

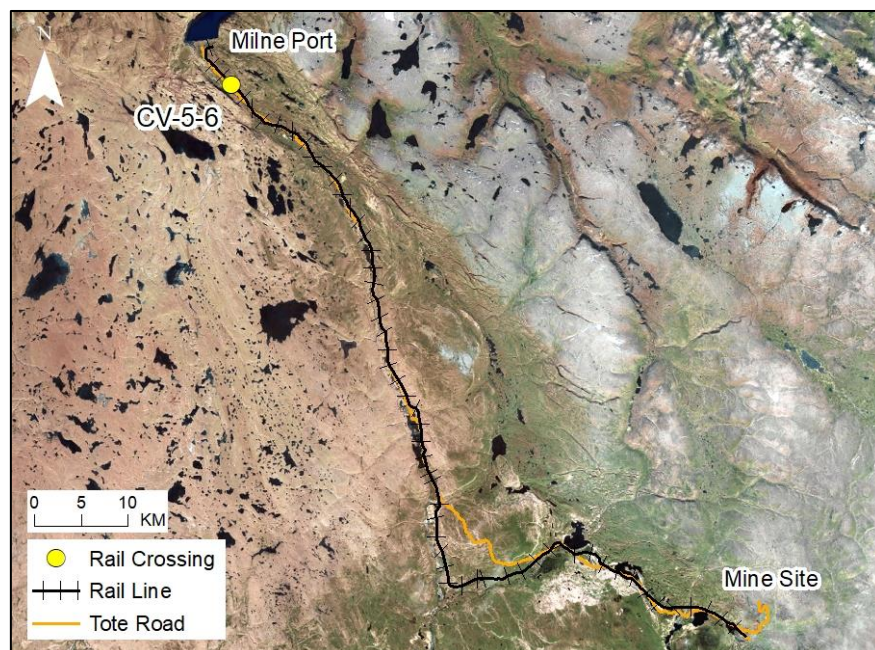
RAIL CV-5-6

LOCATION AND CROSSING DESCRIPTION

Site ID:	CV-5-6	Dates Surveyed:	15-Jun-19	Waterbody Type:	Stream
Project Interaction:	Rail Cut	Centreline UTM Coordinates:	17W 506665 E 7971530 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):	0.042
---------------------	--------------	----------------------	---	--	-------



SUMMARY

The North Rail crosses an unnamed intermittent stream at CV-5-6 that merges with branches crossed by the rail at CV-5-5 and CV-5-7 and flows to the Tote Road where it pools within a ditch adjacent to the Tote Road. The ditch drains through an unnamed culvert to isolated pools located on the west side of the Tote Road that have no further downstream connectivity. The stream will be diverted to the rail culvert at CV-5-7.

In addition to the lack of connectivity to Phillips Creek downstream, there is a natural permanent high gradient and subsurface flow barrier 80 m upstream of the road crossing and downstream of the proposed cut. There was little water in the channel during spring 2019.

The portion of the stream that will be diverted does not provide fish habitat and the diverted flow will be returned to the same system, upstream of the permanent barrier to fish passage.

**BAFFINLAND IRON MINES
MARY RIVER PROJECT**

North/South Consultants Inc.
Aquatic Environment Specialists

FISH HABITAT:

ARCTIC CHAR - NO

NINESPINE STICKLEBACK - NO

RAIL CV-5-6

BARRIERS

Upstream/ Downstream	UTM		Barrier Type			Height (m)	Gradient (°)	Description	Site Label
	Easting	Northing	1	2	3				
Downstream	506625	7971351	VD	HG	SSF	1.5	15	Permanent Barrier: High gradient with vertical drop, followed (5 m downstream) by subsurface flows	A



A

RAIL CV-5-6

FISH HABITAT POTENTIAL

Nearest Potential Overwintering Habitat - ARCH: Milne Inlet **Distance to Nearest Potential Overwintering Habitat - ARCH (km):** 9.1

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

FISHERIES DATA

Date: 15-Jun-19 **Temperature (°C):** NR **Gear Used:** Visual

Distance Fished (m): N/A **Duration Fished (seconds):** N/A

Species	Season	Effort (Seconds)	Fish Captured	Fish Observed	CPUE (No. Fish/60 Seconds)	Length Range (mm)
ARCH	Spring	N/A	N/A	0	-	-
NNST	Spring	N/A	N/A	0	-	-

COMMENTS

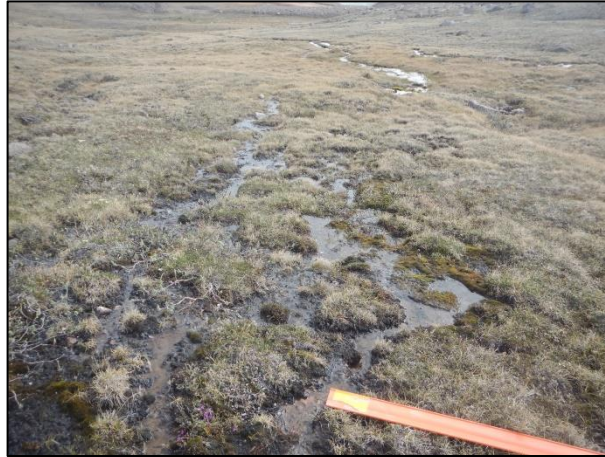
There was little water at the crossing, and a permanent downstream barrier of high gradient combined with subsurface flow in spring 2019.

RAIL CV-5-6

15-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).