









Post-Closure Phase: from to



Agreement			for gold, silver, copper and zinc. Companies such as Dejour Mining, Inco, Placer Dome, Noble Peak Resources were active on this ground. Historic Exploration involved geological mapping, ground and airborne geophysical surveying, rock and soil sampling, diamond drilling.	cease at that location and an archaeologist will be consulted. Location of palaeontological sites is not expected due to Archean aged rocks and lack thereof significant macrofossils.	does not cover any protected areas. Arviat is the nearest community.
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ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2024-10-24
ᓄᓇᓂᓄᓐ	Mayor	Hamlet of Arviat	2024-10-30
ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2025-05-12
ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2025-10-07
ᓄᓇᓂᓄᓐ	Mayor	Hamlet of Arviat	2025-10-07
ᓄᓇᓂᓄᓐ	Director and CLO	Kivalliq Inuit Association	2025-10-07
ᓄᓇᓂᓄᓐ	Luis Manzo	Kivalliq Inuit Association	2025-10-07
ᓄᓇᓂᓄᓐ	Land Use Inspector	Crown Indigenous Relations and Northern Affairs Canada	2025-10-07
ᓄᓇᓂᓄᓐ	Director of Licensing	Nunavut Water Board	2025-10-07
ᓄᓇᓂᓄᓐ	Info	Nunavut Impact Review Board	2025-10-07
ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2025-11-14
ᓄᓇᓂᓄᓐ	Luis Manzo	Kivalliq Inuit Association	2025-11-14
ᓄᓇᓂᓄᓐ	John Main	Nunavut Legislative Assembly	2025-11-14
ᓄᓇᓂᓄᓐ	SAO	Hamlet of Arviat	2025-11-14
ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2025-12-09
ᓄᓇᓂᓄᓐ	Nicole Issakiark	Arviat Hunters and Trappers Organization	2025-12-10
ᓄᓇᓂᓄᓐ	SAO	Hamlet of Arviat	2025-12-09





						support/Snowmachine/ATV/generator
propane	hazardous	30	100	3000	Lbs	cooking
oil	hazardous	50	20	1000	Liters	oil for generator; Drill Rig/camp support

**ΔL<sup>sb</sup> <D<sup>sb</sup>C>yl<sup>sb</sup> D<sup>sb</sup>**

<b>ΔL<sup>sb</sup> &lt;D<sup>sb</sup>C&gt;yl<sup>sb</sup> D<sup>sb</sup></b>	<b>sb<sup>sb</sup> ΔΓ<sup>sb</sup>C<sup>sb</sup>C<sup>sb</sup>σ&lt;<sup>sb</sup>&lt;<sup>c</sup></b>	<b>aP<sup>c</sup> ΔΓ<sup>sb</sup>C<sup>sb</sup>C<sup>sb</sup>σ&lt;<sup>sb</sup>&lt;<sup>c</sup></b>
299	pump from nearby water source	nearby water source



# **Additional Information**

## **SECTION A1: Project Info**

## **SECTION A2: Allweather Road**

## **SECTION A3: Winter Road**

## **SECTION B1: Project Info**

6106 Resources plans to conduct an initial drill program in 2026 to verify historic results and find areas of high gold and silver potential. If promising the project would continue seasonally in spring/summer and/or winter over following years.

## **SECTION B2: Exploration Activity**

Satellite remote sensing may be used to acquire high resolution satellite imagery or hyperspectral data. This would be undertaken completely remotely by a 3rd party expert contractor. The area of investigation would be limited to 6106 mineral claims/exploration agreements. Samples of soil and other sediments may be completed. This would involve the collection of a small bag of soil from a 10x10cm hole, dug by hand. The tundra vegetation on top would be carefully removed and replaced after sampling. On land drilling will be completed using primarily a diamond drilling rig, such as the Zinex A5 or similar, to recover drill core for geological logging, cutting and sampling for shipment to a laboratory for preparation, digestion and analysis. Reverse Circulation drilling may also be used, for example a Super Hornet heli portable rig. Reverse Circulation drilling produces "chip" samples which will be collected at the drill site through a cyclone and "riffle-splitter" or similar into composite samples, usually spanning a 5ft interval. On ice drilling (typically diamond drilling) Drilling as described above will primarily be completed on land, however if required to demonstrate continuity within the mineralisation drilling may be conducted in a similar manner on ice. On site sample processing will be limited to the geological logging of rock type, alteration and mineralisation, along with basic measurements using a portable X-Ray Fluorescence device (pXRF) and magnetic susceptibility tool (KT-10). After logging, the drillcore will be cut over specific intervals using a diamond saw, with half of the drillcore being assigned a sample ID and bagged for shipping to a laboratory off-site. Off site sample processing. All samples prepared on site from drilling and rock chip sampling activities will be shipped off-site to a certified laboratory, for example ALS Laboratories, Yellowknife. The samples will then undergo crushing, pulverising, splitting, digestion in acids and then analysis. This will quantify the concentration of elements of interest within the samples.

## **SECTION B3: Geosciences**

Geophysical surveys may be conducted to gain information about the subsurface without intrusive methods. Magnetic data can be acquired either by ground surveys, which involves walking a number of straight lines across the target area carrying a magnetometer device, or airborne methods. Airborne methods involve a similar line based approach, but with a fixed wing or helicopter to cover the distance. Electromagnetic (EM) surveys may also be used, which can be completed by ground or airborne means. Ground EM surveys involve laying cables in a set configuration and the creation of a current through the cables via battery power or generators. Measurements are then taken on foot within the loop of cable and the response recorded, indicating the conductivity/resistivity of the subsurface. Aerial photography will be conducted, this will likely be completed via helicopter and is an alternative/supplement to satellite data collection. Ground penetrating radar may be used to confirm lake depths. Geological maps already exist for the project area. Detailed geological mapping may be completed over certain target areas in conjunction with rock chip sampling. All drillcore or chips generated from diamond drilling or reverse circulation drilling will be logged for geology. This will form a 3D geological model of the target areas. Geophysical surveys completed via fixed wing or helicopter may require periods of lower altitude flying. No aerial surveys will be undertaken during times of increased wildlife sensitivity when herds of caribou are observed in the project area.

## **SECTION B4: Drilling**

The number of drillholes is highly dependent on the results of the first phase of results. However, a maiden drilling program may be expected to consist of up to 25 drillholes to approximately 80 in a year where promising results have been found. Primarily diamond drills will be used, however reverse circulation drilling may be used where suitable. Reverse circulation drills do not require water usage. Drillhole depth will vary depending on the target area, however initial diamond drillholes may average 250-300m depth with deeper holes extending to 400-500m depth to test extensions of mineralisation. Reverse circulation drillholes will likely average 200m. No additives to be used with reverse circulation drilling, diamond drilling may use calcium chloride as an additive to water to assist when drilling through permafrost. Drill cuttings from diamond drilling will be directed to a nearby natural depression/sump with the drilling water being re-circulated downhole. Drilling equipment will be moved via helicopter. During winter, with sufficient snow coverage drilling equipment may be dragged on skids.

## **SECTION B5: Stripping**



1960s at Turqueil Lake with work programs extending into the 1980s, consisting of geological mapping, rock sampling, soil sampling, airborne and ground geophysics and substantial drilling programs. Copper, zinc and silver mineralisation is also present and has been subject to extensive previous mineral exploration. The project area has several eskers, which are trending NW/SE. There are also areas mapped as "Sand" and "Tundra Polygon" which are typical landforms for the tundra landscape. Topography is generally flat with small rocky outcrops which in places are rounded due to glaciation. Seasonal temperature variation across the project area is pronounced. Average winter daytime temperatures in the surrounding Kivalliq-Ennadai region reach approximately -24 °C, with nighttime lows near -32 °C, while summer daytime highs average around +15 °C. Broader Nunavut climate data indicate winter averages ranging between -26 °C and -12 °C, and summer averages from +2 °C to +9 °C. Strong prevailing westerly winds are typical. Lakes in the region generally remain frozen until early to mid-May, followed by a cool, rainy season beginning in late August. Air quality in the area is expected to generally be good due to the remote location and minimal industrial activity, although wildfires activity can impact air quality periodically. Noise levels are also expected to be low due to the remote location. The area is one of contiguous permafrost, which can extend to a depth of 160 m or more and reach temperatures as low as -15°C. Although waterbodies in the region are generally pristine in nature, natural geology and environmental inputs and flow processes can cause water quality to vary by waterbody and season. The project area encapsulates several large waterbodies of note, including Heninga Lake, Carr Lake, Turquetil Lake, Kaminak Lake and Maguse Lake towards Arviat.

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The Project area is in a predominantly treeless Southern Arctic Tundra. Vegetation is comprised of grasses, lichens, low shrubs, mosses, and various arctic flowering plants. A limited abundance of spruce, willows, alders, and ground birch can be found in sheltered niches along lake edges or watercourses. The Aquatic life in the freshwater environments include species such as Arctic char, lake trout, northern pike and Arctic grayling. Project lies within the range of the Qamanirjuaq barren ground caribou herd. The calving period of June 9 to June 22 is a particularly sensitive time for the caribou herd, which currently is predominantly located NW of Whale Cove, which is further NE than the project area. Other mammals include moose, muskox, grizzly bears, wolverines, arctic ground squirrels, wolves and arctic fox. Polar bears are present along the coast of Hudson Bay but rarely move far enough in land to be present within the project area. Within the Kivalliq region there are favourable habitats for birds such as waterfowl-geese and ducks, shorebirds such as sandpipers, and raptors like falcons and hawks. Notable examples include the Ross's goose, snow goose, peregrine falcon and rough-legged hawk. Many of these species utilise the Kuugaarjuk Migratory Bird Sanctuary which is south of Arviat, outside of the Project area. There are no known official species at risk within the project area. There are also no known National Wildlife Areas, Migratory Bird Sanctuaries or Other Conserved Areas in the Project area as per the National Protected and Conserved Areas Network of Canada.

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The project is located 135km northwest of Arviat, in the Kivalliq Region of Nunavut. The project covers Crown land and Inuit owned surface and subsurface land. Exploration Agreements with the NTI are in place on Inuit owned land with subsurface rights. 6106 Resources are not aware of any archaeological or culturally significant sites in the Project Area but will avoid any sites that are identified over time. The bedrock geology is dominated by Archean aged rocks, which would be host to only microfossils, and so the palaeontological aspect is limited. The project will significantly add to the subsurface geological knowledge of the Rankin-Ennadai Greenstone Belt, an important source of gold for Nunavut. The project, due to its remote location is not expected to effect human health, local or regional traffic patterns. 6106 Resource acknowledges the traditional land use in the Kivalliq Region, with importance of harvesting practices. The project location is 135km inland from Arviat, and is not expected to interrupt harvesting practices. 6106 Resources is committed to working with the Arviat HTO, Kivalliq Inuit Association and the Hamlet of Arviat, over the life of the project. 6106 Resources will also preferentially use Arviat, Kivalliq, and Nunavut-based businesses, maximizing local employment, providing on-the-job and other training opportunities, and supporting community initiatives as requested and feasible.

**Miscellaneous Project Information**

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Physical Impacts  
1. Designated environmental areas: No designated environmental areas occur within the Project footprint. A winter trail may be used by low-pressure vehicles (e.g., tracked or skid-mounted) to connect Arviat with the Hook Lake Camp (final location TBD).  
2. Ground stability: Effects on ground stability will be minimized by avoiding areas highly sensitive to exploration, directing runoff into sumps to prevent land scouring, and protecting permafrost (as described below). Given these measures, along with the small scale and limited extent of activities, no significant effects on ground stability are expected.  
3. Permafrost: Permafrost could be affected by heated structures, drilling operations, and unfilled sumps. To reduce potential impacts, the camp will be placed on dry, stable terrain, avoiding wetlands. Heated tents and drill shacks will be elevated on cribbing to promote air flow and limit ground warming. Any excavated sumps or depressions near drill collars will be backfilled at closure to prevent water ponding and subsequent permafrost degradation. With these measures and the modest scale of the program, no significant permafrost impacts are anticipated.  
4. Hydrology / limnology: Water may be drawn from lakes, streams, ponds, or rivers near the camp and drill sites. Although 6106 Resources is requesting a cumulative withdrawal limit of up to 299 m³/day (Type B Water Licence threshold), typical use is expected to remain below 100 m³/day and occur on fewer than 100 days per year on average. Drill water use will be minimized by recycling and reusing drill water, settling and removing cuttings, and/or using a freshwater tank to eliminate repeated intake from lakes. Together, these practices can reduce water demand by up to 90%. Under-ice withdrawals will not exceed 10% of available water volume, determined in accordance with DFO's Protocol for Winter Water Withdrawal or the Mackenzie Valley Land

and Water Boards' Technical Reference Document. No significant impacts on hydrology or limnology are expected.

5. Water quality: Water quality could be influenced by spills, sump releases, or drilling effluent. Biodegradable drilling additives will be used where possible, and drilling on ice will avoid the use of salt and operate with a closed fluid loop. Sumps will be located at least 31 m from the ordinary high water mark and managed according to best practices. All chemicals will be stored at least 31 m from water and handled in accordance with the Spill Contingency Plan. With these mitigation measures in place, no significant impacts on water quality are anticipated.

6. Climate conditions: Given the limited scale and nature of the proposed work, no impacts on climate are anticipated.

7. Eskers and other unique/fragile landscapes: Eskers are present within the exploration area. Impacts will be minimized by avoiding sensitive terrain, managing runoff through sumps to reduce land scouring, and protecting permafrost as described earlier. No significant effects on these landforms are predicted.

8. Surface and bedrock geology: The nature and scale of the Project are not expected to cause significant effects on surface or bedrock geology. Geological knowledge of the area will be enhanced through exploration.

9. Sediment and soil quality: Sediment and soil may be affected by spills, sump discharges, or drilling activities. Biodegradable drilling additives will be used where possible, drilling on ice will avoid salt and use closed circuits, and sumps will be placed at least 31 m from the ordinary high-water mark and managed in accordance with best practices. Chemicals will be stored at least 31 m from water, and spill response measures outlined in the Spill Contingency Plan will be followed. No significant impacts on sediment or soil quality are expected.

10. Air quality: Air quality may be influenced by emissions from fuel combustion or waste incineration. 6106 Resources will reduce emissions by limiting helicopter use and equipment run-times, performing preventative maintenance, minimizing open burning, burning only appropriate waste streams (e.g., untreated wood, paper, cardboard), and using a dual-chamber, forced-air incinerator designed for the waste types generated. Given these measures and the scale of the Project, no significant impacts on air quality are expected.

11. Noise levels: Noise from camp operations, drilling, and helicopter use may disturb wildlife. Noise will be localized, intermittent, and short-term. Work will cease if wildlife approaches any site. Additional measures include reducing idling and unnecessary flights, maintaining equipment to reduce noise, and following the Wildlife Management and Monitoring Plan. No significant noise impacts are anticipated.

Biological Impacts

1. Vegetation: Vegetation effects from the Project footprint will be reduced by:

- Minimizing overall footprint through consolidation of structures and materials.
- Locating the camp on dry, durable ground to reduce erosion and ground disturbance.
- Using previously disturbed areas (e.g., airstrips) where feasible.
- Elevating heated tents and drills on cribbing to reduce vegetation disturbance and permafrost thaw.
- Avoiding off-road vehicle use when rutting or gouging could occur.
- Reducing winter trail and winter road size by minimizing corridor length and width and using existing trails where possible.
- Using natural depressions or sumps for liquid waste, and backfilling any dug sumps after use to support revegetation.
- Minimizing salt use during drilling by substituting calcium chloride for sodium chloride, which is more harmful to plants.
- Preventing non-native species introduction by cleaning equipment prior to mobilization.
- V-notching winter stream crossings before melt to prevent unnatural ponding.
- Locating sumps, fuel storage, and infrastructure more than 31 m from waterbodies.
- Avoiding areas with identified sensitive features.
- Progressively closing drill sites and fly camps to limit cumulative disturbance.
- Stabilizing areas susceptible to erosion or sediment loss at closure.

With these measures and the small scale of the Project, no significant vegetation impacts are predicted.

2. Wildlife, birds, wildlife habitat, and migration patterns: Project activities may affect wildlife habitat or cause disturbance. In addition to the habitat-protection measures above, 6106 Resources will implement mitigation to:

- reduce disturbance to wildlife, dens, and nests
- minimize wildlife attraction
- limit helicopter-related disturbance
- reduce direct wildlife impacts

Reducing disturbance to wildlife, dens, and nests:

- Closely monitor activities during Qamanirjuaq caribou calving and post-calving (June 9–22 and June 23–July 3) and halt work if caribou approach. Abide by the KIA's Mobile Mitigation Measures.
- Avoid habitat disturbance during the bird nesting season when possible.
- Maintain a 300 m buffer from bird concentrations (e.g., colonies, molting sites).
- If active nests are located, stop disruptive work until nesting is complete and establish species-appropriate buffers.
- Avoid drilling near active carnivore dens.
- Skirt camp tents to deter wildlife denning.

Reducing wildlife attraction:

- Enforce a strict no-feeding-wildlife policy.
- Store food waste and attractants securely and in ways that reduce odours.
- Require crews to return all food scraps to camp for proper management.
- Dispose of attractant wastes promptly via backhaul or approved onsite incineration.
- Do not establish a landfill, as it may attract wildlife.
- Screen kitchen greywater to remove food particles and treat sumps with lime or lye as needed.
- Train personnel in waste-management procedures designed to reduce attraction.
- Install a bear fence if necessary.
- Conduct routine inspections to verify that attractants are controlled and food waste is managed appropriately.

3. Minimizing helicopter disturbance:

- Halt exploration, including flights, if Qamanirjuaq caribou approach during calving/post-calving.
- Avoid unnecessary low-level flights or landings near wildlife.
- Fly above 610 m altitude whenever possible and not below 300 m except for operational needs.
- Adjust flight paths to avoid wildlife when low flying is required.
- Maintain a 1,100 m vertical buffer over bird concentrations.
- Maintain a 1.5 km lateral buffer from bird colonies and molting areas.
- Detour flights around wildlife.
- Conduct wildlife scans before landing and avoid landing near animals.

4. Minimizing direct wildlife impacts:

- Enforce a strict no-hunting policy.
- Permit fishing only with proper licences.
- Provide bear-awareness and deterrence training.
- Equip crews with deterrence gear (e.g., air horns, bear bangers, spray) and train them.
- Use bear fences where required.
- Use wildlife monitors when appropriate.
- Avoid deliberate approach to wildlife.
- Train all workers on wildlife-related policies and waste-management practices.
- Check active work areas for signs of wildlife access or new nesting.

With these measures and the limited scale of activities, no significant impacts to wildlife, birds, habitat, or migration patterns are expected.

3. Aquatic species, habitat, and migration/spawning: All water intake lines will be screened to avoid entraining or impinging fish, and DFO-recommended mitigation measures will be followed or guidance sought as needed. No in-water construction is planned. With these actions, no significant impacts on aquatic species or habitat are anticipated.

4. Wildlife protected areas: The exploration program does not overlap any wildlife protected areas.

Socioeconomic Impacts

1. Archaeological and cultural historic sites: Ground disturbance from the camp and drill sites could affect archaeological or cultural sites. If areas of potential significance are identified, an archaeologist will be engaged to assess possible camp and drill locations. Archaeological assessments will continue as required over the life of the Project. Although no known archaeological or cultural sites occur within the mineral claims, any discovered sites will be avoided. With these measures and the small scale of the Project, no significant impacts are anticipated. If any areas are discovered, exploration activities will cease in that area and cordoned off. The site will then be reported to the Government of Nunavut, chief archaeologist.

2. Employment: The Project is expected to provide positive employment benefits. 6106 Resources will prioritize contracting with Arviat, Kivalliq, and Nunavut businesses, maximize local hiring, and offer on-the-

job and other training opportunities. With established mining operations already present in the region, an experienced workforce is available. Overall, the Project is expected to contribute positively to regional employment.<sup>3</sup> Community wellness: Community wellness is expected to benefit from increased employment, local business participation, and 6106 Resources' support for community initiatives. Overall impacts on community wellness are anticipated to be positive.<sup>4</sup> Human health: Due to the remote location, small scale, and the mitigation measures described throughout the application, no impacts on human health are expected.

### **Cumulative Effects**

Exploration activities by 6106 resources are all anticipated to be of limited scale and impact and will be mitigated to avoid significant residual impacts. However, residual impacts must be considered in combination with those of other projects undertaken in the past, present, or future, to confirm that even individually-limited impacts are unlikely to result in significant cumulative impacts. Exploration activities have been considerable in the Rankin-Ennadai Greenstone Belt (geological province) which now hosts world class gold deposits and mining operations, such as the Meliadine and Meadowbank Complex mines of Agnico Eagle. This gold mining activity is a considerable, long term positive socio-economic impact with a very limited surface footprint. 6106 Resources exploration activity would add to this. 6106 mineral claims and exploration agreements are in areas of previous exploration activity. Cumulative effects of exploration are expected to have mitigatable negative impacts. In this area, the highest potential for negative cumulative effect, should there be one, is on the Qamanirjuaq barren-ground caribou herd, who utilise the area as habitat. Care is to be taken during the calving and post calving periods, which sees the herd to the NE of the Project area. To mitigate during this time of the year winter access is considered, making use of significant snow cover to drag resupplies and equipment to the camp, reducing the number of helicopter and/or float plane flights required during more sensitive periods of the year. With significant mitigation measures in place, no significant cumulative negative impacts are anticipated.







