



Department of Energy, Mines & Resources  
PO Box 2703, Whitehorse, Yukon Y1A 2C6



July 19, 2018

File No: LQ00492

Metallic Minerals Corp.  
Box 31215  
Whitehorse, YT  
Y1A 5P7

Dear Sir/Madam:

**Re: Class 4 Quartz Mining Land Use Approval**

Your application for a Class 4 approval has been approved and is subject to the attached conditions.

A security deposit is a condition of this Class 4 approval and will be determined following a confirmed cost assessment and analysis of the proposed work plan submitted by operator.

In response to a letter, sent by Mineral Resources Branch (MRB) on June 25, 2018, requesting initial security and outlining security collection options, Metallic Minerals Corp. selected a progressive security collection approach. As such, initial security will be based on a detailed work plan for the first operating season. This information shall be submitted to the Chief of Mining Lands at least 30 days prior to the commencement of work.

In each year to follow, the security requirement will be reviewed and adjusted according to additional activities proposed for the season and reclamation completed in the previous season. To facilitate this assessment, please ensure that pre-season and post-season reports are provided. Not providing reports may result in additional security being required.

The effective date of this approval will be July 19, 2018 however, until security is provided, no work or undertakings that have been identified to require financial security may be undertaken.

To be clear, financial security is required for any work conducted on the new road access proposed, upgrading of existing road access proposed and the proposed clearings. Also, an Access Management and Reclamation Plan shall be submitted to the Chief for review and approval prior to the construction of new access or alteration of existing access at site.

The effective date of this approval will be July 19, 2018. All work, including restoration, must be completed by July 18, 2023, and inspected before full security and/or completion certificates can be applied for.

The attached 'Operational Guidelines' offer additional mitigations that would enable you to maximize the environmental performance of your program, but are not approval conditions.

Please feel free to contact our office at (867) 996-2256 should you have any questions.

Regards,

A handwritten signature in blue ink, appearing to read 'R. Savard', written over a light blue rectangular background.

Robert Savard  
A/Chief, Mining Land Use

cc: EMR Natural Resources Officer, Compliance Monitoring and Inspections  
ENV Environmental Affairs, Environmental Protection Branch



**MINING LANDS  
MINERAL RESOURCES BRANCH  
GOVERNMENT OF YUKON**

Pursuant to the *Quartz Mining Act* and *Quartz Mining Land Use Regulation*, the Chief, Mining Land Use hereby grants a Class 4 approval to:

Metallic Minerals Corp.  
Box 31215

APPROVAL NUMBER:	LQ00492
PROPERTY NAME:	Keno-Silver
UNDERTAKING:	Quartz
CLASS:	Class 4 Approval
EFFECTIVE DATE:	July 19, 2018
EXPIRY DATE:	July 18, 2023

This approval shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Quartz Mining Act* and the *Quartz Mining Land Use Regulation* made there under as proposed in Mining Land Use Application LQ00492.

Dated this July 19, 2018

A handwritten signature in blue ink, appearing to read "Robert Savard", written over a horizontal line.

Robert Savard  
A/Chief, Mining Land Use

**MINING LAND USE  
APPROVAL  
Class 4**

<b>SCOPE OF APPROVAL:</b>			
Claim Status Report (Appendix A)		LQ00492	
Operating Season	April 15 – November 1	Keno-Silver	
<b>PROJECT ACTIVITIES (ON-CLAIM):</b>			
<b>USE OF VEHICLES/EQUIPMENT</b>			
Use of vehicles on existing roads or trails			<input type="radio"/> No <input checked="" type="radio"/> Yes
Gross vehicle weight	On-roads: >40t	On-trails: >20t	
Off-road use of vehicles in summer			<input checked="" type="radio"/> No <input type="radio"/> Yes
Off-road use of vehicles in winter			<input checked="" type="radio"/> No <input type="radio"/> Yes
<b>NEW &amp; EXISTING ACCESS</b>			
Upgrading of existing access	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 30 km	Width: 15 m
New roads	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 20 km	Width: 15 m
New trails	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 30 km	Width: 15 m
New temporary trails	<input checked="" type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
Other new access:			
<b>LINES &amp; CORRIDORS</b>			
Lines	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 20 km	Width: 1.5 m
Corridors	<input checked="" type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
<b>SITE PREPARATION</b>			
Number of clearings per claim: 20		Area: 20 m x 20 m = 400m <sup>2</sup>	
Number of clearings for helicopter pads and camps: 1 Camp		Area: 625 m <sup>2</sup>	
Removal of the vegetative mat = 25,650m <sup>2</sup>			<input type="radio"/> No <input checked="" type="radio"/> Yes
<b>EXPLORATION TRENCHING &amp; BULK SAMPLING</b>			
Hand-dug			<input type="radio"/> No <input checked="" type="radio"/> Yes
Mechanized			<input type="radio"/> No <input checked="" type="radio"/> Yes
Number: 450	Length: 35 m	Width: 2.5 m	Depth: 2.5 m
			Total volume: 100 000 m <sup>3</sup>
Bulk sampling		<input type="radio"/> No <input checked="" type="radio"/> Yes	Amount/year: 1000 tonnes
Explosives		<input type="radio"/> No <input checked="" type="radio"/> Yes	Total amount: 1000 kg
			Max. in 30 days: 1000 kg
<b>EXPLORATION DRILLING</b>			
TYPE	NUMBER OF HOLES	DEPTH (m)	
Reverse Circulation	200	50,000 m	
Diamond	350	50,000 m	
Rotary Air Blast	500	50,000m	

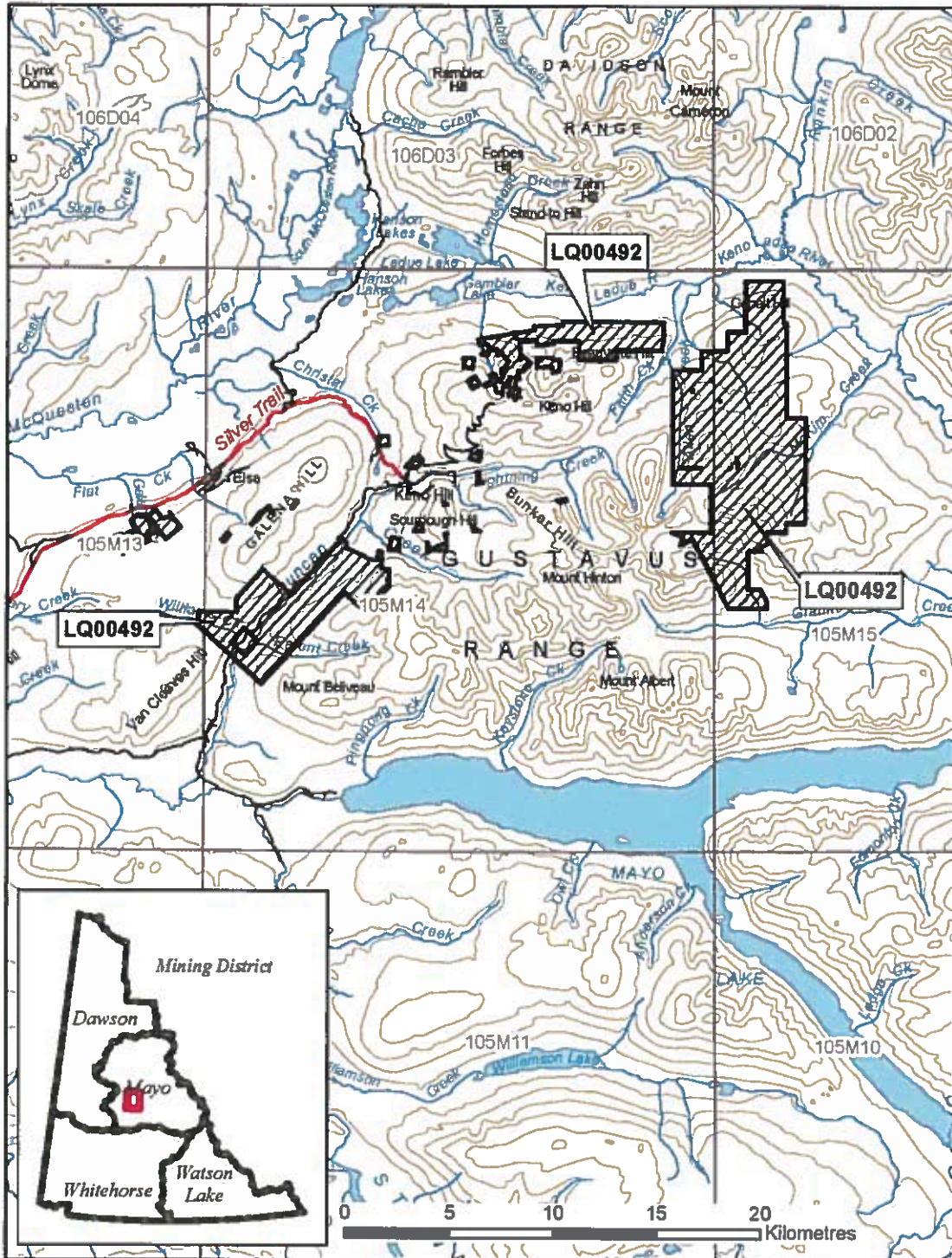
**MINING LAND USE  
APPROVAL  
Class 4**

<b>FUEL STORAGE</b>		
<b>FUEL TYPE</b>	<b>STORAGE TYPE &amp; CAPACITY</b>	<b>TOTAL VOLUME</b>
Gasoline	220L Drums	2 200L
Diesel	220L Drums	2 220L
Jet A/B	220L Drums	2 220L
Diesel	Double-walled tank	10 000L
<b>FACILITIES &amp; STRUCTURES</b>		
Camp structures: 10 framed wall-tent structures		
Number of persons in camp at any one time: 30	Number of person days: 3000	
Construction of underground structures		<input checked="" type="radio"/> No <input type="radio"/> Yes
Amount per year: 0	Amount per program:0	

All other applicable legislation, regulations, laws, by-laws and ordinances must be complied with. Additional authorizations or approvals may be required. Any doubt as to whether an additional authorization or approval is required should be verified by a duly authorized official at the appropriate government body or bodies.

MINING LAND USE  
APPROVAL  
Class 4

LQ00492  
Keno-Silver  
Metallic Minerals Corp.



**MINING LAND USE  
APPROVAL  
Class 4**

**DEFINITIONS**

“**Act**” means the *Quartz Mining Act*, S.Y. 2003, c.14;

“**Access road**” means a road that provides access to a public highway or to a private road;

“**Adverse effects**” of an exploration program means its adverse environmental or socio-economic effects and any adverse effects it may have on the existing or asserted aboriginal or treaty rights of any First Nation;

“**Chief**” means the Chief of Mining Land Use designated pursuant to the Act;

“**Clearing**” means an area that is cleared of trees, brush or vegetative mat for the purpose of establishing a campsite or carrying out mining exploration, but does not include an area cleared for the purpose of establishing a corridor or trail;

“**Corridor**” means a path from which trees and brush have been cut to accommodate a water line, fuel line or power line;

“**Effective date**” means the date this Approval comes into force as evidenced by the date of the signature of the Chief;

“**Exploration program**” means any activity or group of activities undertaken for the sole or principal purpose of assessing land for its suitability for the production of minerals;

“**Foundation**” means the part of a structure that penetrates the ground and supports the structure;

“**Isolated road**” means a road that does not provide access to a public highway directly or through a private road;

“**Inspector**” means an inspector designated pursuant to the Act;

“**Line**” means a line cut for the purpose of carrying out a geophysical, geological, or engineering survey;

“**Low ground pressure vehicle**” means a vehicle that applies 35 kPa of pressure or less to the ground surface;

“**Operator**” means a person who is engaging in an exploration program, or in development or production;

“**Person-day**” in respect of the use of a campsite, means the use of the campsite by one person during a period of 24 hours;

“**Response**” means a notice given by the Chief that indicates whether or not an exploration program may be carried out or that extends the time for the Chief’s review of a Notification or operating plan;

“**Road**” means a pathway for vehicular traffic the construction of which requires the movement of rock or earth;

“**Site**” means the area bounded by the sum of the mineral claims described above under ‘Scope of Approval’;

“**Summer**” means the period of a year that is not winter;

“**Trail**” means an access to a site within a claim or lease that is constructed with little or no movement of rock or earth; and

“**Trenching**” means excavation carried out on a mineral claim for the purpose of obtaining geological information;

“**Upgrading**”, in relation to a road, means re-establishing a road that has not been useable for more than five years by vehicles of a type the road was originally designed to serve, modifying a road to provide usability for vehicles that are of a different type than those for which the road was originally designed to serve and any other upgrading or modifying of a road, other than for maintenance or erosion control;

“**Vegetative mat**” means the organic surface of soil, characterized by the accumulation of organic matter, or partly decomposed organic matter, derived mainly from leaves, twigs, and woody materials, and includes the root mass of living vegetation;

“**Winter**” means the period of the year during which (a) the ground is frozen sufficiently to support a vehicle, other than a low ground pressure vehicle, without rutting or gouging of the surface; and (b) there is a sufficient amount of snow on the ground to produce a packed base of 10 cm.

## **PART ONE – GENERAL REQUIREMENTS**

### **Duration of Approval**

- 1.0 This approval is valid upon signature of the Chief until the expiry date. In the event that claims lapse, or that agreements to operate on claims are dissolved, the approval becomes null and void for that portion of the operating plan, where there is no right to the minerals.

### **Compliance with Operating Conditions**

- 1.1 All mineral exploration activities must comply with the Operating Conditions contained in Schedule 1 of the *Quartz Mining Land Use Regulation* and within the approval. Where there is a difference between the operating conditions and approval, the terms of this approval shall prevail. These Operating Conditions are enforceable.

### **Reporting Requirements**

#### **Contact Information**

- 1.2 Submissions and reports to the Chief should be made to both the following addresses:

Chief, Mining Land Use  
Box 2703, K-9  
Whitehorse, Yukon  
Y1A 2C6

Mining Lands Officer  
Box 10, K-MA  
Mayo, YT Y0B 1G0  
mayo.mining@gov.yk.ca

- 1.3 The contact for the Operator will be:

Metallic Minerals Corp.  
Box 31215  
Sue Craig  
sue.craig@metallic-minerals.com  
(6040 629-7800)

### **Pre-season and Post-season Reporting**

- 1.4 A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
- 1.5 A report shall be submitted at the end of each mining season indicating exploration activities completed during that season. This report shall include but is not limited to:
- detailed mapping of all areas worked;
  - location of new construction;
  - new areas of disturbance;
  - map data, in the form of SHP files or GIS compatible, of all new roads and trails;
  - map data, in the form of SHP files or GIS compatible, of all reclaimed roads and trails;
  - areas of permafrost encountered;
  - total disturbed area;
  - pre-activity survey results, if applicable;
  - reclamation activities; and



- documentation produced by environmental monitors.
- 1.6 The operator shall contact the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343 at least 14 days prior to commencing the field season.
  - 1.7 The operator shall contact the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343 at least 14 days prior to leaving the site at the end of the operation.

### **Spill Reporting**

- 1.8 All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343.
- 1.9 An operator who takes an emergency remedial measure shall, as soon as possible but not later than 10 days after taking it, send a written report to the Chief describing the duration, nature and extent of the emergency and the measures taken to respond to it.

### **Heritage Reporting**

- 1.10 All paleontological resources uncovered during operations shall be reported to the Yukon Paleontology Program, Government of Yukon in Whitehorse at (867) 667-8089 or (867) 667-5386 and the Chief.
- 1.11 All archaeological resources uncovered during operations shall be reported to the Yukon Archaeology Program, Government of Yukon in Whitehorse at (867) 667-3771 or (867) 667-5386 and the Chief.
- 1.12 The report(s) developed for Section(s) 2.20-2.21, shall be submitted to Government of Yukon – Mining Lands, Mineral Resources Branch and the Heritage Resources Unit, Cultural Services Branch.

### **Wildlife Reporting**

- 1.13 All incidents with wildlife shall be reported to the District Conservation Officer in Mayo (Northern Tutchone Region) at (867) 996-2247.

## **PART TWO – PROJECT SPECIFIC OPERATING CONDITIONS**

### **Schedule 1 Operating Conditions (Appendix B)**

The operator is bound by the Schedule 1 Operating Conditions per the *Quartz Mining Land Use Regulation*. In addition to the Schedule 1 Operating Conditions, the operator must also comply with the following terms and conditions:

#### **Erosion Control and Permafrost**

- 2.0 The operator shall insulate the ground surface beneath all temporary structures and temporary facilities used in the project where permafrost is present to:
- a) prevent any vegetation from being removed; and
  - b) prevent the ground from settling or eroding.

#### **Trenching**

- 2.1 Open trenches shall be sloped at one end to avoid entrapment of wildlife.
- 2.2 The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

#### **Solid Waste**

- 2.3 The operator shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife, until properly disposed of in accordance with the *Solid Waste Regulations*.
- 2.4 When burning kitchen waste on site it must be burned regularly to reduce odours that might attract wildlife and be burned to ash by forced air or fuel fired incineration.

#### **Petroleum Fuel and Hazardous Substances**

- 2.5 The operator shall, with indelible marker or paint, clearly identify the owner, the contents and the date on fuel drums to establish and manage ownership and responsibility.
- 2.6 All fuel cache(s) must be protected with an earthen berm and flagged to prevent spills resulting from accidental contact with heavy equipment. Flags should be visible above the snow pack.
- 2.7 The location of any spills shall be clearly marked with stakes or flags.

#### **Drilling**

- 2.8 The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

#### **Roads/Trails Construction and Upgrading**

- 2.9 Reclamation and/or decommissioning of roads and trails shall be progressive in nature and shall be documented annually in the post-season report. Reclamation and/or

decommissioning of roads and trails shall occur as soon as roads and trails are no longer needed for exploration activities unless the need is documented in the post and pre-season reports. The status of roads and trails (i.e. active or inactive) and ongoing/completed reclamation activities shall be reported to the Chief, Mining Land Use annually via post-season reports.

- 2.10 An Access Management and Reclamation Plan shall be submitted to the Chief for review and approval 90 days prior to the construction of new access or alteration of existing access. The Chief may require any additional information that they consider necessary. The approved plan will be incorporated as a condition of approval LQ00492.
- 2.11 The Access Management and Reclamation Plan shall detail the locations of existing and proposed roads; road construction and upgrading; operating procedures; maintenance; water, dust and erosion management; and final decommissioning and reclamation.
- 2.12 The operator shall submit, as a part of their annual post-season report, detailed maps and information regarding all reclaimed and new access development and upgrading of existing access annually.

#### **Bulk Sampling**

- 2.13 The proponent shall expedite the removal of bulk samples from the property.
- 2.14 Bulk samples stored on site shall be located at least 30 m from any water body.
- 2.15 Bulk samples shall be stored on an impermeable liner and in a fashion that poses no acid rock drainage/metal leaching risk, until removed from the property.

#### **Unmanned Aerial Vehicle**

- 2.16 The proponent shall maintain a minimum lateral distance of 150m between wildlife and Unmanned aerial vehicle.

#### **Wildlife**

- 2.17 The Proponent shall carry out all phases of the project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying or taking their nests or eggs.

#### **Vehicles**

- 2.18 Equipment shall be cleaned of foreign soil and plant material prior to moving it into the project property.

#### **Invasive Species**

- 2.19 Employees shall be familiarized with all invasive plants listed on the Yukon Invasive Species Council website (<https://www.yukoninvasives.com/plants.html>) and the presence of invasive plant species on the project property shall be reported to Government of Yukon at [invasives@gov.yk.ca](mailto:invasives@gov.yk.ca).

### **Heritage**

- 2.20 A Heritage Resources Overview Assessment shall be completed in advance of ground disturbing activities. Areas with elevated potential for the presence of archaeological or historic sites shall be avoided until a heritage resources impact assessment can be completed.
- 2.21 A Heritage Resources Impact Assessment shall be completed in advance of ground disturbing activities in the areas with elevated potential for the presence of archaeological or historic sites.
- 2.22 Upon discovery of a heritage resource, the Proponent shall notify the First Nation of Na-Cho Nyak Dun, in addition to Government of Yukon, Chief of Mining Land Use.

### **Public Communication**

- 2.23 Public notices shall be posted in Keno City to communicate project activities that are overlapping with hiking trails and wildlife viewing areas.

### **Security**

- 2.24 Security will be determined by the Chief based on the amount of new access and clearings proposed (20 km roads) and (25,650 m<sup>2</sup> total clearings where the vegetative mat is removed) and upgrading of existing access (30 km).
- 2.25 Security will be paid by the Operator within thirty (30) days of issuance of approval LQ00492, unless otherwise notified in writing by the Chief.
- 2.26 Adjustments to the initial security, provided in Section 2.24, may be required at any time by the Chief.
- 2.27 Any change to the security requirements as a result of sections 2.26 shall become a term of this Approval and the operator must furnish security within thirty (30) days of receiving the written notice from the Chief of the requirement to post additional security.
- 2.28 Security will be returned as per Section 139 of the *Quartz Mining Act* and section 18 of the *Quartz Mining Land Use Regulation*.

### **PART THREE – RECLAMATION AND/OR DECOMMISSIONING**

- 3.0 Reclamation and/or decommissioning shall be progressive in nature where possible and will occur prior to the expiry of the exploration program or prior to the expiry of this approval, whichever comes first, according to standards outlined in the operating conditions, unless otherwise specified by the Chief.
- 3.1 Debris, equipment, fuel barrels, scrap metal and other waste at the work site shall be completely disposed of, so as not to attract wildlife, by removal to an authorized disposal site at the cessation of the exploration program.
- 3.2 Structures must be removed and the site restored at the end of the exploration program or prior to the expiry of this approval, whichever comes first, to a level of utility comparable to its previous level of utility.
- 3.3 If an amendment to this approval or new approval is granted, for the claims within the scope of this approval (Appendix A), all outstanding reclamation continues to be the responsibility of the operator.

### **PART FOUR – OTHER MATTERS**

- 4.0 Security may be required at any time by the Chief.
- 4.1 Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.
- 4.2 Attached (Appendix C) are the commitments that form part of this operating plan.



# LQ00492 Appendix A Claim Status Report

20 June 2018

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s	Grouping	Permit
Aho 1 - 17	YC57784 - YC57800	2024/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
Aho 18 - 20	YC67501 - YC67503	2024/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
Blanche	YC00365	2024/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
BLANCO	12882	2028/01/13	Metallic Minerals Corp.	100.00	105M14 L		LQ00492
BROOK	59337	2022/08/03	Metallic Minerals Corp.	100.00	105M14 L		LQ00492
CARIBBEAN	59245	2022/08/03	Metallic Minerals Corp.	100.00	105M14 L		LQ00492
CIMARRON	59246	2024/04/27	Metallic Minerals Corp.	100.00	105M14 L		LQ00492
P Ft	YF52105	2022/09/29	Metallic Minerals Corp.	100.00	105M13	HM03239	LQ00492
Gram 1 - 24	YC52446 - YC52469	2020/11/01	Metallic Minerals Corp.	100.00	105M14, 105M15		LQ00492
Gram 25 - 42	YC68104 - YC68121	2020/11/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
HORN-SILVER	59334	2024/12/01	Metallic Minerals Corp.	100.00	105M14 L		LQ00492
Isabel	59029	2021/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
Isabel 2	62326	2021/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
Isabel 3 - 4	62993 - 62994	2021/12/01	Metallic Minerals Corp.	100.00	105M14	F	LQ00492
Jack 1 - 8	YB03908 - YB03915	2022/10/09	Metallic Minerals Corp.	100.00	105M13	HM03239	LQ00492
John 1 - 11	YB03897 - YB03907	2022/10/09	Metallic Minerals Corp.	100.00	105M13	HM03239	LQ00492
P Livi 1 - 11	YE55981 - YE55991	2021/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
P Livi 12 - 211	YF57312 - YF57511	2021/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
P Livi 212 - 227	YE10712 - YE10727	2021/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
P Livi 236 - 239	YE10736 - YE10739	2021/12/01	Metallic Minerals Corp.	100.00	105M15		LQ00492
Louis 1 - 28	YF46473 - YF46500	2024/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
M 41 - 44	YE41541 - YE41544	2021/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
M 53 - 72	YE41553 - YE41572	2021/12/01	Metallic Minerals Corp.	100.00	105M14, 105M15		LQ00492
M 75 - 88	YE41575 - YE41588	2021/12/01	Metallic Minerals Corp.	100.00	105M15, 105M14		LQ00492
M Fr. 45 - 51	YE41545 - YE41551	2021/12/01	Metallic Minerals Corp.	100.00	105M14 F		LQ00492

Total claims selected : 588

Right column indicator legend:  
 R - Indicates the claim is on one or more pending renewal(s).  
 P - Indicates the claim is pending.

Right column indicator legend:  
 L - Indicates the Quartz Lease.  
 F - Indicates Full Quartz fraction (25+ acres)  
 P - Indicates Partial Quartz fraction (<25 acres)

D - Indicates Placer Discovery  
 C - Indicates Placer Codiscovery  
 B - Indicates Placer Fraction



# Claim Status Report

20 June 2018

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NIS #'s	Grouping	Permit
P Mac Fr.	YF52107	2022/09/29	Metallic Minerals Corp.	100.00	105M14	P HIM03243	LQ00492
P MMG 3 - 4	YE55803 - YE55804	2022/12/22	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 5	YE55805	2018/12/22	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 6	YE55806	2022/12/22	Metallic Minerals Corp.	100.00	105M14	HM03256	LQ00492
P MMG 7 - 11	YE55807 - YE55811	2022/12/22	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 17	YE55817	2018/12/22	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 19 - 25	YE55819 - YE55825	2018/12/29	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 29	YE55829	2018/12/29	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG 30 - 104	YE55830 - YE55904	2020/01/03	Metallic Minerals Corp.	100.00	105M14	HM03257	LQ00492
P MMG 105 - 153	YE55905 - YE55953	2019/01/03	Metallic Minerals Corp.	100.00	105M14	HM03257	LQ00492
P MMG 154 - 180	YE55954 - YE55980	2022/01/03	Metallic Minerals Corp.	100.00	105M14		LQ00492
P MMG Fr. 1 - 2	YE55801 - YE55802	2022/12/22	Metallic Minerals Corp.	100.00	105M14	P	LQ00492
P MMG Fr. 16	YE55816	2018/12/29	Metallic Minerals Corp.	100.00	105M14	P	LQ00492
P MMG Fr. 18	YE55818	2022/12/29	Metallic Minerals Corp.	100.00	105M14	P	LQ00492
P MMG Fr. 26	YE55826	2018/12/29	Metallic Minerals Corp.	100.00	105M14	F	LQ00492
P MMG Fr. 27 - 28	YE55827 - YE55828	2018/12/29	Metallic Minerals Corp.	100.00	105M14	P	LQ00492
MONTANA	12989	2030/11/30	Metallic Minerals Corp.	100.00	105M14	L	LQ00492
SILVER BASIN # 7 - 8	55466 - 55467	2024/12/01	Metallic Minerals Corp.	100.00	105M14	L	LQ00492
Taf	YC39574	2021/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
P TEACH 1 - 8	YE70944 - YE70951	2021/12/01	Metallic Minerals Corp.	100.00	105M14		LQ00492
P TEACH 9	YE70952	2021/12/01	Metallic Minerals Corp.	100.00	105M14	P	LQ00492
Union	12811	2021/12/01	Metallic Minerals Corp.	99.00	105M14		LQ00492
P Vancouver Fr.	YF52106	2022/09/29	Metallic Minerals Corp.	100.00	105M14	F HIM03243	LQ00492

Criteria(s) used for search:

CLAIM DISTRICT: 1000003 CLAIM STATUS: ACTIVE & PENDING DOCUMENT NUMBER: LQ00492 REGULATION TYPE: QUARTZ

.efi column indicator legend:

R - Indicates the claim is on one or more pending renewal(s).  
P - Indicates the claim is pending.

Right column indicator legend:

L - Indicates the Quartz Lease.  
F - Indicates Full Quartz fraction (25+ acres)  
P - Indicates Partial Quartz fraction (<25 acres)

D - Indicates Placer Discovery  
C - Indicates Placer Codiscovery  
B - Indicates Placer Fraction

Total claims selected : 588

## APPENDIX B

### *Quartz Mining Land Use Regulation*

#### **Schedule 1** **Operating Conditions**

##### **Removal of the Vegetative Mat**

1. If the vegetative mat must be removed to carry out exploration activities, it must be removed so as to protect the seed and root stock contained within the mat and be stored separately from other overburden or bedrock removed for use in re-establishing the vegetative mat when the exploration program ceases.

##### **Re-establishment of the Vegetative Mat**

2. (1) All vegetated areas disturbed by exploration activities, including fuel and waste storage areas, clearings, corridors, temporary trails, camps and supporting infrastructure, and trenches and drill sites, must be left in a condition conducive to re-vegetation by native plant species or other species adaptable to the local environment to encourage re-vegetation comparable to similar, naturally occurring, environments in the area.

(2) Conditions conducive to re-vegetation include provision of adequate soil layer with moisture retaining ability, no soil contamination by hydrocarbons or other hazardous substances, provision of adequate seed or root stock, and contoured or otherwise stable slopes.

3. If adequate seed or root stock is not naturally available, re-seeding or transplanting of vegetation is required. Only non-invasive species may be used for re-seeding or transplanting. Consult with the Mining Inspector prior to seeding.

##### **Erosion Control and Permafrost**

4. All areas disturbed during an exploration program must be re-sloped, contoured or otherwise stabilized to prevent long-term soil erosion, slumping and subsidence.
5. All exploration activities must be carried out to avoid or minimize damage to and loss of permafrost.

##### **Trenching**

6. Trenching carried out by hand or using hand-held tools must be methodical. All trenches must be stabilized and marked to minimize risk to the public.
7. Trenches constructed with mechanized equipment must be back filled by first depositing any removed overburden and bedrock and then replacing the vegetative mat that was removed to construct the trench.



### **Historic Objects and Burial Grounds**

8. Exploration activities must not be carried out within 30m of a known archeological site unless the Chief indicates, in writing, that such activities may be carried out.
9. Any sites containing archeological objects, paleontological objects or human remains or burial sites discovered in the course of carrying out an exploration program must be immediately marked and protected from further disturbance and, as soon as practicable, the discovery reported to the Chief. No further activities may be carried out within 30m of the site until the Chief indicates, in writing, that activities may be resumed.

### **Solid Waste**

10. All solid waste, including debris, equipment, barrels, drums, and scrap metal, must be safely stored on the site of the exploration program while the program is carried out and must be disposed of in accordance with the *Solid Waste Regulation* when the program ceases.
11. Camps must be kept clean and tidy.

### **Petroleum Fuel and Hazardous Substances**

12. If petroleum fuel storage capacity exceeds 4000 L, a secondary containment structure must be constructed. The containment structure must be made of a material impervious to petroleum products and:
  - a) if there is a single storage tank, be of sufficient size to accommodate at least 110% of the capacity of the storage tank; or
  - b) if there is more than one storage tank, be of sufficient size to accommodate 110% of the capacity of the largest storage tank or 10% of the total capacity of all the tanks, whichever is larger.
13. All petroleum products, including waste petroleum products, and any other hazardous substances must be stored in a secure fashion no less than 30m from the ordinary high water mark of any water body.
14. All petroleum products, including waste petroleum products, and any other hazardous substance, must be transferred and handled without spillage.
15. All petroleum products and any other hazardous substances must be removed from the site of the exploration program when the program ceases.
16. All waste petroleum products and any other special waste, as defined in the *Special Waste Regulations*, generated in the course of carrying out the exploration program must be disposed of in accordance with the *Special Waste Regulations* when the program ceases.

### **Spills and Spill Contingency Plans**

17. A spill contingency plan for petroleum products and other hazardous waste must be prepared and posted in the camp and at all fuel handling locations used in carrying out the exploration program.

18. All spill clean-up equipment and material must be maintained in a state of readiness sufficient at all times to contain and clean-up any hazardous material spills.
19. If a spill occurs, the spill contingency plan must be immediately implemented and notice given to the 24-hour Yukon Spill Report Line. As soon as practicable, an inspector must be contacted. Whatever remedial action is required to clean-up the spill and reclaim the affected land and water must be taken.

#### **Use of Vehicles**

20. Vehicles must be maintained and operated to prevent spills of fuel, lubricants, coolants and oil.

#### **Timber and Brush**

21. Cut brush must not be piled so that it blocks movement of wildlife or people.
22. Leaning trees created by cutting of lines, corridors, temporary trails, and clearings must be felled.
23. When it is economically viable to do so, timber suitable for sale must be salvaged and stockpiled.
24. All risk of fire hazard must be avoided.

#### **Drilling**

25. All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
26. Vegetation other than that within a drill sump, must not be covered with drill cuttings.
27. Core must be stored in a stable fashion.
28. Drill mud must be re-circulated when possible.
29. All drill fluids must be contained in a sump.
30. Drill holes that pose a hazard or that lead to ground water must be plugged to prevent flow of water to the surface.
31. The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
32. Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.

### **Roads, Trails, and Off-road Trail Use**

33. All vehicles must be operated to avoid rutting and gouging of roads and trails.
34. Off road and trail routes must be reconnoitered and must be used in a way that minimizes ground disturbance, including damage to permafrost and sensitive wildlife habitat.
35. If rutting, gouging, ponding or permafrost degradation occurs off road or trail, vehicle use must be suspended or relocated to ground that is capable of bearing the weight of the vehicle without causing such damage.
36. Use of skids on permafrost or wet ground is only permitted outside of winter where it is not reasonable to use any other means of transporting equipment.
37. Routes for temporary trails must be reconnoitered and flagged.
38. In addition to any remedial action required in relation to item 2 of this schedule, temporary trails must be blocked to prevent further vehicular access.

### **Release of Sediment**

39. All reasonable care must be taken in carrying out exploration activities near or adjacent to a water body to prevent sediment from entering a water body, unless otherwise permitted by law.

### **Use of Explosives**

40. Explosives must be set off in a manner to minimize impact on wildlife and the public to ensure that forest fires, unplanned landslides, or artificial damming of water bodies does not occur.

### **Waste Rock**

41. Waste rock piles must be located at least 30m from any water body and be physically stable.
42. Waste rock containing sulfides must be returned underground.
43. Access to underground openings must be blocked to prevent access by wildlife and people.

## APPENDIX C

### Proponent Commitments

- Existing disturbed areas will be used whenever possible to minimize creation of additional disturbance.
- Hunting wildlife is strictly prohibited while conducting work for, or on behalf of, Metallic Minerals Corp.
- All disturbance will be documented and reported in annual Post-Season reports.
- MMG is committed to minimize increased disturbance whenever possible utilizing pre-existing disturbed sites and all areas disturbed by MMG will be reclaimed progressively.
- Wildlife always have the right-right-or-way.
- Harassment of wildlife is strictly prohibited.
- Staff will not encourage nuisance wildlife by feeding or interaction and will minimized interaction.
- Every effort shall be made to avoid disturbing wildlife.
- Whenever feasible, MMG will avoid disruption of the vegetative mat.
- Natural or artificial sumps will be immediately adjacent to the drill hole or shared where drill hole proximity allows. Sumps will be filled and recontoured at the completion of drilling. Sumps will be filled and recontoured at the completion of drilling.
- All disturbance that creates open holes (i.e., shafts, adits and/or deep trenches) will be blocked off to prevent entrapment of wildlife.
- All staff will undergo proper Bear-Aware training.
- Temporary bear-fences will be installed to surround pop-up fly camps and will be taken down once work in the local area ceases.
- An electric fence will be installed around the base camp to assist with deterring potential wildlife.
- All interactions or incidents with wildlife will be reported to the Mayo District Conservation Officer.
- All wildlife concerns or potential additional mitigations will be recorded.

- All staff and contractors will be required to take a bear awareness program.
- The proponent will adhere to the Waste Management Plan outlined.
- In the event there is a nuisance bear or bear frequenting the area, staff will be made aware during the daily safety meeting and MMG will inform the local Conservation Officer to take appropriate, recommended measures.
- Waste, including kitchen/food waste, must be managed properly. Proper food storage, handling and disposal of cooking waste will help prevent attracting wildlife. All waste created in the kitchen will be regularly disposed of at a registered landfill.
- Other attractants such as solid waste and (potentially) hazardous waste will be securely stored and transported to a regulated landfill on a regular basis.
- Sightings of wildlife will be recorded by all employees and contractors in provided wildlife sighting sheets, which will be located in the office at camp. Recording this information is important as it allows MMG and other interested parties (including NND FN) in monitoring wildlife and is seasonally reported to YTG Environment for inclusion in the Conservation Data Centre (CDC) database.
- If any of the species listed in Table 3 are observed in an area, they must be reported to the acting project manager, recorded on the Wildlife Observation Form (posted in camp) and the area will subsequently be avoided until/if the animal moves away. If den sites or nests are discovered prior to work activities, these locations must be recorded and avoided until/if they are no longer in use by wildlife. Bird nests/eggs are not to be moved or disturbed. A pre-disturbance nesting-site evaluation must be completed in areas of planned work activity.
- Land disturbance (including but not limited to access building, trenching, pad or clearing construction) will be completed to avoid, whenever possible, the core migratory bird breeding period (May 1st-July 31st). If disturbance must be conducted during this time, a pre-disturbance site evaluation must be completed to ensure no nesting birds (in particular, birds listed under the Migratory Birds Convention Act) will not be disturbed or destroyed. Any nests observed will be recorded, clearly marked at a distance and reported to the on-site Project Manager to ensure that no work is completed in the area. Potential re-routing or postponing work in the area may be required.
- Pre-disturbance site evaluations will be completed to prevent disturbance of migratory bird nest-sites.
- Whenever possible, no surface disturbance will occur during the core migratory bird breeding period.
- All nesting sites observed will be recorded and flagged at a distance to prevent potential disturbance. Nesting site locations will be reported to the on-site Project Manager.

- Pre-activity surveys (look, listen and observe) for Collared Pika will occur prior to conducting disturbance of any kind in an area. If sign of Pika (nest-sites, urine) or Pika are observed, the/their location will be adequately documented, reported to the on-site Project Manager, the area will be flagged out at a distance and activity will not occur in the area until the Pika is no longer present.
- All Pika observations will be annually reported in the Post-Season report which will be provided to YTG Environment and the Yukon Conservation Data Centre.
- All MMG staff - always listen and observe for a minimum of a half-an-hour for Collared Pika prior to conducting disturbance of any kind.
- UAV Flights will not be conducted during birthing or rutting season when the animals are more sensitive to disturbance.
- Drone operator is in visual contact with the drone so can alter flight course if animals are observed.
- Routine helicopter traffic in order to access the claims could be decreased by establishing fly camps in the eastern claim-block.
- No PAG waste rock will be deposited on surface permanently.
- All waste rock will only be deposited at surface (at the edge of trenches) temporarily, before being backfilled into the trench that it originated from.
- Back-filling areas of disturbance as soon as practical will ensure timely rehabilitation.
- Ore removed to surface will be immediately sacked into ore bags (i.e., preventing exposure to weather), thereby reducing risk of acid-rock drainage (ARD) and/or metal leaching.
- Routine geochemical testing of excavated materials.

## Operational Guidelines

### ***Exploration activities***

The Yukon Chamber of Mines has developed an informative Best Management Practices document that should be reviewed in the context of project activities. The Operator should reference the following document when planning and conducting project activities:

- Yukon Mineral and Coal Exploration Best Management Practices and Regulatory Guide ([http://yukonminers.org/wp-content/uploads/2017/06/BMP\\_RG\\_Aug29\\_FINAL\\_WebFile.pdf](http://yukonminers.org/wp-content/uploads/2017/06/BMP_RG_Aug29_FINAL_WebFile.pdf)).

### ***Bears and other wildlife***

To increase worker safety, reduce potential conflicts and prevent unnecessary wildlife mortality, the Operator should implement pertinent components of:

- Guidelines for Industrial Activity in Bear Country for the Mineral Exploration, Placer Mining and Oil & Gas Industries ([http://www.env.gov.yk.ca/publications-maps/documents/Guidelines\\_for\\_Industrial\\_Activity\\_in\\_Bear\\_Country.pdf](http://www.env.gov.yk.ca/publications-maps/documents/Guidelines_for_Industrial_Activity_in_Bear_Country.pdf))
- If an electric fence is an appropriate precaution, or a requirement, the Operator should reference the following comprehensive and highly informative guide: Reducing Wildlife Conflict with Electric Fencing: A Beginner's Guide (<http://www.env.gov.yk.ca/publications-maps/documents/ElectricFencing.pdf>)

### ***Invasive species***

To minimize the risk and consequences of spreading invasive plant species the Operator should:

- Become familiar with the Yukon invasive species and how to manage them by referring to the Yukon Invasive Species Council document, "Why Should I Care About Invasive Species" ([http://yukoninvasives.com/pdf\\_docs/WhyshouldIcare2011\\_sm.pdf](http://yukoninvasives.com/pdf_docs/WhyshouldIcare2011_sm.pdf))

### ***Heritage Resources***

To better understand how to manage potential impacts to heritage resources, the Operator should refer to the following document(s):

- Mineral Exploration Best Management Practices for Heritage Resources ([http://www.tc.gov.yk.ca/pdf/Mineral\\_Exploration\\_BMP\\_for\\_Heritage\\_Resources.pdf](http://www.tc.gov.yk.ca/pdf/Mineral_Exploration_BMP_for_Heritage_Resources.pdf))
- Best Management Practices for Burial Sites and Human Remains in Yukon ([http://www.tc.gov.yk.ca/pdf/BurialSites\\_BMP\\_2014.pdf](http://www.tc.gov.yk.ca/pdf/BurialSites_BMP_2014.pdf))

### ***Work in/near water***

Project activities have the potential to affect water quantity, quality and/or rate of flow. The Operator should provide for the protection of water by applying practices described in:

- Best Management Practices for Works Affecting Water in Yukon ([http://www.env.gov.yk.ca/publications-maps/documents/bestpractes\\_water.pdf](http://www.env.gov.yk.ca/publications-maps/documents/bestpractes_water.pdf)).

### ***Aircraft use***

Project activities are authorized in an area known to be inhabited by sheep and/or caribou. The Operator and/or aircraft pilots should plan flight paths and protocols based on the published guideline(s):

- Flying in Sheep Country: How to Minimize Disturbance from Aircraft ([http://www.env.gov.yk.ca/publications-maps/documents/flying\\_in\\_sheep\\_country.pdf](http://www.env.gov.yk.ca/publications-maps/documents/flying_in_sheep_country.pdf)).
- Flying in Caribou Country: How to Minimize Disturbance from Aircraft ([http://www.env.gov.yk.ca/publications-maps/documents/flying\\_caribou\\_country.pdf](http://www.env.gov.yk.ca/publications-maps/documents/flying_caribou_country.pdf)).