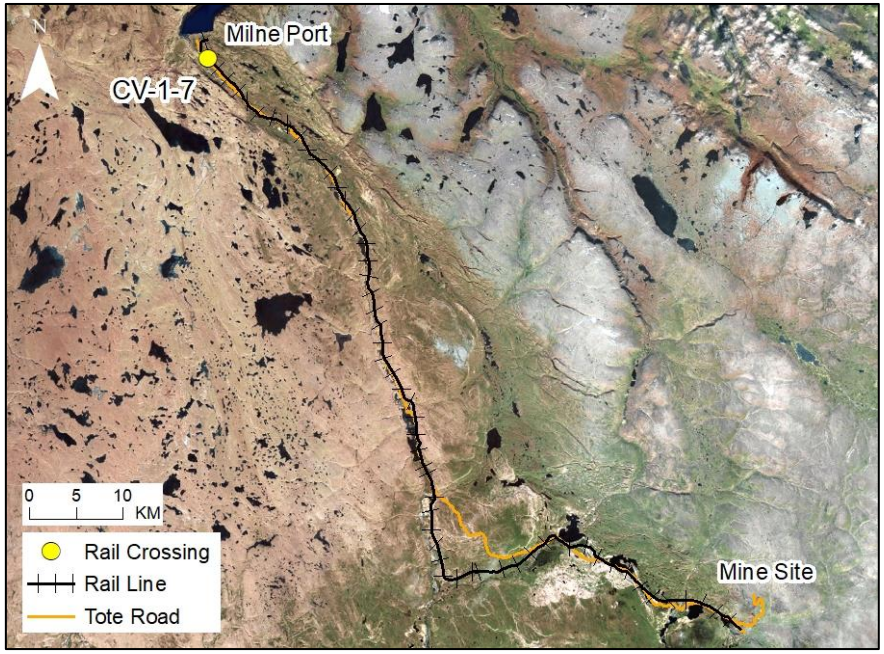
RAIL CV-1-7

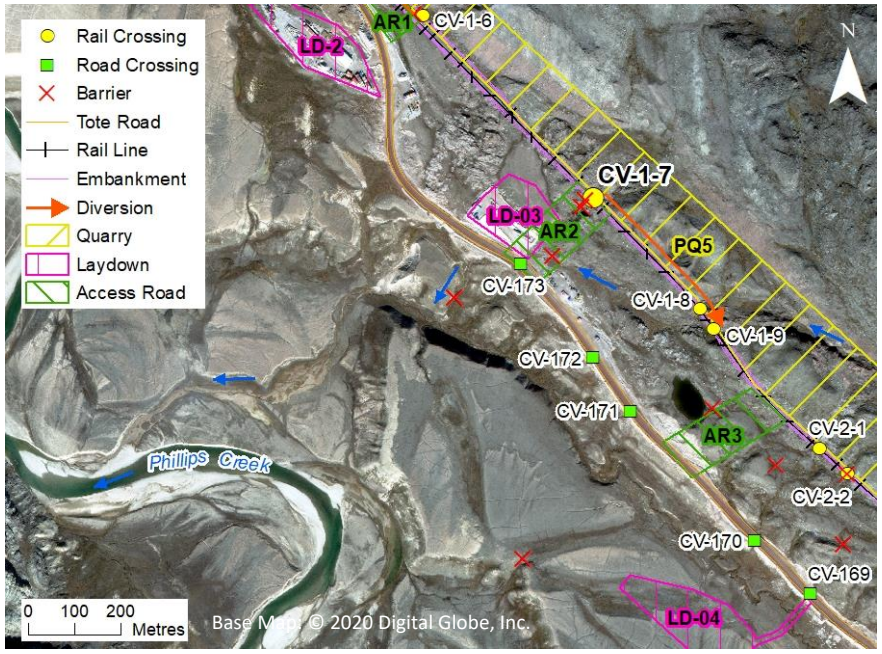
LOCATION AND CROSSING DESCRIPTION

Site ID:	CV-1-7	**Dates Surveyed:**	14-Jun-19	**Waterbody Type:**	Stream
Project Interaction:	Rail Cut	**Centreline UTM Coordinates:**	17W 504662 E 7973667 N	**Culvert Length (m):**	N/A
Number of Barrels:	N/A	**Culvert Diameter/Span (mm):**	N/A	**Slope (%):**	N/A

GENERAL PHYSICAL CHARACTERISTICS

Flow Regime: Intermittent **Stream Order:** 1 **Drainage Basin Area (km²):** 0.025





SUMMARY

The North Rail will cut an unnamed intermittent stream at CV-1-7 and flow will be diverted to another stream (CV-1-9) that is part of the same overall system that drains to Phillips Creek downstream of the Tote Road. The streams at rail crossings CV-1-7, CV-1-8, and CV-1-9 merge immediately upstream of the existing Tote Road crossing CV-173.

None of the stream branches upstream of the Tote Road provide fish habitat due to the presence of a permanent barrier to fish passage approximately 200 m downstream of the Tote Road. Diverted flow will therefore be returned to the same drainage upstream of fish habitat. There are three additional permanent barriers to fish passage between the Tote Road and the cut site CV-1-7.

The area of this stream that will be affected by flow diversion is not fish habitat.

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BARRIERS

Upstream/ Downstream	UTM		Barrier Type			Height (m)	Gradient (°)	Description	Site Label
	Easting	Northing	1	2	3				
Downstream	504646	7973663	SSF					Permanent Barrier: Flow becomes subsurface for 8-10 m	A
Downstream	504638	7973649	HG	VD	B		19	Permanent Barrier: Combination of boulders, a vertical drop, and a high gradient	B
Downstream	504574	7973541	VD			> 2.0		Permanent Barrier: Following vertical drop, water seeps into terrestrial vegetation	C
Downstream	504360	7973452	HG	VD		1.8	17	Permanent Barrier: 1.8 m vertical drop over a horizontal distance of 5 m	D

A

B

C

D

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FISH HABITAT POTENTIAL

Nearest Potential Overwintering Habitat - ARCH: Milne Inlet

Distance to Nearest Potential Overwintering Habitat - ARCH (km): 6.3

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

COMMENTS

Electrofishing was conducted downstream of the permanent barrier 200 m downstream of the Tote Road. One juvenile Arctic Char was captured between the barrier and Phillips Creek downstream.

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14-JUN-19

A

B

C

Photos 1. Photos taken at the cut centreline in spring: (A) facing upstream; (B) facing downstream; and (C) across (left bank looking at right bank).