Meliadine Exploration Project

Response to

Water licence 2BB-MEL1424 Inspection Report

Inspection conducted by INAC's inspector on

June 8th, 2018

Prepared by:

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Submitted to INAC

July 6th, 2018

On June 8th 2018, the INAC inspector, Christine Wilson, conducted an inspection of drilling sites in the Meliadine area. The inspector requested, via the inspection report, “a response to the inspector regarding two recent failures to comply, PART F item 1 and item 2. The response must include a brief summary (“cheat sheet”) of the terms and conditions of the water licence which apply during the drilling process (e.g.: prior to set-up, during drilling and closure)”.

- ✓ Concerning the failure to dispose drill waste thirty one (31) meters from the ordinary high water mark described in the May 10th 2018 inspection report. The situation was related to cuttings present on the ice.
  - ➢ When drilling on ice, Agnico Eagle Exploration Division’s drilling contractor installs 3 casings with a tube and seal around them to prevent cuttings from spilling on the ice (Figure 1). The waste water is then pumped in the decantation system allowing solid particles to settle in the bottom of the tank and the treated water to be reused for drilling (Figures 2 and 3). The settled cuttings is then pumped, transported on land and disposed of. It has been determined that the cuttings present on the ice during the inspection was a spill that occurred during a move of the tank. The spill should have been cleaned directly by the drilling company as soon as it occurred. Instructions on this procedure were recalled by the geologist in charge and these cuttings on the ice were shoveled by the geology team as shown on Figure 4.

Figure 1, Cuttings tube around casing

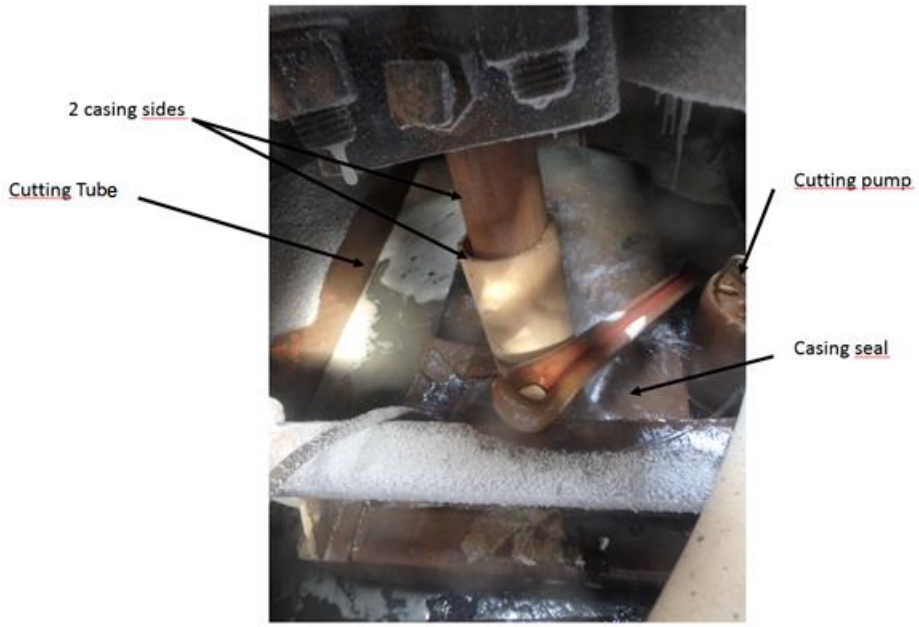


Figure 2, Waste water settling tank

Figure 3, Waste water settling tank

Figure 4, Cuttings removal at hole M18-2445

- ✓ Regarding the inspector's concern about the respect of the thirty-one (31) meter boundary from a water body and the failure to dispose of used drill water at a location where direct flow to a water body is not possible:
  - ➢ The procedure EXP-ENV-001 has been updated to reduce the environmental risks related to exploration activities and to ensure compliance with the authorizations. The procedure is attached and available for comments. Adjustments to the tools and procedure used to localize the drilling and cuttings disposal in regard to the water bodies is now described in the procedure and this will improve the confidence about the respect of the 31 meter buffer zone, even during the winter period when the high water mark can be difficult to localize on the field.
    - o A verification of the precision between the lake and creek shapefiles coming from the government of Canada vs the high resolution satellite pictures bought by AEM showed that a gap between the locations of the water boundaries exists between these tools. This gap is, in certain situations, large enough to create potential non-compliances with the licence and this, mainly during the winter period. For this reason, following the assessment of the situation, the procedure EXP-ENV-001 now includes an improved procedure for the planning of drilling sites, thus reducing the associated risks.

Figure 5, Example of gap between lake boundaries

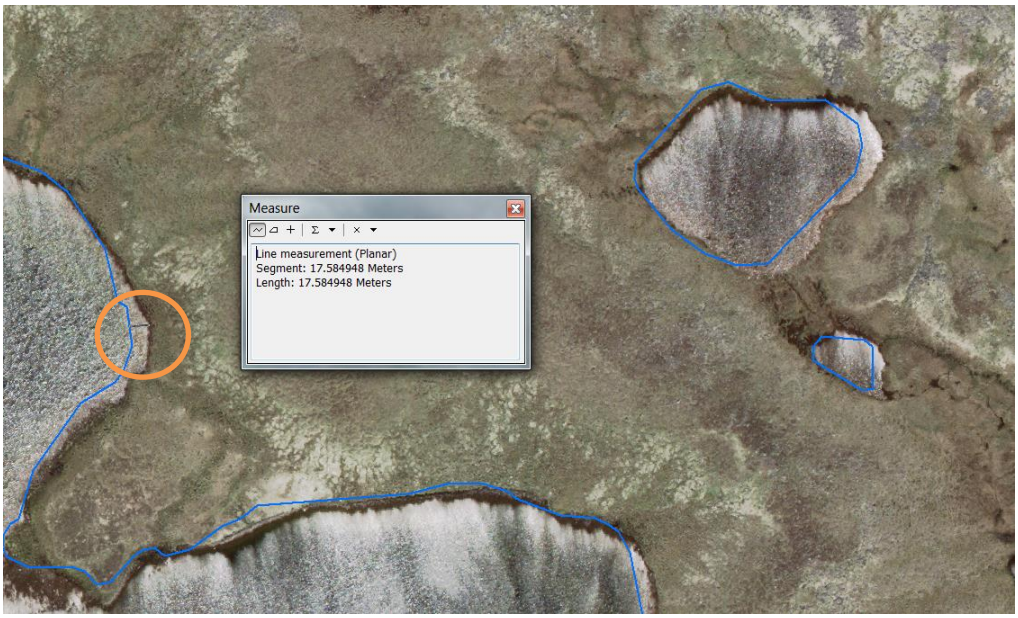
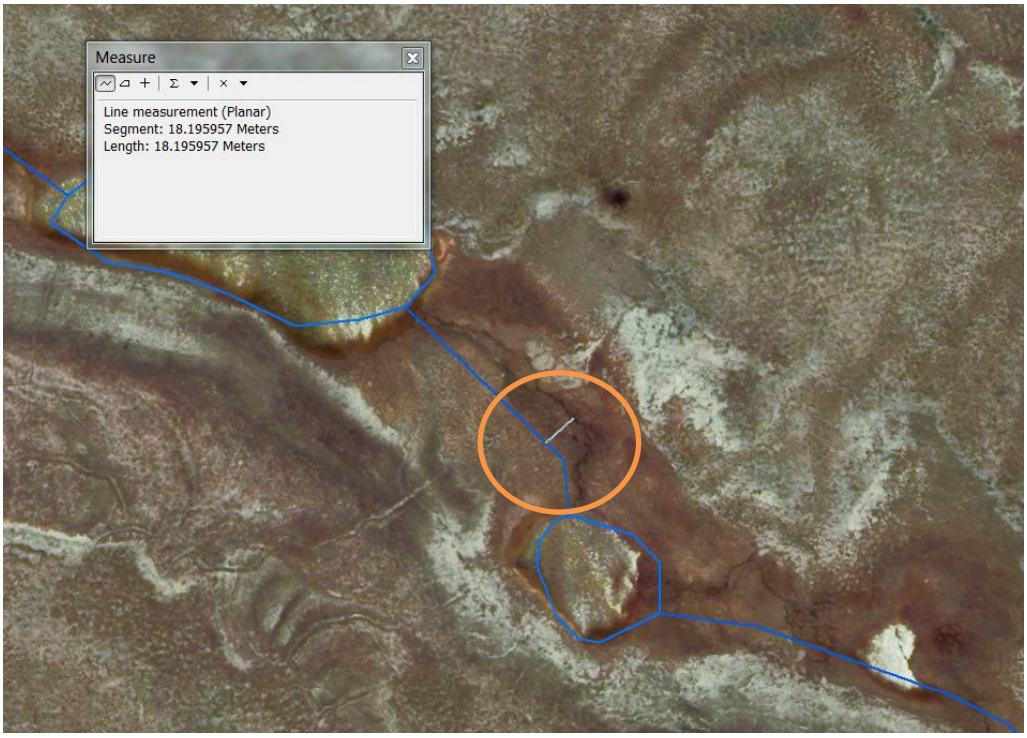


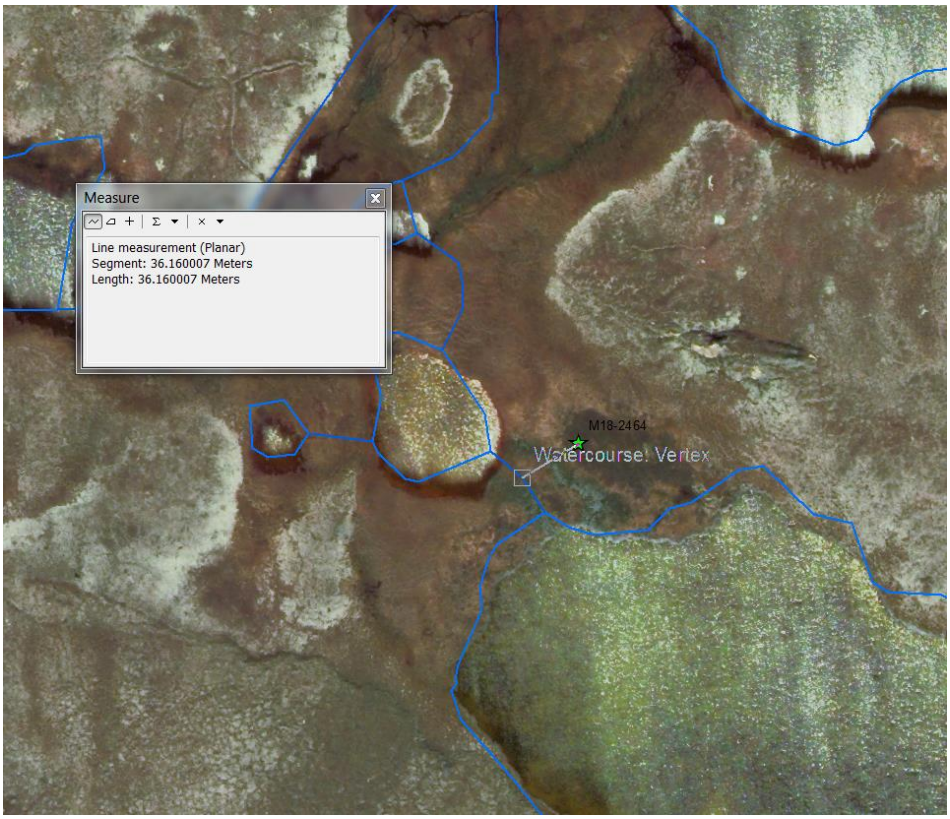
Figure 6, Example of gap between river/creek location



- ✓ At drill hole M18-2464, the inspector observed on June 8th 2018, that :
    1. Drill hole M18-2464 is located approximately at N63° 00’ 06.4”, W92° 09’ 30.4, which is on Inuit owned land with surface and sub surface rights. The drill rig had recently moved to this location and begun drilling.
    2. The drill site is located between two small water bodies, with the actual drill approximately 60ft from a flowing stream (Photo 1). The inspector is concerned that the proponent may have failed to meet the requirements of PART F item 1.
    3. The water intake is located on a lake proximal to the drill hole, approximately at N63° 00’ 12.3”, W92° 10’ 01.6”. The water intake is operated in accordance with PART C item 1, item 3 and item 5.
    4. The cuttings line is located on the north east side of the drill rig. Though the location of the line appeared to be 31 meters from a water body, the cuttings waters would have connectivity with the nearby lake because of freshet. This activity fails to meet the requirements of PART F item 2.

    - Observation 2: As stated by the inspector, Part F item 1 of the licence is a bit redundant when drilling during the winter, but we understand the intent in the summer.
        - As discussed above, we can see that when using the Canada water course shapefile, the hole M18-2464 was located at 36 meters from the creek, but due to the gap between the reality in the field and the tool, the hole was drilled nearer than planned. To reduce the risk in the future, the procedure EXP-ENV-001 has been updated and the protection buffer extended internally with respect to the planning tool we use and this, in order to avoid working within the thirty-one (31) meter from a water body, even during the winter period unless otherwise authorized to do so by the Nunavut Water Board.

Figure 7, Distance between hole M18-2464 and creek presumed location



- Observation 3, the cuttings disposed by the sludge line associated to hole M18-2464 were measured to be located at more than 31 meters from a water body. A visit of the area on July 3rd concluded that the cuttings disposed at the 2 cuttings deposits for hole M18-2464 had not migrated toward the ponds.

Figure 8, Location of the cuttings deposits

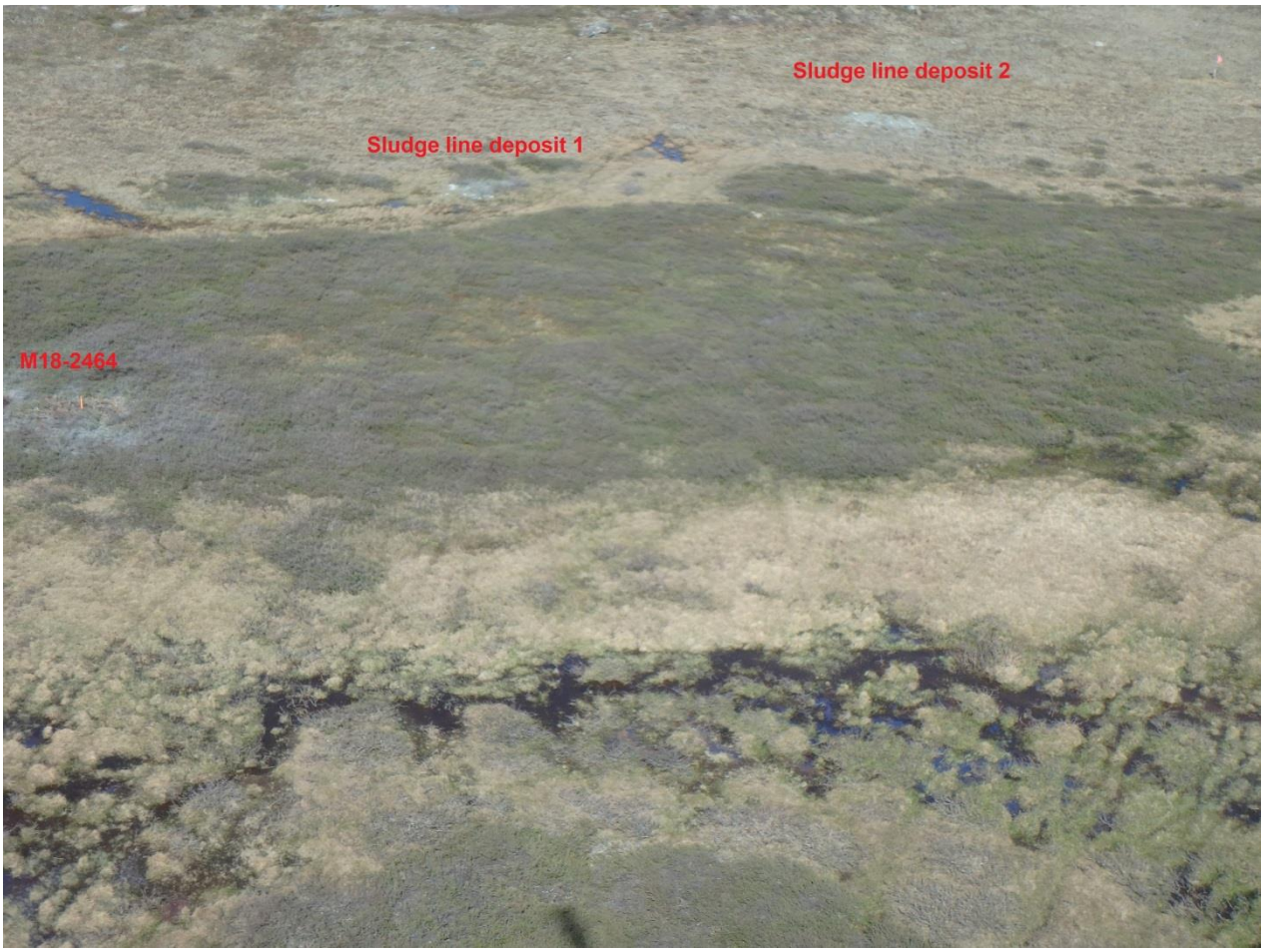


Figure 9, Cuttings deposit 1