



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee		Licensee Representative	
Lupin Mines Inc		Karyn Lewis	
Licence No. / Expiry		Representative's Title	
2AM-LUP2032		Project Manager	
Land / Other Authorizations		Land / Other Authorizations	
Date of Inspection		Inspector	
2020 July 2		Baba Pedersen	
Activities Inspected			
☒ Camp	☐ Drilling	☐ Mining	☐ Construction
☐ Roads/Hauling	☐ Other:	☒ Other: Mine Reclamation	☐ Reclamation
☐ Fuel Storage			

Conditions:	A - Acceptable	C - Concern	U - Unacceptable	NA – Not Applicable	NI – Not Inspected
Water Use	Condition	Comment	Site Conditions	Condition	Comment
Intake/Screen	A	5	Water Management Structures		
Flow Measure. Device	A	5	Culverts / Bridges		
Source:			Drainage	A	2
Water Use:	A	5	Erosion / Sediment		
Recirculation (y /n)			Mitigation Measures	C	3
			Reclamation Activities	A	
			Materials Storage	A	2
Waste Disposal			Signage		7
Waste Water	A	1			
Solid Waste	A	2	Monitoring		
Hazardous Waste			Sample Collection / Analysis		1
Food Waste	A	4			
*The number in the comments field will correspond with specific comments provided below.					
Samples taken by Inspector:		Location(s):			
☐ Yes ☒ No					

SECTION 1	☒ Comments (s. __)	☐ Non-Compliance with Act or Licence (s. __)	☐ Action Required (s. __)
On Thursday July 2, 2020 I, Baba Pedersen, Resource Management and Water Resources Officer with Crown-Indigenous Relations and Northern Affairs Canada, the Writer of this Report, did Inspect the holder (Lupin Mines Incorporated) of Water Licence number 2AM-LUP2032 issued for the Reclamation of the Lupin Mine Site located at approximately N 65*46' and W 111*14'in the Kitikmeot Region of the Territory of Nunavut (Photos 1 and 2). Upon arrival to the site, the writer was accompanied by Gord Peckford, Mine Manager of the Lupin Mine Site for Nahanni Construction Ltd and John Franklin Kaodluak, CIRNAC Contracted Bear Monitor. The purpose of the Inspection was the following: 1. To Inspect Terms and Conditions pertaining to the Water Licence stated above and additionally to ensure that the Licensee is abiding by named Terms and Conditions within the Licence Permit. 2. To follow up on the Progress Made by Nahanni/LMI as per their Reclamation Security Release Request. THIS REPORT IS PERTAINING TO ITEM 1. Due to the ongoing global Covid-19 Pandemic situation, this was a very unique Inspection process. The writer flew in to the site on an Air Charter, which is the only accessible means of travel to and from the mine site during the summer months. Recommended health guidelines including social distancing in response to the pandemic were respected the entire time the writer was on the ground at the Lupin Site. John Franklin Kaoudluak and the writer followed Gord Peckford around the site using their own ATV's while Gord was using his company's truck. At NO Time did any named parties including the 2 Pilots of the Charter Flight come into contact with anyone working at the Lupin Site.			
SECTION 2	☒ Comments	☐ Non-Compliance with Act or Licence	☐ Action Required
The Mine Site Reclamation Project is now in full operation. There are approximately up to 84 people on site at any time. The following was observed by the writer: 1. The Sewage Lagoon (Photo 3) is within volume limits as it still has more than 1 meter of Freeboard. The writer was informed that the content of the Lagoon has been Sampled recently and LMI is awaiting the Lab Results. 2. The Temporary Land Fill Storage Area (Photos 4 through 8) is comprised of only Non-Hazardous Materials and there was no visible Run-off into any bodies of water or streams. 3. LMI Mitigation Measures for Dust Control is by the use of a Truck (as seen in Photo 9) watering all Roads. During very strong winds (Photos 10 and 11) windblown dust has the potential of traveling long distances, hence the use of a water truck is needed to minimize the risk of windblown dust.			



4. Incineration of Camp Food Waste (Photo 12) is done daily with a large Incinerator.
5. Potable Water is taken from the Contwoyto Lake Intake (Photos 13 and 14). LMI has recently emailed the writer a copy of Water Consumption Records showing they are well within allowable limits.
6. LMI has verbally told the writer that they and their Contractor, Nahanni, may try and complete the planned 2 year project in 1 year only.
7. The writer gave Nahanni verbal instructions to ensure all Signage for Sample Stations were In-Place before the writer's next scheduled Inspection.

SECTION 3	☐ Comments	☐ Non-Compliance with Act or Licence	☒ Action Required
1. Sewage Lagoon Sample Results from the Lab MUST be provided to the writer for approval prior to Decanting. 2. The Temporary Landfill Storage Area is in an acceptable state. The writer walked the entire area and the perimeter and found no major concerns. 3. LMI MUST pay constant attention to Dust Control Mitigation Measures in order to minimize the effects of windblown dust getting into any Bodies of Water. 4. The writer has no concerns with the Incineration of Camp Food Waste. 5. The writer has no concerns with Potable Water retrieval or Consumption Levels. 6. LMI MUST inform the Nunavut Water Board IN WRITING if there are to be any changes in the Approved Project Schedule. 7. Where required, Sample Station Signage is to be Repaired or Replaced prior to the next scheduled Inspection.			

Licensee or Representative	Inspector's Name
	Baba Pedersen
Signature	Signature
	Signed Original on File
Date	Date
	2020 July 15

Office Use Only: Follow-up report to be issued by Inspector ☐ Yes ☒ No

cc. CIRNAC, Manager Field Operations, Iqaluit, justin.hack@canada.ca

Nunavut Water Board, Manager of Licensing, Gjoa Haven, licensing@nwb-oen.ca



PHOTO LOG

Date	Camera	Inspector	Authorization
2020 July 2	Sony DSC-HX50V	Baba Pedersen	2AM-LUP2032
Photo Log # DSC05582		Location	

Photo 1



Description: Lupin Mine Site Photo taken on arrival on July 2, 2020

Photo Log # DSC05644	Location
----------------------	----------

Photo 2



Description: Lupin Mine Site



Photo Log # DSC05656

Location

Photo 3



Description: Sewage Lagoon

Photo Log # DSC05680

Location

Photo 4



Description: Temporary Storage of Demolished Debris – View 1



Photo Log # DSC05685

Location

Photo 5



Description: Temporary Storage of Demolished Debris – View 2

Photo Log # DSC05694

Location

Photo 6



Description: Temporary Storage of Demolished Debris – View 3



Photo Log # DSC05705

Location

Photo 7



Description: Temporary Storage of Demolished Debris – View 4

Photo Log # DSC05708

Location

Photo 8



Description: Temporary Storage of Demolished Debris – View 5



Photo Log # DSC05733

Location

Photo 9



Description: Truck Watering Road

Photo Log # DSC05637

Location

Photo 10



Description: Wind Blown Sand Dust – View 1



Photo Log # DSC05825

Location

Photo 11



Description: Wind Blown Sand Dust – View 2

Photo Log # DSC05735

Location

Photo 12



Description: Incinerator for Camp Food Waste



Photo Log # DSC05791

Location

Photo 13



Description: Water Intake – View 1

Photo Log # DSC05792

Location

Photo 14



Description: Water Intake – View 2



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee		Licensee Representative	
Lupin Mines Inc		Karyn Lewis	
Licence No. / Expiry		Representative's Title	
		Project Manager	
Land / Other Authorizations		Land / Other Authorizations	
2AM-LUP2032			
Date of Inspection		Inspector	
2020 August 27		Baba Pedersen	
Activities Inspected			
☐ Camp	☐ Drilling	☐ Mining	☐ Construction
☐ Roads/Hauling	☐ Other:	☒ Other: Reclamation Security	☐ Reclamation
☐ Fuel Storage			

Conditions:		A - Acceptable		C - Concern		U - Unacceptable		NA – Not Applicable		NI – Not Inspected	
Water Use		Condition	Comment	Site Conditions		Condition	Comment	Haz/Mat Management		Condition	Comment
Intake/Screen				Water Management Structures				Storage		A	
Flow Measure. Device		A		Culverts / Bridges				Spills			
Source:				Drainage		A		Spill Plan			
Water Use:		A		Erosion / Sediment							
Recirculation (y / n)				Mitigation Measures		A		Administrative			
				Reclamation Activities		A	All	Records		A	
				Materials Storage		A		Reports			
Waste Disposal				Signage				Plans			
Waste Water		A						Notifications		A	
Solid Waste		A		Monitoring				Other			
Hazardous Waste		A		Sample Collection / Analysis		A					
<i>*The number in the comments field will correspond with specific comments provided below.</i>											
Samples taken by Inspector:				Location(s):							
☐ Yes ☒ No											

SECTION 1	☒ Comments (s. __)	☐ Non-Compliance with Act or Licence (s. __)	☐ Action Required (s. __)
On Thursday August 27, 2020 I, Baba Pedersen, Resource Management and Water Resources Officer with Crown-Indigenous Relations and Northern Affairs Canada, the Writer of this Report, did inspect the holder (Lupin Mines Incorporated) of Water Licence number 2AM-LUP2032 issued for the Reclamation of the Lupin Mine Site located at approximately N 65°46' and W 111°14' in the Kitikmeot Region of the Territory of Nunavut. Upon arrival to the site, the Inspector was accompanied by Gord Peckford, Mine Manager of the Lupin Mine Site for Nahanni Construction Ltd and John Franklin Kaodluak, CIRNAC Contracted Bear Monitor. The purpose of the Inspection was the following: 1. To inspect Terms and Conditions pertaining to the Water Licence stated above and additionally to ensure that the Licensee is abiding by named Terms and Conditions within the Licence Permit. 2. To follow up on the Progress Made by Nahanni/LMI as per their Reclamation Security Release Request. Due to the ongoing global Covid-19 Pandemic situation, this was a very unique Inspection process. The Inspector flew in to the site on an Air Charter, which is the only accessible means of travel to and from the mine site during the summer months. Recommended health guidelines including social distancing in response to the pandemic were respected the entire time the Inspector was on the ground at the Lupin Site. John Franklin Kaodluak and the Inspector followed Gord Peckford around the site using their own ATV's while Gord was using his company's truck. At NO Time did any named parties including the 2 Pilots of the Charter Flight come into contact with anyone working at the Lupin Site.			
SECTION 2	☒ Comments	☐ Non-Compliance with Act or Licence	☐ Action Required
The following is a list of Specific Locations that were observed during this Inspection; 1 The Third Party Berm (Photos 1 & 2) This area contains <u>Waste Oils</u> and <u>Waste Fuels</u> that were accumulated during the Decontamination of all Facilities on Site. Nahanni has provided a detailed Inventory List of these previously. This area also contains a small amount of Drummed Fuel belonging to other parties. All contents of the 3rd Party Berm will be removed from Site during the Back Haul via Ice Road at Project Completion 2 The Main Tank Farm (Photos 3, 4 & 5) The following <u>Tanks</u> in the Main Tank Farm have been <u>Cleaned, Dismantled and Placed in the Land Fill</u>; <u>M-01, M-05, M-06, M-07, M-08, M-09, M-10, M-11, M-12 and M-13.</u> The <u>Pipeline</u> associated with the above Tanks on the <u>West Side</u> of the Tank Farm have also been <u>Cleaned, Dismantled and Placed in the Land Fill</u> Tanks M-02, M-03 & M-04 are Still Standing in the Main Tank Farm and contain an approximate combined <u>1.4 Million Liters of Fuel.</u> The <u>Pipeline</u> associated with the above Tanks on the <u>East Side</u> of the Tank Farm <u>Remains in Place</u>			



Tanks M-16, M-17, M-18, M-19, M-20, M-21 and M-22 have been Cleaned and Decommissioned, but remain Standing

The Main Pump Shack Remains in Place within the Tank Farm

Pump Station #1, Pump Station #2 and all associated Pipeline located just Outside the East Side of the Tank Farm have all been Cleaned, Dismantled and Placed in the Land Fill

3 The JET-A Tank Farm (Photo 6)

The M-14 Tank has been Cleaned, Dismantled and Placed in the Land Fill including it's associated Pipeline

The M-15 Tank is Still Standing and contains approximately 382,000 Ltrs of Jet-A Fuel, it,s associated Pipeline and Pump Station Remains in Place.

4 Cold Storage Building #1 (Photo 7)

Is the Left Hand (North) Side of the 2 Buildings

This Building is still Standing and scheduled to be Demolished in 2021

5 Cold Storage Building #2 (Photo 8)

Is the Right Hand (South) Side of the 2 Buildings

This Building is still Standing and scheduled to be Demolished in 2021

6 #19 Batch Plant, aka Paste Plant (Photo 9)

All Debris has been removed and placed in the Land Fill

The Concrete Foundation Remains in place

7 #11 the Mill (Photos 10 & 11)

All Debris has been removed and placed in the Land Fill.

The Concrete Foundation, some Large Concrete Blocks and a Trench in the Concrete Foundation remain in place. The Trench is filled with water that requires draining.

8 #15 Carpenter Shop (Photo 12)

All Debris has been removed and placed in the Land Fill

The Concrete Foundation Remains in place

9 #8 Travel Ways (Photo 13)

All Debris has been removed and placed in the Land Fill

10 #8 Hoist Room (Photo 14)

All Debris has been removed and placed in the Land Fill

11 #10 Warehouse (Photo 15)

All Debris has been removed and placed in the Land Fill

12 #12 Power House (Photo 16)

All Debris has been removed and placed in the Land Fill

This area has been covered in Sand

13 #17 Emergency Power House (Photo 17)

All Debris has been removed and placed in the Land Fill

This area has been covered in Sand and only a Pile of Large Rocks remain

14 Shaft Hole (Photo 18)

All Debris has been removed and placed in the Land Fill

This area has been covered with large Metal Beams and Plates which are covered in Sand and 2 large Concrete Blocks

15 #8 Surface Shop (Yellow Garage) (Photo 19)

This building remains Standing and in use.

As per Gord Peckford, this is 1 of 2 Buildings that will remain standing for at least 5 years

16 #16 Fire House (Photo 20)

All Debris has been removed and placed in the Land Fill

This area has been covered in Sand

17 Office/Administration Building (Photo 21)

This Building is still Standing and scheduled to be Demolished in 2021

18 The 500/600/700/800 Dorm Complexes (Photo 22)

These Buildings are still Standing and scheduled to be Demolished in 2021

19 Generator Building for the 1300 Dorm (Photo 23)

This Building is still Standing and scheduled to be Demolished in 2021

20 The 1300 Dorm Complex (Photo 24)

This Building is still Standing and scheduled to be Demolished in 2021

21 #4 The 900/1000/1100/1200 Dorm Complexes (Photo 25)

All Debris has been removed and placed in the Land Fill

This area has been covered with a Gravel Pad

22 Log Guest House (Photo 26)

This building remains Standing and in use.

As per Gord Peckford, this is 1 of 2 Buildings that will remain standing for at least 5 years

23 Water Line (Photo 27)

The Water Line has been removed from the Pump House at Contwoyto Lake up to the Log Guest House (approximately 90% of Line).

All Debris has been removed and placed in the Land Fill

24 Lower Sewage Lagoon (Photo 28)

The Decant Program in the Lower Sewage Lagoon is almost complete with only 1 or 2 days left. The levels are the lowest I have ever seen with an estimated 4 meters of Freeboard. After completion, they will then start Decanting the Upper Sewage Lagoon into the Lower Section



25 Burn Pit Area (Photo 29)

The Burn Pit area is located on an old Historic Dump Site. Nahanni just recently completed a 3 Day Burn Program. Golder is digging a few Test Pits to see how far down the Historic Dump goes.
This whole area will be excavated and put into the Land Fill in 2021, then the area will be Capped and Covered
I walked around the Perimeter of the Burn Pit and could not find any visible Run-off

26 Land Fill (Photos 30 & 31)

The Land Fill area is actively being used and filled up. I walked and viewed the area from the Bottom, Middle Level and the Top. Nahanni is compacting the material as they go by “Track Packing” with the Excavator and Bulldozer
The Debris is piled in Lifts/Layers that are between 4 and 5 meters thick
They have put a 2 meter layer of Gravel as an Intermediate Fill between the Lifts/Layers of Debris
The Final Cover of Gravel will be a minimum of 2 meters thick when completed
The completed Land Fill will have a 4 to 1 Slope down towards the Lower Sewage Lagoon

27 Asbestos Burial Pit (Photo 32)

All Asbestos has already been cleaned up and Buried under the Land Fill Area and covered with 3 meters of Gravel
Approximate location is under the large brown box in the center of the picture
Nahanni has provided a detailed Inventory List of this previously

28 Tailings Line (Photo 33)

The Tailings Line has been 100% removed. It ran from the Mill Building out to Cell 5 along the side of the road
All Debris has been removed and placed in the Land Fill

29 Water Pump House at Contwoyto Lake (Photo 34)

The Building has been Demolished and all Debris has been removed and placed in the Land Fill
The Concrete Foundation remains with 2 large sheets of Metal covering a Hole with “Do Not Remove – Open Hole” Spray Painted on the Metal Sheets

SECTION 3

☐ Comments

☐ Non-Compliance with Act or Licence

☒ Action Required

While on the ground at the Lupin site, Mr. Peckford was informed that the purpose of this Inspection is to verify that the demolition work claimed to having been completed actually has been completed. For those that do make any decisions regarding Reclamation Security, this Inspection Report is one of many tools that the deciding authorities will use to make their decisions. The Inspector stresses this fact to anyone reading this report as well. At this time, the Inspector is satisfied that all Demolition Work claimed to have been completed by the Contractor at the Lupin Site, has been completed as stated.

Licensee or Representative	Inspector's Name
	Baba Pedersen
Signature	Signature
	Signed Original on File
Date	Date
	2020 September 9

Office Use Only: Follow-up report to be issued by Inspector

☐ Yes ☒ No

cc. CIRNAC, Manager Field Operations, Iqaluit, justin.hack@canada.ca

Nunavut Water Board, Manager of Licensing, Gjoa Haven, licensing@nwb-oen.ca



PHOTO LOG

Date	Camera	Inspector	Authorization
2020 August 27	Sony DSC-HX50V	Baba Pedersen	2AM-LUP2032
Photo Log # DSC06503			
Photo 1			
			
Description: 3 rd Party Berm, aka Third Party Drum Storage, View 1			
Photo Log # DSC06504			
Photo 2			
			
Description: 3 rd Party Berm, aka Third Party Drum Storage, View 2			



Photo Log # DSC06507

Photo 3



Description: Main Tank Farm – View 1

Photo Log # DSC06520

Photo 4



Description: Main Tank Farm – View 2



Photo Log # DSC06542

Photo 5



Description: Main Tank Farm – View 3 – Showing Pump Shack

Photo Log # DSC06537

Photo 6



Description: Jet-A Tank Farm



Photo Log # DSC06562

Photo 7



Description: Cold Storage Building #1 – On Left Side

Photo Log # DSC06561

Photo 8



Description: Cold Storage Building #2, aka #20 ATV Building



Photo Log # DSC06568

Photo 9



Description: #19 Batch Plant, aka Paste Plant – Concrete Foundation Remains – All Debris Removed and Placed into the Land Fill

Photo Log # DSC06570

Photo 10



Description: #11 Mill, View 1 – Large Concrete Blocks in Top Right of Photo to be Removed – All other Debris Removed into Land Fill



Photo Log # DSC06571

Photo 11



Description: #11 Mill, View 2 – Trench requires Draining and Cover Material

Photo Log # DSC06573

Photo 12



Description: #15 Carpenter Shop – Concrete Foundation Remains – All Debris has been Removed and Placed into the Land Fill



Photo Log # DSC06574

Photo 13



Description: #8 Travel Ways – All Debris has been Removed and Placed into the Land Fill

Photo Log # DSC06577

Photo 14



Description: #8 Hoist Room – All Debris has been Removed and Placed into the Land Fill



Photo Log # DSC06579

Photo 15



Description: #10 Warehouse – Foreground - All Debris has been Removed and Placed into the Land Fill

Photo Log # DSC06582

Photo 16



Description: #12 Power House – Foreground – All Debris has been Removed and Placed into the Land Fill



Photo Log # DSC06586

Photo 17



Description: #17 Emergency Power House – All Debris has been Removed and Placed into the Land Fill

Photo Log # DSC06590

Photo 18



Description: Shaft Hole – All Debris Removed and Placed into the Land Fill



Photo Log # DSC06595

Photo 19



Description: #8 Surface Shop (Yellow Garage) – 1 of 2 Buildings that will remain for at least 5 years

Photo Log # DSC06597

Photo 20



Description: #16 Fire House – Dark Sand Area in Foreground – All Debris has been Removed and Placed into the Land Fill



Photo Log # DSC06598

Photo 21



Description: Office/Administration Building - Building on Left Side

Photo Log # DSC06604

Photo 22



Description: 500/600/700/800 Dorm Complexes - Two 2-Storey Buildings in Background with Brown Roofs



Photo Log # DSC06599

Photo 23



Description: Generator Building for 1300 Dorm – Building on Right with 2 White Fuel Tanks

Photo Log # DSC06602

Photo 24



Description: 1300 Dorm Complex – White Building



Photo Log # DSC06610

Photo 25



Description: #4 900/1000/1100/1200 Dorm Complexes – All Debris Removed and placed into the Landfill

Photo Log # DSC06613

Photo 26



Description: Log Guest House – This is 1 of 2 Buildings that will remain for at least 5 years



Photo Log # DSC06617

Photo 27



Description: Water Line – From here all the way down to Contwoyto Lake in the Background – ALL Debris Removed into the Land Fill

Photo Log # DSC06650

Photo 28



Description: Lower Sewage Lagoon



Photo Log # DSC06675

Photo 29



Description: Burn Pit Area – Entire Area yet to be Excavated, Capped and Covered

Photo Log # DSC06704

Photo 30



Description: Land Fill – Bottom View



Photo Log # DSC06737

Photo 31



Description: Land Fill – Top View

Photo Log # DSC06714

Photo 32



Description: Asbestos Burial Pit– Approximate Location is under the large Brown Box in the Center of the Picture

