

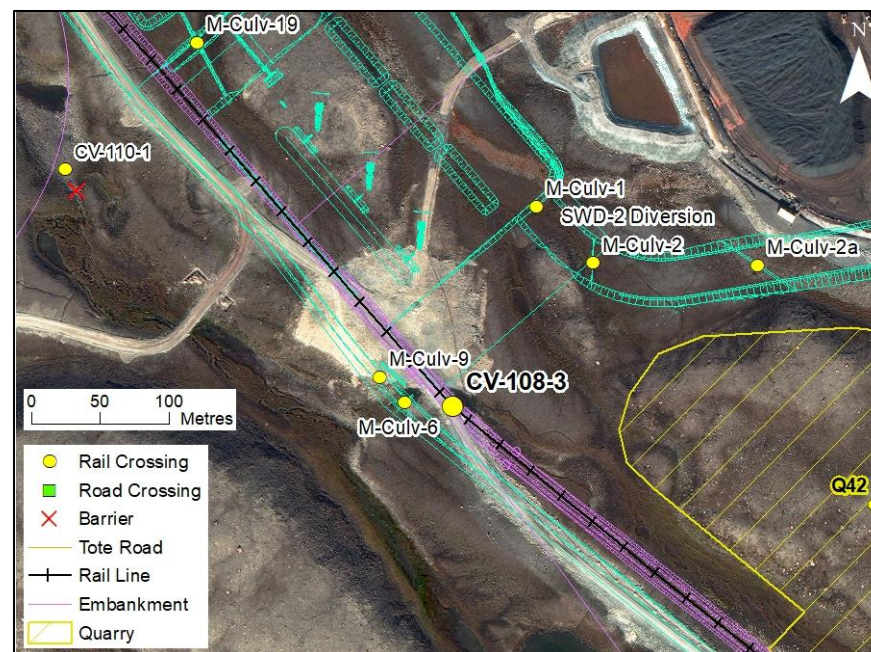
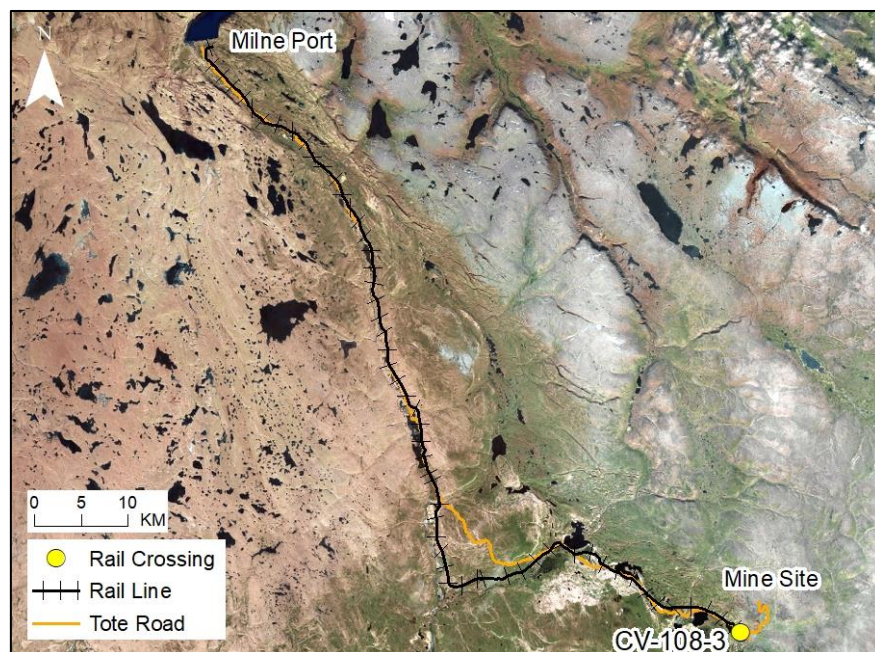
RAIL CV-108-3

LOCATION AND CROSSING DESCRIPTION

| | | | | | |
|-----------------------------|--------------|------------------------------------|------------------------|----------------------------|--------|
| Site ID: | CV-108-3 | Dates Surveyed: | 27-Jun-19 | Waterbody Type: | Stream |
| Project Interaction: | Rail Culvert | Centreline UTM Coordinates: | 17W 561366 E 7912738 N | Culvert Length (m): | 24 |
| Number of Barrels: | 2 | Culvert Diameter/Span (mm): | 1500 | Slope (%): | 5 |

GENERAL PHYSICAL CHARACTERISTICS

| | | | | | |
|---------------------|--------------|----------------------|---|--|-------|
| Flow Regime: | Intermittent | Stream Order: | 2 | Drainage Basin Area (km²): | 0.149 |
|---------------------|--------------|----------------------|---|--|-------|



SUMMARY

The rail will cross an unnamed intermittent stream at CV-108-3 that drains northwest to Sheardown Lake approximately 620 m downstream from the rail centreline. This stream is a smaller branch of the stream crossed by the rail at CV-110-1 approximately 430 m downstream from the centreline. This branch will also be crossed by an access road site (M-Culv-6) 40 m downstream. This crossing is on top of an existing Mine Site access road with no existing culvert at the location.

During the spring 2019 survey, the stream consisted of unconnected pools on the upstream and downstream sides of the access road with no connectivity to the larger CV-110-1 stream. There is a permanent barrier that extends from 450-550 m downstream of the CV-108-3 centreline. The barrier is a boulder field on a steep incline with several large vertical drops. Due to the permanent barrier there is no fish habitat at the rail crossing.

**BAFFINLAND IRON MINES
MARY RIVER PROJECT**

North/South Consultants Inc.
Aquatic Environment Specialists

FISH HABITAT:

ARCTIC CHAR - NO

NINESPINE STICKLEBACK - NO

RAIL CV-108-3

BARRIERS

| Upstream/ Downstream | UTM | | Barrier Type | | | Height (m) | Gradient (°) | Description | Site Label |
|-------------------------|---------|----------|--------------|----|---|---------------|-----------------|--|---------------|
| | Easting | Northing | 1 | 2 | 3 | | | | |
| Downstream | 561093 | 7912895 | VD | HG | B | 0.55 | 15 | Permanent Barrier: Upper end of long barrier | A |
| Downstream | 561025 | 7912966 | B | | | | | Permanent Barrier: Lower end of long barrier | B |



RAIL CV-108-3

27-JUN-19



A



B



C

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