



**Energy, Mines and Resources**  
Box 2703, Whitehorse, Yukon Y1A 2C6  
Mineral Resources Branch (K-9)  
Mining Lands

August 21, 2015  
LQ00431

File No:

Silver Range Resources Ltd.  
1016-510 West Hastings St.  
Vancouver, BC V6B 1L8

Dear Sir/Madam:

**Re: Class 3 Approval**

Your application for Class 3 approval has been approved:

- As submitted.
- Subject to the attached conditions.
- Subject to security deposit as received.

The effective date of this approval will be August 21, 2015. All work, including restoration, must be completed by August 20, 2025, 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.

Please feel free to contact our office at (867) 456-3822 should you have any questions.

Yours truly,

A handwritten signature in blue ink, appearing to read "J. St. Amand".

Judy St. Amand  
A/Chief, Mining Land Use

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

**Silver Range Resources  
LQ00431**

**OPERATIONAL GUIDELINES**

- The operator shall familiarize themselves with Yukon invasive species and how to manage them by referring to the Yukon Invasive Species Council document Why Should I Care About Invasive Species?
- The operator should report the presence of any invasive plants that are listed on the Yukon Invasive Species Council website:  
<http://www.yukoninvasives.com/plants.html> to Government of Yukon by e-mail (invasives@gov.yk.ca).



**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:

Silver Range Resources  
1016-510 West Hastings St  
Vancouver, British Columbia  
V6B 1L8

APPROVAL NUMBER: LQ00431  
UNDERTAKING: Quartz  
CLASS: Class 3 Approval  
EFFECTIVE DATE: August 21, 2015  
EXPIRY DATE: August 20, 2025 or until a Class 4 approval is issued, whichever occurs first

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 LQ00431.

Dated this 21<sup>st</sup> day of August, 2015

  
\_\_\_\_\_  
Judy St. Amand  
A/Chief, Mining Land Use

**MINING LAND USE  
APPROVAL  
Class 3  
LQ00431  
Silver Range Resources**

**SCOPE OF APPROVAL: Claim Status Report (Appendix A)**

**NTS: 095D03, 095D06, Mel Property**

**Definitions**

“**Act**” means the *Quartz Mining Act*, SY 2003, c.14; amended by SY 2008, c.19; SY 2013, c.18;

“**Operator**” means a person who is engaging in an exploration program;

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

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

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

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

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

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

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

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

“**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

“**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.

**PART ONE – GENERAL REQUIREMENTS**

**Duration of Approval**

1. 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.
  
2. All outstanding reclamation continues to be the responsibility of the operator.

### **Compliance with Operating Conditions**

3. All mineral exploration activities must comply with the Operating Conditions contained in Schedule 1 of the Quartz Mining Land Use Regulation. These Operating Conditions are enforceable.

## **PART TWO - REPORTING REQUIREMENTS**

### **Contact Numbers/Planning and Communication**

4. Submissions and reports to the Chief should be made to both the following addresses:

Chief, Mining Land Use	Mining Lands Officer
Box 2703, K-09	Box 269
Whitehorse, Yukon Y1A 2C6	Watson Lake, Yukon Y0A 1C0
	Watson.mining@gov.yk.ca

5. The contact for the Operator will be:  
Silver Range Resources  
1016-510 West Hastings St.  
Vancouver, British Columbia  
V6B 1L8
6. All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Natural Resource Officer, Mining Division Watson Lake & Whitehorse (867) 456-3882
7. 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.
8. A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
9. A report shall be submitted at the end of each mining season indicating exploration activities completed during that season. This report shall include but not be 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, and
  - reclamation activities.
10. The operator shall contact the Natural Resource Officer, Mining at Whitehorse (867) 456-3882 at least 14 days prior to commencing the field season.

11. The operator shall contact Natural Resource Officer, Mining at Whitehorse (867) 456-3882 at least 14 days prior to leaving the site at the end of the exploration program.
12. The operator shall contact the trappers using the registered trapping concessions that overlap with the project to minimize land-use conflicts and to identify areas where there may be traps, snares and other trapping equipment in order to avoid damaging any trapping infrastructure during the project.

#### **Heritage**

13. All palaeontological resources uncovered during operations shall be reported to the Yukon Palaeontology Program, Government of Yukon in Whitehorse at (867) 667-8089 or (867) 667-5386.
14. 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.

#### **Wildlife**

15. All incidents with wildlife shall be reported to the District Conservation Officer in Watson Lake (Liard Region) at (867) 536-3210, as well as any other communication regarding wildlife.
16. The operator shall maintain a detailed wildlife log for submission to the District Conservation Officer each year.

### **PART THREE – TERMS AND CONDITIONS**

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

17. 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**

18. 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.
19. 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.

20. 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**

21. All areas disturbed during an exploration program must be re-sloped, contoured or otherwise stabilized to prevent long-term soil erosion, slumping and subsidence.
22. All exploration activities must be carried out to avoid or minimize damage to and loss of permafrost.
23. 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

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

24. 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.
25. The report developed for Section 24 shall be submitted to Government of Yukon – Mining Lands, Mineral Resources Branch and the Heritage Resources Unit, Cultural Services Branch.
26. 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.
27. Any sites containing archeological objects, palaeontological 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.

### **Disposal of Wastes/Cleanliness**

28. 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.
29. 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.
30. 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.

31. Camps must be kept clean and tidy.

### **Fuel and Chemical Storage and Handling**

32. If petroleum fuel storage capacity exceeds 4000L, 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.

33. 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.

34. 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.

35. All petroleum products, including waste petroleum products, and any other hazardous substance, must be transferred and handled without spillage.

36. All waste petroleum products and any other special waste, as defined in the Special Waste Regulations, generated in the course of carrying out the explorations program must be disposed of in accordance with the Special Waste Regulations when the program ceases.

37. The operator shall clearly identify the owner, the contents and the date on fuel drums to establish and manage ownership and responsibility.

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

38. 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.

39. 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.

40. 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.

41. The location of any spills shall be clearly marked with stakes or flags.



### **Use of Vehicles**

- 42. Vehicles must be maintained and operated to prevent spills of fuel, lubricants, coolants and oil.
- 43. To prevent the spread of invasive plants, all heavy equipment and vehicles shall be clean and free of seed and plant material prior to entering the project area.

### **Timber and Brush**

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

### **Trenching**

- 48. Trenching carried out by hand or using hand-held tools must be methodical.
- 49. All trenches must be stabilized and marked to minimize risk to the public.
- 50. Open trenches shall be sloped at one end to avoid entrapment of wildlife.
- 51. 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.
- 52. The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

### **Drilling**

- 53. All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
- 54. Vegetation other than that within a drill sump, must not be covered with drill cuttings.
- 55. Core must be stored in a stable fashion.
- 56. Drill mud must be re-circulated when possible.
- 57. All drill fluids must be contained in a sump.
- 58. Drill holes that pose a hazard or that lead to ground water must be plugged in a suitable manner.

59. The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
60. Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.
61. The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

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

62. All vehicles must be operated to avoid rutting and gouging of roads and trails.
63. 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.
64. 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 and the former routes must be restored in compliance with the operating conditions for re-establishment of the vegetative mat and erosion control.
65. 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.
66. Routes for temporary trails must be reconnoitered and flagged.
67. In addition to any remedial action required in relation to re-establishment of the vegetative mat, temporary trails must be blocked to prevent further vehicular access.
68. The operator shall construct and use the winter road as early in the winter season as is safe and practical.
69. During trail construction, the operator shall construct trails as narrow as possible and avoid straight lines where possible.

#### **Release of Sediment**

70. 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.

#### **Wildlife**

71. The operator shall install a portable electric fence around the perimeter of the camp or, at a minimum, around the kitchen/dining facility, grey water sump, and incinerator.

#### **Security**

72. Security may be required at any time by the Chief.

## **Reclamation**

73. Reclamation shall be progressive in nature where possible and completed before expiry of the approval.

## **PART FOUR – FINAL DECOMMISSIONING**

74. Final reclamation will occur prior to the expiry of the exploration program, according to standards outlined in the operating conditions for re-establishment of vegetative mat and erosion control.
75. All petroleum products and any other hazardous substance must be removed from the site of the exploration program when the program ceases.
76. 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.
77. 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 as often as is practicable throughout the mining season and completely at the cessation of the exploration program.
78. Structures must be removed and the site restored at the end of the exploration program to a level of utility comparable to its previous level of utility.

## **PART FIVE – OTHER MATTERS**

### **Applicable Laws**

79. 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.
80. Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.
81. Attached (Appendix B) is a list of the approved exploration activities.
82. Attached (Appendix C) are the commitments that form part of this operating plan.

## APPENDIX A Claim Status Report

21 August 2015

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s	Grouping	Permit
ANDY 1 - 8	YA72509 - YA72516	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
BOZ 1 - 4	YA66985 - YA66988	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
CHUNGO 1 - 8	YA66946 - YA66953	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
DAVE 1 - 8	YA72501 - YA72508	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
EDY 1 - 7	YA66962 - YA66968	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
HOSE 1 - 8	YA66919 - YA66926	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
JEAN 1 - 4	Y 72731 - Y 72734	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
JEAN 5 - 10	Y 72961 - Y 72966	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
JEAN 11 - 21	Y 74418 - Y 74428	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
JERI 1 - 8	YA66931 - YA66938	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
JOE 1 - 2	YA45269 - YA45270	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	F HL12518	LQ00221, LQ00431
JONI 1 - 8	YA66846 - YA66853	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
KELI 1 - 4	YA66842 - YA66845	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
KELI 5 - 8	YA66927 - YA66930	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
MEL 11 - 16	Y 22230 - Y 22235	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
MEL 147 - 188	YE60147 - YE60188	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LTD	100.00	095D03, 095D06	HL12518	LQ00431

Total claims selected : 337

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

## Claim Status Report

21 August 2015

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s	Grouping	Permit
MEL 281 - 318	YE60551 - YE60588	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00431
MUMBO 1 - 8	YA66977 - YA66984	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
OTT 1 - 8	YA66954 - YA66961	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
RALFO 1 - 7	YA66939 - YA66945	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
SAM 1	YB46141	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	F HL12518	LQ00221, LQ00431
SAM 2 - 35	YB46142 - YB46175	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
SAM 36 - 38	YB46176 - YB46178	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	F HL12518	LQ00221, LQ00431
SAM 39 - 86	YB46179 - YB46226	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
SIN 1 - 8	YA66989 - YA66996	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
SOV 1 - 6	YA28600 - YA28605	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
TOMI 1 - 8	YA66969 - YA66976	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
WET 1 - 16	Y 83309 - Y 83324	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431
WET 25 - 32	Y 83325 - Y 83332	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431

Total claims selected : 337

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

## Claim Status Report

21 August 2015

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s	Grouping	Permit
YANG 1 - 6	YA66997 - YA67002	2020/04/03	ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	100.00	095D06	HL12518	LQ00221, LQ00431

**Criteria(s) used for search:**

CLAIM STATUS: ACTIVE & PENDING DOCUMENT NUMBER: LQ00431 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 : 337

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

**Appendix B**  
**MINING LAND USE**  
**EXPLORATION ACTIVITY REPORT**

**August 18, 2015**

**LQ00431**

**Class III**

**095-D-03 NW**

Silver Range Resources Ltd.  
1016 - 510 W. Hastings Street  
Vancouver, BC V6B1L8

ELEMENT	CRITERIA	TERMS AND CONDITIONS
Construction of structures		35 person camp consisting of 4-15 Tent Frames; 3 m x 5 m wood frame generator shack; wood frame outhouses
Establishment of trails per program		10 km x 4 m
Fuel Storage in a facility		Jet A = 2,000 L in drums; Diesel = 20,000 L in drums; Gasoline = 1,000 L in drums; Propane = 2,000 lb in 100 lb bottles
Nb of clearings per claim, including existing clearings		Up to 20 clearings per claim; Up to 100m <sup>2</sup> for trenches; up to 50 m <sup>2</sup> or drill sites
Nb of person days per camp		4500
Nb of persons in a camp at any one time		35
Surface area of each clearing		Up to 100 m <sup>2</sup>
Total volume of trenching		10,000 m <sup>3</sup>
Upgrading of access roads per		25 km x 4 m
Use of vehicles on existing roads or trails		

# Silver Range Resources LQ00431

## Appendix C Proponent Commitments

### **General**

- All of Silver Range's employees and contractor's employees will be required to familiarize themselves with the relevant sections of the *Yukon Mineral and Coal Exploration Best Management Practices and Regulatory Guide* provided by the Yukon Chamber of Mines.

### **Aquatic Resources**

- In relation to the winter access road: Care will be taken to ensure all crossings are conducted in accordance with the Best Management Practices for Works Affecting Water in Yukon. The route will be scouted in advance of use each season with snowmobiles to ensure all crossings are identified and marked.
- In relation to the potential on-site crossings: If fording is to be used, it will be conducted in accordance with the Best Management Practices for Works Affecting Water in Yukon and the relevant DFO Operational Statement.

### **Water Withdrawal**

- Waterbodies will be visually assessed for flow rate prior to use as a water source. In addition, all water sources will be frequently monitored to ensure drawdown rates are not significantly impacting water levels. If water use appears to be greater than 10% of the instantaneous flow rate, draw will cease and a new, higher flow-rate water source will be located.

### **Wildlife**

- Helicopter activity: Care will be taken to avoid areas frequented by wildlife, and discussion will be undertaken with the local outfitters to ensure any disruption is minimized.
- All trenches will be sloped on one or both ends to permit egress of wildlife.
- Proposed drill or trenching areas will be inspected before clearing is done to check for evidence of migratory birds. Silver Range commits to giving moose encountered along the access route the right-of-way and leaving them undisturbed. The transit of vehicles and convoys will be carried out over the shortest period of time practicable. If aircraft are used, the proponent shall avoid low passes, including aircraft hovering over wildlife, such as moose. Transportation of materials and supplies by winter road will substantially reduce noise disturbances that would result if all materials had to be transported by aircraft.



- Human presence will be kept to a minimum, with crews constrained to specific work areas. Crews will not feed or interact with wildlife. All personnel and contractors will abide by a strict no hunting policy.

### ***Flying***

- Use of the winter road for the majority of supply hauling will reduce the amount of aircraft traffic necessary to conduct exploration activities. Limited fixed-wing support will be required for crew rotations and some supplies, and helicopters may be required to support drilling activities at some remote sites.
- Helicopter and aircraft activity will be closely monitored and before it is carried out additional consultation will be made with territorial government biologists, particularly concerning routes and timing that may affect sheep lambing, moose and caribou calving and the fall rut. During the program, flights will be conducted at elevations that should not startle animals and, if animals are encountered, flight paths will be redirected. This practice ensures the animals are aware of the activity and are not frightened away from the area. The outfitters and wilderness guides will be contacted prior to commencing the program so that flight routes can be adjusted to avoid active hunting or touring areas wherever possible. If hunters or tour groups are unexpectedly observed, helicopters will be rerouted to avoid repeated disturbance. Helicopter operations will be minimized during lambing, calving and rut seasons, and, when necessary during these periods, flight lines will be routed well clear of any sensitive areas.

### ***Increased Access***

- The use of an ice bridge on the Coal River, at the start of any upgrades to the access routes will ensure accessibility is not increased during summer or fall months, because the river crossing will melt in spring, thereby inhibiting traffic beyond the river.

### ***Habitat Loss and Fragmentation***

- Linear disturbances and clearings will be minimized, with cleared vegetation stock piled for reclamation use. When choosing or expanding campsites or equipment storage areas, naturally level, unvegetated areas will be selected where possible to minimize the amount of disturbance to vegetative mat. Where clearing and leveling are necessary, vegetative mat will be removed and placed to one side of the clearing so that it can be replaced after the site is no longer being used. This will promote revegetation and ground stability.
- Material from trenches will be segregated during excavation so that when the trenches are refilled rocky material can be returned to the bottom and more organic rich soils placed back atop it. Vegetation that was cleared from the trench site will be scattered on the soil, and if the area appears to be prone to erosion, erosion bars will be created.
- Drill sites will be cleared and leveled like camp sites. After each site's use is completed, it will be thoroughly cleaned, the drill collar will be marked with a post, then vegetation

mat will be put back and any brush cut to create the site will be scattered across the clearing to biodegrade and promote revegetation.

- Reclamation of the various work sites will be ongoing throughout the exploration program, and the effectiveness of the reclamation activities will be monitored.

Prior to use each year of operations, the winter access route will be flown with a helicopter or traversed by snowmobile to check conditions (overflow ice, snow pack, creek crossings, etc.) and to compile a GPS record of the route and areas of potential concern. Care will be taken to identify areas of critical wildlife habitat and wildlife activity.

- Initial use of the route will be by the snow machine to assess banks, creek crossings and potential for break-through due to thin ice. Routes will be assessed carefully to avoid areas where permafrost degradation or other conditions exist that will create erosion.
- If use of a cat train is necessary north of the Coal River crossing, bulldozers will walk the route in and out initially without a load and with the blade up to compact the trail. Where excessive snow depth necessitates plowing, care will be taken to maintain 10cm of compacted snow.
- Winter use of roads will only proceed under frozen ground conditions with a minimum compacted snow cover of 10cm. No movement of equipment will occur if the surface is not frozen strongly enough to prevent rutting or gouging.
- Ongoing monitoring during the program will allow for additional mitigation (such as seeding with indigenous species) should it be required.
- Care will be taken to minimize disturbance to wildlife encountered along access routes. Where excessive snow depth is encountered, periodic gaps will be made in the snow berms along the side of the trail to allow for wildlife escape. Encounters with wildlife will be logged and reported to the Watson Lake Conservation Officer.

### ***Injury/Mortality***

- Household garbage and combustible debris will be burned on site daily in a forced air incinerator so as not to attract wildlife. Non-combustible items and ashy residues will be compacted and removed from the property on fixed-wing backhauls or by truck during the winter road season and taken to the Whitehorse municipal dump or recycling centres for final disposal. Archer Cathro, the proponent's primary contractor, has a permit from the City of Whitehorse in this regard. Waste oil will be stored in specially marked, sealed containers and taken to an approved disposal site.

### ***Environmental Quality***

- If permafrost is encountered on the property, efforts will be taken to minimize contact with areas containing permafrost, and the vegetative mat will be left as intact as possible. If vegetation and/or surface material is removed (trenching, leveling), it will be returned following completion of activities.

- Trenches will be reclaimed either by the end of each exploration season, or in the following season, once sampling and interpretation is complete.
- A bermed and lined impoundment will be used to store heavy walled fuel drums.
- Fuel will be stored in lined and bermed caches of 205L heavy-walled drums that do not exceed 23,000 litres in aggregate. Empty drums will be kept on site in the event a drum is damaged and requires transfer of contents to a stable container.
- Fuel will be stored on site in heavy-walled 205 litre drums to prevent puncture and leakage. Storage sites will be well marked and will be at least 50 m from any watercourse. If a storage site is created containing more than 20 drums, it will be bermed and lined with an impermeable liner. Empty drums will be kept on site in the event a drum is punctured and fuel has to be transferred to a stable container. Fuel absorbent cloth, berms and aggregates will be kept on site in the event of a spill and a notice disclosing a fuel prevention and remediation plan will be posted at the camp and each fuelling site, which states the emergency spill hotline contact information for the district. Absorbent cloth will be used during refuelling so that minor spillage can be caught before reaching the soil.
- A fuel spill response plan (see attached) will be implemented and will be in an appropriate state of readiness at all times. The location of any petroleum product spills will be marked with stakes or flags and time, manner, location and type of spill will be reported in accordance with Part 11 of the *Environment Act*.
- Use of drill additives will be minimized and, where used, only biodegradable products will be employed. All drill return water and cuttings will be directed into a sump located downhill from each drill collar, where the cuttings can settle out and the water can filter naturally into the ground. The sump will be filled in after the diamond drilling is finished at the site. Similarly, grey water from the camp is directed into a sump and allowed to filter through the ground naturally. An electrified fence will be installed around the grey water sump.

### **Winter Road**

- Initial use of the route will be by the snow machine to assess banks, creek crossings and potential for break-through due to thin ice. Routes will be assessed carefully to avoid areas where permafrost degradation or other conditions exist that will create erosion.
- If use of a cat train is necessary north of the Coal River crossing, bulldozers will walk the route in and out initially without a load and with the blade up to compact the trail. Where excessive snow depth necessitates plowing, care will be taken to maintain 10cm of compacted snow.
- Winter use of roads will only proceed under frozen ground conditions with a minimum compacted snow cover of 10cm. No movement of equipment will occur if the surface is not frozen strongly enough to prevent rutting or gouging.

- Ongoing monitoring during the program will allow for additional mitigation (such as seeding with indigenous species) should it be required.

### **Land Users**

- Helicopter activity: Care will be taken to avoid areas frequented by wildlife, and discussion will be undertaken with the local outfitters to ensure any disruption is minimized.

### **Heritage Resources**

- Once specific exploration targets have been determined, a Heritage Resource Impacts Assessment (HRIA) will be conducted by a qualified contractor before any disruptive activities occur (trenching, clearing, trail construction, etc.). This assessment will study the areas in detail to determine if any heritage sites exist. If any heritage sites are identified by the HRIA, an exclusion perimeter will be setup and the local First Nations and Archaeology Branch of the Yukon Government will be notified.
- Care will be taken to minimize surface disturbances when conducting exploration activities. A Heritage Resource Overview Assessment is underway to determine areas of elevated heritage potential. Areas designated high potential will be avoided whenever possible during exploration and will be ground-truthed prior to any disturbances within them.
- The current proposal commits to use of the Mel Access Roads only under frozen ground conditions with a minimum compacted snow cover of 10cm. No movement of equipment will occur if the surface is not frozen strongly enough to prevent rutting or gouging.
- Use of the Coal River Road will only require snow-plowing of an existing access road and will not affect any undisturbed heritage resources.
- The proponent is familiar with the Yukon Government "Handbook for the Identification of Heritage Sites and Features", and will provide it to employees and contractors to assist with identification of heritage sites and features.
- While undertaking the project, if any ethnographic heritage resources are discovered which are or are not apparently related to the culture and history of First Nations people, the proponent shall notify the Liard First Nation, in addition to notifying the Yukon Government, Heritage Branch.

### **Winter Access**

The following considerations and constraints will be taken into account:

- Prior to use each year of operations, the route will be flown with a helicopter or traversed by snowmobile to check conditions (overflow ice, snow pack, creek crossings, etc.) and to compile a GPS record of the route and areas of potential concern. Care will be taken to identify areas of critical wildlife habitat and trappers' activities.

- The route will be traversed by snowmobile to check and prepare all banks and creek crossings prior to initial use each winter of the permit period.
- Supplies and equipment will be mobilized to at least the north side of the Coal River crossing by wheeled highway trucks. If necessary due to road conditions, supplies and equipment will then be transferred to a cat train or vehicles with low-pressure tires for transport the remainder of the distance to the staging area.
- If a cat train is used, then bulldozers will walk the route in and out initially without a load and with the blade up to compact the trail. Where excessive snow depth necessitates plowing, care will be taken to maintain 10 cm of compacted snow.
- Tall brush present in the existing historical roadbed will be trimmed by bulldozer blade or brushed by hand and stockpiled along the side of the road route.
- Use of the historical roads will only proceed under frozen ground conditions with a minimum compacted snow cover of 10 cm.
- Care will be taken to minimize disturbance to wildlife encountered along the access route. Where excessive snow depth is encountered, periodic gaps will be made in any snow berms along the side of the trail to allow for wildlife escape. Encounters with wildlife will be logged and reported to the Watson Lake Conservation Officer.
- The first crossing of any water body by loaded equipment will be with vehicles not carrying fuel.
- The fuel and equipment caches will be located a minimum of 60 m from the high water mark of any nearby water course. Fuel and equipment caches will be preferentially located in existing clearings.
- A Fuel Spill Response Plan (attached) will be implemented and will be in an appropriate state of readiness at all times. The location of any petroleum product spill will be marked with stakes or flags and the time, manner, location and type of spill will be reported in accordance with Part 11 of the *Environment Act*.
- All solid waste will be hauled out and taken to an appropriate waste depository.
- All natural or constructed ice crossings will be monitored to ensure that ice thickness and condition are satisfactory to support the vehicles taken across them during the period of use.
- If equipment breaks through the ice, Fisheries and Oceans Canada in Whitehorse, the relevant Land Use Inspector, and Liard First Nation will be contacted.
- Registered trap line owners will be contacted prior to the commencement of activities to identify areas of concern and to prevent or minimize damage to trails, traps, snares or other equipment.

- The opened routes will be maintained in a manner that does not restrict the passage by snowmobile or dog sled.
- No camps will be established to carry out the work. Crews will be mobilized daily by snow machine or truck, as necessary, to and from accommodations in Watson Lake or a highway lodge.
- Where an ice bridge is required to support the vehicles across a watercourse that does not have sufficient natural ice cover, the following considerations will be implemented:
  - a. The ice bridge will be constructed by an experienced northern contractor in conjunction with overall preparation of the winter access roads.
  - b. Prior to flooding, which will increase ice thickness to a minimum of 50 cm (to allow 20 tonne loads), clean snow will be pushed from the ice surface to create gradual approaches to the watercourse banks. Flooding in layers  $\leq 4$  cm will create a strengthened crossing.
  - c. Ice bridges will be constructed and maintained following the conditions and measures set out below in order to be in compliance with subsection 35(1) of the *Fisheries Act* and shall use best practices as outlined by Yukon Environment in “Best Management Practices for Works Affecting Water in Yukon”. The following conditions will be met:
    - i. The ice bridge will be constructed of clean (ambient) water, ice and snow,
    - ii. Snow fills will be constructed of clean snow, which will not restrict the water flow at any time,
    - iii. The work will not include realigning the watercourse, dredging, placing fill, or grading or excavating the bed or bank of the watercourse,
    - iv. The ice road/bridge will not run along the length of the water body.
    - v. Materials such as gravel, rock, and wood will not be used,
    - vi. The withdrawal of any water will not exceed 10% of the instantaneous flow, in order to maintain existing fish habitat,
    - vii. Water flow will be maintained under the ice, where this naturally occurs,
    - viii. Measures to protect fish and fish habitat will be incorporated,
    - ix. The proponent and/or field representative will follow the Department of Fisheries and Oceans standards “Freshwater Intake End-of-Pipe Screen Guidelines” to prevent damage to fish populations,
    - x. DFO will be notified 10 working days before starting work by filling out and sending the Pacific Region Operational Statement Notification Form directly to DFO Regional Headquarters.