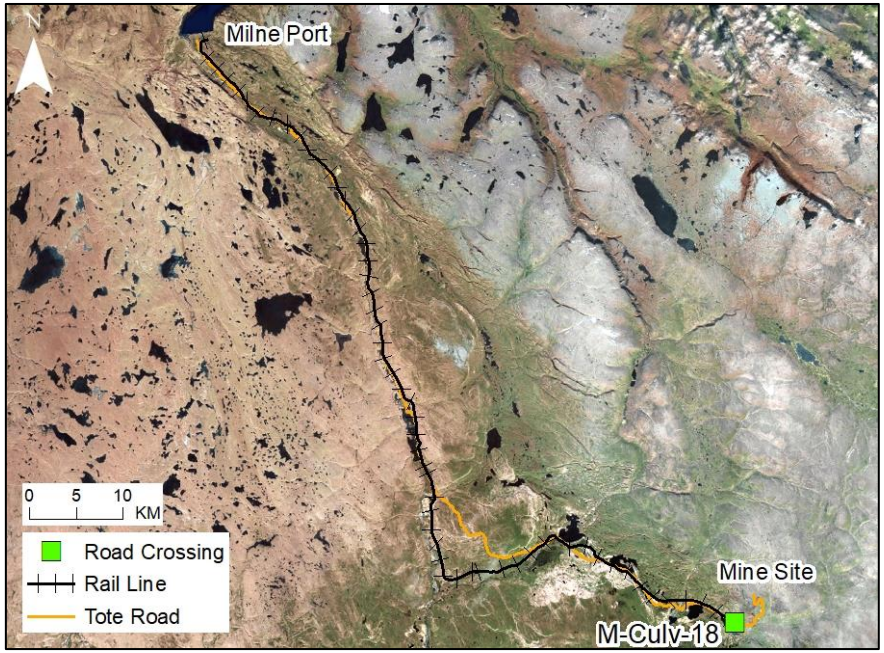
ROAD M-CULV-18

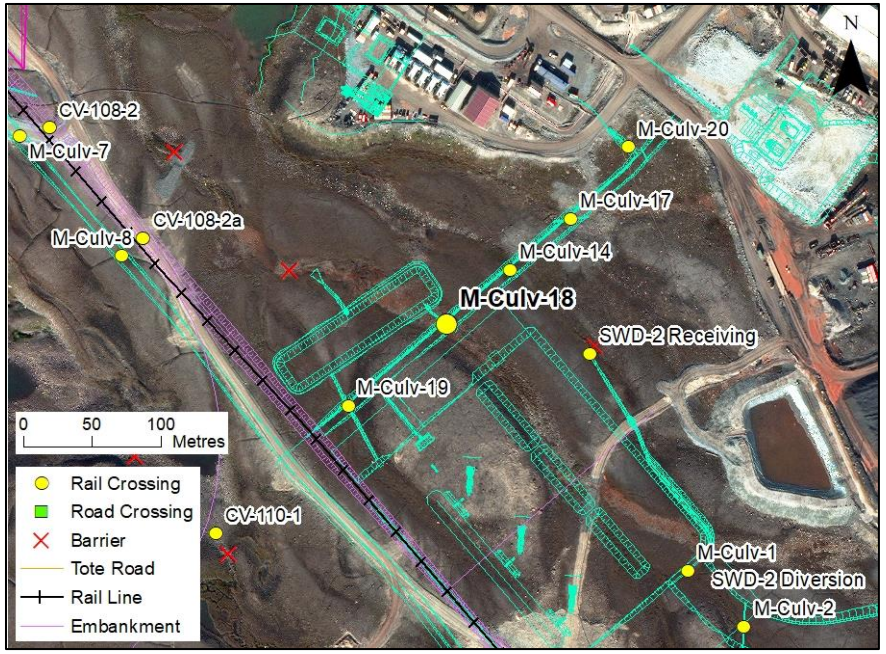
LOCATION AND CROSSING DESCRIPTION

Site ID:	M-Culv-18	**Dates Surveyed:**	25-Jun-19; 27-Aug-19	**Waterbody Type:**	Stream
Project Interaction:	Road Culvert	**Centreline UTM Coordinates:**	17W 561252 E 7913062 N	**Culvert Length (m):**	13.5
Number of Barrels:	1	**Culvert Diameter/Span (mm):**	600	**Slope (%):**	0.4

GENERAL PHYSICAL CHARACTERISTICS

Flow Regime:	Intermittent	**Stream Order:**	3	**Drainage Basin Area (km²):**	0.8542





SUMMARY

The stream that is crossed by M-Culv-18 will be diverted approximately 250 m upstream from this site (at SWD-2-Diversion) to an adjacent tributary to the same stream at site SWD-2-Receiving. This stream is a branch of the M-Culv-3A, M-Culv-3B, M-Culv-4 stream (also known as Sheardown Lake Tributary 1) that flows into Sheardown Lake approximately 650 m downstream of M-Culv-18.

This branch of the SDL-Tributary 1 is shallow with low flows and frequently lacks surface water. There are permanent subsurface flow barriers approximately 130 and 250 m downstream from the road centreline. Due to the permanent downstream barriers, there is no fish habitat at the M-Culv-18 crossing.

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BARRIERS

Upstream/ Downstream	UTM		Barrier Type			Height (m)	Gradient (°)	Description	Site Label
	Easting	Northing	1	2	3				
Downstream	561138	7913101	SSF					Permanent Barrier: Water flowing under boulder field	A
Downstream	561054	7913187	SSF					Permanent Barrier: Existing construction footprint, no culvert, subsurface flow	B

A

B

ROAD M-CULV-18

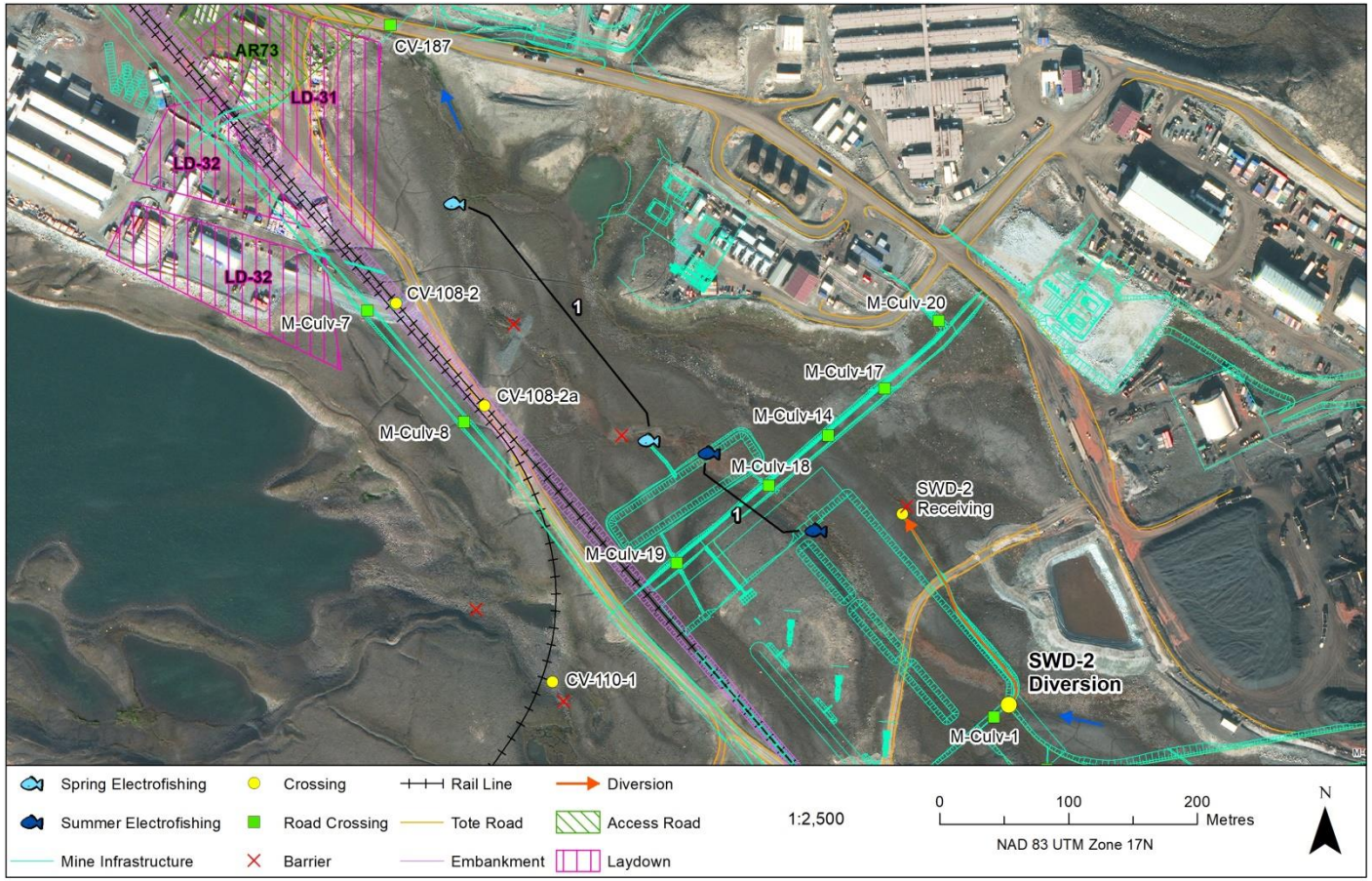
FISH HABITAT POTENTIAL

Nearest Potential Overwintering Habitat - ARCH: Sheardown Lake **Distance to Nearest Potential Overwintering Habitat - ARCH (km):** ~0.90

Overwintering Habitat Upstream of Site - ARCH (Y/N): No

Species	Spawning	Overwintering	Rearing	Adults Present
ARCH	N	N	N	N
NNST	N	N	N	N

FISHING SITES



ROAD M-CULV-18

FISHERIES DATA

Date: 25-Jun-19 **Temperature (°C):** 9.0 **Gear Used:** Backpack Electrofisher/Visual

Distance Fished (m): 240 **Duration Fished (seconds):** 328

Species	Season	Pass	Effort (Seconds)	Fish Captured	Fish Observed	CPUE (No. Fish/60 Seconds)	Length Range (mm)
ARCH	Spring	1	328	1	0	0.18	110 (measured)
NNST	Spring	1	328	0	0	-	-

Date: 27-Aug-19 **Temperature (°C):** 7.0 **Gear Used:** Backpack Electrofisher/Visual

Distance Fished (m): 100 **Duration Fished (seconds):** 330

Species	Season	Pass	Effort (Seconds)	Fish Captured	Fish Observed	CPUE (No. Fish/60 Seconds)	Length Range (mm)
ARCH	Summer/Fall	1	330	0	0	-	-
NNST	Summer/Fall	1	330	0	0	-	-

COMMENTS

No fish were captured/observed upstream of the barriers in this stream in either season in 2019. Only one char was captured during electrofishing surveys conducted, and no additional fish were observed, in spring 2019; the single char was captured downstream of the observed barriers. No fish were captured/observed downstream of the barriers in summer/fall when water levels were lower and surface water was shallow and discontinuous.

ROAD M-CULV-18

25-JUN-19 & 27-AUG-19

A

B

C

D

E

F

Photos 1. Photos taken at the crossing centreline in spring (top) and summer/fall(bottom): (A,D) facing upstream; (B,E) facing downstream; and (C,F) across (left bank looking at right bank). See habitat assessment sheet SWD-2-Diversion for additional photos and habitat data.