



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

August 8, 2016

File No: **LQ00449**

Arcus Development Group
1016 – 510 West Hastings Street
Vancouver, BC
V6B 1L8

Re: Class 3 Quartz Mining Land Use Approval

Your application for a 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 date August 8, 2016. All work, including restoration, must be completed by date August 7, 2026, 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) 993-5343 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Briar Young", written over a large, light-colored scribble.

Briar Young
Chief, Mining Land Use

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

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

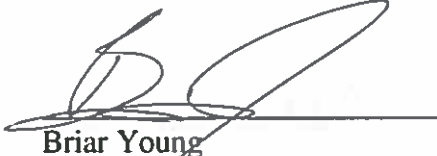
Pursuant to the Quartz Mining Act and Quartz Mining Land Use Regulation, the Chief, Mining Land Use hereby grants a Class 3 Approval to:

Arcus Development Group
1016 – 510 West Hastings Street
Vancouver, BC
V6B 1L8

APPROVAL NUMBER: LQ00449
UNDERTAKING: Quartz
CLASS: Class 3 Approval
EFFECTIVE DATE: August 8, 2016
EXPIRY DATE: August 7, 2026

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 LQ00449.

Dated this 8th day of August, 2016


Briar Young
Chief, Mining Land Use

**MINING LAND USE
APPROVAL
Class 3
LQ00449
Arcus Development Group**

SCOPE OF APPROVAL: See Appendix C - Claim Status Report

NTS: Map Sheet 115J14 – Touleary 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
Box 2703, K-09
Whitehorse, Yukon Y1A 2C6

Mining Lands Officer
Box 249
Dawson City, Yukon Y0B 1G0
Dawson.mining@gov.yk.ca

The contact for the Operator will be:

Arcus Development Group
1016 – 510 West Hastings Street
Vancouver, BC
V6B 1L8
Ph: 604-687-2522
Email: ian@arcusdevelopmentgroup.com

5. 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, (867) 993-7300.
6. 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.
7. A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
8. 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;
 - reclamation activities and,
 - documentation produced by environmental monitors.
9. The operator shall contact Natural Resource Officer, Mining Division at (867) 993-7300 at least 14 days prior to commencing the field season.
 10. The operator shall contact Natural Resource Officer, Mining Division at (867) 993-7300 at least 14 days prior to leaving the site at the end of the exploration program.
 11. 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 any infrastructure during the Project. Contact YG Department of Environment at 867-667-5600 to acquire trapper contact information.

Heritage

12. 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.
13. 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

14. All incidents with wildlife shall be reported to the District Conservation Officer in Dawson (Northern Region) at (867) 993-5492, as well as any other communication regarding wildlife. If bears frequent the camp area, the District Conservation Officer should be contacted.
15. The proponent shall report any sightings of caribou within the project area to the Dawson Regional Biologist at (867) 993-6461.
16. The operator shall maintain a detailed wildlife log for submission to the Chief of Mining Land Use annually.

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.
21. The operator shall minimize disturbance to lichen within the project area to the greatest extent possible.

Erosion Control and Permafrost

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

Historic Objects and Burial Grounds

24. A heritage resources overview assessment 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.

25. The report(s) developed for the above term 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.
28. Upon discovery of a heritage resource the operator shall notify the Heritage Department of Tr'ondëk Hwëch'in and Selkirk First Nation, in addition to Government of Yukon, Chief of Mining Lands and Yukon Heritage.

Wildlife

29. When safe to do so, all flights shall be conducted at a horizontal distance of > 1 km from sheep range during the lambing season (May 1st to June 15th).
30. The operator shall contact the Yukon Department of Environment Habitat Programs Branch for information on the exact location of mineral licks in the project area (867-667-3645).
31. The operator shall contact the Government of Yukon, Department of Environment – Habitat Programs Branch for information on the location of raptor nesting sites (867-667-3645).
32. The operator shall not conduct exploration activities within 1 km of nesting raptors from May 1 to July 31 of each year.
33. The operator shall suspend exploration activities if groups of fifty caribou or greater are within 1 km of active work areas. Caribou shall be given the right of way if encountered on roads and trails.

Disposal of Wastes/Cleanliness

34. 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.
35. 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.

36. 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.

37. Camps must be kept clean and tidy.

Fuel and Chemical Storage and Handling

38. 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.

39. 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.

40. 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.

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

42. 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.

43. 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

44. 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.

45. 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.

46. 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.

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

Use of Vehicles

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

49. The operator shall remove any foreign soil and plant material from equipment prior to moving it into the project area.

Timber and Brush

50. Cut brush must not be piled so that it blocks movement of wildlife or people.

51. Leaning trees created by cutting of lines, corridors, temporary trails, and clearings must be felled.

52. When it is economically viable to do so, timber suitable for sale must be salvaged and stock piled.

53. All risk of fire hazard must be avoided.

Trenching

54. Trenching carried out by hand or using hand-held tools must be methodical.

55. All trenches must be stabilized and marked to minimize risk to the public.

56. Trenches shall be backfilled and/or sloped at one end to avoid entrapment of wildlife.

57. 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.

58. The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

Drilling

59. All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
60. Vegetation other than that within a drill sump, must not be covered with drill cuttings.
61. Core must be stored in a stable fashion.
62. Drill mud must be re-circulated when possible.
63. All drill fluids must be contained in a sump.
64. Drill holes that pose a hazard or that lead to ground water must be plugged in a suitable manner.
65. The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
66. Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.
67. The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

Waste Rock

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

Roads, Trails, and Off-road Trail Use

71. All vehicles must be operated to avoid rutting and gouging of roads and trails.
72. 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.
73. 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.

74. 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.
75. Routes for temporary trails must be reconnoitered and flagged.
76. 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.
77. At the expiry of the Mining Land Use Approval, all new access (roads and trails) must be left in a condition conducive to revegetation.

Release of Sediment

78. 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.

Security

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

Reclamation

80. Reclamation shall be progressive in nature where possible and completed before expiry of the approval.
81. The operator shall ensure that annual reclamation efforts are successful in re-establishing the vegetative mat and community.

PART FOUR – FINAL DECOMMISSIONING

82. 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.
83. All petroleum products and any other hazardous substance must be removed from the site of the exploration program when the program ceases.
84. 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.

85. 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.
86. 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

87. The operator shall contact both Selkirk First Nation and Tr'ondëk Hwëch'in to discuss the types and timing of traditional/recreational land uses in the immediate area of the Project to minimize land-use conflicts.

Applicable Laws

88. 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.
89. Attached (Appendix A) is a list of the approved exploration activities.
90. Attached (Appendix B) are the commitments that form part of this operating plan.
91. Attached (Appendix C) is a list of claims that form part of this approval.

Arcus Development Group LQ00449

Operational Guidelines

- The operator shall familiarize themselves with Yukon invasive species and how to manage them by referring to the Yukon Invasive Species Council (YISC) document "Why Should I Care About Invasive Species?", located here:
http://www.yukoninvasives.com/pdf_docs/WhyshouldIcare2011_sm.pdf
- The operator should report the presence of any invasive plants that are listed on the website (<http://www.env.gov.yk.ca/wildlifebiodiversity/invasiveplants.php>) to the Yukon Conservation Data Centre (at 867-667-5331 or Toll free at 1-800-661-0408 local 5331)
- The operator should incorporate the best management practices found in Environment Yukon's Best Management Practices for Works Affecting Water in Yukon (http://www.env.gov.yk.ca/publicationsmaps/documents/bestpractes_water.pdf) and Yukon Chamber of Mines Yukon Mineral and Coal Exploration Best Management Practices and Regulatory Guide (http://www.yukonminers.ca/images/BMP_RG_October28_REVISIED_WebFile.pdf) when working around water, as applicable.
- Road construction and quartz exploration activities should follow acknowledged Best Management Practices for Heritage Resources, such as: Tr'ondëk Hwëch'in Best Practices for Heritage Resources (www.trondek.ca/downloads/THBestPractices.pdf).

Appendix B

Arcus Development Group LQ00449

Proponent Commitments

Clearing

- Wherever possible, naturally level or pre-disturbed areas will be utilized to minimize the amount of disturbance to vegetative mat and to minimize potential for erosion.
- Where vegetative mat is removed, it will be placed to one side of the clearing and replaced after the site is no longer being used.
- Trenches will be backfilled as soon as possible after they are mapped and sampled.
- Once a drill site is no longer in use, it will be thoroughly cleaned. The drill collar (if present) will be marked with a post, soil will be put back, and any brush or trees previously cut to create the pad will be scattered across the site to biodegrade and promote revegetation.
- Reclamation of trench, drill and sump sites will be ongoing throughout the exploration program.
- If possible, the camp will be located at a previously used site to minimize disturbances.

Waste Disposal

- Drill sites will be kept clean and all solid waste material will be removed as generated.
- Household garbage, food scraps and combustible debris will be burned on-site nightly so as not to attract wildlife.
- Burning will be done in either a closed, forced-air incinerator or a Yukon Burn Barrel as outlined by Environment Yukon in the publication *Guidelines for Industrial Activity in Bear Country*.
- All burning or incineration will be conducted under constant supervision.
- As garbage is generated throughout the day, it will be stored in sealed, animal-proof containers awaiting incineration.
- Electrified fences will be installed around the incinerator site and grey water sumps.
- Non-combustible items and ashy residues will be compacted and removed from the property on a weekly basis during backhauls of supply trips and taken to the Dawson City or Whitehorse municipal dump or approved recycling centre for final disposal.
- Waste oil will be stored in specially marked, sealed containers and taken to an approved disposal site.

- Special waste, such as batteries, will be segregated and taken to approved disposal sites by trained personnel, in accordance with environmental regulations.
- Privies and sumps will be used for liquid wastes at the campsite and will be situated at least 30 m from any waterway.

Wildlife

- A Wildlife Attractant Management Plan is included in the attached Yukon Mining Land Use application. The Proponent will ensure that this policy is implemented and that all personnel and contractors abide by a strict no hunting policy.

Fuel Storage and Handling

- Fuel will be stored onsite in heavy-walled 205 litre drums to prevent puncture and leakage.
- All 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 10 drums, it will be bermed and lined with an impermeable liner.
- Empty drums are kept onsite in the unlikely event that a drum is punctured and fuel has to be transferred to a stable container.
- Fuel absorbent cloth, berms and high-nitrogen fertilizer will be kept onsite in the event of a spill.
- Notices disclosing the fuel prevention and remediation plan will be posted at the camp and at each fuelling site, which state procedures to be followed and the emergency spill hotline contact information for the district.
- A spill prevention and remedial action plan is contained in the attached Yukon mining land use application.

Drilling

- 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 sumps 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 so that the cuttings are buried.
- All sumps will be dug more than 50 m from any watercourse.

Helicopter Use

- Any helicopter activity will be closely monitored and when necessary, routes will be modified to reflect concerns of first nations.
- During the program, flights will be conducted at elevations that should not startle animals and, if animals are encountered, flight paths will be redirected.

- If hunters or hiking groups are unexpectedly observed, helicopters will be rerouted to avoid repeated disturbance.
- Helicopter operations will be minimized during lambing, calving and rut seasons, and flight lines will be routed well clear of sensitive areas, including mineral licks.
- Flight paths and general helicopter practices will be consistent with prescribed procedures outlined in brochures published by the Yukon Department of Environment.



Appendix A
MINING LAND USE
EXPLORATION ACTIVITY REPORT

July 14, 2016

LQ00449

Class III

115-J-14 NE

Arcus Development Group
 1016 -510 West Hastings Street
 Vancouver, BC V6B1L8
 Canada

ELEMENT	CRITERIA	TERMS AND CONDITIONS
Establishment of trails per program		Up to 25km x 4m (on-claim)
Construction of structures		Up to two camps with with tent frame living quarters and outbuildings
Establishing new access roads per program		Up to 10km x 4m (on-claim)
Fuel Storage in a facility		Diesel 20,000L, Gasoline 2,000L, Propane 2,000lb, Jet fuel 500L
Lines		Up to 30km x 1m
Nb of clearings per claim, including existing clearings		Up to 25
Nb of person days per camp		Up to 3000 per year
Nb of persons in a camp at any one time		Up to 30 persons
Total volume of trenching		Up to 40,000m3 over the project area
Surface area of each clearing		Total surface area of clearings: 179,350m2. Drill sites 100m2 each. Trenches 400m2 each. Helicopter pads 150m2 each. Camps 450m2 each.
Use of vehicles on existing roads or trails		Within the design limits or tolerances of the road, if design limits or tolerances of roads or trails are not known, vehicles with a gross vehicle weight of more than 40t for roads, and less than 20t for trails

Claim Status Report

12 July 2016

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NFS #'s	Grouping	Permit
TL 1 - 109	YC76097 - YC76205	2025/04/29	Archer Cathro & Associates (1981) Ltd.	100.00	115003, 115J14	HD03190	LQ00296, LQ00449
TL 110 - 183	YC93602 - YC93675	2025/04/29	Archer Cathro & Associates (1981) Ltd.	100.00	115003	HD03190	LQ00296, LQ00449
TL 184 - 580	YD30404 - YD30800	2022/04/29	Archer Cathro & Associates (1981) Ltd.	100.00	115J14, 115J15	HD03190	LQ00449
TL 581 - 632	YD31571 - YD31622	2022/04/29	Archer Cathro & Associates (1981) Ltd.	100.00	115J15, 115J14	HD03190	LQ00449

Criteria(s) used for search:

CLAIM DISTRICT: 1000002 CLAIM STATUS: ACTIVE & PENDING GRANT NUMBER (FROM & TO): YC76097 & YC76205, YC93602 & YC93675, YD30404 & YD30800, YD31571 & YD31622 REGULATION TYPE: QUARTZ

Total claims selected : 632

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

