

# **Mount Polley Mining Corporation**

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Ministry of Environment Mining Operations Environmental Protection 2080 Labieux Rd. Nanaimo, BC V9T 6J9

# WEEKLY UPDATE REPORT – DECEMBER 2 TO DECEMBER 8, 2015

## **Rehabilitation Work**

Hazeltine Creek Rehabilitation	Hazeltine Creek rehabilitation work carried out this week included:
	<ul> <li>Trucking out of logs removed from the creek area continued.</li> </ul>
	Bridge replacement at Ditch Road and Gavin Lake Road has been completed.

### Water Management

Springer Pit	<ul> <li>The total volume of tailings deposited in the Springer Pit as of December 7<sup>th</sup> is 1,317,909 tonnes (955,006 m<sup>3</sup> including water retained in tailings).</li> <li>Water Elevations (December 8<sup>th</sup>):</li> <li>Springer Pit = 1024.73m (+0.16m from last week)</li> <li>Groundwater well GW12-2a = 1014.97m (+0.17m from last week)</li> <li>Groundwater well GW12-2b = 1015.32m (+0.22m from last week)</li> </ul>
	• Groundwater well GW15-1a = 1025.13m (+0.36m from last week)
	<ul> <li>Groundwater well GW15-1b = 1025.08m (+0.36m from last week)</li> </ul>
	<ul> <li>Groundwater well GW15-2a = 1024.92m (+0.25m from last week)</li> </ul>
	<ul> <li>Groundwater well GW15-2b = 1025.63m (+0.30m from last week)</li> </ul>
	Monthly water quality results for parameters of interest from the Springer Pit supernatant and adjacent groundwater wells will continue to be presented, as available. The last reported water quality was in the <u>November 26<sup>th</sup> report.</u>
	MPMC submitted a third party Qualified Professional review of the water elevations and chemistry of the Springer Pit groundwater wells based on Section 2.6 of Permit 11678.

### **Environmental Monitoring Program**

Water Quality Monitoring	<ul> <li>All water quality monitoring as required by Permit 11678 and the Post-TSF Breach Monitoring Plan is current. Note that:</li> <li>Water discharge sampling included collection of samples in Quesnel Lake near the pipeline diffuser ports at stations QUL-58 (all depths) and QUL-59 (mid depth only, as there were safety concerns due to the high winds on the lake).</li> <li>Samples were collected at end of pipe at treatment plant and throughout Hazeltine Creek, accompanied by Ministry of Environment representatives</li> <li>Supplemental samples were taken at Quesnel Lake station QUL-42 in Mitchell Bay.</li> </ul>
	<ul> <li>Figure 1 shows field turbidity readings for upper, middle and lower Hazeltine Creek.</li> <li>Figure 2 shows a time series graph of turbidity readings at site QUR-1 in the upper Quesnel River.</li> <li>Figure 3 shows field parameter profile results for turbidity and temperature at station QUL-58 on November 30<sup>th</sup> and December 7<sup>th</sup> in Quesnel Lake (station 100m from the Hazeltine Creek outflow diffusers, as the edge of the initial dilution zone).</li> </ul>

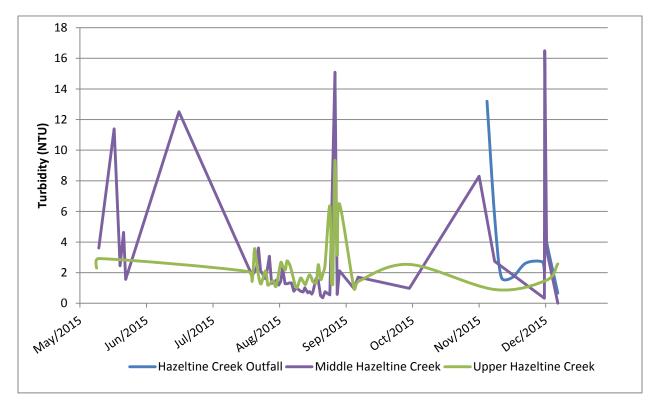


Figure 1. Time series graph for May 15<sup>th</sup> – December 2<sup>nd</sup> showing turbidity levels at monitoring locations in upper and lower Hazeltine Creek (note: discharge commenced on December 1<sup>st</sup> causing a short-lived increase in turbidity in the middle reaches of Hazeltine Creek)

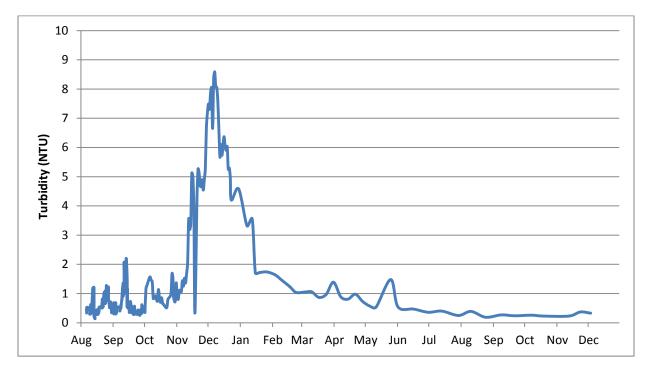


Figure 2. Turbidity time series at station QUR-1 (August 6, 2014 – December 3, 2015)

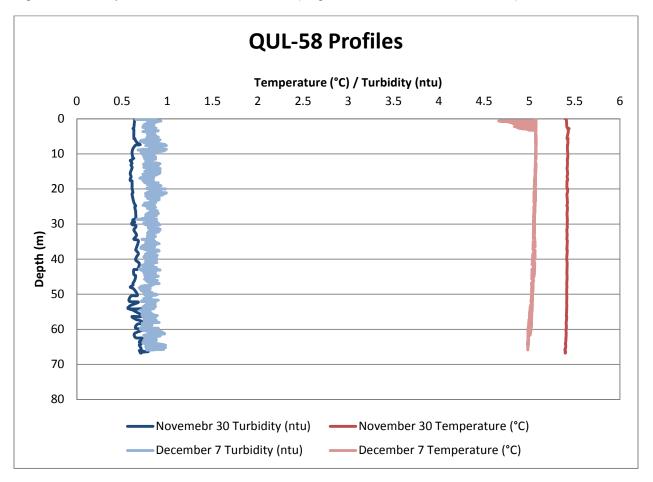


Figure 3. Turbidity and temperature profile at QUL-58 on November 30<sup>th</sup> and December 7<sup>th</sup>