



# **SOUTH KITIKMEOT GOLD PROJECT**

## ***PROJECT DESCRIPTION***

**NOVEMBER 2022**

**VIRIDIS MINING & MINERALS**  
Level 50, 108 St Georges Terrace  
Perth, WA 6000

# I INTRODUCTION

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Viridis Mining & Minerals (Viridis) of Perth, Australia, B.C. is a junior exploration company with 100% ownership of the South Kitikmeot Gold Project (the Project) in the Kitikmeot Region of Nunavut. The Project is comprised of series of seven different claim blocks occurring over an area of approximately 11,000 ha adjacent to the past-producing Lupin Mine and the developing Back River Gold Project, and the northern extent of the Tibbitt to Contwoyto Winter Road. Exploration on the various claim blocks, known as Hiqiniq, Ujaraq, Gold Bug, Esker, Bling, Uist, and Qannituq, started in the 1980s and continued intermittently since, with diamond drilling on the Esker claims in the 1990's.

## 2 PURPOSE

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The purpose of the Project is to conduct exploration-related activities to re-evaluate previously identified gold targets and identify new targets. Exploration activities may include geophysical surveys (ground based and airborne), diamond, rotary air blast or reverse circulation drilling, geochemical and geological sampling, test pitting, trenching, geological mapping, channel sampling and prospecting. Environmental and heritage resources baseline studies may be undertaken to inform future project planning and mitigate potential program impacts. Works will be based either regionally, or out of a main temporary camp to be established near one of the claim blocks. Given the large area over which the claims are located, a temporary satellite camp may be set up to support regional ground crews.

The Purpose of this submission is to support early and ongoing engagement, impact assessment and exploration program permitting.

## 3 LOCATION

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The Project occurs within the Kitikmeot Region of Nunavut, predominantly on Crown Land; activities on and adjacent to one of the claim blocks occurs on an Inuit Owned Land (IOL) parcel. The Project also occurs within the Akaitcho Dene First Nations asserted territory, and is also situated within the boundary of the Môwhì Gogha De Nîtlèè (as defined by the *Tîjchq Agreement*, 2003).

The Project is located 424 km southeast of Kugluktuk, NU, 400 km northeast of Yellowknife, NT and 145 km east - southeast of the Lupin Mine on Contwoyto Lake. Yellowknife is the nearest major centre and main point of access and coordination.

The Property can be reached by helicopter, by fixed wing float or ski plane from Yellowknife or Kugluktuk. The property is 50 km east of the nearest point on the Tibbett Lake to Contwoyto Lake Winter Road (Winter Road) corridor. When the Winter Road is constructed and operational, the Project may be access overland by cattrain or winter trail to the Winter Road.

Fixed wing aircraft have historically landed either on Esker Lake or an adjacent esker airstrip. The nearby Jericho and Lupin mines also have all season airstrips that can support larger aircraft, and if authorized may be used to support project resupply.

The location of the main seasonal camp is yet to be determined; it will be selected, following engagement and reconnaissance. While the main camp may logically be located in the vicinity of the historic Esker Lake camp (which has since been decommissioned), this has not been decided. Further, given the late area over which the claims occur, the main camps may be relocated over time to support easy access to drill target areas. Further, the field program may be supported by small portable temporary satellite camp(s) to allow for safe refuge for remote ground crews.

The Project is located within the Southern Arctic Ecozone and the Takijuk Lake Upland Ecoregion (ECCC 2022). The Project also occurs within Area 1 of the Bathurst Caribou Range Planning Area (GNWT 2019), within the centre of habitation. Bathurst caribou may use the Project area all year, with highest use occurring for summer range.

The area is characterized by very cold winters, brief cool summers and short fall and spring seasons. Climate data from the nearest weather station at the Lupin Mine, 145 km NE of the property, indicate that mean daily temperatures in the area vary from -30°C in January to +12°C in July and that average annual rainfall is 16.0 cm. The topography is gently undulating with sparse bedrock exposures. Lakes and some swamps cover much of the low lying areas (AGL 2016).

The property is centred south of the informally named Esker Lake and includes a small lake in the eastern portion of the claim informally named Sheit Lake in past reports. Elevations on the property range from 390 m at Esker Lake to 430 m at the top of Brandon Hill (AGL 2016).

The Esker claim block located on Esker Lake is the approximate geographic centre of the Project at 65°01' N 108° 01' W (Zone 12N and NAD 83).

## 4 REGULATORY CONTEXT

The various claim blocks were most recently explored by Silver Range Resources Ltd., who held a series of Approvals with a Licence from the Nunavut Water Board to support limited surveys. Past diamond drilling and camp establishment was undertaken at Esker Lake in the early 1990's. Relevant file #s are:

- Bling Recce
  - Nunavut Planning Commission (NPC) file # 148588;
  - NWB # 2WLC-BLI1718;
- Contwoyto Recce
  - NPC # 148597;
  - NWB # 2WLC-CRP1819;
- Qannituk Recce
  - NPC # 148825
  - NWB # 2WLC-QRP1819.

The NPC recently issued a determination for the Project, #149880.

## 5 SCOPE

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The Project scope involves the following:

- Accessing the Project area by air by a fixed wing aircraft or a helicopter, with resupply also occurring by air or winter trail connecting to the Winter Road, with fixed wing aircraft landing at local and regional airstrips or adjacent lakes;
- Constructing and operating a seasonal temporary camp and laydown area able to support up to 60 people;
- Use of a satellite camp(s) for remote crew support and safety;
- Exploration including staking, prospecting, geological mapping, geophysics, geochemical sampling, trenching and drilling both on land and on ice using diamond and/or rotary air-blast/reverse circulation drilling;
- Waste management and water use consistent with camp construction and operation, drilling, core cutting, resupply and access;
- Local use of a boat, helicopter, atv, snowmobile, snow cat and other similar light and heavy duty vehicles for drill support, local access, winter trail construction and maintenance;
- Local overland and over ice winter access for camp and drill support;
- Caching mostly drummed diesel, jet fuel and propane at several locations proximal to drill targets and at the camp;
- Staging equipment and supplies at the camp site over winter and during periods of temporary camp closure;
- Archaeological site assessments, where required;
- Baseline environmental studies.

Some photos are included with the application, illustrating typical program components. As is common in the early days of an exploration program, the Project will start small and expand based on positive exploration results. Accordingly, the following estimations have been made to support Program planning and authorization. These approximations are reflected as accurately as possible in the various documents submitted with the regulatory submissions:

- Initial Program mobilization will occur in mid-winter to early spring 2023, including up to 30 people for up to 6 months, or as weather permits, and may involve 1 drill;
- Based on results, the Program could expand in duration and magnitude to include seasonal work extending from February to October utilizing multiple drills and housing up to approximately 60 persons in a temporary camp;
- Based on a currently unknown rate of the Program expansion, typical materials and equipment used and waste generation are estimated based on the maximum program magnitude and duration.

## 6 TIMING

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The Program is planned to commence in mid winter - early spring 2023 following receipt of approvals, and is expected to be seasonal, although year-round operation is possible depending on conditions. In the near term, winter resupply and camp construction are planned, with drilling commencing thereafter, and seasonal camp operation typically occurring between February and October.

It is expected that the Program, as currently scoped, will last up to 7 years, which is the expected duration of an extended Type A land use permit.

## 7 EQUIPMENT AND MATERIALS

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The maximum extent of typical planned equipment and materials are listed in the application form. Equipment includes drills and a mix of heavy and light duty equipment necessary for running an exploration program, as well as building and maintaining a winter trail. Materials onsite will mostly be drummed fuel (diesel, gasoline, Jet A or B, propane), with some additional exploration and maintenance-related supplies (salt, drilling fluids, lubricants).

## 8 ALTERNATIVES

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Alternatives to the project and alternative means of carrying out the project have been considered and are summarized below:

- Alternatives to carrying out the project:
  - **Do nothing/defer works:** While doing nothing or deferring works will minimize activity on the land, further delaying the start of work reduces value to existing shareholders and attractiveness to future shareholders considering the high price of gold and corresponding high investor interest. Further, deferring work also limits the availability of near-term employment and training opportunities available to local and Indigenous business and workers, and related input into socio-economic wellbeing.
- Alternative means of carrying out the project:
  - **Camp establishment, location:** Viridis is considering multiple locations for its main camp. While it would prefer to locate its activities in pre-disturbed areas wherever possible, the historic camp location is on a very rocky shoreline, which makes aircraft landing and unloading difficult. Viridis looks forward to the outcomes of its engagements with stakeholders and a reconnaissance to aid in selecting a preferable camp location.
  - **Camp establishment, number:** Viridis wishes to establish a main as well as a temporary satellite camp to support a remote ground crew. Alternatively, Viridis could house all workers at its main camp for all activities. However, the long travel distances across the Project area can become unsafe due to changing weather conditions. Utilizing a small satellite camp to support remote non-drill crews, in addition to a central camp, is Viridis's preferred alternative for camps.

## 9 LANDOWNER, RIGHTS HOLDER AND STAKEHOLDER ENGAGEMENT

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Viridis is undertaking to engage with the following land owners, rights and stake holders in advance of and throughout the life of the project:

- Akaitcho Dene First Nations Interim Measures Office;
- Crown-Indigenous Relations and Northern Affairs Canada;
- Government of Nunavut;
- Hamlet of Kugluktuk;
- Kitikmeot Inuit Association;
- Kugluktuk Angoniatit Association;
- Mackenzie Valley Land and Water Board;
- Other licenses and land users with interests in the local area;
- Public;
- Tłıchǫ Government.

Engagement efforts and outcomes are tracked in an engagement log, and engagements are undertaken in accordance with the *Engagement Plan*.

## 10 REFERENCES

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*Tijchq Agreement*. 2003

Aurora Geosciences Ltd. (AGL). 2016. Technical Report, Geological mapping, Prospecting & Geophysical Surveys at the Esker Lake Property, Nunavut Mining District, Nunavut, Canada.

Environment and Climate Change Canada (ECCC). 2022. The Ecological Framework of Canada, Southern Arctic Ecozone, Takijuaq Lake Upland Ecoregion. Accessed October 2022. Available at: <http://www.ecozones.ca/english/region/41.html>

Government of Northwest Territories (GNWT). 2022. Department of Environment and natural Resources, Programs and Services, Barren Ground Caribou: Bathurst Herd, Ahik, Beverly and Qamanirjuaq Herds. Access October 2022. Available at: <https://www.enr.gov.nt.ca/en/services/barren-ground-caribou>

Government of Northwest Territories (GNWT). 2019. Bathurst Caribou Range Plan. Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. ii + 86 pp.