capacity in kilograms)

cm (h)	Capacity	cm (h)	Capacity	cm (h)	Capacity	cm (h)	Capacity
2.5	25	37.5	5625	75	22500	112.5	50625
3.5	49	40	6400	77.5	24025	115	52900
5.0	100	42.5	7225	80	25600	120	57600
7.5	225	45	8100	82.5	27225	125	62500
10	400	47.5	9025	85	28900	130	67600
12.5	625	50	10000	87.5	30625	135	72900
15	900	52.5	11025	90	32400	140	78400
17.5	1225	55	12100	92.5	34225	145	84100
20	1600	57.5	13225	95	36100	150	90000
22.5	2025	60	14400	97.5	38025	155	96100
25	2500	62.5	15625	100	40000	160	102400
27.5	3025	65	16900	102.5	42025	165	108900
30	3600	67.5	18225	105	44100	170	115600
32.5	4225	70	19600	107.5	46225	175	122500
35	4900	72.5	21025	110	48400	180	129600

Figure 1-2: Ice Bearing Capacity Chart

The Lupin Mine ice road was constructed to allow sufficient width on portage and lake sections for trucks to safely pass. Minimum widths were 30 meters on ice and 10 meters on portages. Portages were constructed out of snow and ice to ensure that there was sufficient coverage over original ground. Flooding of portages was completed with use of two insulated water trucks. Nahanni maintained a minimum of 10 cm snow/ice coverage over original ground and rocks. There was no impact to the original ground required. Due to a number of major storm events in March, the Lupin road was blown in following the construction of the alignment to design width. This resulted in sections of the road at a less than desired width during periods of the mobilization.

Nahanni maintained regular communications with the Contwoyto Winter Road Committee (CWRC) during all activities. Information on the ice road route and condition, the schedule of ice road construction, expected load frequency and duration of operations was shared. Nahanni developed ice road speed limitations and rules that were consistent with the CWRC joint venture road requirements. The Lupin road rules were shared with the CWRC and YK Dispatch to allow the opportunity for their input and agreement. All drivers and vehicles were registered with the CWRC and YK Dispatch to ensure all carriers travelled on the main ice road and Lupin road, in accordance with the rules established.

At the entrance to the Lupin Mine ice road, Nahanni posted a sign relaying: not for public access, name of the project, posted speed limits, use at your own risk and contact information for Nahanni's site superintendent. On the Lupin ice road, it was requested that all vehicles adhere to the rules set forward by Nahanni. All vehicles, including hotshots and pickup trucks, were required to travel at 25km/hr for safety and to support ice growth on the road. Ice road travel was dispatched in groups of two to four vehicles. Loaded trucks travelled a minimum of 300 meters apart and were not allowed to stop on ice surfaces.

Maintenance and upgrades to the ice road continued during the mobilization. The combination of cold weather and general use allows for natural growth of the ice thickness. Nahanni received the initial engineered load chart from Norex Engineering on March 11th. The 94 cm load chart allowed for the initiation of the mobilization activities to site. Following receipt of additional profile results, Nahanni received a certified load limit increase of 100 cm ice thickness on March 18th that was required for the heaviest loads. This allowed Nahanni to mobilize the heaviest loads to site.

Nahanni maintained a temporary ice road camp at Portage 55. The camp included a sump pit for discharge of wastewater. Closure of the ice road camp included the demobilization of the 2 trailers and all support equipment and materials. All debris was collected to leave a clean site. Lime was applied within the sump before the excavated granular material was replaced to cover the excavated area.

A final inspection of the entire Lupin Mine ice road alignment was conducted by Nahanni operators on March 27th, 2020 to ensure no debris was left on the land.

2. MAP OF WATER USE ACTIVITIES

Water used for portage construction and for the ice road camp operation was sourced from various lakes along the winter road alignment. **Table 2-1** provides coordinates of all locations used for obtaining water during the ice road construction and mobilization activities. The quantity of water used from each source has been provided in **Table 2-2**, recorded on a daily basis.

Table 2-1: Water Source Locations

Water Source Location	Longitude N (NAD 83)	Latitude W (NAD 83)
P56-1	64° 33' 25.82"	110° 04' 12.10"
P56-2	64° 40' 20.87"	110° 05' 46.90"
P57-1	64° 42' 05.77"	110° 08' 10.10"
P57-2	64° 44' 03.58"	110° 06' 53.06"
P58-1	64° 45' 30.57"	110° 06' 22.72"
P-59	64° 47' 45.45"	110° 04' 48.18"
P-60	64° 50' 16.69"	110° 04' 56.42"
P-61	64° 54' 31.42"	109° 51' 16.86"
P-62	64° 54' 53.62"	109° 49' 55.64"
P-63	64° 56' 33.83"	109° 47' 50.62"
P-64	65° 11' 27.15"	109° 43' 06.61"

Table 2-2: Water Usage

Date	Purpose	Source Location	m ³
9-Feb-20	Camp Activities	P56-1	0.3
10-Feb-20	Ice Road Construction	P56-1	60.0
10-Feb-20	Ice Road Construction	P56-2	30.0
10-Feb-20	Camp Activities	P56-1	0.4
11-Feb-20	Ice Road Construction	P56-1	90.00
12-Feb-20	Ice Road Construction	P56-2	30.0
12-Feb-20	Ice Road Construction	P57-1	60.0
12-Feb-20	Camp Activities	P56-1	0.5
13-Feb-20	Ice Road Construction	P57-1	90.0
14-Feb-20	Ice Road Construction	P57-1	30.0
14-Feb-20	Camp Activities	P56-1	0.5
15-Feb-20	Ice Road Construction	P57-1	60.0
15-Feb-20	Ice Road Construction	P57-2	30.0
16-Feb-20	Ice Road Construction	P57-1	45.0



WATER LICENSE ANNUAL REPORT LUPIN MINE – WINTER ACCESS PROJECT

16-Feb-20	Camp Activities	P56-1	0.5
16-Feb-20	Ice Road Construction	P58-1	45.0
17-Feb-20	Ice Road Construction	P59	90.0
18-Feb-20	Camp Activities	P56-1	0.5
18-Feb-20	Ice Road Construction	P59	90.0
19-Feb-20	Ice Road Construction	P59	45.0
19-Feb-20	Ice Road Construction	P60	45.0
20-Feb-20	Ice Road Construction	P60	90.0
20-Feb-20	Camp Activities	P56-1	0.5
21-Feb-20	Ice Road Construction	P60	60.0
22-Feb-20	Ice Road Construction	P61	60.0
22-Feb-20	Camp Activities	P56-1	0.5
23-Feb-20	Ice Road Construction	P57-1	90.0
24-Feb-20	Ice Road Construction	P62	60.0
24-Feb-20	Camp Activities	P56-1	0.5
25-Feb-20	Ice Road Construction	P62	45.0
26-Feb-20	Ice Road Construction	P63	90.0
26-Feb-20	Camp Activities	P56-1	0.5
27-Feb-20	Ice Road Construction	P63	90.0
28-Feb-20	Ice Road Construction	P63	90.0
28-Feb-20	Camp Activities	P56-1	0.5
29-Feb-20	Ice Road Construction	P58-1	60.0
01-Mar-20	Ice Road Construction	P60	90.0
01-Mar-20	Camp Activities	P56-1	0.5
02-Mar-20	Ice Road Construction	P63	90.0
03-Mar-20	Ice Road Construction	P61	90.0
03-Mar-20	Camp Activities	P56-1	0.5
05-Mar-20	Ice Road Construction	P60	90.0
05-Mar-20	Camp Activities	P56-1	0.5
06-Mar-20	Ice Road Construction	P64	90.0
07-Mar-20	Ice Road Construction	P64	90.0
07-Mar-20	Camp Activities	P56-1	0.5
08-Mar-20	Ice Road Construction	P64	90.0
09-Mar-20	Ice Road Construction	P64	90.0
09-Mar-20	Camp Activities	P56-1	0.5
11-Mar-20	Camp Activities	P56-1	0.5

13-Mar-20	Camp Activities	P56-1	0.5
15-Mar-20	Camp Activities	P56-1	0.5
17-Mar-20	Camp Activities	P56-1	0.5
19-Mar-20	Camp Activities	P56-1	0.5
21-Mar-20	Camp Activities	P56-1	0.5

Figures 2-1 to 2-5 display the locations where water was obtained for the camp operation and portage construction.

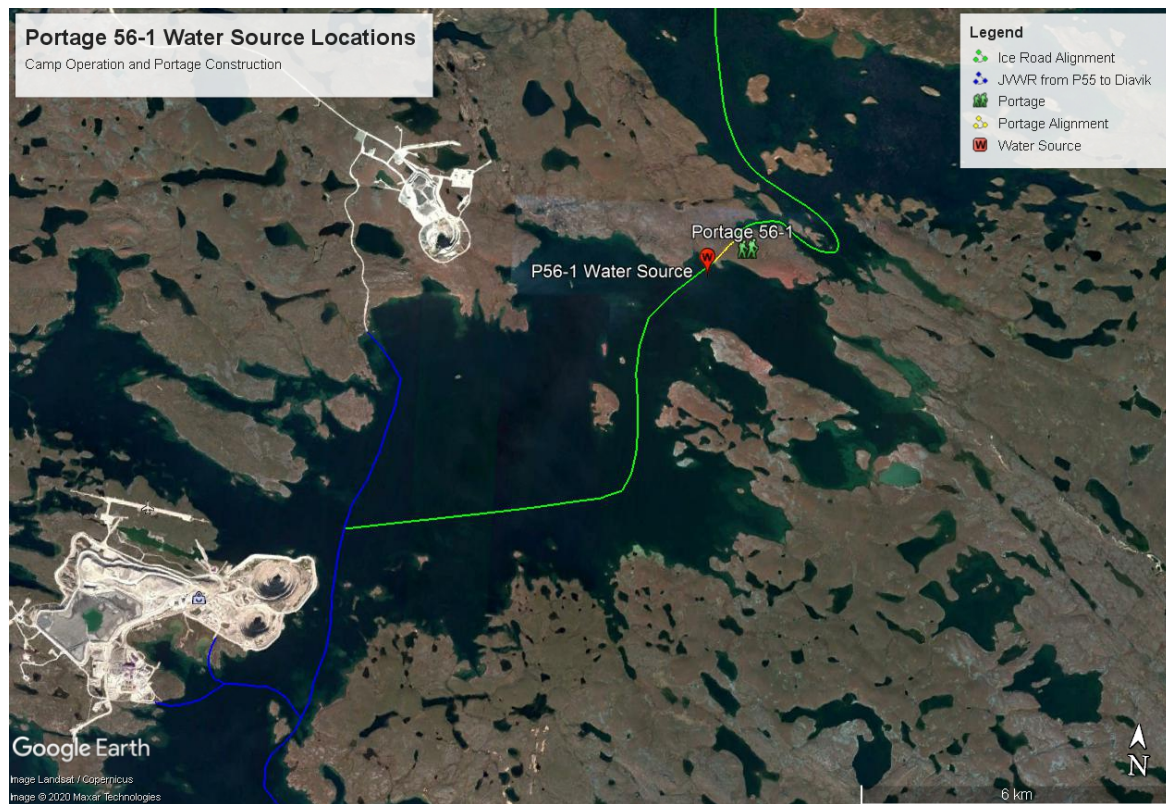


Figure 2-1: P56-1 Water Source Location



Figure 2-2 P56-2 to P58-1 Water Source Locations

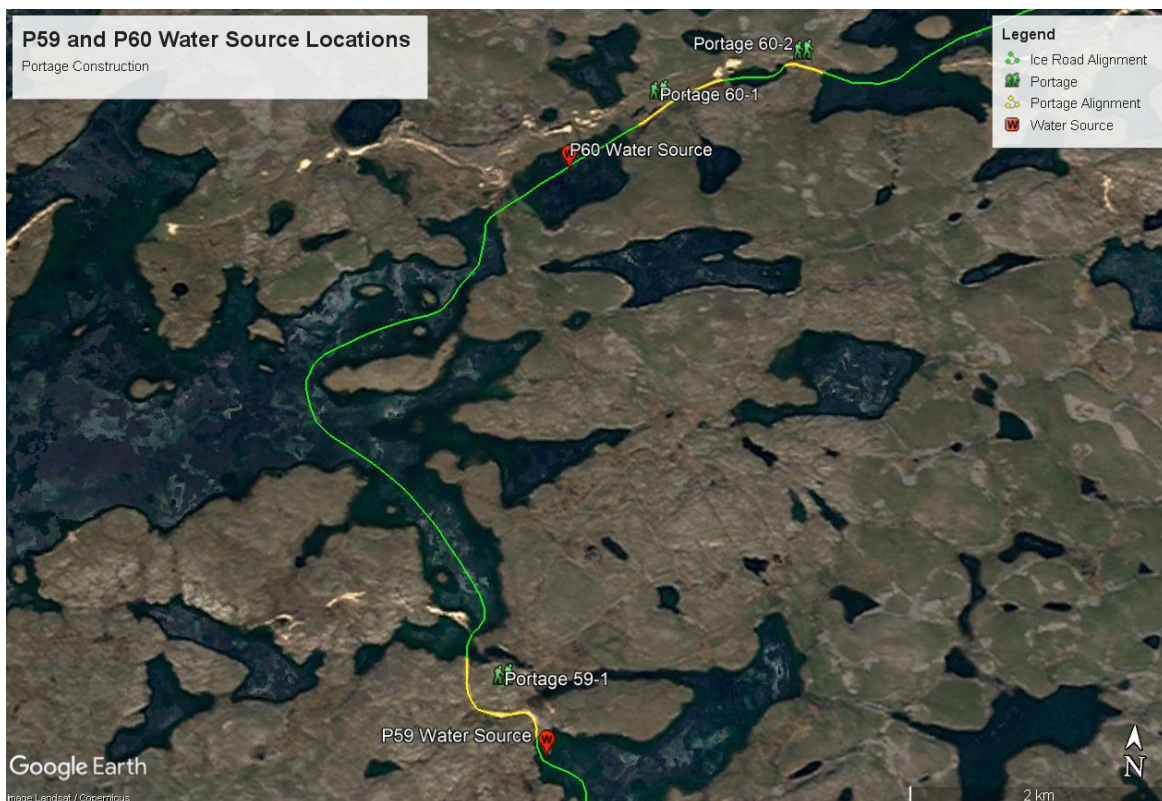


Figure 2-3: P59 and P60 Water Source Locations

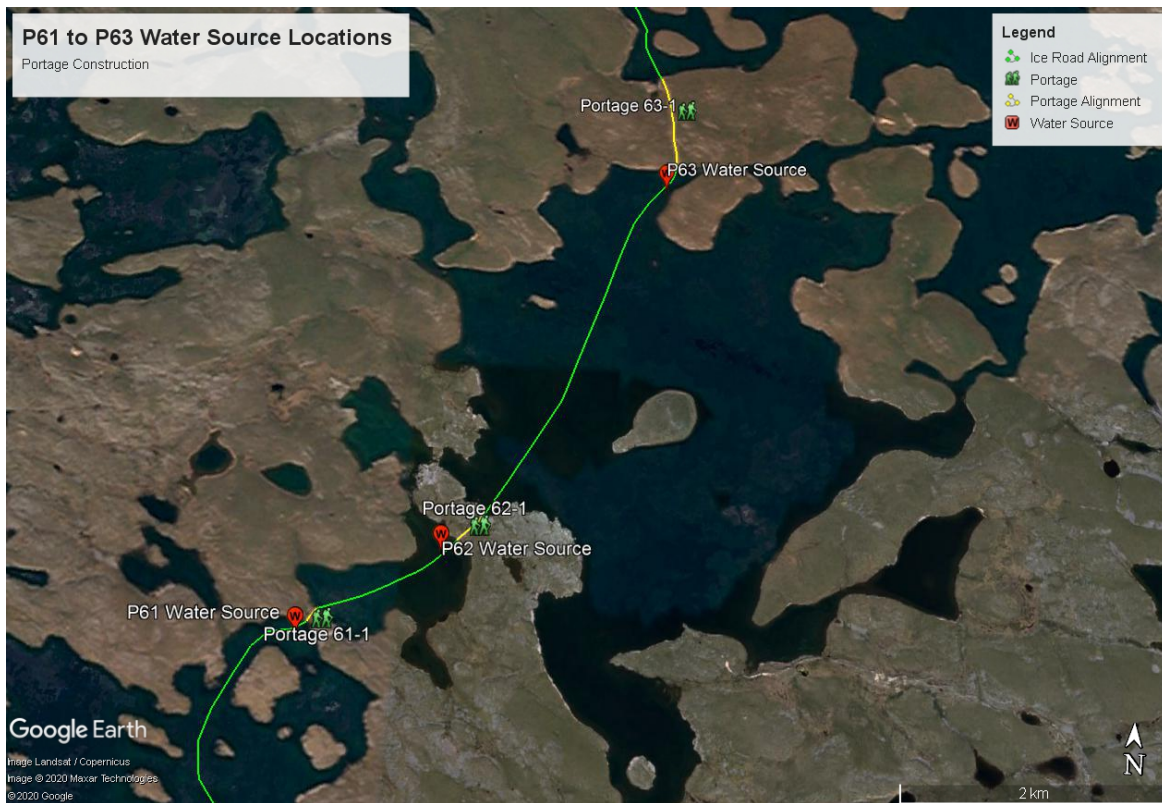


Figure 2-4: P61 to P63 Water Source Locations

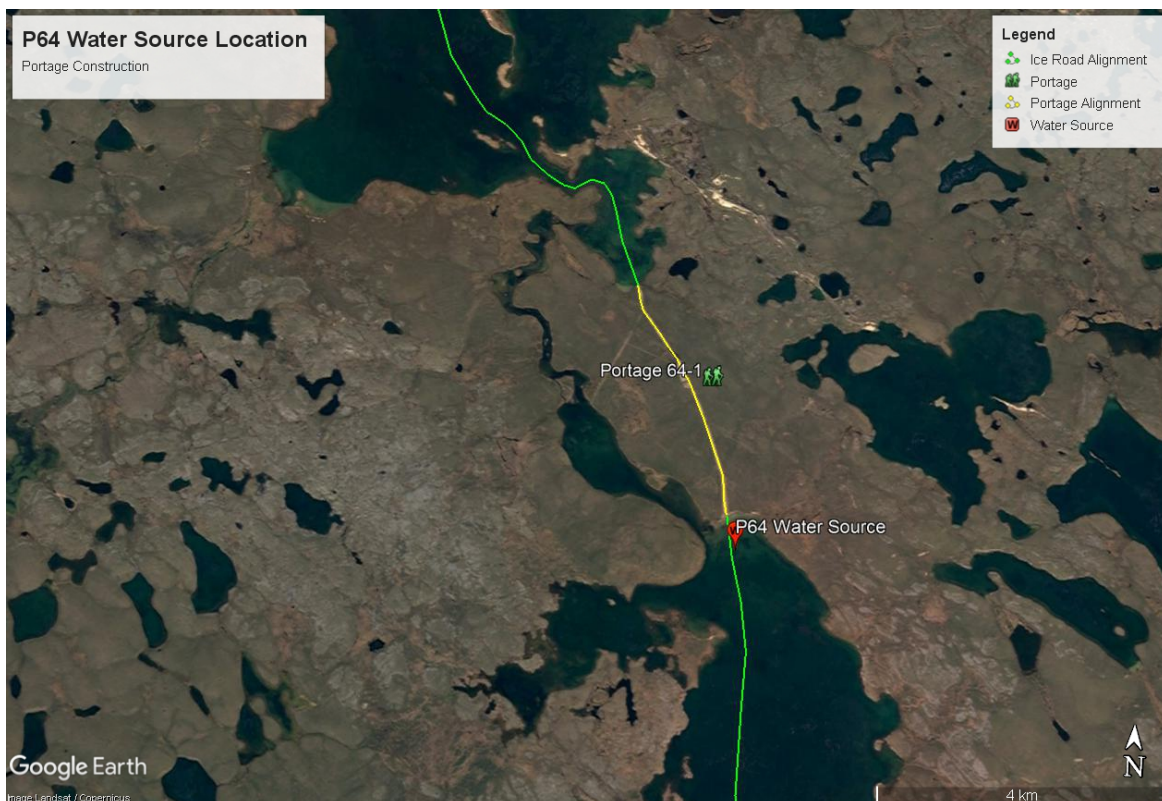


Figure 2-5: P64 Water Source Location

3. MAP OF LAND USE ACTIVITIES

Figure 3-1 displays the overall alignment of the Lupin ice road route from the JVWR near Diavik to the Lupin Mine site.



Figure 3-1: Lupin Mine Ice Road 2020 Alignment

Figures 3-2 and 3-3 display the Portage 55 (P55) temporary camp location that was used following inspector approval along with the backfilled sump and fuel storage areas.

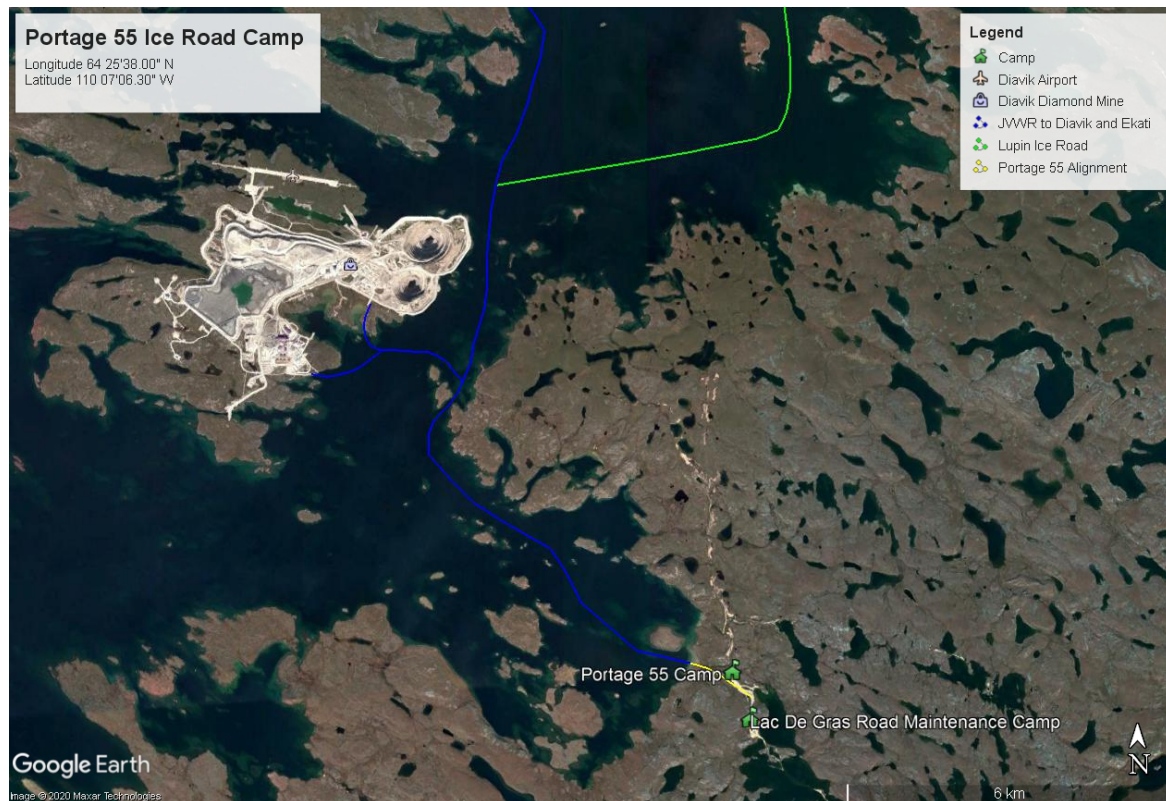


Figure 3-2: Portage 55 Camp



Figure 3-3: Portage 55 Lupin Mine Ice Road Camp Sump and Fuel Locations

Table 3-1 provides the coordinates for all land use activity conducted by Nahanni. Land use activities included the staging and operation of a temporary ice road camp at Portage 55 (P55) and the construction of portages along the Lupin Mine ice road alignment. The coordinates provided for portages are at approximately the center point of each portage. **Figures 3-4 to 3-8** have been provided as map sheets to show the alignment of the Lupin Mine ice road over portages and lakes from P55 to the Lupin Mine site. Land use activities commenced on February 8th, 2020 and were concluded on March 25th, 2020 at the end of the site mobilization program.

Table 3-1: Lupin Mine Ice Road 2020 Alignment

Location	Longitude	Latitude
Portage 55	64° 25' 35.10"N	110° 07' 00.00"W
Camp Location	64° 25'38.0"N	110° 07'06.30"W
Backfilled Sump	64° 25'38.31"N	110° 07'06.96"W
Fuel Storage	64° 25'37.38"N	110° 07'05.41"W
Portage 56-1	64° 33'44.40"N	110° 03'46.10"W
Portage 56-2	64° 40'11.00"N	110° 05'36.40"W
Portage 57-1	64° 42'57.30"N	110° 08'08.50"W
Portage 57-2	64° 44'12.78"N	110° 06'32.62"W
Portage 58-1	64° 45'39.40"N	110° 06'33.50"W
Portage 59-1	64° 47'55.80"N	110° 05'19.84"W
Portage 60-1	64° 50'38.40"N	110° 03'51.97"W
Portage 60-2	64° 50'49.09"N	110° 02'32.80"W
Portage 61-1	64° 54'36.76"N	109° 51'08.80"W
Portage 62-1	64° 55'00.50"N	109° 49'39.00"W
Portage 63-1	64° 56'54.14"N	109° 47'48.03"W
Portage 64-1	65° 12'43.19"N	109° 44'00.45"W

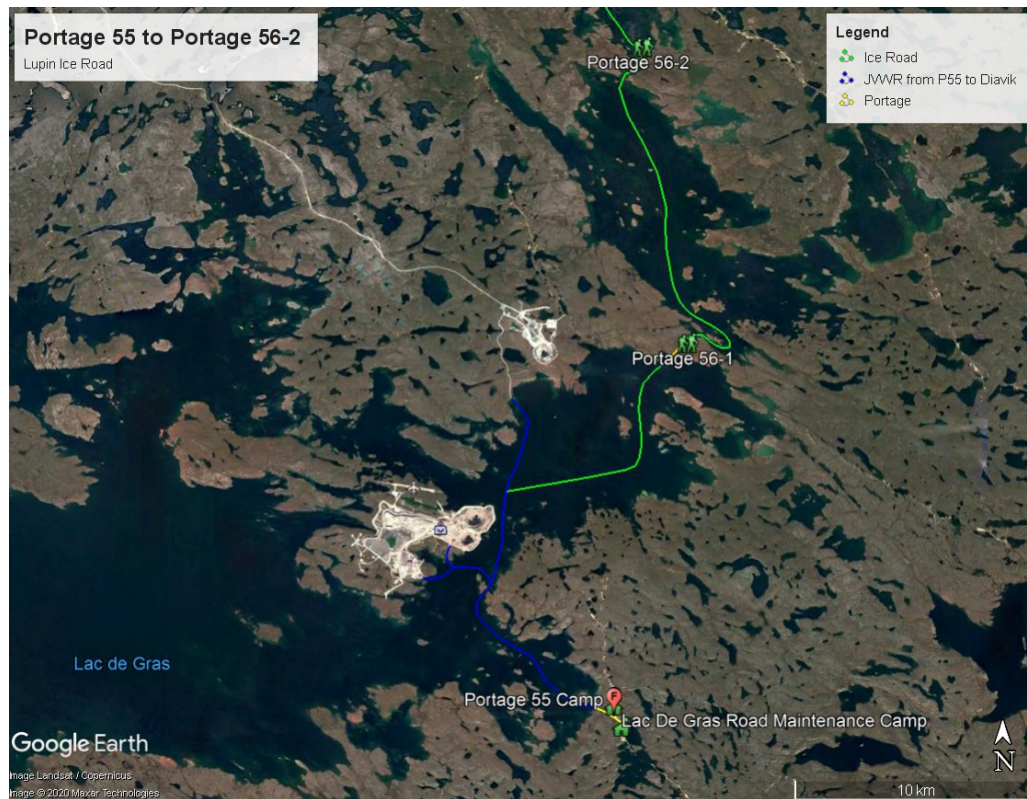


Figure 3-4: Portage 55 to Portage 56-2

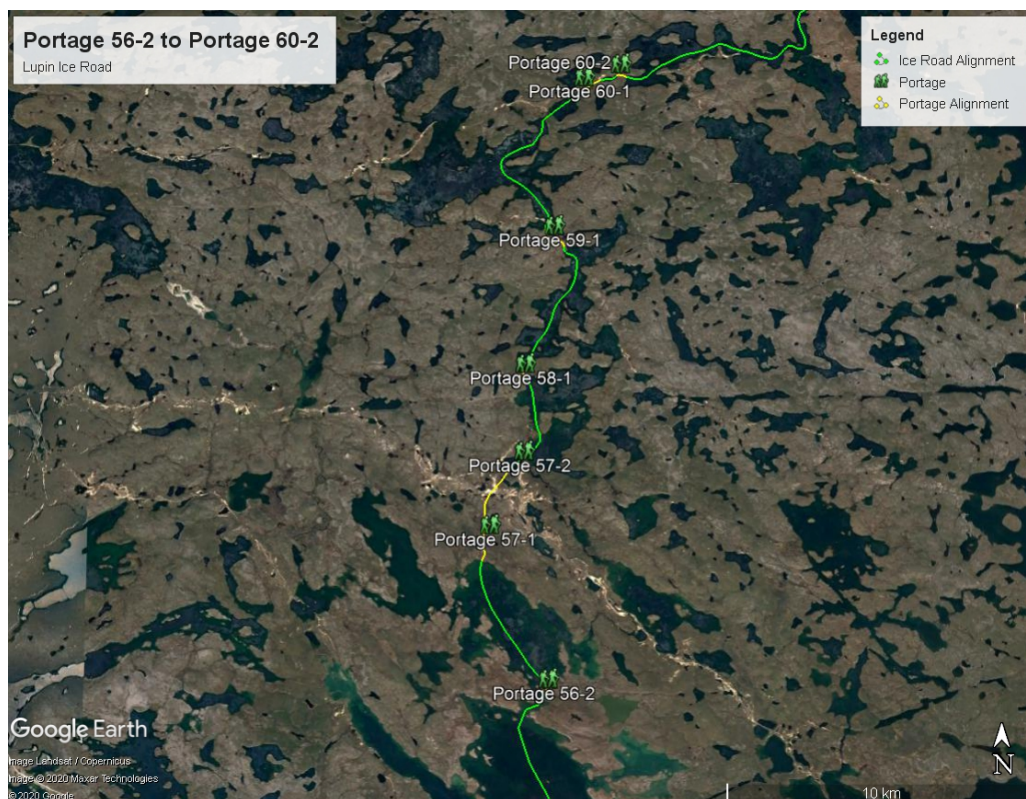


Figure 3-5: Portage 56-2 to Portage 60-2

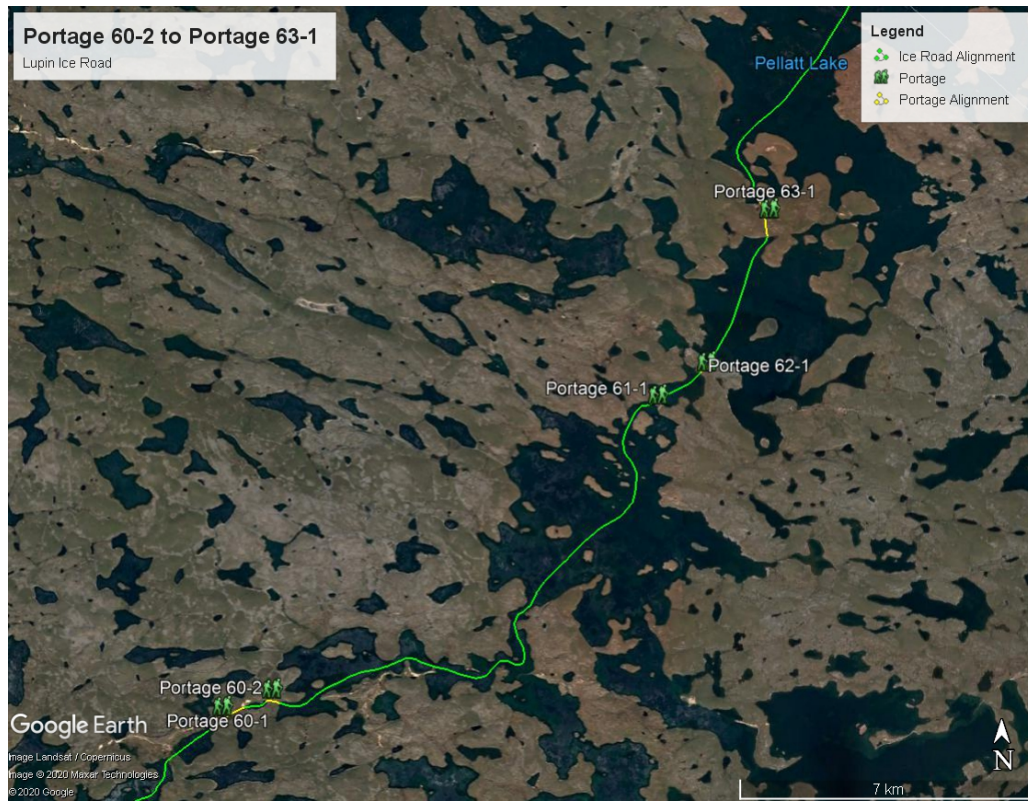


Figure 3-6: Portage 60-2 to Portage 63-1

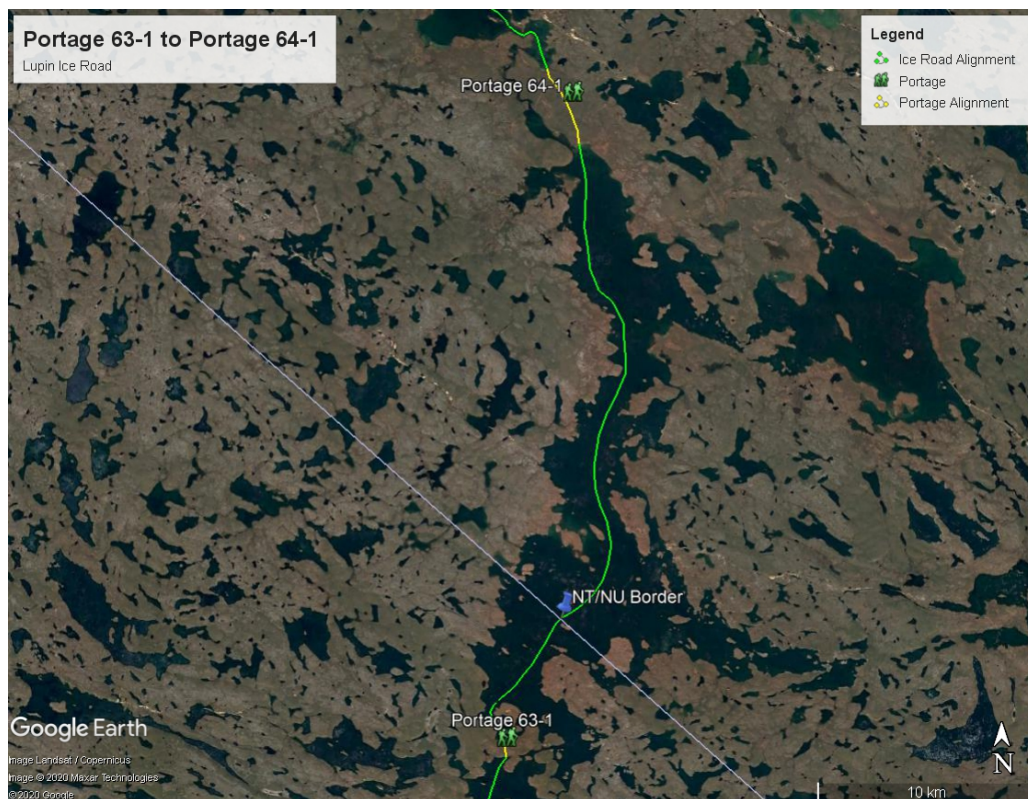


Figure 3-7: Portage 63-1 to Portage 64-1



Figure 3-8 Portage 64-1 to Lupin Mine

4. LOG OF ENCOUNTERS WITH LAND USERS

Location	Number of People Encountered	Activity Being Undertaken	Date & Time	Mitigation Measures or Adaptive Management Undertaken to Prevent Disturbance to their Land Use
Contwoyto Lake	2	Hunting	March 3, 2020 11:00AM	Stopped to talk to Hunters and made sure all was well and communicated our work activity to them.
Contwoyto Lake	3	Hunting	March 7, 2020 11:00AM	Stopped to talk to Hunters and made sure all was well and communicated our work activity to them.
Contwoyto Lake	1	Hunting	March 18, 2020 4:00PM	Stopped to talk to Hunters and made sure all was well and communicated our work activity to them.

5. WILDLIFE ENCOUNTERS AND MITIGATIONS SUMMARY

Location	Species	Number of Animals	Animal Activity Observed	Gender & Age of Animals
Contwoyto Lake	Caribou	200+	Eating on Island	Unknown
Contwoyto Lake	Wolves	2	Hunting Caribou	Unknown
Pellatt Lake	Caribou	100+	Eating on Island	Unknown
Pellatt Lake	Wolves	2	Hunting Caribou	Unknown
P55	Wolverine	1	Passed by Camp	Unknown
P55	Caribou	200+	Eating	Unknown
Contwoyto Lake	Ptarmigan	20+	Flying	Unknown
Pellatt Lake	Ptarmigan	20+	Flying	Unknown
P55	Ptarmigan	20+	Walking	Unknown

5.1 Cease-Work Orders Required as a Result of Proximity to Caribou or any Other Wildlife

No cease-work orders were required as a result of the proximity to caribou or any other wildlife during the construction of the 2020 Lupin Mine Winter Access Project.

5.2 Mitigation Actions Undertaken and Analysis of their Effectiveness

No mitigations actions were necessary during the construction of the 2020 Lupin Mine Winter Access Project. All employees received a site orientation that included wildlife awareness training prior to engaging in the road construction activities. Everyone had the responsibility to report wildlife activity and have an understanding that construction activity could not occur within 200m of caribou or muskox. This was not a concern for the 2020 Lupin Mine ice road construction.

6. ENCOUNTERED HERITAGE SITES

No heritage sites were encountered during the construction of the 2020 Lupin Mine Winter Access Project.

7. LOCAL AND INUIT HIRES

Nahanni did not have the opportunity to hire local unit for the 2020 Lupin Mine ice road construction activities. The concern with COVID-19 spread into northern aboriginal communities impacted our ability to staff the project with rotations from the communities.

8. SITE PHOTOS



Figure 8-1: Ice Thickness Verification



Figure 8-2: Haglund



Figure 8-3: Establishing Ice Road Alignment after Profiling



Figure 8-4: 160M Grader Plowing Ice Road Alignment



Figure 8-5: 950H Loader with Plow



Figure 8-6: Grader Tire Change



Figure 8-7: Ice Road Equipment Repair



Figure 8-8: Contwoyto Lake



Figure 8-9: Service Truck



Figure 8-10: Drifting following the Storm



Figure 8-11: Plowing Alignment After Storm



Figure 8-12: Push After the Storm



Figure 8-13: Lac du Sauvage



Figure 8-14: Arrived at Lupin Mine



Figure 8-15: Lupin Mine Site



Figure 8-16: Camp on the Move to Lupin Mine



Figure 8-17: Ice Road Camp Sleeper Demobilization



Figure 8-18: Ice Road Camp Kitchen Demobilization



Figure 8-19: Preparing Ice Road Camp for Demobilization



Figure 8-20: Water Plow Truck



Figure 8-21: Ice Road Camp Equipment Demobilization



Figure 8-22: Portage 55 Demobilization Activities



Figure 8-23: P55 Trailers Removed



Figure 8-24: Final Loads leaving P55



Figure 8-25: P55 Camp Location after Cleanup



Figure 8-26: P55 Camp Location Cleared



Figure 8-27: Covered 90Sump Area at P55



Figure 8-28: P55 Sump Closure

9. FOLLOWING YEAR WORK PLAN

Nahanni currently has no plan to construct a winter road to the Lupin Mine site in 2021.

10. COMPLIANCE – TERMS AND CONDITIONS OF ALL AUTHORIZATIONS

Nahanni has complied with all terms and conditions set out in the following authorizations:

- MV2019F0026 Type A Land Use Permit, November 19, 2019
- 8BW-LUP1924 NWB License, December 4, 2019

Regular communication was maintained with the inspectors in both territories (NT & NU) prior to and during all activities. The following notifications were made in accordance with the requirements:

- 48-hour notification to inspectors prior to land-use operations
- 48-hour notification of ice road superintendents and contact information
- 10-day notification of establishment of a fuel cache at Portage 55
- Notification to inspectors of seasonal shut down, demobilization and site clean up

11. MANAGEMENT PLANS

No updates to the existing management plans are required at this time. Management plans associated with the LUP and WUL include:

- Community Engagement Plan, September 26, 2019
- Spill Contingency Plan, September 26, 2019
- Waste Management Plan, September 26, 2019

12. UNAUTHORIZED DISCHARGES & FOLLOW-UP ACTION

No unauthorized discharges were required during the construction of the 2020 Lupin Mine Winter Access Project.