

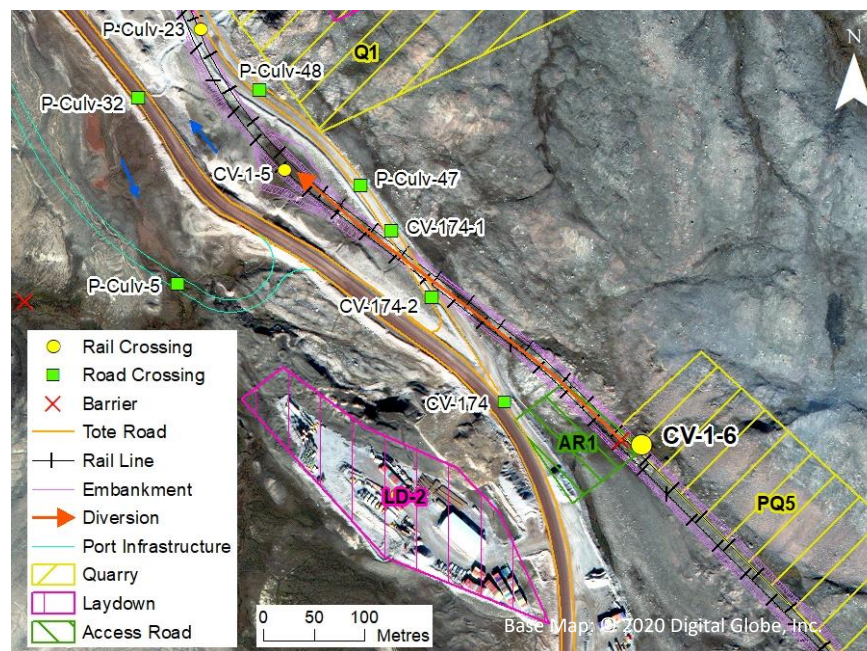
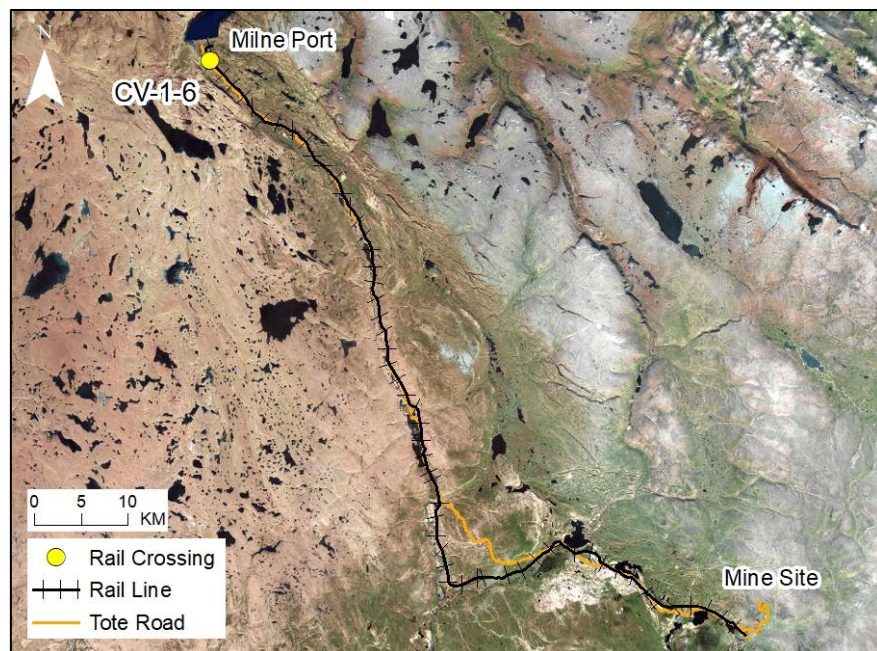
# RAIL CV-1-6

## LOCATION AND CROSSING DESCRIPTION

<b>Site ID:</b>	CV-1-6	<b>Dates Surveyed:</b>	18-Jun-19	<b>Waterbody Type:</b>	Stream
<b>Project Interaction:</b>	Rail Cut	<b>Centreline UTM Coordinates:</b>	17W 504292 E 7974064 N	<b>Culvert Length (m):</b>	N/A
<b>Number of Barrels:</b>	N/A	<b>Culvert Diameter/Span (mm):</b>	N/A	<b>Slope (%):</b>	N/A

## GENERAL PHYSICAL CHARACTERISTICS

<b>Flow Regime:</b>	Intermittent	<b>Stream Order:</b>	1	<b>Drainage Basin Area (km<sup>2</sup>):</b>	0.063
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## SUMMARY

The rail will cut a stream at CV-1-6 and divert the flow to a culvert at a low point to the northwest (CV-1-5). The same stream is crossed by the Tote Road 150 m downstream of CV-1-6 at CV-174, and a culvert installation is planned at P-Culv-5 550 m downstream of CV-1-6. The culvert installation at P-Culv-5 will receive the flows diverted to CV-1-5 via another culvert installation (P-Culv-32) on the road (see projected flow paths on the map above).

The branch of the stream that will be diverted at CV-1-6 does not provide fish habitat due to the presence of permanent downstream barriers and a lack of surface water outflows from the receiving pond at P-Culv-20 and the absence of overwintering habitat upstream. There is no connectivity to Phillips Creek. Flow will be returned to the same drainage basin with no net change in flows downstream of the convergence of sub-catchments for CV-1-6 and CV-1-5.

BAFFINLAND IRON MINES  
MARY RIVER PROJECT

 **North/South Consultants Inc.**  
Aquatic Environment Specialists

FISH HABITAT:

ARCTIC CHAR - NO

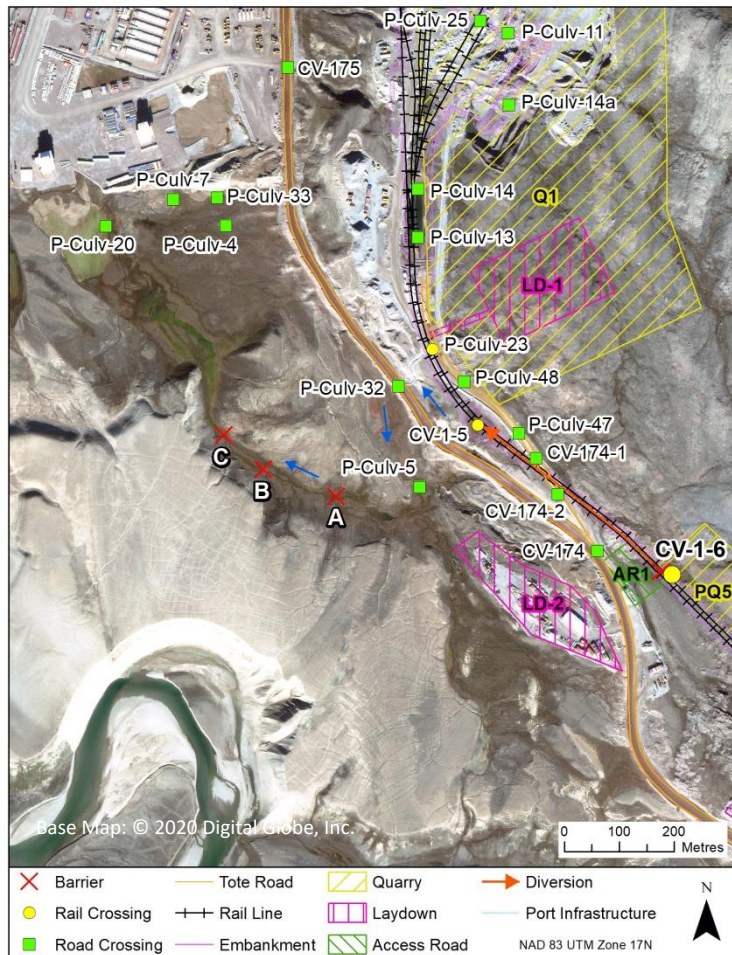
NINESPINE STICKLEBACK - NO



RAIL CV-1-6

## BARRIERS

Upstream/ Downstream	UTM		Barrier Type			Height (m)	Gradient (°)	Description	Site Label
	Easting	Northing	1	2	3				
Downstream	503680	7974206	VD	SHALL		0.2		Potential permanent barrier: small vertical drop with shallow water	A
Downstream	503547	7974255	VD	SHALL		0.2		Potential permanent barrier: small vertical drop with shallow water	B
Downstream	503475	7974318	VD	SHALL		0.45		Potential permanent barrier: moderate vertical drop with shallow water	C



**A**



**B**



**C**

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FISH HABITAT POTENTIAL

Nearest Potential Overwintering Habitat - ARCH: N/A

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

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

Multiple permanent vertical barriers downstream of the crossing as well as an existing laydown that prevents connectivity to Phillips Creek (see P-Culv-20). There was no natural fish habitat prior to laydown construction.



# RAIL CV-1-6

18-JUN-19



A



B



C

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