



WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee	Licensee Representative
McGill University, Department of Geology	Christopher Omelon
Licence No. / Expiry	Representative's Title
8WLC-MGU1920	Base Manager, Arctic Research Station
Land / Other Authorizations	Land / Other Authorizations
N2016N0018	
Date of Inspection	Inspector
July 11, 2019	Joseph Monteith, Erik Allain, and Jeremy Fraser
Activities Inspected	
<div><input checked="" type="checkbox"/> Camp<input type="checkbox"/> Drilling<input type="checkbox"/> Mining<input type="checkbox"/> Construction<input type="checkbox"/> Reclamation<input checked="" type="checkbox"/> Fuel Storage</div> <div><input type="checkbox"/> Roads/Hauling<input checked="" type="checkbox"/> Other:water use, and waste disposal<input type="checkbox"/> Other:</div>	

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable
PART:			Condition	Observation No.*	
A: SCOPE, DEFINITIONS AND ENFORCEMENT			A		
B: GENERAL CONDITIONS			A		
C: CONDITIONS APPLYING TO SECURITY			NI		
D: CONDITIONS APPLYING TO WATER USE			A	1-5	
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT			A	6-9	
F: CONDITIONS APPLYING TO MODIFICATIONS			NI		
G: CONDITIONS APPLYING TO CONSTRUCTION			NI		
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING			A	14	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING			NA		
J: CONDITIONS APPLYING TO MONITORING			NI		
SCHEDULES			A		
*The observation number corresponds with specific comments provided below.					
Samples taken by Inspector:		Location(s) Main Camp: N79 25 00.0 W90 43 00.0 Crusoe camp: N79 23 21.0 W91 01 25.0			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

SECTION 1	<input type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
BACKGROUND			
<p>The Station, located near expedition fiord on Axel Heiberg Island, NU, consisted of approximately 11 buildings situated on crown lands for the purpose of supporting scientific field work. The camp is spread out and contains buildings grouped together at two locations (see <i>Figure 1</i>). The locations of the camps, where water and waste were used and produced, is located at:</p> <p>Main Camp: N79 25 00.0 W90 43 00.0 Crusoe camp: N79 23 21.0 W91 01 25.0</p> <p>On May 9, 2016 3BC-MGU1015 was issued On May 4, 2018 8WLC- MGU was issued On March 25, 2019 8WLC-MGU1920 was issued.</p> <p>Inspector Statement</p> <p>On July 11, 2018, A Water Licence Inspection was conducted by Water Resource Officer (WRO) Joseph Monteith, Erik Allain, and Jeremy Fraser at Expedition Fiord, Axel Heiberg Island, Nunavut, for water licence 8WLC-MGU1920.</p> <p>Water Supply Facilities</p> <ol style="list-style-type: none">Water is withdrawn from a small lake downhill from the main camp (photo 1). The water supply is situated next to the old camp kitchen (photo2), and the airstrip (photo 3).No sign of drawdown, erosion, disturbance or sedimentation was observed at the small lake.A water pump (photo 6) is used to move the water uphill to a water storage tank(photo 17).No water meter observed on site at the time of inspectionNo logs were observed on site. <p>Solid Waste</p>			



6. Bulk Metal was observed on site (photo 10).
7. Old Sump Pit (photo 8).
8. An incinerator toilet was observed on site called a Incinolet (photo 12). Incinolet waste in drum (photo 18, and 19).
9. Honey buckets (photo 13).

Fuel Cache

10. None of the fuel observed was within 31 metres of any water body.
11. Fuel caches were observed on site (photo 3, 14, 15, 20 & 21).
12. 24 drums counted total
13. Berm water release (photo 20, & 21).

Crusoe River Camp

14. Site appeared to be in a state of temporary closure (photo26 & 27).

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
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Do the following items below to bring yourself back into compliance:

-Report all spills as per water licence

SECTION 3	<input type="checkbox"/> Comments	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
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Part 5: Item c.

c. report spills immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295;

Licensee or Representative	Inspector's Name
	Joseph Monteith
Signature	Signature
	
Date	Date
	December 12, 2019

CC: Licensing Department, NWB
Justin Hack, Manager of Field Operation

PHOTO LOG

Date	Camera	Inspector	
July 11, 2019	Nikon Cool Pix	Joseph Monteith	
Photo Log #	Location		
Photo 1	Axel Heiberg Island		
			



Description: 5 weather havens, 3 buildings, 6 tents. Water source is the small lake in the left hand side of the photo.

Photo Log #	Location
Photo 2	Axel Heiberg Island, NU
	
Description: McGill Camp, with water source next to camp infrastructure. Airstrip is on the opposite side of the small lake from the camp. On the white polygonal plane.	

Photo Log #	Location
Photo 3	Axel Heiberg Island
	
Description: Fuel Cache at Airstrip – Sign of spill. 9 drums out of secondary containment. 10 drums in secondary containment. Total 19 drums. 2 x spill kits on site. 4 waste barrels next to 2x spillkits.	



Photo Log #	Location
Photo 4	Axel Heiberg Island
	
Description: old flooring for helicopters, or building	

Photo Log #	Location
Photo 5	Axel Heiberg Island



Description: old kitchen 2 x propane tanks, 1 x storage tank for heating

Photo Log #

Photo 6

Location

Axel Heiberg Island



Description: Water Pump

Photo Log #

Photo 7

Location

Axel Heiberg Island



Description: Water Withdrawal hose, with fish mesh screen

Photo Log #

Photo 8

Location

Axel Heiberg Island



Description: old sump pit

Photo Log #

Photo 9

Location

Axel Heiberg Island



Description: Fuel Cache with secondary containment. And Spill kit

Photo Log #
Photo 10

Location
Axel Heiberg Island



Description: Solid Waste



Photo Log #

Location

Photo 11

Axel Heiberg Island



Description: mobile incinerator

Photo Log #

Location

Photo 12

Axel Heiberg Island



Description: Incinolet – incinerator toilet in latrine.



Photo Log #	Location
Photo 13	Axel Heiberg Island
	
Description: toilet	

Photo Log #	Location
Photo 14	Axel Heiberg Island
	
Description: fuel storage tanks in secondary containment, 2 x heating storage tank in secondary containment	

Photo Log #	Location
Photo 15	Axel Heiberg Island



Description: 3 x drums in secondary containment.

Photo Log #

Photo 16

Location

Axel Heiberg Island



Description: building heating storage tank not in secondary containment. 7 x propane cylinders. Water storage tank next to building.

Photo Log #

Photo 17

Location

Axel Heiberg Island



Description: Water Storage Tank 20 gallon tank. Approximately 10 gallons in tank.

Photo Log #
Photo 18

Location
Axel Heiberg Island



Description: Burn box – drum cut in half, mesh screen overtop to mitigate



Photo Log #

Photo 19

Location

Axel Heiberg Island



Description: incinerated human waste from Incinolet.

Photo Log #

Photo 20

Location

Axel Heiberg Island



Description: Fuel Cache at the airstrip. 8 drums out of secondary containment. Sign of spill. Berm water. No sign of spill in berm.



Photo Log #	Location
Photo 21	Axel Heiberg Island
	
Description: 8 drums in secondary containment. Water from berm may of poured out during transfer of drums in and out of secondary containment	


Photo Log #	Location
Photo 22	Axel Heiberg Island
	
Description: 2 x spill kits	



Photo Log #

Location

Photo 23

Axel Heiberg Island



Description: building at airstrip

Photo Log #

Location

Photo 24

Axel Heiberg Island



Description: 2x old drums behind building.

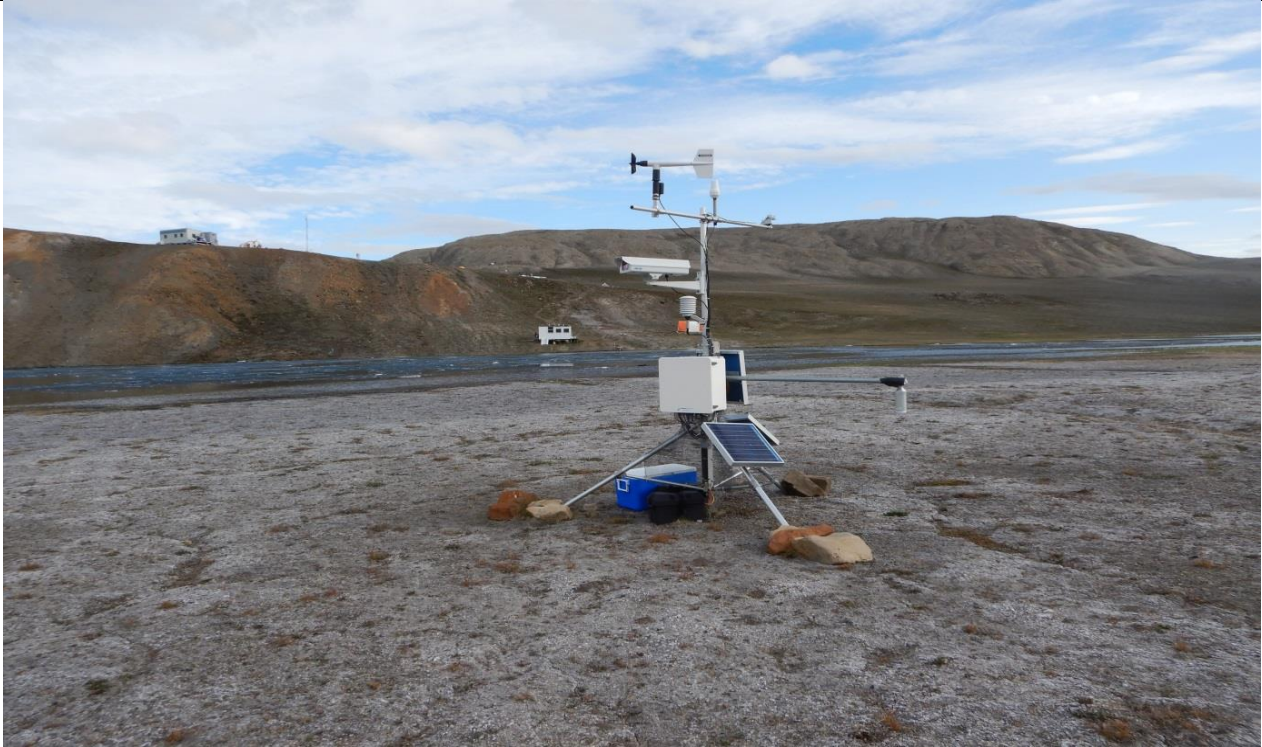
Photo Log #

Location



Photo 25

Axel Heiberg Island



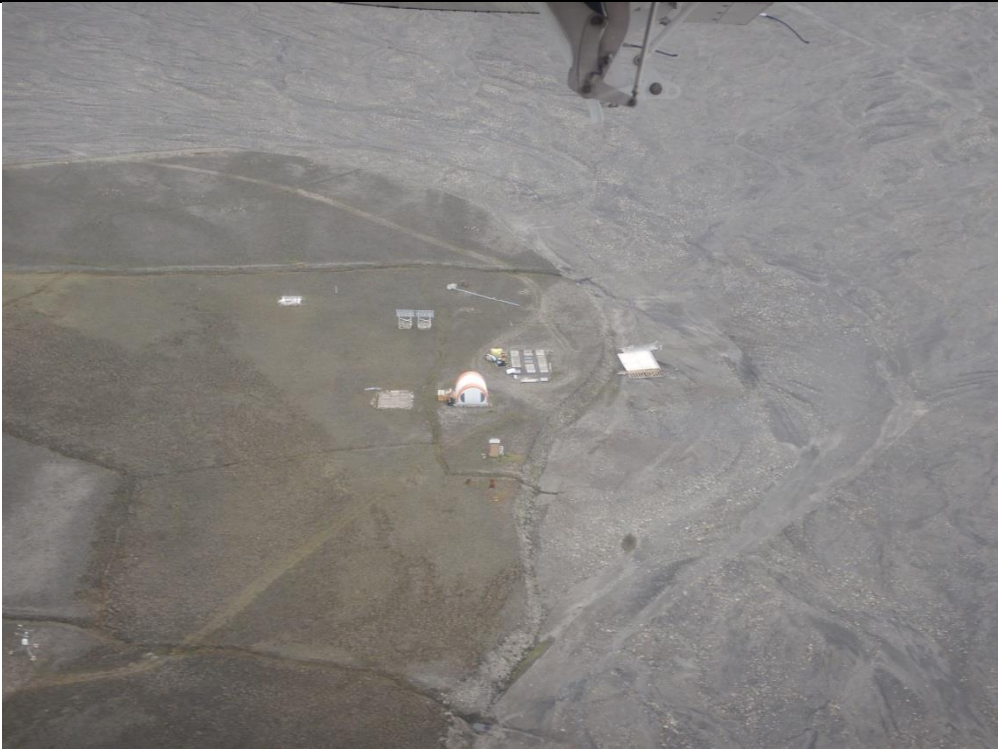
Description: weather monitoring instruments powered by batter in cased in protective covering.

Photo Log #

Location

Photo 26

Axel Heiberg Island



Description: Site of the Crusoe Camp. Structures on site. Site appears to be in a state of temporary closure. Instruments on bottom left hand side of camp.



Photo Log #	Location
Photo 27	Axel Heiberg Island
	
Description: 1 weather haven at camp, 2 x flooring but no erected structure. Crusoe Camp.	