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April 16, 2015

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

WEEKLY POST-TSF BREACH REPORT – WEEK OF APRIL 8 – 14, 2015

Water Management

Polley Lake Dewatering	Polley Lake water elevation = 922.69 m (April 14th) In order to maintain the Polley Lake water level, water from Polley Lake continued to discharge through the completed outlet structure into Hazeltine Creek this week at a rate of approximately 0.35 m^3/s.
TSF Water Management	All water from the TSF water collection system continues to be transferred to the Springer Pit via the Central Collection Sump. No releases of water to the environment occurred this week. Please refer to previous weekly reports, such as the December 31st, 2014 report, for an overview map of the water management system.

Government, First Nations and Stakeholder Engagement

Publication of Monitoring Results and Rehabilitation Updates	Mount Polley will continue to present interpreted environmental monitoring results and updates on remediation work on the Mount Polley Updates page of the Imperial Metals website (www.imperialmetals.com). A Public Notice was posted on April 14th for the Community Open House scheduled for 6:30pm on April 22nd at the Gibraltar Room in Williams Lake.
Engagement Activities and Communications with Regulators	Activities relating to government, First Nations, and stakeholder communication and engagement this week included: • The weekly Ministry of Environment (MoE) update meeting on April 8th. • Installation of signage for public safety in Quesnel Lake at the mouth of Hazeltine Creek. • A Mine Development Review Committee update meeting on April 9th to discuss preliminary feedback and questions on the return to restricted operations permit amendment applications. • Sampling of Polley Lake with MoE representatives. • A tour of Hazeltine Creek for representatives from the Ministry of Forests, Lands and Natural Resource Operations on April 14th.

Sediment and Erosion Control Measures

Silt Curtain	The turbidity barrier (silt curtain) installed in Quesnel Lake near the outlet of the new Edney (Hazeltine) Creek channel, downstream from the Lower Hazeltine Creek sedimentation ponds is in good condition.
General	Environmental monitors are monitoring sediment and erosion control and rehabilitation work in Upper, Middle, and Lower Hazeltine Creek. This monitoring is now being conducted by MPMC staff. An assessment of areas where additional sediment and erosion control is required adjacent to the completed sections of creek channel was completed this week. 16,480 tonnes of rock, including rip rap and angular rock, were hauled to the Hazeltine Creek area this week for use in rehabilitation work. An additional 13,560 tonnes of rock were excavated and moved within Hazeltine Creek as part of the channel reconstruction work. Screening of material for creation of fish habitat features at an on-site gravel pit continued this week. Rock liner material being used is low sulphur rock from the Cariboo Pit and a sampling program is in place to verify the geochemistry of the rock. A sampling program to verify geochemistry of creek subgrade material after tailings have been removed is also in place.
Bootjack Creek	Construction of a channel that will allow Bootjack Creek to flow into Polley Lake is almost complete, and a fish fence has been installed at the channel mouth.
Upper Hazeltine Creek	In Reaches 1 and 2, no construction work was conducted this week. The Polley Lake outlet structure has been installed, and channel construction and armouring is complete.
Middle Hazeltine Creek	In Reach 3 (downstream of the Gavin Lake Road bridge), 1900m of channel has been constructed and armoured, and Hazeltine Creek is now flowing in the reconstructed channel all the way from Polley Lake to this point (4600m). Grading of the floodplain has been completed to approximately 2300m downstream of the bridge.
Lower Hazeltine and Edney Creeks	Removal of tailings from the Quesnel Lake shoreline on the north side of the Edney (Hazeltine) Creek mouth has been temporarily discontinued due to high lake levels. Re-contouring of eroded banks adjacent to the Ditch Road bridge was completed this week. Planting of willow live stakes and wattles by a crew from the Soda Creek First Nation commenced this week.

TSF Construction

TSF Construction	The amendment to permit M-200 approving repair of the TSF breach to manage 2015 freshet was received from the Ministry of Mines on December 17th, 2014. An update on work being completed under this approval is as follows: • Foundation preparation and material placement for Perimeter Embankment buttressing is ongoing. • Upstream Fill material placement for the cut-off wall is ongoing. • CSM (cutter soil mixing) Wall construction is ongoing. • Foundation preparation and placement immediately downstream of the cut-off wall (Phase 2 footprint) is ongoing. Project components that have been completed to date under this approval are detailed in the March 26th, 2015 report.

Water Quality Monitoring Program

Water Quality Monitoring Sites

The current water quality monitoring program is outlined in the table below. Changes to the monitoring program this week (as per the monitoring program submitted to MoE):

- Monitoring of Polley Lake commenced.
- Monitoring of station HAC-05 resumed now that creek rehabilitation is not actively occurring near the site.
- Station HAC-10 at the outflow of Polley Lake was established.

All monitoring was completed as scheduled.

Area	Monitoring Type	Frequency	Stations
Polley Lake	Samples	Monthly	P1, P2
	Profiles	Bi-monthly	P1, P2
Hazeltine Creek	Samples	Weekly	HAC-01b, HAC-08, HAC-05, HAC-10
Edney Creek	Samples	Weekly	EDC-01, EDC-02
Quesnel Lake	Profiles	Weekly	QUL-21a, QUL-18, QUL-54, QUL-55, QUL-56, QUL-2a, QUL-79, QUL-40a, QUL-120a
	Samples	Weekly	QUL-2a, QUL-18, QUL-55
	Samples	Monthly	QUL-40a, QUL-120a
Quesnel River	Samples	Weekly	QUR-1

Attachment 1 to this report provides a map of these sampling locations.

Continuous Monitoring

The monitoring program also includes a sonde (datalogger) that is deployed in the Quesnel River at monitoring site QUR-1. The sonde measures field parameters (turbidity, pH, specific conductance, dissolved oxygen, and temperature) every 15 minutes. A second sonde, which measures the same parameters at the same frequency, is deployed at the outlet of the Lower Hazeltine Creek sedimentation ponds.

Results

Figure 1 shows a time series graph for this week of daily field turbidity readings for Upper Hazeltine Creek (at the Gavin Lake bridge, HAC-05), Lower Hazeltine Creek (upstream and downstream of the sedimentation ponds), and Edney Creek (upstream and downstream of the confluence with Hazeltine Creek).

Figure 2 shows a turbidity and temperature profile from April 14th at site QUL-18 in Quesnel Lake (at the deepest point of the West Basin, downstream of the Hazeltine Creek mouth).

Figure 3 shows a time series graph of turbidity at site QUR-1. Turbidity data are from laboratory analysis completed by ALS Environmental.

Note: Mount Polley is currently working with their hydrology contractor to refine the Hazeltine Creek rating curves so that data can be presented in this weekly report.

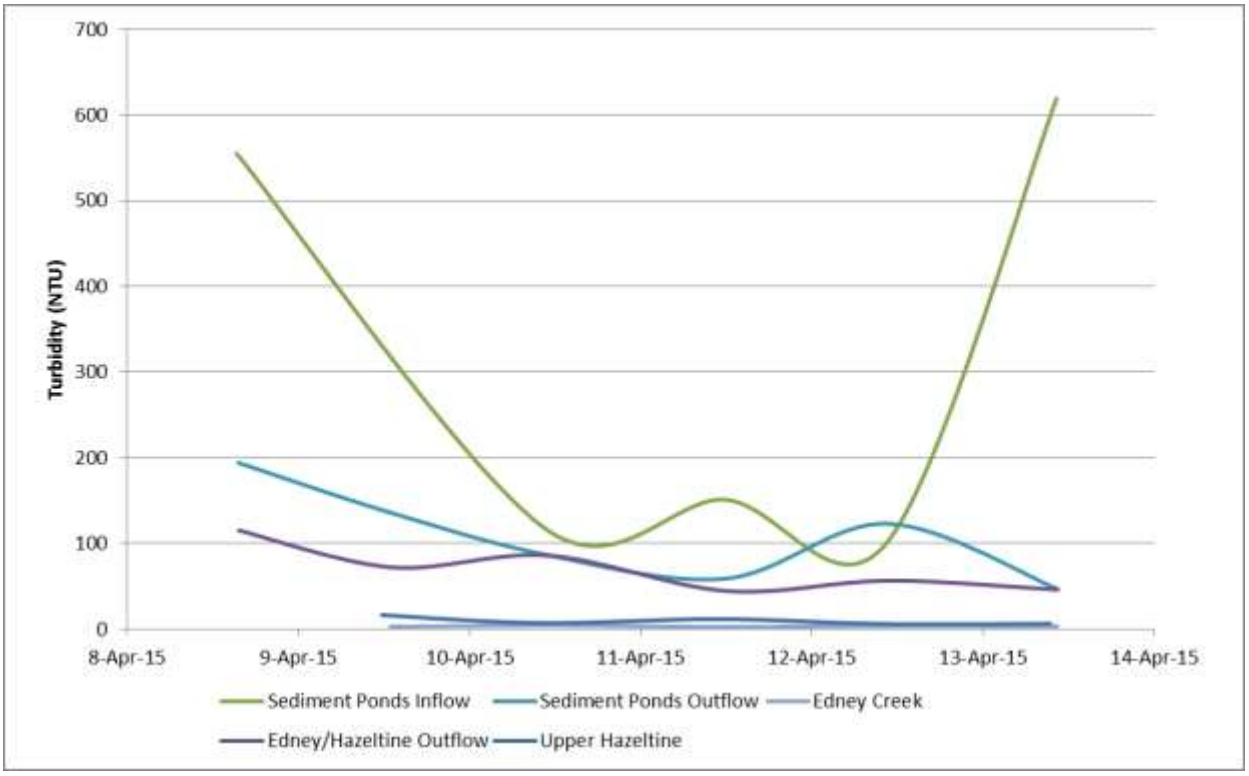


Figure 1. Time series graph for April 8th to 14th showing turbidity for Hazeltine Creek (at the Gavin Lake Road bridge, upstream of the sedimentation ponds, and downstream of the sedimentation ponds), for Edney Creek in its new channel, and for the combined Edney/Hazeltine Creek outflow into Quesnel Lake

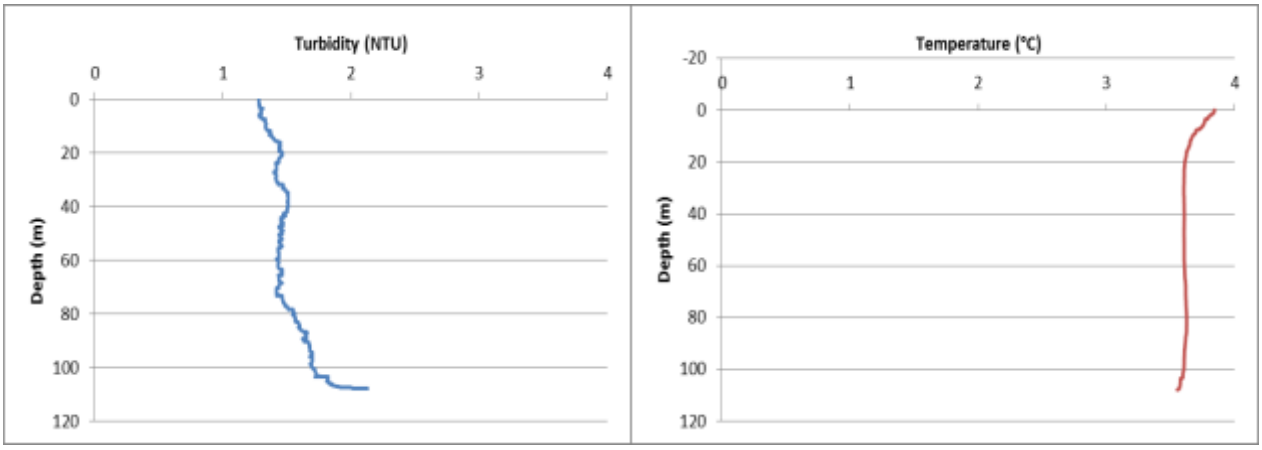


Figure 2. Turbidity and temperature profiles from site QUL-18 (April 14th)

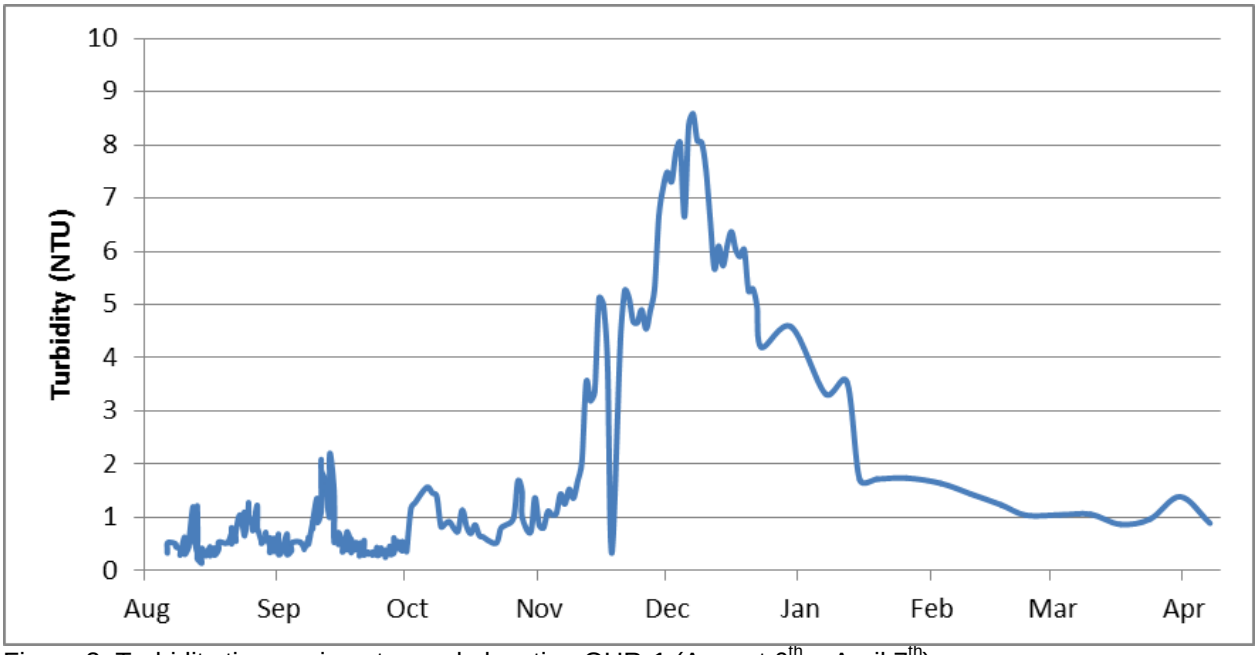
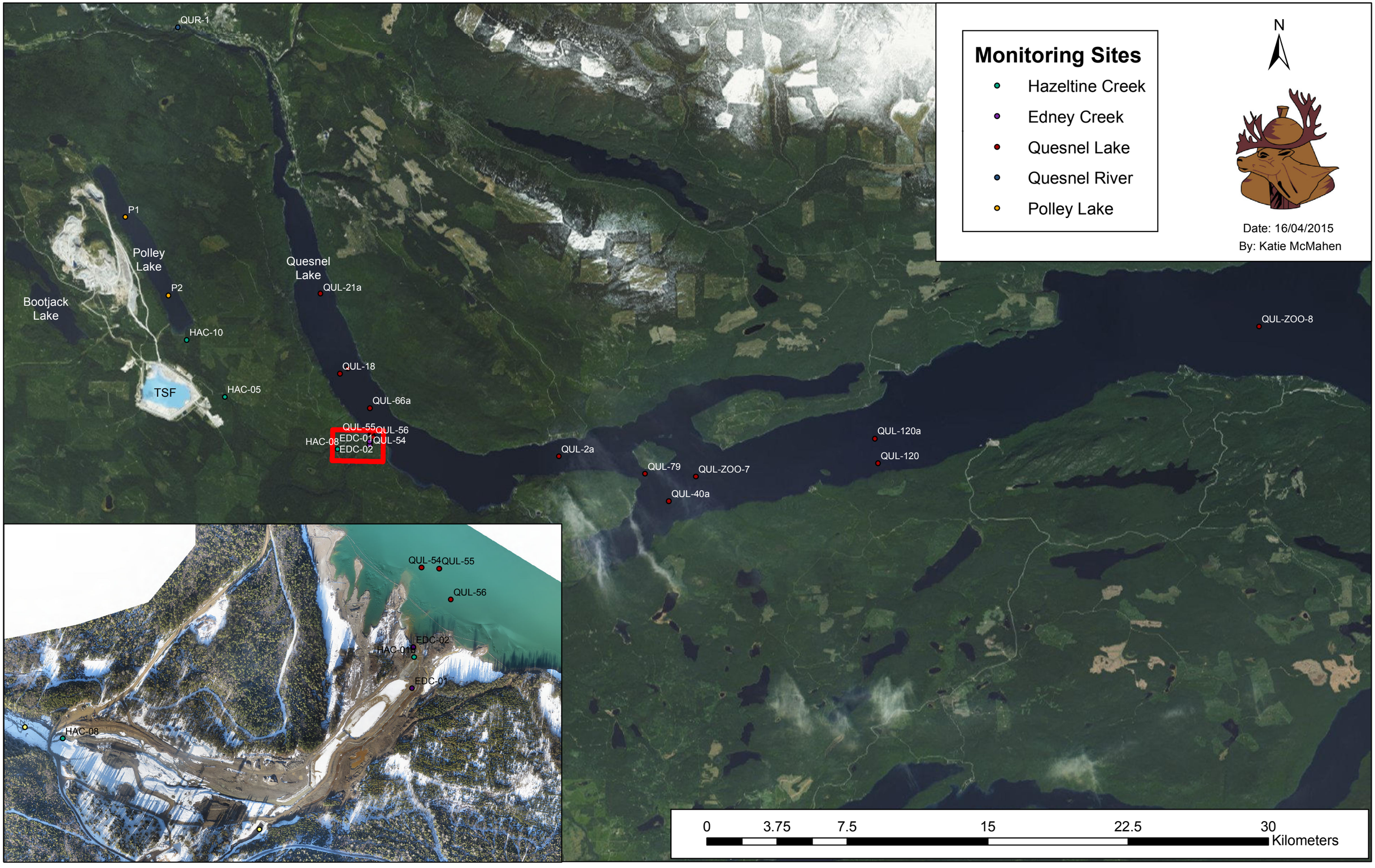


Figure 3. Turbidity time series at sample location QUR-1 (August 6th – April 7th)

Attachments

Attachment 1: Monitoring Locations Map


QUR-1
P1
Polley Lake
P2
Bootjack Lake
HAC-10
TSF
HAC-05
Quesnel Lake
QUL-21a
QUL-18
QUL-66a
QUL-55
QUL-56
HAC-08
EDC-01
QUL-54
EDC-02
QUL-2a
QUL-79
QUL-ZOO-7
QUL-40a
QUL-120a
QUL-120
QUL-ZOO-8
QUL-54
QUL-55
QUL-56
EDC-02
HAC-01
EDC-01
HAC-08
Monitoring Sites
Hazeltine Creek
Edney Creek
Quesnel Lake
Quesnel River
Polley Lake
N
Date: 16/04/2015
By: Katie McMahen
0
3.75
7.5
15
22.5
30
Kilometers