

Freshet Inspection Report

Location: Mine Site, Exploration Camp

Owner: Sites Services/Environment

DATE : 2019-05-06

Inspected By :

MG, RS

Applicable Management Plans:

- Freshet Action Plan – March 2019 – Version 5

Applicable Licence

- Water Licence No: 2AM-MEL1631 – April 2016

AWAR and Bypass Road

Specific Risks:

- Blockages in culverts impeding flow
- Ice dams upstream or downstream of bridges
- Flow across or along roads (install straw logs as needed)
- Slumping of roadside
- TSS transport from quarries along AWAR into water bodies or streams
- Ensure no snow banks or piles along roadside
- Damage to in the inlet or outlet of culverts which may impede flow capacity
- Ensure no snow cover or snow piles, which would prevent routing of water into or out of the culverts
- Ensure no bed erosion upstream and downstream of watercourse crossing structures
- Ensure no scour under bridge abutments and abutment foundations
- Ensure no erosion along cutslopes and fillslopes of embankments

Observations:

- Culverts in main flow areas (south of km 19) have been cleared
- Culverts north of km range from clear to covered in drifted snow
- All bridges cleared
- No flow observed
- No geotechnical concerns observed

Mitigation Measures:

- Continue to monitor for flow
- Monitor northern culverts to ensure do not require clearing. Will re-assess upon next inspection

Pictures No.:

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Itivia

Specific Risks:

- Blockages of main culvert impeding flow
- Integrity of strawlogs, silt fences, and check dams installed to control TSS
- Any runoff from lease area towards Melvin Bay (sample as needed, install straw logs/silt fences)
- Cracking, slumping, or erosion of perimeter berms
- Integrity of liner/geotextile
- Integrity of all geotechnical structures, laydowns, etc.
- TSS transport from Itivia Quarry
- Ensure snow is stored in designated snow pad
- Damage to in the inlet or outlet of the culvert which may impede flow capacity
- Ensure no snow cover or snow piles, which would prevent routing of water into or out of the culvert
- Ensure no bed erosion upstream and downstream of Culvert
- Ensure no erosion along cutslopes and fillslopes of embankments

Observations:

- Itivia culvert requires clearing
- Snow management is good and majority of snow is stored in snow pad area.

Mitigation Measures:

- Main culvert to be cleared out May 11th when rock check dam installation is scheduled. Culvert and snow management will be re-assessed at next visit to ensure ready for flow.

Pictures No.:

Environmental Personnel: Matt Gillman

Signature :



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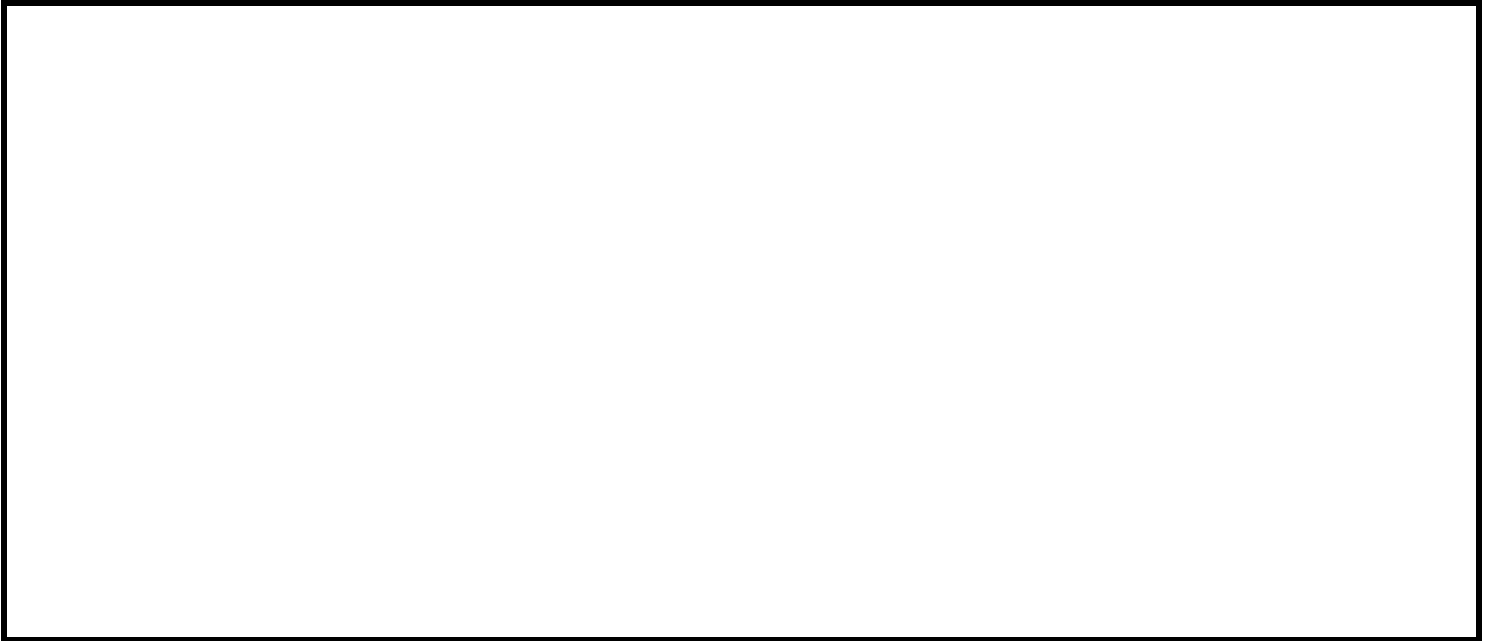
Picture 1:



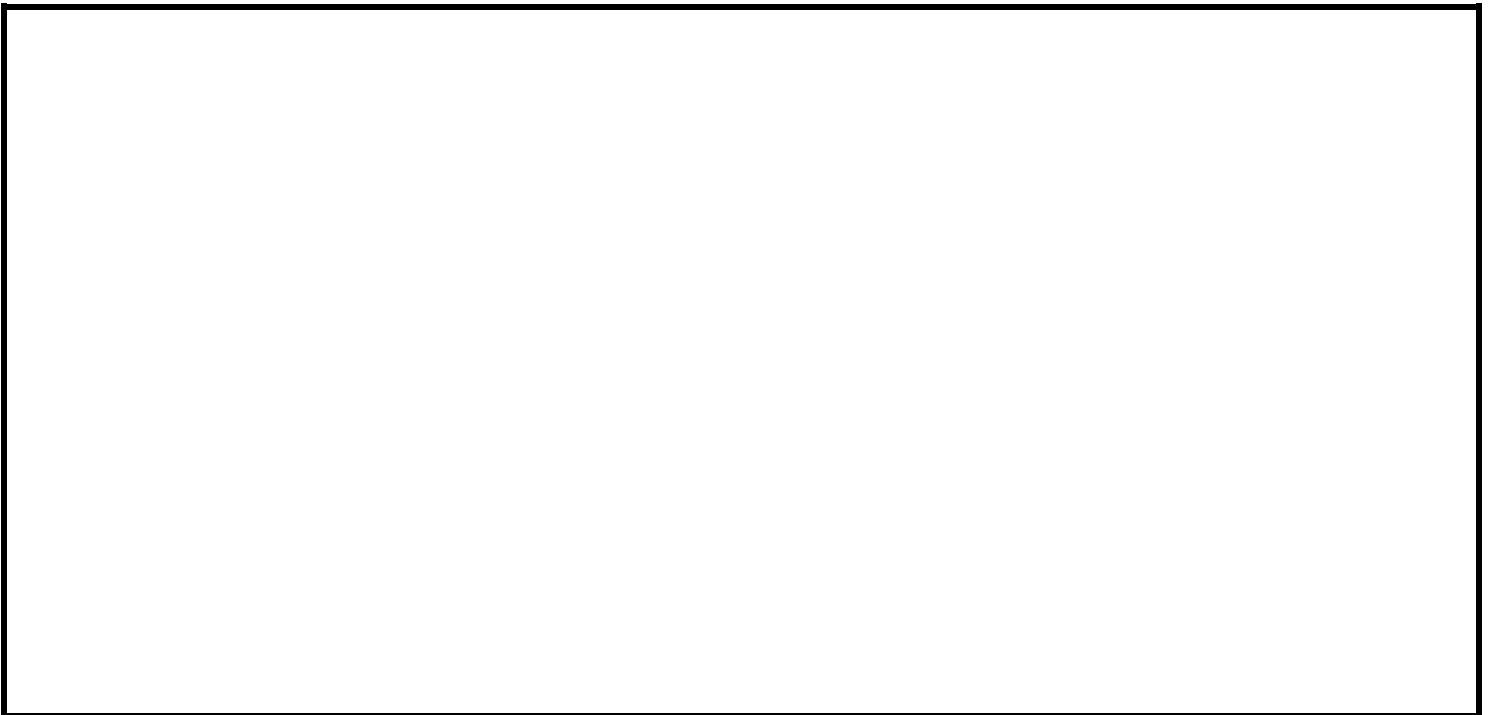
Picture 2:



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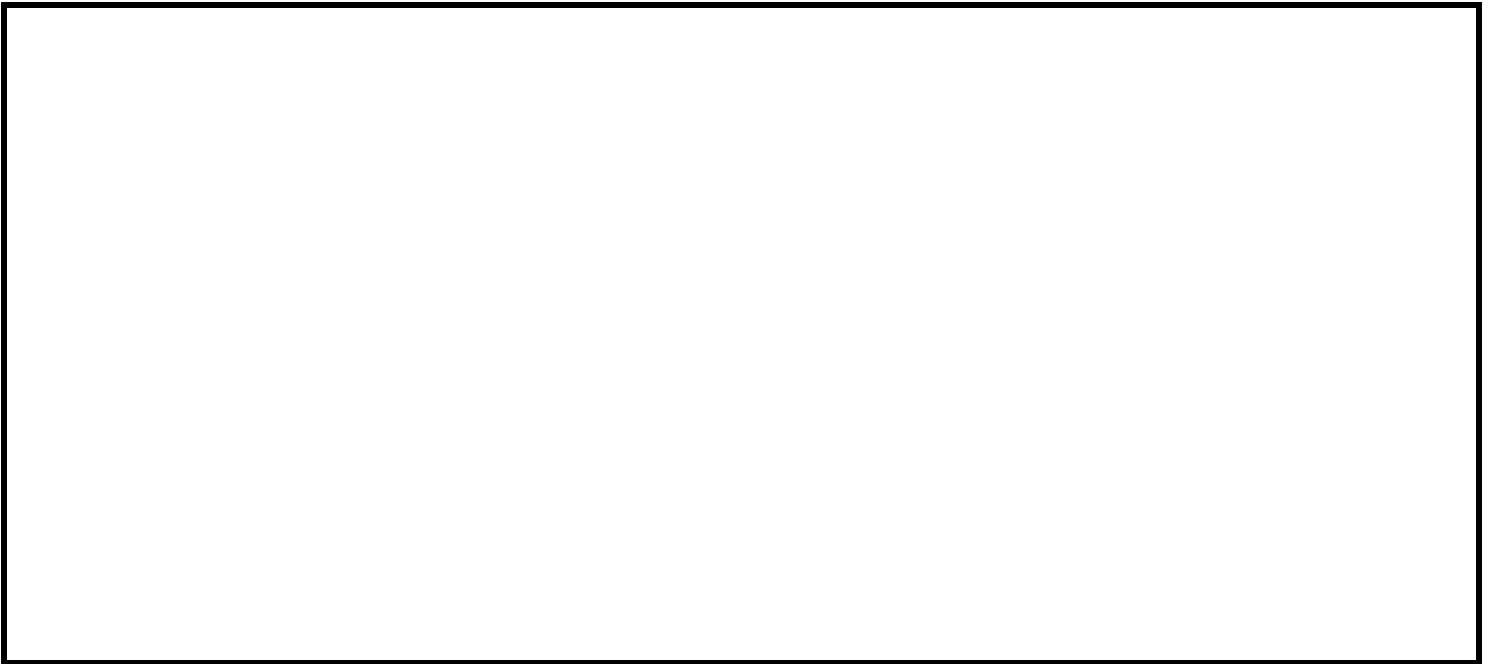
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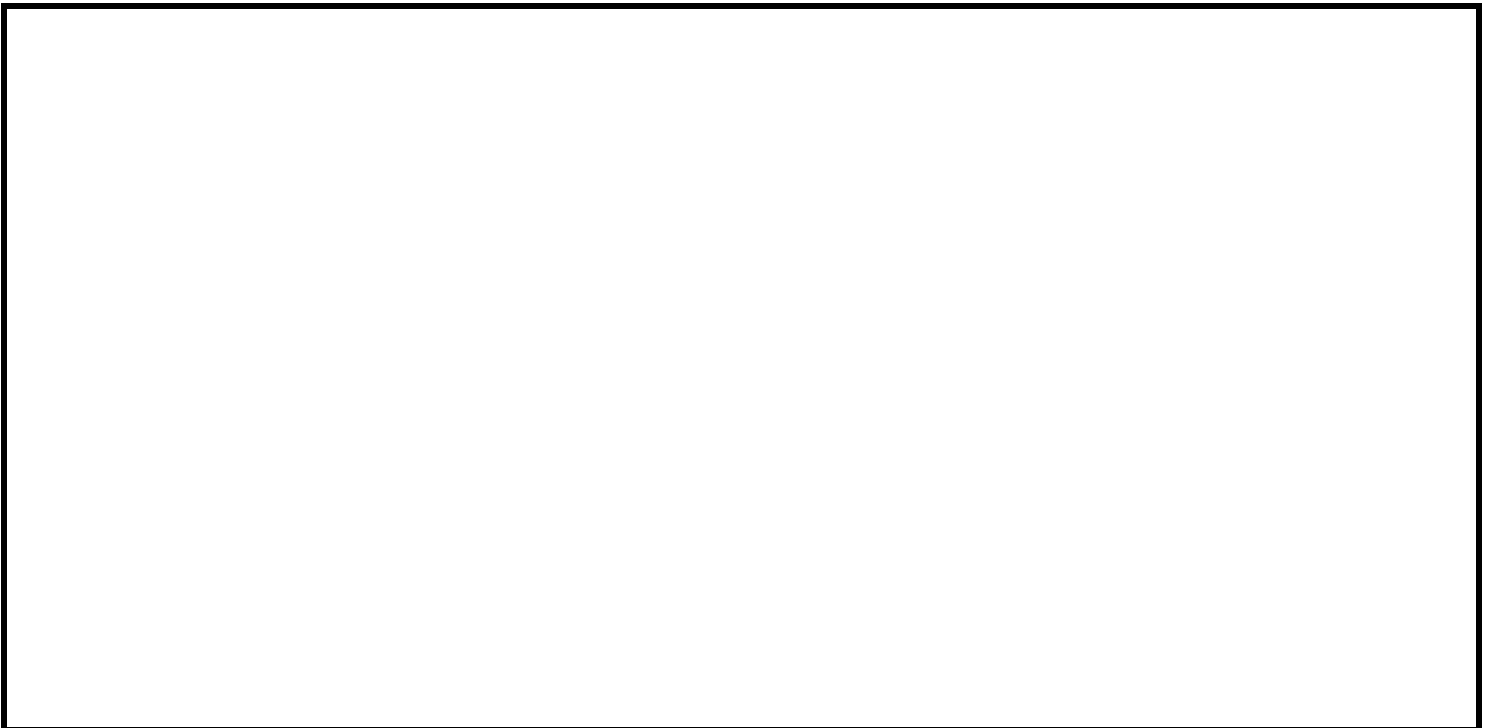
Picture 4:



Freshet Inspection Report



Picture 5:



Picture 6: