



# Water Licence Inspection Report

☐ Original  
☐ Follow-Up Report

|   |                          |
|---|--------------------------|
| Organization  | Representative           |
| <b>Canadian North Resources Inc.</b>  | <b>Trevor Boyd</b>       |
| Authorization No. / Expiry  | Representative's Title   |
| <b>Water Licence 2BE-FER2227</b>  | <b>Project Geologist</b> |
| Inspection Date   | Inspector                |
| <b>August 14, 2023</b>  | <b>RMO Kyle Amsel</b>    |
| Other Authorization/s   |                          |
| <b>N2022X0010 (Winter Haul Land Use Permit)</b>   |                          |
| Activities Inspected  |                          |
| <input checked="" type="checkbox"/> Camp, Commercial <input checked="" type="checkbox"/> Drilling <input type="checkbox"/> Mining <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage <input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Winter Hauling<br><input type="checkbox"/> Camp, Private <input type="checkbox"/> Other <a href="#">Click or tap here to enter text.</a> |                          |

## Section 1 Comments

On August 14, 2023 Crown-Indigenous Relations and Northern Affairs Resource Management Officer Kyle Amsel (Inspector) conducted an Inspection of Water Licence 2BE-FER2227 (Licence) issued to Canadian North Resources Inc. for the use of water and deposit of waste in support of a mineral exploration operations (Undertaking). The inspection was conducted as follow up to Inspection 2022-KIV10-KA which was conducted in October of 2022.

Accompanying the Inspector on site was Geologist Carl-Phillipe Folkesson, and Camp Manager Michael Hanson. The main contact for the Undertaking Trevor Boyd was not on site at the time.

## Observations

### 1) Drilling

- a) Drilling in the area is mostly conducted with lighter fly drills. (Photo 1) One larger sled drill is used by the project but not moved during summer months.
- b) Fresh water is permitted to be taken from areas proximal to drilling as per Part C Item 1 of the Licence in a volume not to exceed 274m<sup>3</sup> per day.
- c) Drill 4 was inspected at 62° 52' 26.6"N 96° 57' 40.19"W drilling hole FL23-527B.
  - i) The area chosen is over 31m from fresh water.
  - ii) Water intake is located at 62° 52' 22.84"N 96° 57' 37.51"W (Photo 2). As part of the water pumping a generator setup is placed outside of 31m from the small stream and an electric pump is placed in the stream. A screen is part of the pump meeting requirements under Part C Item 6.
  - iii) Water is continuously being pumped to the drill and metered as required under Part B Item 4 of the Licence (Photo 3). This was noted as a concern in the 2022 Inspection and the Inspector considers this matter addressed. Excess water not being used for the drill was discharged at 62° 52' 27.64"N 96° 57' 40.34"W.
  - iv) Water from the drill pipe containing cuttings is recovered and piped into two settling tanks (Photo 4). Cutting is settled out and the water is re-circulated into the bore hole. Cuttings is flown in quartex bags and disposed off in a sump at camp.
  - v) Fuel is stored in a double walled fuel cube which transfers fuel to a drum used as functional fuel tank for drill (Photo 5).



- d) Hazardous materials such oil and drilling grease are stored in a fly-crate with a rubber liner acting as secondary containment.
- e) Daily water usage for drilling is recorded as required under Part J Item 1 (Photo 6). This was noted as a concern in the 2022 Inspection and the Inspector considers this matter addressed. Some dates have volumes of water missing due to issues with the water meter used. The Licensee is encouraged to continue efforts to rectify this issue.
- f) Several other drill locations were inspected from the air (Photo 7 & 8)
- 2) Drill collars
  - a) Under Part I item 10 & 11 of the Licence, the Licensee will either remove or cut off drill casings upon completion of drilling or may leave them in the field for no longer than two years if signalled or signed appropriately.
  - b) On inspection several drill collars were observed that were not being drilled and had not been signed or removed/cut off. This is not compliant with Part I Item 10 & 11 of the Licence.
  - c) On September 3, 2023 the Representative advised that collars for the majority of drill holes have either been cut or signalled. This was noted as a concern in the 2022 Inspection and the Inspector considers this matter addressed. Photos were provided as evidence (Photo 9 & 10).
- 3) Drill Laydown at 62° 52' 12.3"N 96° 55' 24.2"W (Photo 11)
  - a) The concerning material related to the 2022 Inspection report have been removed from the area.
  - b) No plan for the removal of the buildings, structures and material has been presented to the inspector.
- 4) Historic Bulk Sample Location
  - a) At the time of inspection, the area was dry with no standing water.
  - b) No new acid drainage was evident.
  - c) Silt curtains installed in the area appear kept and maintained.
- 5) Fuel Containment Area (FCA)
  - a) The FCA was rebuilt since last inspection. (Photo 12). No rips in the liner are present and the facility appears significantly improved since last inspection.
  - b) At the time of the Inspection no water was present in the facility.
  - c) The licensee sought to discharge water from the facility prior to inspection and took water samples which were outside limits set in Part D Item 12. This water was placed in drums to allow for transportation to a facility authorized to receive wastes.
- 6) Cuttings sump
  - a) The sump noted at 62° 53' 37.5"N 96° 54' 38.9"W is the only sump used by the project. Cuttings from all drills and materials from the core shack are deposited in the sump. (Photo 13)
  - b) Since the 2022 Inspection the sump has reduced capacity due to additional deposition of cuttings into it. There is flow of cuttings apparent from the rear of the sump.
  - c) The Inspector is concerned with the sump in it's current condition as the amount of cuttings being deposited is exceeding it's capacity and further deposition may cause off site impacts.
- 7) Spill 2022-436 was inspected. The area showed signs of hydrocarbon contamination. A representative stated soil samples were collected which are to be analyzed for hydrocarbon contamination. The Licensee is encouraged to continue remediation efforts.
- 8) Camp Site
  - a) Core shack cuttings are now dumped directly into quartex bags, and the area is no longer is covered in cuttings. This was noted as a concern in the 2022 Inspection and the Inspector considers this matter addressed. (Photo 14)
  - b) Camp water usage is recorded in a logbook in the water tank room. There the tank levels are checked daily and value recorded, then difference tabulated to determine daily usage. Considering



scope, complexity and nature of the operation the Inspector considers this satisfactory with Part B Item 4 of the Licence.

9) Administrative

- a) The Representatives presented to the Inspector a handwritten document noted as "Dash Back Haul's". This document showed dates of backhaul, and general description and quantity of material. On request Representatives emailed the Inspector a contract for transportation and proposal for disposal for 4 marine shipping containers containing non-hazardous wastes. Record keeping of backhauled waste was noted as a concern in the 2022 Inspection and the Inspector considers this matter address, though the Licensee is encouraged to simplify the data collection methods and make it more easily presentable.

**Section 2 Non-Compliance with Water Licence**

Non-compliance with Water Licence 2BE-FER2227

- No instances of non-compliance.

**Section 3 Action Required**

The Licensee shall:

- Present to the Inspector no later than March 31, 2024 a written plan for the removal, remediation and/or disposal of the drilling laydown located at 62° 52' 12.3"N 96° 55' 24.2"W. This plan will include a planned timetable.
- Endeavor to continue removal or cutting off of drill collars in the field.

**Section 4 Other**

|                            |                    |
|----------------------------|--------------------|
| Licensee or Representative | Inspector's Name   |
| Trevor Boyd                | RMO Kyle Amsel     |
| Signature                  | Signature          |
| Date                       | Date               |
|                            | September 11, 2023 |

Office Use Only: Follow-up report to be issued by Inspector

☐ Yes ☐ No





## PHOTO LOG

| Date:                   | Authorization Number: | Camera/Model:  | Inspector      |
|-------------------------|-----------------------|----------------|----------------|
| Monday, August 14, 2023 | 2BE-FER2227           | Sony DCS-HX50V | RMO Kyle Amsel |

| Photo No. | Lat/Long (DD.MM.SS.SS, NAD83) |
|-----------|-------------------------------|
| Photo 1   | N62° 52' 29.6" W96° 57' 34.9" |



### Description:

Drill 4 at hole FL23-527B.

| Photo No. | Lat/Long (DD.MM.SS.SS, NAD83) |
|-----------|-------------------------------|
| Photo 2   | N62° 52' 22.6" W96° 57' 37.3" |



### Description:

Water intake at drill 4.





Photo No.

Photo 3

Lat/Long (DD.MM.SS.SS, NAD83)

N62° 52' 26.7" W96° 57' 40.5"



14 08 2023

Description:

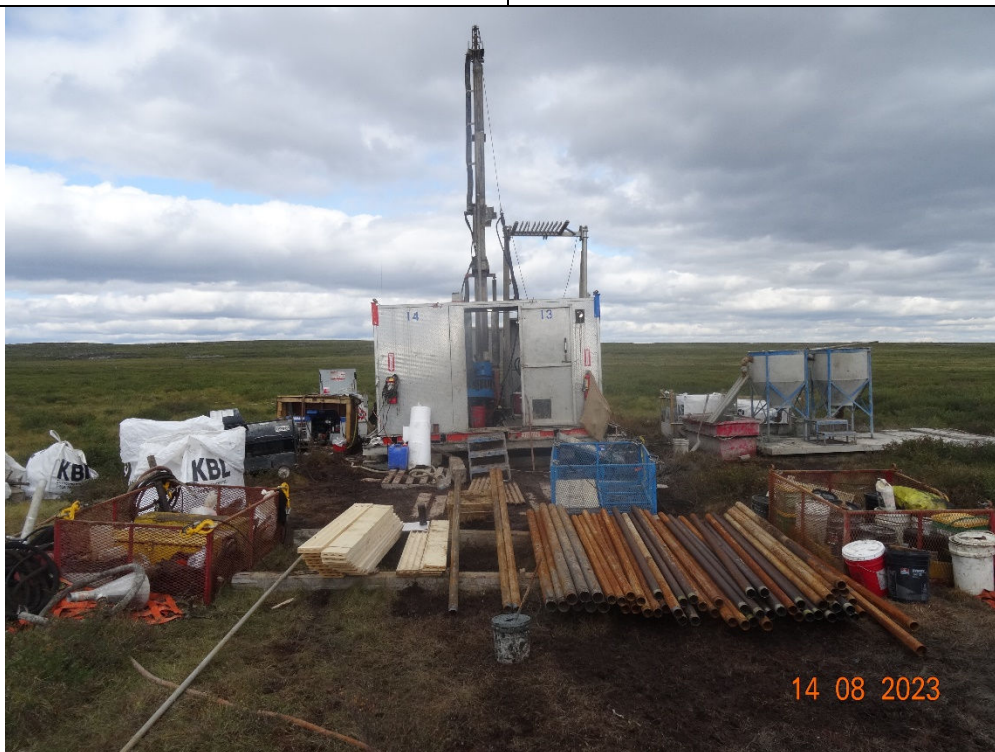
Water meter of drill 4.

Photo No.

Photo 4

Lat/Long (DD.MM.SS.SS, NAD83)

N62° 52' 26.2" W96° 57' 40.3"



14 08 2023

Description:

Overview of drill 4. Drill rod in forefront. Cutting settling tanks on right. Fuel storage on left of drill.





Photo No.

Photo 5

Lat/Long (DD.MM.SS.SS, NAD83)

N62° 52' 26.8" W96° 57' 40.8"



Description:

Fuel storage at drill. Fuel is flown in using double walled cube. Fuel is transferred to drum on right which is functional fuel tank of drill.

Photo No.

Photo 6

Lat/Long (DD.MM.SS.SS, NAD83)

Not available

Description:

Excel spreadsheet maintained at camp with daily water usages at each drill.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)





Photo 7

N62° 52' 7.9" W96° 45' 25.6"



**Description:**

Drill Inspected.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo 8

N62° 52' 7.9" W96° 45' 25.6"



**Description:**

Drill inspected.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)





Photo 9

Not available.



**Description:**

Appropriate signalling installed at drill collars for hole FL22-476. Provided by representative.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo 10

Not available



**Description:**

Appropriate signalling installed at drill collars for hole FL22-485. Provided by representative.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo 11

N62° 52' 5.1" W96° 55' 33.8"





**Description:**

Old drill laydown aerial view.

**Photo No.**

Photo 12

**Lat/Long (DD.MM.SS.SS, NAD83)**

N62° 53' 31.6" W96° 54' 5.8"



**Description:**

Newly refurbished Fuel Containment Berm.

**Photo No.**

Photo 13

**Lat/Long (DD.MM.SS.SS, NAD83)**

N62° 53' 31.6" W96° 54' 5.8"





**Description:**

Drill cuttings sump.

**Photo No.**

Photo 14

**Lat/Long (DD.MM.SS.SS, NAD83)**

N62° 53' 33.6" W96° 54' 18.6"



**Description:**

Core shack area. Core cuttings are now handled differently that previous inspection and area is now clean of cuttings.