



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



July 9, 2019

File No: LQ00526

ATAC Resources Ltd.
1016-510 West Hastings St.
Vancouver, BC
V8B 1L8

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 Issue Date. All work, including restoration, must be completed by Expiry Date, 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 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) 993-5343 should you have any questions.

Regards,

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:

ATAC Resources Ltd.
1016-510 West Hastings St.
Vancouver, BC
V8B 1L8

APPROVAL NUMBER: LQ00526
PROPERTY NAME: Connaught
UNDERTAKING: Quartz
CLASS: Class 3 Approval
EFFECTIVE DATE: July 9, 2019
EXPIRY DATE: July 8, 2029

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 July 8, 2019

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

Bobbie Milnes
Chief of Mining Land Use

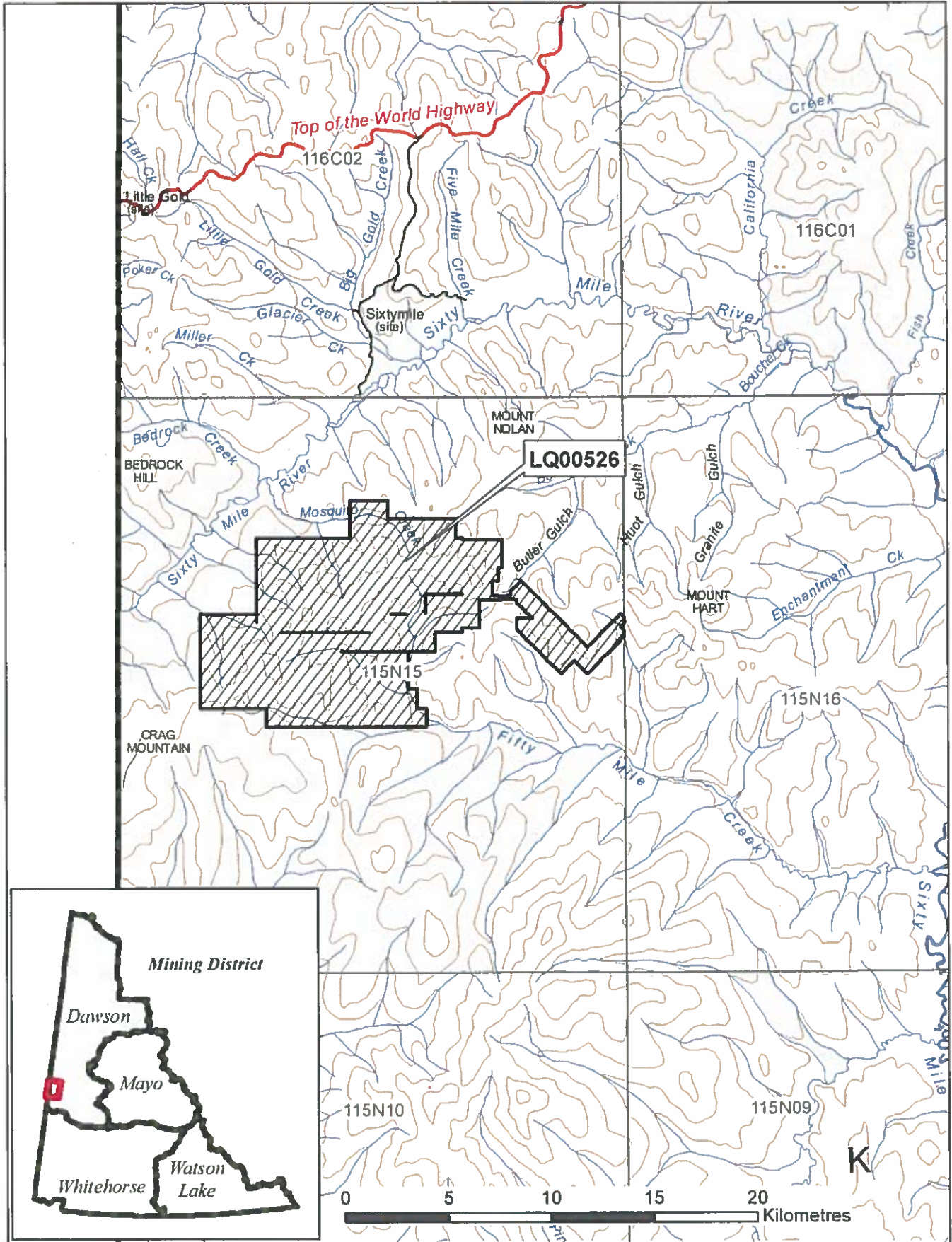
**MINING LAND USE
APPROVAL
Class 3**

SCOPE OF APPROVAL:				
Claim Status Report (Appendix A)				
Operating Season	May 15 – October 31			
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:		On-trails:	
	More than 40 t		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 type="radio"/> No <input checked="" type="radio"/> Yes	Length: 10 km	Width: 5 m	
New roads	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 5 km	Width: 4 m	
New trails	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 15 km	Width: 3 m	
New temporary trails	<input checked="" type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m	
Other new access: construction of 1 bridge or ford				
LINES & CORRIDORS				
Lines	<input type="radio"/> No <input checked="" type="radio"/> Yes	Length: 20 km	Width: 1 m	
Corridors	<input checked="" type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m	
SITE PREPARATION				
Number of clearings in total: 100		Area: 12500 m ²		
Clearings with vegetative mat removed: 50		Area: 10000 m ²		
Clearings with vegetative mat intact: 50		Area: 2500 m ²		
Number of clearings for helicopter pads and camps: 0		Area: 0 m ²		
EXPLORATION TRENCHING & BULK SAMPLING				
Hand-dug				<input type="radio"/> No <input checked="" type="radio"/> Yes
Mechanized				<input type="radio"/> No <input checked="" type="radio"/> Yes
Number: 100	Length: 100 m	Width: 1 m	Depth: 2 m	Total volume: 20000 m ³
Bulk sampling			<input type="radio"/> No <input checked="" type="radio"/> Yes	Total amount: 200 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/YR		DEPTH (m)	
Reverse Circulation	200		20000	
Diamond	200		40000	
Rotary Air Blast	200		20000	

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FUEL STORAGE		
FUEL TYPE	STORAGE TYPE & CAPACITY	TOTAL VOLUME
Diesel	205 L drums	20000 L
Propane	100 lb tank	5000 L
Gasoline	205 L drums	2000 L
Jet A	205 L drums	10000 L
FACILITIES & STRUCTURES		
Camp structures: wall tents, wooden sheds		
Number of persons in camp at any one time: 50	Number of person days: 8250/yr	
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.



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**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 evidence 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

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“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 249
Dawson City, YT Y0B 1G0
dawson.mining@gov.yk.ca

1.3 The contact for the operator will be:

Julia Lane
jlane@atacresources.com
(604)688-2568
ATAC Resources Ltd.
1016-510 West Hastings St.
Vancouver, BC
V8B 1L8

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 Klondike Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300 at least 14 days prior to commencing the field season.

1.7 The operator shall contact the Klondike Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300 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 Klondike Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300.

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) 2.13-2.15, 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 Dawson (Northern Region) at (867) 993-5492.

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 or suitable barrier and flagged to prevent spills resulting from accidental contact with heavy equipment. Flags should be visible above the snow pack.
- 2.0 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

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

Access

- 2.2 Reclamation and 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 on-going/completed reclamation activities shall be reported to the Chief and Tr'ondëk Hwëch'in annually via post-season reports.
- 2.3 The operator shall develop an Access Management Plan for all new roads and trails within the project area to submit for approval to the Chief prior to the commencement of any road or trail construction activities. The Chief shall consult with Tr'ondëk Hwëch'in on the Access Management Plan.
- 2.4 The operator shall post signage indicating that all new access roads and trails within the project area are intended for mining or exploration purposes.

Wildlife

- 2.5 While activities are underway, the operator shall contact the Regional Biologist (867-993-6461) weekly between July 1st and Oct. 20th to obtain migration updates on the Forty Mile Caribou Herd (FMCH). If the Regional Biologist expects the FMCH to migrate through the Project area, the Regional Biologist will provide written guidance to the Operator through the Chief regarding mitigations, including the cessation of flight operations during sensitive periods, and when exploration operations should cease for the season.
- 2.6 The operator shall cease work when any caribou are observed on active claim blocks until the caribou move off on their own accord.
- 2.7 The operator shall take all necessary precautions to minimize disturbance to caribou specific habitat (lichen) within the project area.
- 2.8 The operator shall follow Flying in Caribou Country guidelines, when safe to do so, including:
- a. At all times of year, maintain over-flight altitudes at least 300 m (1,000 ft.) above ground level.
 - b. During sensitive times of the year (rutting), maintain over-flight altitudes at least 600 m (2,000 ft.) above ground level.
- 2.9 In addition to the kitchen sump and incineration site, electric fences shall be installed around the food preparation and storage area.
- 2.10 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.

2.11 If active bird nests are discovered, the operator shall contact the Regional Biologist (867-993-6461) for appropriate mitigation (e.g. minimum setback distances).

2.12 The operator shall give wildlife the right of way to protect wildlife and prevent collisions.

Heritage Resources

2.13 A heritage resources impact assessment shall be completed in advance of ground disturbing activities in areas with elevated potential for the presence of archaeological or historic sites.

2.14 Upon discovery of a heritage resource, the operator shall notify the Heritage Department of Tr'ondëk Hwëch'in and the Government of Yukon, Chief and Tourism-Heritage.

2.15 A 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.

Bulk Sampling

2.16 The operator shall expedite the removal of bulk samples from the property within 12 months.

2.17 Bulk samples shall be stored in a way that acid rock drainage/metal leaching will not occur.

2.18 No potentially acid generating or metal leaching material shall be used for road construction, camp construction or airstrip construction.

2.19 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 not utilized for construction.

2.20 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. Bulk samples must be stored on an impermeable liner at least 30 m from any waterbody, until removed from the site.

2.21 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.

2.22 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.

Invasive Species

2.23 The operator should report the presence of any invasive plants that are listed on the Yukon Invasive Species Council website: www.yukoninvasives.com/plants.html to Government of Yukon by e-mail (invasives@gov.yk.ca).

Trapping

2.24 The operator shall notify the Registered Trapping Concession holders at least thirty (30) days prior to each field season to reduce any potential negative impacts to trapping. The operator can contact the District Conservation Office in Dawson (Northern Region) at (867)993-5492 to acquire trapper contact information.

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 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.



Appendix A

Claim Status Report

30 May 2019

Claim Name and Nbr:	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s	Grouping	Permit
CN 1 - 120	YC44099 - YC44218	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 125 - 162	YC44219 - YC44256	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 167 - 178	YC44257 - YC44268	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 189 - 198	YC44269 - YC44278	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 199 - 202	YC62938 - YC62941	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 203 - 216	YC63043 - YC63056	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 217 - 288	YF53297 - YF53368	2020/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
CN 289	YF53369	2020/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	F HD03582	
CN 290 - 301	YF53370 - YF53381	2020/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
NC 1 - 8	YC44412 - YC44419	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
NC 13 - 32	YC44420 - YC44439	2025/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
Om 1 - 48	YE60601 - YE60648	2021/05/26	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	
TN 1 - 210	YF56591 - YF56800	2020/05/29	Archer Cathro & Associates (1981) Ltd.	100.00	115N15	HD03582	

Criteria(s) used for search:

CLAIM DISTRICT: 1000002 CLAIM NAME: TN CLAIM STATUS: ACTIVE & PENDING REGULATION TYPE: PLACER, QUARTZ

Total claims selected : 569

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

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

Operator Commitments

- Careful route selection will be conducted to minimize impact on habitat and vegetation, and to reduce any necessary cuts or fills. Roads will be constructed with a bulldozer and/or excavator and Best Management Practices will be observed, referencing the Yukon Mineral and Coal Best Management Practices and Regulatory Guide.
- Trails will be constructed by clearing trees and brush such that four wheel drive vehicles can traverse the ground surface. Vegetative mat will be left intact and not disturbed other than incidental impacts from vehicle tires and treads.
- Where rutting has occurred, the ground will be restored.
- Water bars or dips will be built at regular intervals to minimize potential for erosion.
- If no further drilling is anticipated in an area, roads and trails that were constructed for access in those areas will be reclaimed. Reclaimed roads will be re-contoured with the excavator, scarified and periodically cut by small trenches (1-2' deep) to discourage vehicle use.
- Any organic matter and vegetative mat disturbed during clearing construction will be stockpiled for reclamation use. Drill pads, trenches, and trails will be progressively reclaimed as soon as they are no longer needed for exploration activities. All disturbed areas will be re-contoured and stockpiled brush and topsoil will be scattered across the reclaimed areas to promote natural re-vegetation and reduce the chance of erosion. Dips and/or erosion bars will be established along reclaimed trails to promote natural drainage patterns and minimize potential for erosion. Where disturbances occur outside vegetated areas, the slope will be re-contoured to match natural slopes, and erosion bars will be constructed to enhance drainage potential.
- A strict no hunting policy will be in place for all employees and contractors.
- All disturbances which could cause animal entrapment (trenches, drill holes, etc.) or other significant impacts over winter months will be progressively reclaimed before the end of each season.
- The Operator is committed to creating the least possible amount of new linear disturbances (roads/trails) throughout the duration of this project. Wherever possible, existing trails and roads will be used, and progressive reclamation will be conducted as soon as a road or trail is no longer needed.
- No-fly buffer zones will be established around known or suspected mineral licks.
- Flight operations will be curtailed during sensitive periods, such as the fall rut.
- Relevant guidelines will be reviewed by staff and pilots prior to conducting flight operations.
- Wildlife Act (Yukon)
- Environment Act (Yukon)
- Grey water will be directed to sumps excavated more than 30 m from the nearest water course and above the local ground water table.

- All non-hazardous, flammable waste, including solid kitchen waste, will be incinerated daily in a diesel-fueled, forced-air incinerator.
- Non-flammable residue will be compacted and bagged, then flown out and taken to the municipal dump in Dawson City, where it will be authorized for disposal.
- Recyclable items (metal, bottles and some plastics) will be taken to an authorized recycling centre.
- Human waste will be handled with privies dug at least 30 m from any waterway, and will be renewed and backfilled on a monthly basis.
- The Operator has committed to installing electrified fences around the kitchen sump and incineration site.
- Air horns and bear spray will also be available at key sites where animal attractants are present.
- Fuel will be stockpiled in a bermed and lined fuel storage facility, located at least 50m from any waterbody.
- A Fuel Spill Contingency and Emergency Response Plan will be in place and spill kits will be available at all locations where refueling, storage, or transfer take place.
- To protect cultural resources, the operator will discuss cultural uses with the Tr'ondëk Hwëch'in and other local communities prior to conducting work.
- If any artifacts are identified during exploration activities, work plans will be modified to protect the site, and appropriate Tr'ondëk Hwëch'in and Yukon Government personnel will be notified. Work in the affected site will cease until an appropriate strategy is developed to protect the identified resources.
- The Operator's commitments for ARD and ML include the commitments to ensure drill holes are small in diameter, and that they are capped with cement once drilling is complete. Trenches will be progressively backfilled. No sulphide material will be left exposed to the atmosphere for a significant amount of time.
- The Operator has committed to following the Yukon Mineral and Coal Best Management Practices and Regulatory Guide, which includes several mitigations to ensure there is little potential for contamination from acid rock drainage and metal leaching.
- Fuel will only be brought in to the project site as required for exploration activities each season, and fuel stored on site between exploration seasons will be kept to a minimum.
- The Operator has stated that fuel will be stored in 205 L drums to minimize the potential for spillage if a container is damaged or punctured. Empty drums with capacity exceeding 10% of the stored fuel will be kept on hand in case any damage occurs and one or more drums needs to be transferred to a new container.
- Fuel will be stockpiled in a bermed and lined fuel storage facility.
- All petroleum products will be stored at least 50 m from the nearest watercourse (Mosquito Creek).
- A Fuel Spill Contingency and Emergency Response Plan will be in place and spill kits will be available at all locations where refueling, storage, or transfer take place.
- Non-flammable residue will be compacted and bagged, then flown out and taken to the municipal dump in Dawson City, where it will be authorized for disposal.

- Recyclable items (metal, bottles and some plastics) will be taken to an authorized recycling centre. Other special waste such as batteries will be segregated from other non-hazardous waste, and will be handled and transported off-site before the end of each field season. Where necessary, a permit will be obtained from Environment Yukon in regard to disposal of special waste products.
- Human waste will be handled with privies dug at least 30 m from any waterway, and will be renewed and backfilled on a monthly basis.

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).

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>).

