

# 1501253 BC Ltd.'s responses to ECCC's Technical Review Memorandum dated March 18, 2025.

**Date:** March 21, 2025

**To:** Maja Crawley, Environmental Assessment Officer, Environmental Protection Operations Directorate

**Copy:** Richard Dwyer, Manager of Licensing, Nunavut Water Board

**From:** Alexandre Jones Vilela da Silva, c/o 1501253 BC Ltd.

**Subject:** Response to Environmental Protection Operations Directorate's review of 1501253 BC Ltd.'s Type B Water Licence Application 2BE-CPM---- for the Coppermine Project

**Region:** Kitikmeot

## Summary

Environment and Climate Change Canada (ECCC) has reviewed 1501253 BC Ltd.'s Type B Water Licence Application 2BE-CPM---- for the Coppermine Project and made several recommendations. This document directly addresses these recommendations by either responding directly in this document, and/or amending application documents. The document list below outlines documents that were amended to assist with the queries and recommendations, and have been attached with this response.

## Document List:

Wildlife Management Plan 1501253 B.C. Ltd V3

### **1. Species at Risk.**

- a) 1501253 BC Ltd. has consulted the Species at Risk Registry and obtained the most current information for our operations. The Wildlife Management Plan has been updated with addition of several species. The Species at Risk Registry will be printed off, laminated and kept at the drill site.
- b) 1501253 BC Ltd. will consult with the Government of Nunavut to identify appropriate mitigation and/or monitoring measures to avoid and lessen project effects to species under their management responsibility.

### **2. Species at Risk – SAR Missing and/or Effects and Measures Missing**

- a) 1501253 BC Ltd. has added additional information to the Wildlife Management Plan Table 2, to expand in further detail the potential adverse impacts the proposed activities may have on wildlife, and what mitigation measures will be taken place for species at risk wildlife which may be present in the project area.

Additionally, 1501253 BC Ltd has reviewed the spatial dataset (<https://data-donnees.az.ec.gc.ca/data/species/protectrestore/critical-habitat-species-at-risk-canada/>) displaying the geographic areas within which critical habitat (CH) for terrestrial species at risk, listed on Schedule 1 of the federal Species at Risk Act (SARA), occurs in Canada. This includes terrestrial species and species for which Environment and Climate Change Canada (ECCC) lead. No critical habitats for species at risk occur within the project area.

- b) 1501253 BC Ltd. will ensure that the measures mentioned in the Wildlife Management plan are strictly adhered to, to avoid or lessen any potential adverse effects, and monitor procedures and protocols as needed to inform adaptive management.

### **3. Project Activities Within Migratory Bird Habitat – Project Activities During Nesting Season**

- a) 1501253 BC Ltd. will carry out all phases of the project in a manner that reduces risk to migratory birds and to avoid harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests and eggs. These measures and procedures are clearly outlined in the Wildlife Management Plan, which the Company will strictly adhere to minimise and potential effect on the environment and wildlife.

If you have any more questions or I can be of any further assistance, please don't hesitate to contact me.

Kind regards,

**Alex Vilela**

Exploration Manager, 1501253 B.C. Ltd  
alex.vilela@sentinelresources.com.au

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# Wildlife Management Plan

Coppermine Project

Coppermine River area, Kugluktuk

21/03/2025

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**REVISION HISTORY**

The table below is a revision history table that outlines the revisions made by 1501253 B.C. Ltd to this document.

Version	Date	Section	Summary of Changes
1.2	04/03/2025	Intro	Updated diamond drilling to 'drilling'. Updated map.
1.3	21/03/2025	2.0, 3.0	Added Buff-breasted sandpiper and Red Knot, Transverse Lady beetle
1.3	21/03/2025	4.2, 4.3, 4.4	Added more detail
1.3	21/03/2025	4.6 table 1	Added email for bird sightings
1.3	21/03/2025	Appendix B	Added map of bluenose east caribou herd calving grounds and reference
1.3	21/03/2025	3.0 table 2	Added mitigation methods to reduce effect on fish, and coco matting for tundra plant species



## 1.0 Introduction

The Coppermine Project is an early-stage mineral exploration program that will likely include a small drilling program for approximately 10-20 holes, geological mapping and prospecting, rock chip and soil sampling, small ground-based non-invasive geophysical surveys, and possibly airborne geophysical surveys. Staff will be based out of Kugluktuk or Hope Lake Camp (managed by White Cliff Minerals, NPC file No 150522) and fly to site via helicopter or fixed wing. Activities will cease during the Bluenose East caribou herd calving and post calving form from 28th may to 3rd July.

Diesel fuel will be used for the drill rig, and aviation fuel (A1) will be used for the helicopter. Small fuel caches up to 3,800l of combined diesel and aviation fuel will be created at the drill site and possibly other locations in the project area to support geological mapping, rock chip sampling and prospecting. Fuel will be stored on a flat area in 205l barrels, and in sit in a secondary pop-up containment bund that is sealed to prevent any spillage or leakage from seeping into the underlying soil. Fuel caches will be stored at least 31 metres away from the ordinary high-water mark of any water body.

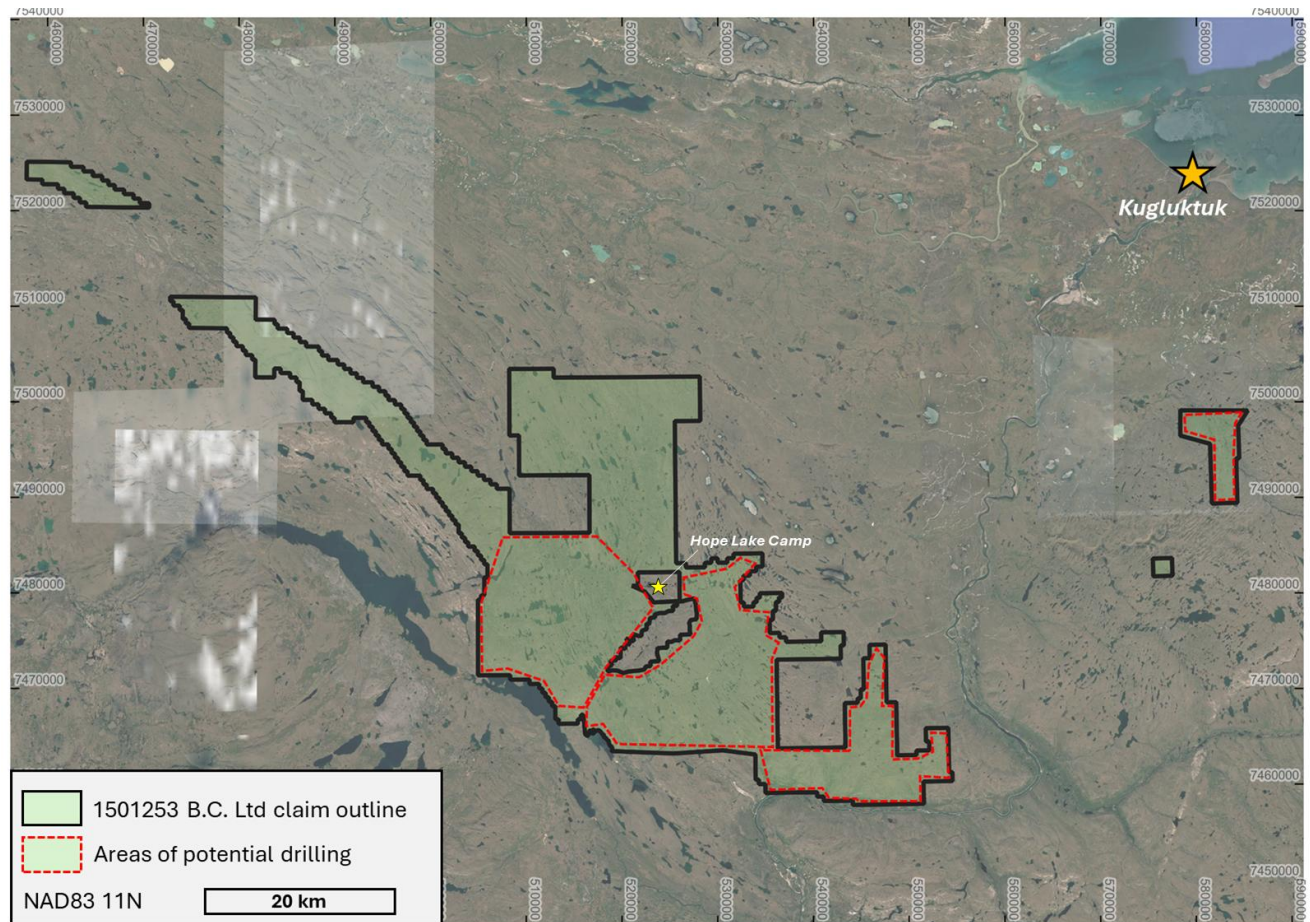
Spill kits will be located at each cache, and at the drill rig. Kits will contain fuel absorbent pads, heavy duty plastic bags, tarps, and empty drums or buckets, and hand tools.

After drilling is complete and the site is remediated, 1501253 B.C Ltd will conduct a thorough inspection of each drill location area to check for:

- Hydrocarbon staining
- Fire and safety hazards
- Debris or litter

1501253 B.C Ltd commits to taking a series of photographs of the drill site locations after the activities are complete, for recording and reporting purposes. All items, waste, and fuel barrels will be removed upon completion of each hole.



**Figure 1. Project Location**

All employees and contractors working on site must be familiar with the Wildlife management Plan. The Plan will be printed and laminated, and posted at the drill site.

The site supervisor for the Coppermine Project, and main contact for all Wildlife related matters is listed below:

**Alex Vilela**  
**Exploration Manager**

Perth, Australia  
[alex.vilela@sentinelresources.com.au](mailto:alex.vilela@sentinelresources.com.au)  
+61 45 9298209

## 2.0 Wildlife and Habitat Features of Concern

Table 1 below lists the terrestrial species that may be encountered in the Project area and marine mammals in the surrounding waters, as well as listings from the federal Species at Risk Act. The Act defines “threatened” as a species likely to become endangered if nothing is done to reverse the factors leading to extirpation or extinction. “Species of special concern” means a wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats. None of the specific populations of marine mammals in the Project area are currently listed in Schedule 1 of the Act, though they are in consideration for addition.

**Table 1. Species in or proximal to the Project area**

Species	Species at Risk Act Status
Land Mammals	
Fox	N/A
Muskox	N/A
Barren-ground Caribou	Special Concern
Dolphin-Union Caribou	Special Concern
Polar Bear	Special Concern
Grizzly Bear	Special Concern
Wolf	Threatened
Wolverine	Special Concern
Birds	
Short Eared Owl	Special Concern
Peregrine Falcon	Special Concern
Eskimo Curlew	Endangered
Harris Sparrow	Special Concern
Red-necked Phalarope	Special Concern
Buff-breasted sandpiper	Special Concern
Red Knot	Endangered
Insects	
Transverse Lady Beetle	Special Concern

Marine Mammals	
Beluga Whale	Endangered
Ringed Seal	Under consideration for addition
Killer Whale	Endangered
Bowhead Whale – Berring-Chukchi-Beaufort population	Special Concern

### 3.0 Project Impacts and Mitigations

Table 2 below describes the potential direct and indirect impacts on wildlife and/or wildlife habitat and mitigations for the species list in Table 1.

**Table 2. Potential wildlife impacts and mitigations**

Species	Potential Impacts	Mitigations
Dolphin-Union Caribou Barren-ground Caribou Muskox	<ul style="list-style-type: none"> <li>Human-wildlife interactions</li> <li>Alteration to migratory routes and calving</li> <li>Sensitivity to disturbance such as noise, dust from drill rig, ATV movement</li> <li>Disturbance from helicopters</li> <li>Exposure to hazardous substances</li> </ul>	<ul style="list-style-type: none"> <li>Always give wildlife the right-of-way, delay working in any locations where caribou or muskox are present</li> <li>Stop all field activities during the Barren-Ground Caribou Bluenose East Herd calving and post-calving from 28th May to 3rd July.</li> <li>Avoid landing helicopter or fixed wing aircraft in areas where wildlife is present</li> <li>Avoid flying below 300 m above ground level or operating snowmobiles/ATVs in areas where caribou or muskox are present</li> <li>Do not locate any operations so as to block or cause substantial diversion to migration</li> <li>Adhere to the Waste Management Plan and Spill Management Plan to minimize wildlife attractants in camp, and to ensure no animals are exposed or interact with any hazardous substances such as fuel</li> <li>Employ a zero-tolerance policy for feeding or harassing wildlife</li> </ul>
Polar Bear Grizzly Bear	<ul style="list-style-type: none"> <li>Human-wildlife interactions</li> <li>Attraction to work areas (food, fuel, etc.)</li> <li>Sensitivity to disturbance such as noise, dust from drill rig,</li> </ul>	<ul style="list-style-type: none"> <li>Always give wildlife the right-of-way, delay working in any locations where polar bears or grizzlies are present</li> <li>Avoid landing helicopter or fixed wing aircraft in areas where wildlife is present</li> <li>Adhere to the Waste Management Plan and Spill Management Plan to minimize wildlife attractants in camp, and to ensure no animals are exposed or interact with any hazardous substances such as</li> </ul>

Species	Potential Impacts	Mitigations
	ATV movement, especially during denning or when with their young	<p>fuel</p> <ul style="list-style-type: none"> <li>• Conduct daily inspections to ensure no significant wildlife attractants are present on the site</li> <li>• Conduct frequent wildlife scans, particularly when first exiting a building or entering a new work area</li> <li>• Stock bear-bangers and noise makers at site to keep approaching wildlife from coming close to camp</li> <li>• Employ a zero-tolerance policy for feeding or harassing wildlife</li> <li>• If needed erect a bear fence around the drill site to prevent wildlife from interacting with personnel or infrastructure</li> <li>• Show the training video <i>Working in Bear Country</i> to all contractors, employees, and visitors to site</li> <li>• In the unlikely event that a polar bear or grizzly bear must be euthanized, stock equipment to properly dress the animal to avoid wasting the hide</li> </ul>
Wolverine Fox Wolf	<ul style="list-style-type: none"> <li>• Human-wildlife interactions</li> <li>• Attraction to work areas if food or shelter is available</li> <li>• Rabies potential in the fox population</li> <li>• Sensitivity to disturbance such as noise, dust from drill rig, ATV</li> <li>• Disturbance from helicopters</li> </ul>	<ul style="list-style-type: none"> <li>• Always give wildlife the right-of-way, delay working in locations where wildlife is present</li> <li>• Avoid landing helicopter or fixed wing aircraft in areas where wildlife is present</li> <li>• Adhere to the Waste Management Plan and Spill Management Plan to minimize wildlife attractants in camp, and to ensure no animals are exposed or interact with any hazardous substances such as fuel</li> <li>• Conduct daily inspections to ensure no significant wildlife attractants or wildlife shelter are present on the site</li> <li>• Conduct frequent wildlife scans, particularly when first exiting a building or new area</li> <li>• Stock bear-bangers and noise makers at site to deter wildlife from coming close to camp</li> <li>• Employ a zero-tolerance policy for feeding or harassing wildlife</li> <li>• Assume any fox or wolf acting aggressively or failing to respond to deterrence is rabid and could pose a threat to site personnel</li> <li>• If needed erect a bear fence around the drill rig to prevent wildlife from interacting with personnel or infrastructure</li> </ul>

Species	Potential Impacts	Mitigations
Short eared owl Peregrine Falcon Eskimo Curlew Harris Sparrow Red-necked Phalarope Buff-breasted sandpiper Red Knot	<ul style="list-style-type: none"> <li>Habitat shifting or alteration</li> <li>Nest disturbance</li> <li>Sensitivity to disturbance such as noise, dust from drill rig, ATV</li> <li>Disturbance from helicopters</li> </ul>	<ul style="list-style-type: none"> <li>Avoid active nests and relocate work activities if nesting sites are encountered</li> <li>Aircraft will maintain minimum vertical setback of 1100 m (3500 feet) in areas where concentrations of birds are present, and maintain minimum lateral aerial setback of 1.5 km from concentrations of birds (e.g., bird breeding colonies and moulting areas)</li> <li>Record all bird sightings, particularly large concentrations</li> <li>Conduct visual scan of work area for nests prior to any work or land disturbance</li> <li>Employ a zero-tolerance policy for feeding or harassing wildlife</li> </ul>
Bowhead Whale Killer Whale Beluga Whale Ringed Seal	<ul style="list-style-type: none"> <li>Sensitivity to disturbance from aircraft or equipment operating near shore</li> <li>Exposure to hazardous substance spills</li> </ul>	<ul style="list-style-type: none"> <li>Avoid flying or landing aircraft near the shoreline if marine mammals are present in the area</li> <li>Employ a zero-tolerance policy for feeding or harassing wildlife</li> <li>Report all whale sightings immediately to Takuvunga@gov.nu.ca</li> <li>Adhere to the Waste Management Plan and Spill Management Plan to minimize wildlife attractants in camp</li> </ul>
Transverse Lady Beetle	<ul style="list-style-type: none"> <li>Habitat shifting or alteration</li> <li>Ground disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Avoid areas where beetles are located and relocate work activities if large numbers are encountered</li> <li>Record sightings, particularly large concentrations</li> <li>Conduct visual scan of work area for beetles prior to any work or land disturbance</li> </ul>
Tundra plant species	<ul style="list-style-type: none"> <li>Habitat shifting or alteration</li> <li>Ground disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Avoid placing drill rig in areas where there is lots of plant life, stick to rocky outcrops</li> <li>Place drill rig on 8x8x12' timbers to minimize disturbance to tundra surface</li> <li>Place coco matting below drill rig to protect tundra and any plants</li> </ul>
Fish in water bodies	<ul style="list-style-type: none"> <li>disturbance of watercourse beds and banks</li> <li>fish injury and mortality via entrapment</li> <li>changes to aquatic habitat</li> </ul>	<ul style="list-style-type: none"> <li>Place water intake screens a minimum of 30 cm above the bottom of the watercourse to prevent the entrainment of sediment and benthos that dwell in the substrate</li> <li>Ensure all openings for guides and seals are smaller than the opening width of the screen material (2.54 mm) so fish cannot pass through</li> <li>When possible, avoid withdrawing water, or reduce the rate of water withdrawal, during critical timing windows to diminish the likelihood of entraining eggs and larval fish</li> </ul>



## 4.0 Monitoring and Mitigation Procedures

1501253 B.C. Ltd commits to respecting local wildlife and associated customary rights of the custodians of the lands. 1501253 B.C. Ltd is committed to taking required measures to mitigate negative impacts to wildlife and the wildlife habitats in which we operate. This section addresses 1501253 B.C. Ltd's approach to several aspects of the operation, including the main camp, waste and fuel management, and internal and external reporting.

### 4.1 Drill Rig Setup

Prior to any potential land disturbances such as the drill rig setup, fuel caches, or aircraft landing areas, the site supervisor will survey the areas and ensure it is a suitable location and formulate a plan to minimize any ground disturbance. B.C. Ltd will avoid setting up a drill rig or working in areas where wildlife or wildlife habitat have the potential to be impacted. The drill site will site on 8x8x12' timbers placed on the tundra to minimize disturbance to tundra surface. Up to 20m<sup>3</sup> of water will be used each day for drilling, which will be taken from a nearby lake or river. Water used for drilling will be recycled in a tank and reused to reduce the amount drawn from water sources. Waste water from drill cuttings will be deposited in a sump more that 31m away from the ordinary high-water mark on any water body, and then filled over the top.

There will be no discharge of any kind into any water bodies. There will not be any pollutants discharged into any water body. All water pumped downhole for drill bit cooling that is returned to surface will be collected in a hand-dug sump and pumped into a settling tank for further drill use. Using returned water will substantially reduce the daily water consumption during drilling. There will not be any deleterious contaminants polluting the ground or water sources during the drill program. No drilling will occur, waste deposited, or sump created within 31 m of the normal high-water mark of any water body. Additionally, all hazardous materials will be placed in secondary containment and stored a minimum of 31 m from the normal high-water mark of any water body. All waste materials will be incinerated, reused, recycled and/or disposed of at an accredited facility.

All signs of wildlife, wildlife dens, or nests will be properly reported, recorded in the Wildlife Log, and discussed at daily meetings with all employees and contractors.

### 4.2 Land Transport

Minimize overland off-road transit by vehicles except in winter when no rutting or gouging of the ground will occur, and stick to existing tracks when possible. Ensure that if small amounts of offroad ATV driving occurs, it is limited to areas of low vegetation or high

exposed rocky areas. Minimize winter road development by keeping widths to those necessary and using existing roads and corridors where available and practical

### 4.3 Aircraft

The presence of aircraft can be stressful for animals, particularly during sensitive periods of the years such as calving and rutting. 1501253 B.C. Ltd will work with fixed-wing and helicopter pilots to follow best practices for minimizing disturbance to local wildlife such as caribou, muskox, and polar bears. Aircraft will maintain minimum vertical setback of 1100 m (3500 feet) in areas where concentrations of birds are present. Maintain minimum lateral aerial setback of 1.5 km from concentrations of birds (e.g., bird breeding colonies and moulting areas).

### 4.4 Waste and Fuel Management

1501253 B.C. Ltd will adhere to the Waste Management Plan and the Spill Management Plan to ensure that animal attractants such as food and waste hydrocarbons are managed properly at the Coppermine Project. The Company will implement a strict 'no feeding of wildlife' policy, and store food waste and wildlife attractants in a manner resistant to wildlife access and that reduces smells. The Company will require all field crews to return any food scraps and associated wastes to the camp for appropriate management.

Domestic waste will be stored in designated waste bins at the drill site infrastructure and incinerated daily to eliminate wildlife attractants. Hazardous waste and waste hydrocarbons will be sorted and placed in sealed metal drums to prevent wildlife access. Fuel will be stored in secondary containment and fuel containers will be inspected daily to check for damage or leaks. All spills will be cleaned up immediately and contaminated snow/ice and soil will be placed in separate sealed drums and backhauled off site for disposal.

### 4.5 Site Inspections

Designated employees will conduct daily inspections to ensure the site is free of wildlife and wildlife attractants. Site inspections will help ensure personnel are adhering to the Waste Management Plan and Spill Contingency Plan for the Project. Site inspections will also scan for possible wildlife access to site infrastructure, and for any signs of wildlife entering the site (prints, diggings, tracks, etc.). Findings of the site inspections will be reported to the site supervisor and necessary corrective actions will be completed in a timely manner.

### 4.6 Reporting

In the event of a wildlife sighting, wildlife incident (equipment or human interactions, mortalities, etc.), or a bear sighting/incident, personnel will follow the steps in Table 3 below.



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**Table 1. Reporting Procedures and Contacts**

Step	Procedure
1	Report the wildlife sighting/incident to the site supervisor
2	<p><b>RECORDKEEPING</b></p> <p><b>Sighting only:</b> Fill out the Wildlife Observation Log (Appendix A)</p> <p><b>Incident:</b> Fill out the Wildlife Log and proceed to Step 3</p> <p>Keep copies of all records for discussion with regulators and Indigenous partners</p>
3	<p><b>REPORTING</b></p> <p>Report all wildlife incidents to:</p> <p><b>Local Conservation Officers</b></p> <p>Kitikmeot Regional Office: (867) 982-7440</p> <p>Kugluktuk Wildlife Office: (867) 982-7451</p> <p><b>Local Hunters and Trappers Organizations</b></p> <p>Kugluktuk HTO: (867) 982-4908</p> <p>If it becomes necessary to euthanize an animal due to suspected rabies or aggressive behavior, approval to proceed should be sought from the local Conservation Officer. For foxes, avoid head shots and direct contact with the carcass unless instructed otherwise by the Conservation Officer.</p> <p><b>Land Mammals –</b> Report all mammal sightings (with photos if possible) to Takuvunga@gov.nu.ca</p> <p><b>Birds –</b> report bird sightings to NWT_NUChecklist.TNO_NUReleve@canada.ca</p> <p><b>Migratory birds:</b> Report mortalities or incidents of disturbance to individuals or nests to:</p> <p>Environment and Climate Change Canada – Canadian Wildlife Service (<a href="mailto:cwsnorth-scfnord@ec.gc.ca">cwsnorth-scfnord@ec.gc.ca</a>)</p> <p><b>Whales:</b> Report all whale sightings (with photos if possible) to Takuvunga@gov.nu.ca</p>

## 2.1 Roles and Responsibilities

**1501253 B.C. Ltd Senior Management** - Responsible for ensuring that the site supervisor is aware of wildlife species present in the area, as well as appropriate mitigations to minimize

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impact to wildlife and wildlife habitat. The Senior Management team will ensure that management plans are properly implemented and that the site supervisor is familiar with the conditions of site authorizations such as the land use permit.

**Site Supervisor** – Responsible for ensuring employees and contractors on site are aware of wildlife and wildlife habitat protection measures and appropriate procedures for wildlife encounters. The site supervisor is responsible for implementing management plans such as the Waste Management Plan to minimize wildlife interaction with the Project. Should a wildlife sighting or incident occur, they will ensure proper documentation and that the appropriate authorities are notified in a timely manner.

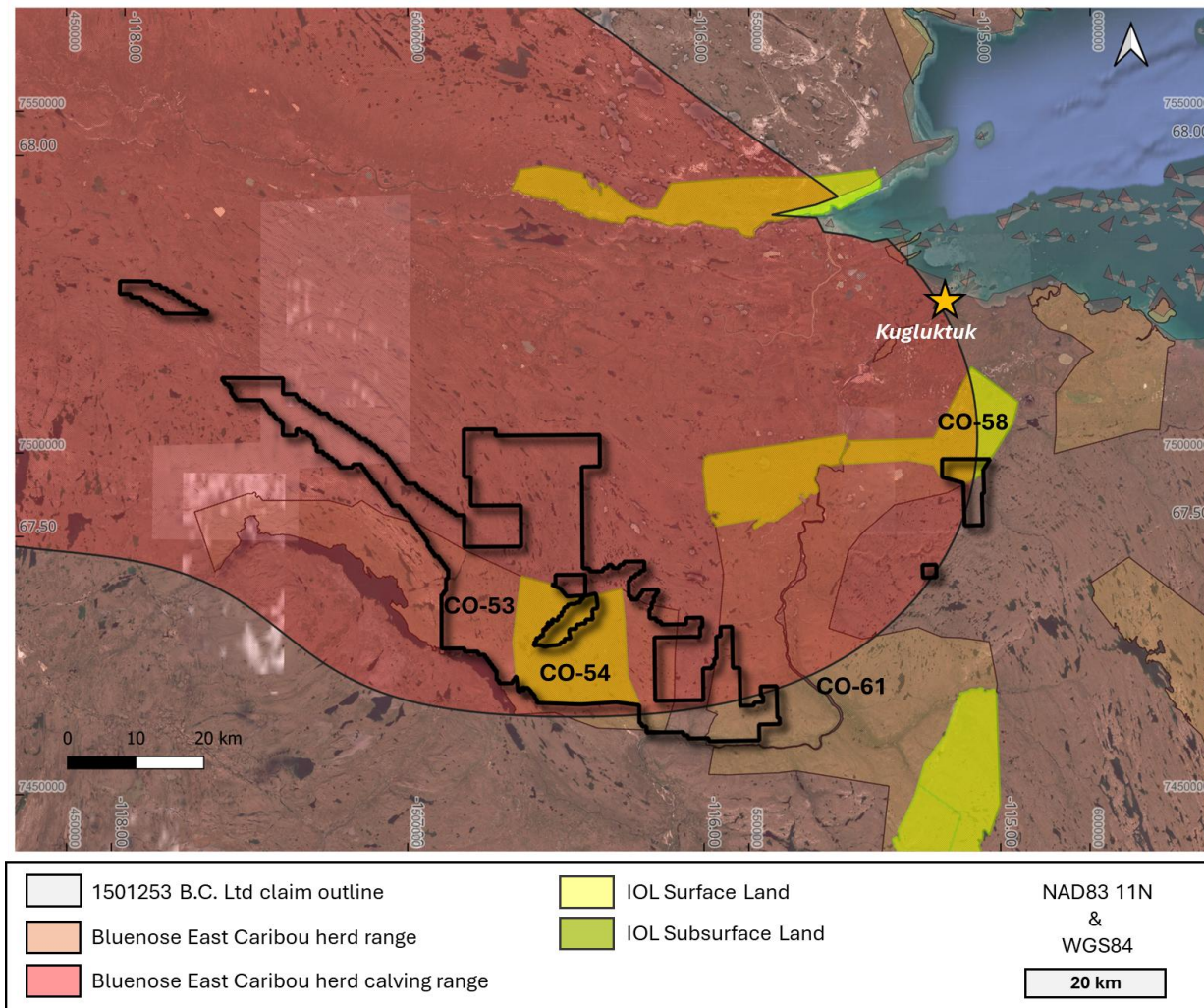
**Staff and Contractors** – All personnel working on site must be familiar with the Wildlife Management Plan and understand how to respond to a wildlife sighting and/or incident. Staff and contractors must adhere to the Waste Management Plan and Spill Management Plan to help minimize wildlife attractants and environmental risks created by the Project.

Appendix A: Wildlife Observation Log

<b>Date/Time</b>	<b>Name of Observer</b>	<b>Location</b>	<b>Species, number, and description</b>	<b>Comments (direction of movement, deterrents used, response to presence etc.)</b>

<b>Date/Time</b>	<b>Name of Observer</b>	<b>Location</b>	<b>Species, number, and description</b>	<b>Comments (direction of movement, deterrents used, response to presence etc.)</b>

## Appendix B.



Map showing outline of Bluenose East Caribou herd annual and calving range, in relation to the Company's claims. Outline of caribou calving comes from the 2011 paper by Nagy et al., titled 'subpopulation structure of caribou (*Rangifer tarandus* L.) in arctic and subarctic Canada'. The calving and post-calving dates are taken from J.A. Nagy et al, titled 'Seasonal Ranges of the Cape Bathurst, Bluenose-West, and Bluenose East Barren-Ground Caribou Herds', 2005, which defines the bluenose east caribou herd calving and post-calving dates as being from 28<sup>th</sup> May – 20<sup>th</sup> June. The company plans of ceasing all exploration activities from 28<sup>th</sup> May – 3<sup>rd</sup> July to prevent any disruption to caribou over this period.