



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



November 13, 2020

File No: LQ00544

Shawn Ryan
P.O. Box 213
Dawson City, YT
Y0B 1G0

Dear Sir/Madam:

Re: Class 3 Quartz Mining Land Use Approval

Your application for a Class 3 approval has been approved and is subject to the attached conditions. The effective date of this approval will be November 13, 2020. All work, including restoration, must be completed by November 12, 2030, and inspected before full security and/or completion certificates can be applied for.

4.0 Security shall be paid by the operator by April 30th, annually, unless otherwise notified in writing by the Chief.

4.1 Any change to the security requirements 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.

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 ensure that pre-season and post-season reports are provided before and after each exploration season. Pre- and post-season reports assist the Mineral Resources Branch in monitoring exploration activity and reclamation. Not providing reports may result in additional security being required.

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 "BML".

Bobbie Milnes
Chief of 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 3 approval to:

Shaun Ryan
PO Box 213
Dawson City, Yukon
Y0B 1G0

APPROVAL NUMBER: LQ00544

PROPERTY NAME: Shanghai

UNDERTAKING: Quartz


CLASS: Class 3 Approval

EFFECTIVE DATE: November 13, 2020 or until a Class 4 approval is issued, whichever comes first.

EXPIRY DATE: November 12, 2030

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.

Dated this November 13, 2020



Bobbie Milnes
Chief of Mining Land Use

**MINING LAND USE
APPROVAL
Class 3**

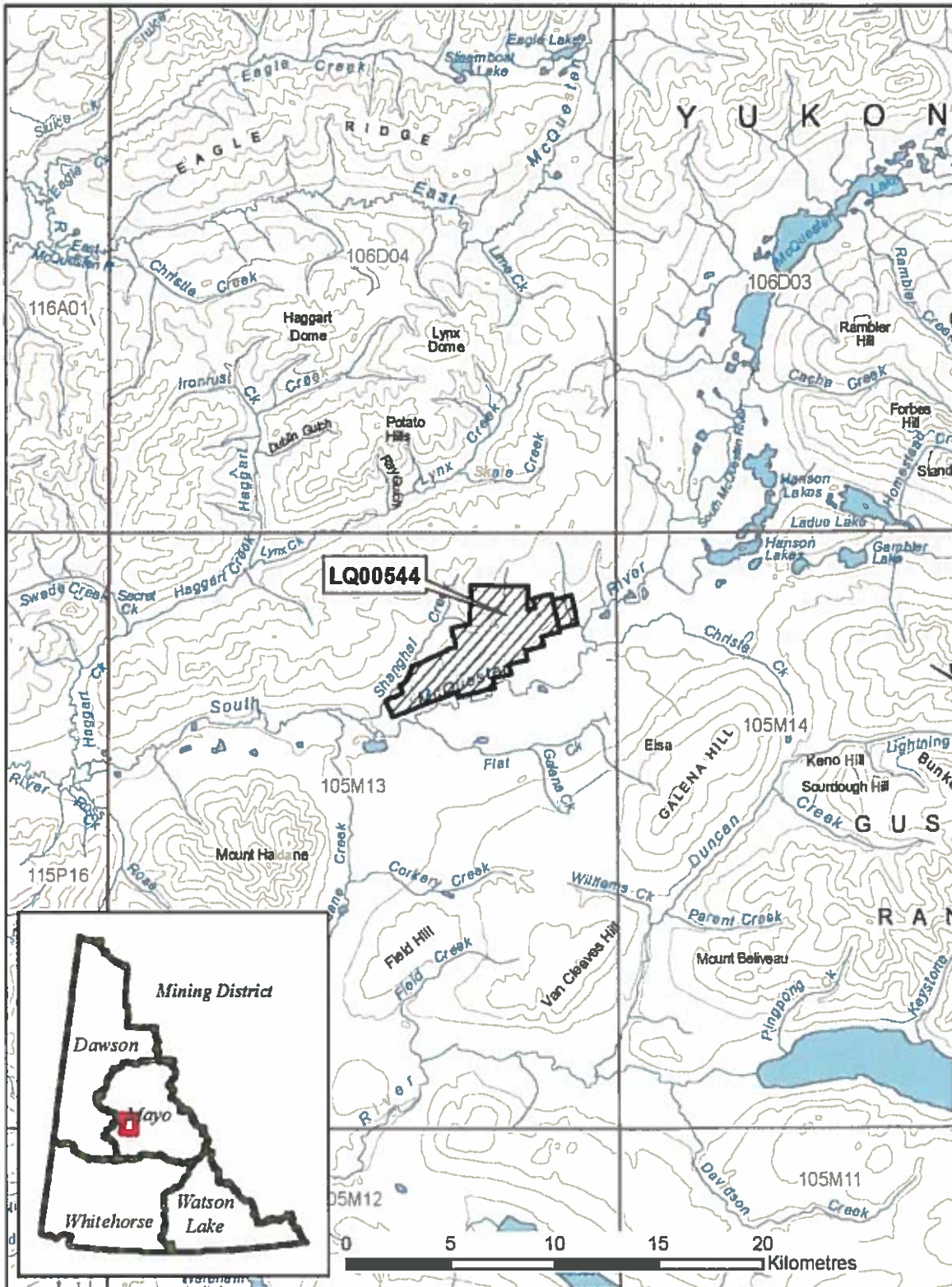
| SCOPE OF APPROVAL: | | | | |
|---|-----------------------|---|---------------------------------|---|
| Claim Status Report (Appendix A) | | | LQ00544 | |
| Operating Season | March 1 – November 30 | | | |
| PROJECT ACTIVITIES (ON-CLAIM): | | | | |
| USE OF VEHICLES/EQUIPMENT | | | | |
| Use of vehicles on existing roads or trails | | | | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Gross vehicle weight | | On-roads: More than 40 t | On-trails: Less than 20 t | |
| 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 |
| NEW & EXISTING ACCESS | | | | |
| Upgrading of existing access | | <input checked="" type="radio"/> No <input type="radio"/> Yes | Length: 0 km | Width: 0 m |
| New roads | | <input type="radio"/> No <input checked="" type="radio"/> Yes | Length: 15 km | Width: 10 m |
| New trails | | <input type="radio"/> No <input checked="" type="radio"/> Yes | Length: 40 km | Width: 2 m |
| New temporary trails | | <input type="radio"/> No <input checked="" type="radio"/> Yes | Length: 40 km | Width: 2 m |
| Other new access: 40 helicopter pads 175m ² /pad | | | | |
| LINES & CORRIDORS | | | | |
| Lines | | <input type="radio"/> No <input checked="" type="radio"/> Yes | Length: 10 km | Width: 2 m |
| Corridors | | <input checked="" type="radio"/> No <input type="radio"/> Yes | Length: 0 km | Width: 0 m |
| SITE PREPARATION | | | | |
| Number of clearings per claim: 25 Total 500 clearings | | Area: 46,000 m ² veg. mat removed; 7,000m ² veg. mat intact | | |
| Number of clearings for helicopter pads and camps: 42 | | Area: 27,000 m ² | | |
| Removal of the vegetative mat | | | | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| EXPLORATION TRENCHING & BULK SAMPLING | | | | |
| Hand-dug | | | | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Mechanized | | | | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Number: 100 | Length: 25 m | Width: 1 m | Depth: 2 m | Total volume: 5,000 m ³ |
| Bulk sampling | | <input checked="" type="radio"/> No <input type="radio"/> Yes | Amount/year: 0 tonnes | |
| Explosives | | <input checked="" type="radio"/> No <input type="radio"/> Yes | Total amount: 0 kg | Max. in 30 days: 0 kg |
| EXPLORATION DRILLING | | | | |
| TYPE | NUMBER OF HOLES | | DEPTH (m) | |
| Reverse Circulation | 100/year | | 10,000/year | |
| Rotary Air Blast | 100/year | | 10,000/year | |
| Diamond | 100/year | | 10,000/year | |

**MINING LAND USE
APPROVAL
Class 3**

| FUEL STORAGE | | |
|--|------------------------------------|---|
| FUEL TYPE | STORAGE TYPE & CAPACITY | TOTAL VOLUME |
| Jet B | 200L Drum | 10,000L |
| Diesel | 200L Drum | 10,000L |
| Gasoline | 200L Drum | 2,000L |
| Propane | 100lb bottle | 2,000lbs |
| FACILITIES & STRUCTURES | | |
| Camp structures: Trailers; tent frame (two camps) | | |
| Number of persons in camp at any one time: 30/camp | | Number of person days: 4,500/camp |
| Construction of underground structures | | <input checked="" type="radio"/> No <input type="radio"/> Yes |

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 3**



**MINING LAND USE
APPROVAL
Class 3**

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

**MINING LAND USE
APPROVAL
Class 3**

“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.

**MINING LAND USE
APPROVAL
Class 3**

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:

Shawn Ryan
P.O. Box 213
Dawson City, YT
Y0B 1G0
sryan@ryanwoodexploration.com

**MINING LAND USE
APPROVAL
Class 3**

Pre-season and Post-season Reporting

- 1.4 A pre-season report shall be submitted no later than March 31st outlining the exploration activities planned for the season including the proposed locations.
- 1.5 A post-season report shall be submitted no later than December 31st 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 Northern Tutchone 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 Northern Tutchone 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 Northern Tutchone 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.

**MINING LAND USE
APPROVAL
Class 3**

- 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) 2.19-2.20, shall be submitted to Government of Yukon – 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.

**MINING LAND USE
APPROVAL
Class 3**

2.6 All fuel cache(s) must be protected with an earthen berm or suitable barrier 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 until cleanup has taken place. Location markings shall not be removed until directed in writing by an Inspector.

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.

Acid Rock Drainage/Metal Leaching

2.9 The operator shall submit an Acid Rock Drainage/Metal Leaching Management Plan to the Chief, Mining Land Use for review and approval prior to undertaking ground-disturbing activities. The Chief will share this plan with First Nation Na-Cho Nyäk Dun.

2.10 No acid generating or metal leaching material shall be used for road construction or camp construction.

2.11 Potentially acid generating rock excavated for construction materials shall be returned underground and stabilized to prevent acid rock and metal leaching and shall not be utilized for construction.

2.12 All rock and ore with the potential for acid generation or metal leaching shall be segregated and stored on liners and under covers to minimize interaction with air and water.

2.13 Any rock that has ARD/ML potential shall be tested and characterized to determine actual ARD/ML potentials. The operator shall provide this information to the Chief annually in the post season report. The operator shall apply additional mitigation measures to prevent exposure of ARD/ML material and associated adverse effects.

2.14 The Chief may at any time request the operator have a third party conduct metallurgical testing on aggregate material sourced from the area to confirm that material is not potentially acid generating by undergoing metal leaching and acid rock drainage testing.

MINING LAND USE APPROVAL Class 3

Access

2.15 The operator shall develop and implement an Access Management Plan for the Project, to be approved by the Chief, of Mining Lands. The plan shall include, but is not limited to;

- Access control measures, which will limit use of new roads and trails to authorized users.
- A detailed reclamation plan for roads and trails.
- Requirement for reporting the status of roads and trails (i.e. active or inactive).
- Requirement for providing digitized track of all newly created roads and trails.

Summary reports generated as a result of the Access Management Plan shall be shared with First Nation Na-Cho Nyäk Dun.

Wildlife

2.16 The operator shall submit a Wildlife Mitigation and Monitoring Plan to the Chief, Mining Land Use for review and approval. The plan shall outline and include but not be limited to project design features; wildlife mitigation measures to avoid or minimize effects on wildlife; site-specific data on wildlife uses within the project sites; sightings and counts of caribou, moose, raptors, bears, and sheep collected throughout the mining season; disturbance, displacement, and risk of mortality to wildlife; The Chief shall share the plan with affected First Nations.

2.17 The operator shall conduct a non-intrusive search for bird nests prior to clearing/stripping activities taking place. If active bird nests are discovered, project activities shall be postponed in the nesting area until nesting is completed. The operator 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.

Other Land Users

2.18 The operator shall communicate plans and timing of activities to First Nation Na-Cho Nyäk Dun and other land and resource users (eg. Registered Trapline Concession Holders, local community) that may be affected by the proposed project at least thirty (30) days prior to each field season, and shall work with these individuals and governments to identify and resolve potential land use conflicts and any potential negative effects on other users.

Heritage

2.19A Heritage Resources Overview Assessment (HROA) 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 such time as a Heritage Resources Impact Assessment can be completed. Prior to conducting the HROA the operator shall invite First Nation Na-Cho Nyäk Dun to participate and provide input into the HROA.

**MINING LAND USE
APPROVAL
Class 3**

- 2.20A Heritage Resources Impact Assessment (HRIA) shall be completed in advance of ground disturbing activities in areas with elevated potential for the presence of archaeological or historic sites. Prior to conducting a HRIA the operator shall invite First Nation Na-Cho Nyäk Dun to participate and provide input into the HRIA.
- 2.21 Upon discovery of a heritage resource the operator shall notify the Heritage Department of First Nation Na-Cho Nyäk Dun in addition to the Government of Yukon, Chief of Mining Lands and Heritage Department.

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 or prior to the expiry of the approval, whichever comes first.
- 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 Security shall be paid by the operator by April 30th, annually, unless otherwise notified in writing by the Chief.
- 4.2 Any change to the security requirements 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.
- 4.3 Security will be retained as per Section 139 of the Quartz Mining Act and Section 18 of the Quartz Mining Land Use Regulation.

**MINING LAND USE
APPROVAL
Class 3**

4.4 Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.



Appendix A LQ00544

Claim Status Report

| Claim Name and Nbr | Grant No. | Expiry Date | Registered Owner | % Owned | NTS #'s | Grouping | Permit |
|--------------------|-------------------|-------------|------------------|---------|---------|-----------|-------------------|
| R CA 1 - 8 | YC11620 - YC11627 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R LS 1 - 8 | YC11612 - YC11619 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R RA 1 - 8 | YC11628 - YC11635 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R SF 1 - 6 | YC11636 - YC11641 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R Shanghai 1 - 60 | YC11642 - YC11701 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R Shanghai 61 - 65 | YC57330 - YC57334 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | P HM02970 | CIQ00200, LQ00544 |
| R Shanghai 66 - 86 | YC57561 - YC57581 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |
| R SR 1 - 8 | YC11604 - YC11611 | 2022/01/27 | Shawn Ryan | 100.00 | 105M13 | HM02970 | CIQ00200, LQ00544 |

Criteria(s) used for search:

CLAIM DISTRICT: 1000003 CLAIM STATUS: ACTIVE & PENDING DOCUMENT NUMBER: LQ00544 REGULATION TYPE: QUARTZ

Left 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)

Total claims selected : 124

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

**MINING LAND USE
APPROVAL
Class 3
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.

**MINING LAND USE
APPROVAL
Class 3**

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.

**MINING LAND USE
APPROVAL
Class 3**

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.

**MINING LAND USE
APPROVAL
Class 3**

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.

**MINING LAND USE
APPROVAL
Class 3**

43. Access to underground openings must be blocked to prevent access by wildlife and people.

**MINING LAND USE
APPROVAL
Class 3
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 (<https://www.yukonminers.org/index.php/all-docs/guidebooks/3-yukon-mineral-and-coal-exploration-best-management-practices-and-regulatory-guide/file>).

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 (<https://yukon.ca/sites/yukon.ca/files/env/env-guidelines-industrial-activity-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 (https://yukon.ca/sites/yukon.ca/files/env/env-electric-fencing_en.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" (<https://www.yukoninvasives.com/index.php/en/resources/brochures/31-why-should-i-care-about-invasive-species/file>).

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).
- Best Management Practices for Burial Sites and Human Remains in Yukon (http://www.tc.gov.yk.ca/pdf/BurialSites_BMP_2014.pdf).

**MINING LAND USE
APPROVAL
Class 3**

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 (<https://yukon.ca/sites/yukon.ca/files/env/env-preferred-practices-works-affecting-yukon-waters.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 (<https://yukon.ca/sites/yukon.ca/files/env/env-flying-sheep-country.pdf>).
- Flying in Caribou Country: How to Minimize Disturbance from Aircraft (<https://yukon.ca/sites/yukon.ca/files/env/env-flying-caribou-country.pdf>).

