

# **Mount Polley Mining Corporation**

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### October 31, 2014

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

# WEEKLY TSF BREACH MONITORING REPORT - WEEK OF OCTOBER 22 - 28, 2014

# **Water Management and TSF Works**

Polley Lake	Polley Lake level elevation = 921.77 m		
Dewatering	Because the lake water level is within its natural range, no pumping from Polley Lake to Hazeltine Creek occurred this week. Temporary stoppage of pumping helped to accommodate downstream restoration works.		
Breaches	No breaches of the water management system containing water flow from the Tailing Storage Facility (TSF) occurred this week.		
TSF and	Construction of the following works is complete:		
Water	The Polley Lake plug access road.		
Management Structures	The Central Collection Sump.		
Ott dotales	The Breach Pond.		
	<ul> <li>Upstream 1 and 2 sumps, including installation of the Slurry 1 pump.</li> </ul>		
	All water from TSF water collection systems is currently transferred to Springer Pit via the Central Collection Sump. The only exception is water from the Breach Pump which is transferred to the Till Borrow Pit to allow settling of suspended solids prior to being transferred to the Central Collection Sump.		
	Updates on additional projects are as follows:		
	The ditch from the Breach Pond to the Till Borrow Pit is approximately 75% complete.		
	<ul> <li>The road to the Till Borrow Pit, which will provide access for buttress work along the Perimeter Embankment and allow restoration materials to be hauled to Hazeltine Creek, is almost complete. Construction will be temporarily stopped until geotechnical drilling in the road right of way is finished.</li> </ul>		
	All structures referenced are shown in Figure 1. This figure also shows areas along the Perimeter Embankment that are scheduled for stripping and foundation preparation, which is required for buttressing of the embankment.		

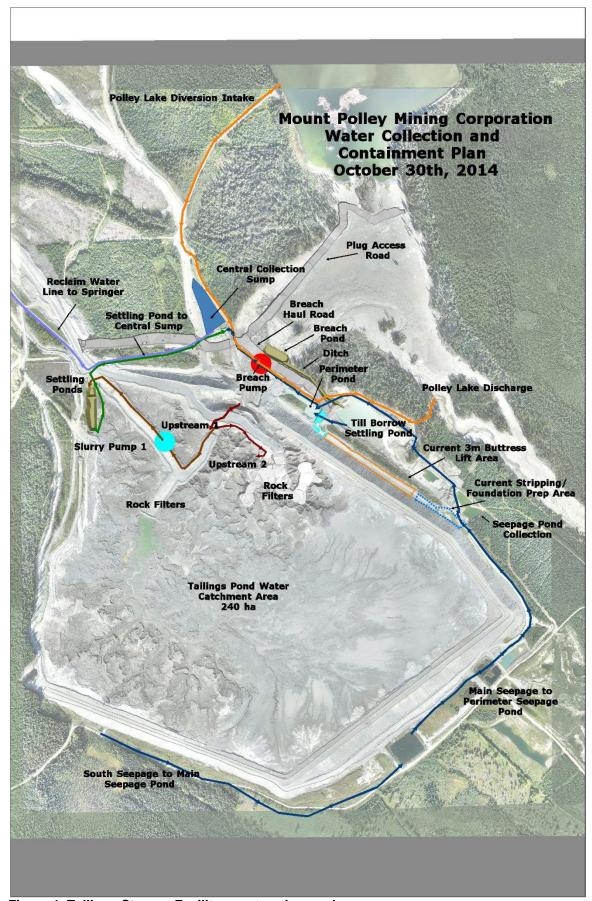


Figure 1. Tailings Storage Facility construction works

#### **Sediment and Erosion Control Measures**

Silt Curtain	The silt curtain attached to the log boom at the mouth of Hazeltine Creek continues to remove sediment from the water column. The curtain is in good condition.	
Sediment Control Works	Current sediment and erosion control works underway on lower Hazeltine Creek (below the Ditch Road) include:  Construction of the Upper and Lower Sedimentation Ponds.  Screening of select excavated materials to obtain suitable aggregate sizes for future creek rehabilitation.  Collection and mulching of woody debris.  Re-grading and landscaping of select areas.  Installation and maintenance of silt control measures including silt fences and straw bales.  Environmental construction monitoring is occurring continuously during all activities. No change in turbidity in the water in Hazeltine Creek has been detected as a result of the construction.	
	Design work on the sediment and erosion control plan for upper Hazeltine Creek is ongoing.	

# **Routine Water Quality Monitoring Program**

The maps on pages 1-8 of Figure 5 (attached) show locations that have been sampled as part of the water quality monitoring program. The table below is a summary of the current water quality monitoring program; however, unsafe weather and lake conditions result in occasional lake samples not being completed.

Frequency	Area	Sample Locations
Daily	Quesnel River	QUR-1
	Hazeltine Creek	HAC-01a
Weekly	Quesnel Lake	QUL-2a, QUL-18, QUL-21a, QUL-40a, QUL-66, QUL-66a, QUL-112/QUL-112a, QUL-119, QUL-120/QUL-120a, QUL-zoo-8/QUL-zoo-8
	Hazeltine Creek	HAD-1 (when pumping), HAC-05
	Polley Lake	P1, P2POL-5, POI-6 (field parameter profiles only)
2x/week	Quesnel Lake	QUL-79
Time/weather permitting	Quesnel Lake	QUL-2, QUL-21, QUL-31a, QUL-87, QUL-119

Note that data has not been appended to this repot. Changes to the reporting method are in progress.

#### **QA/QC**

A flow chart has been provided as Appendix A which shows how data is being managed and processed to maintain quality control.

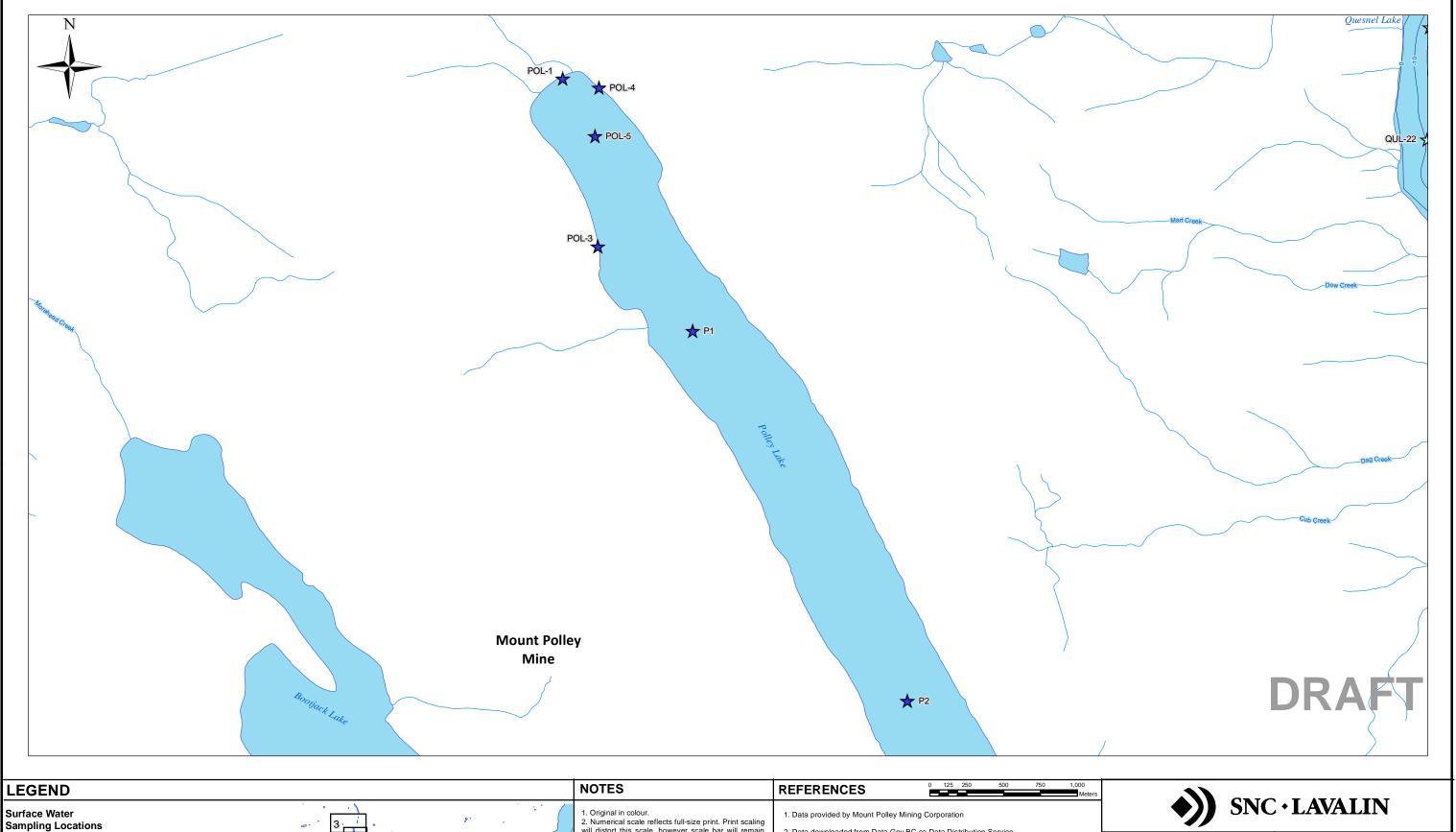
### **ATTACHMENTS**

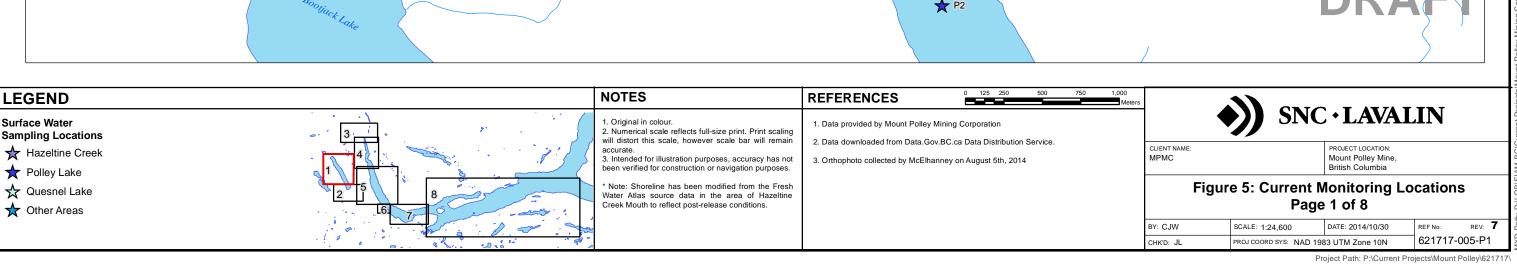
Drawings:

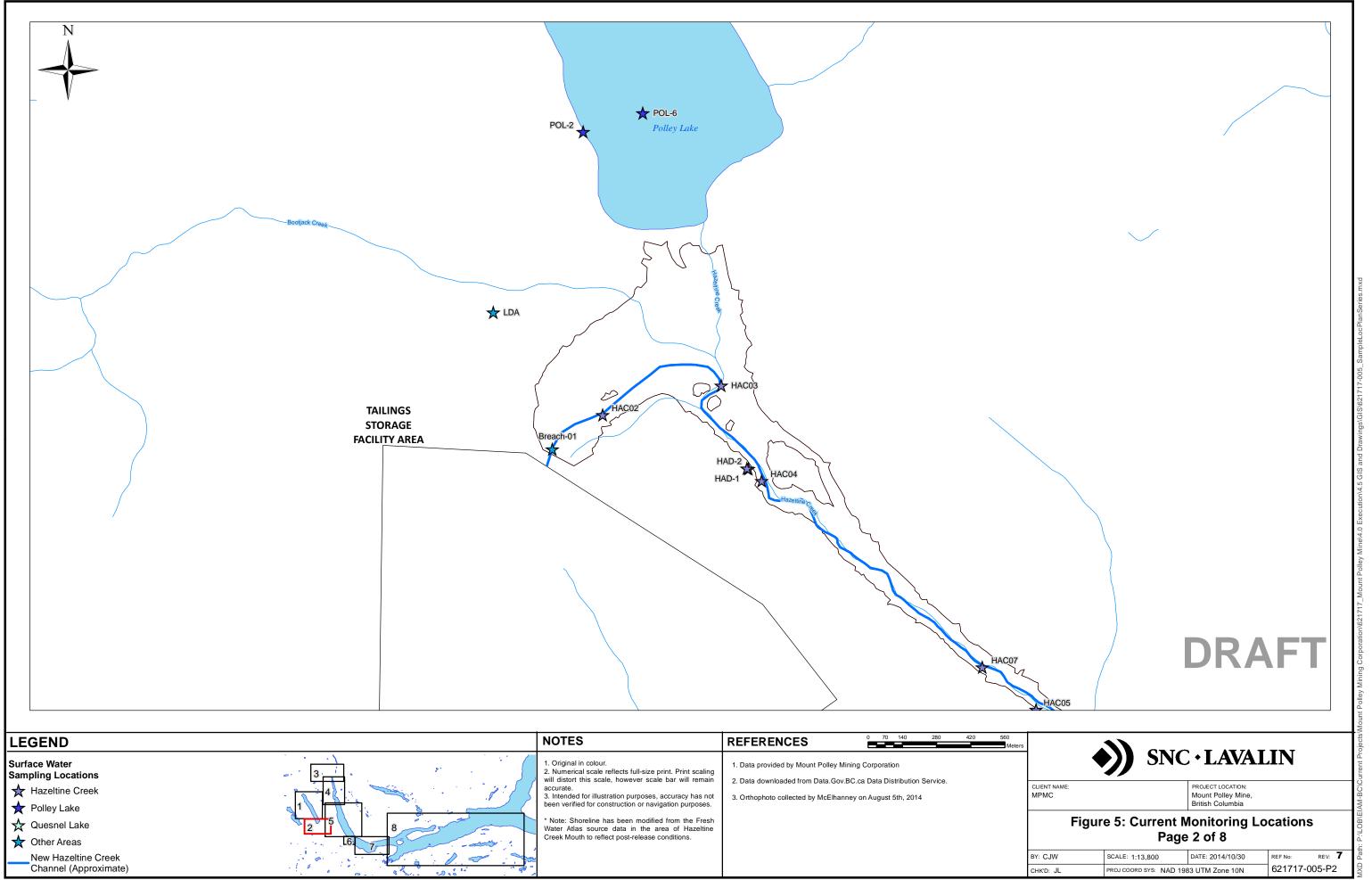
612717-005-P1 through 612717-005-P8: Current Monitoring Locations (Figure 5)

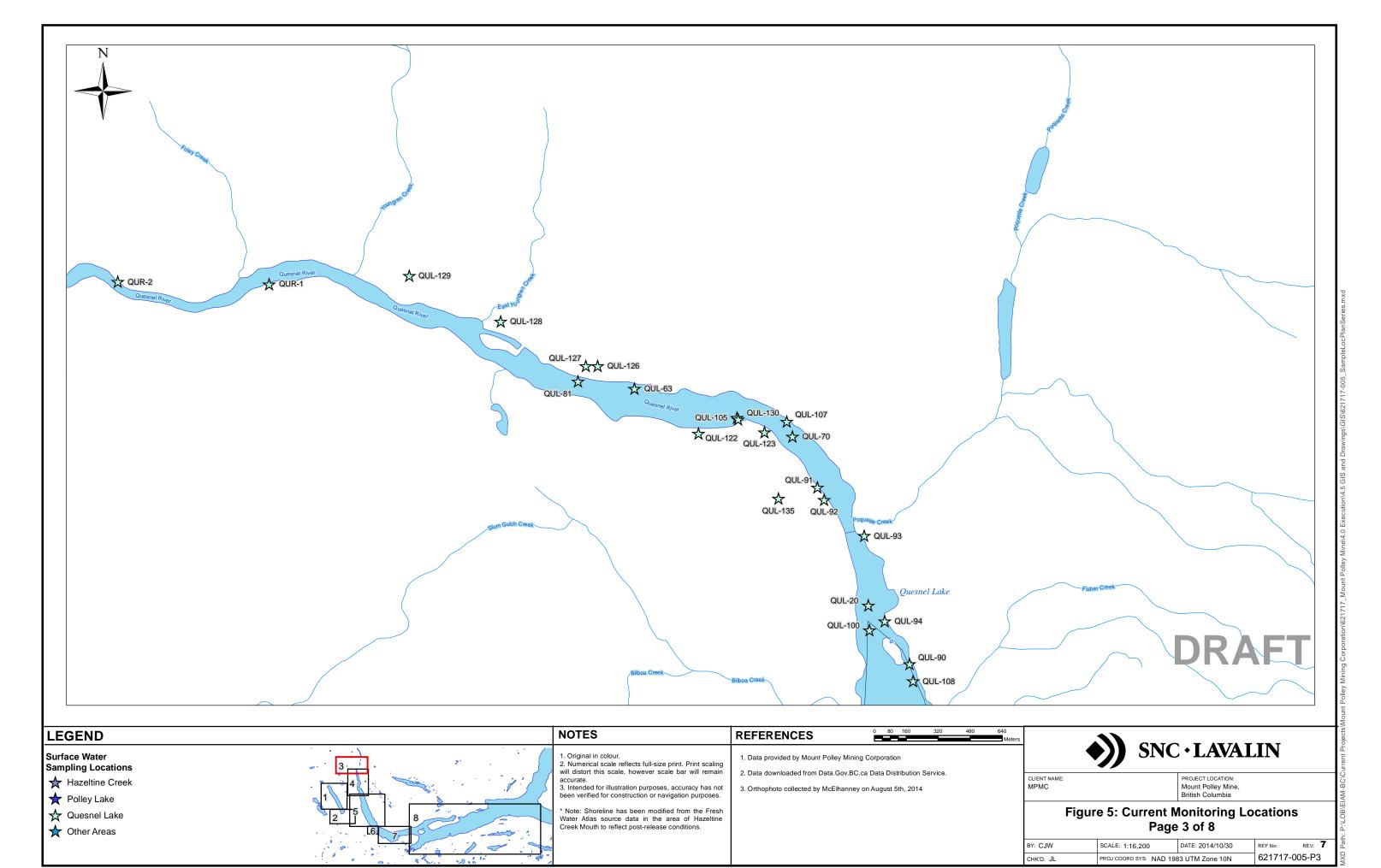
Appendices:

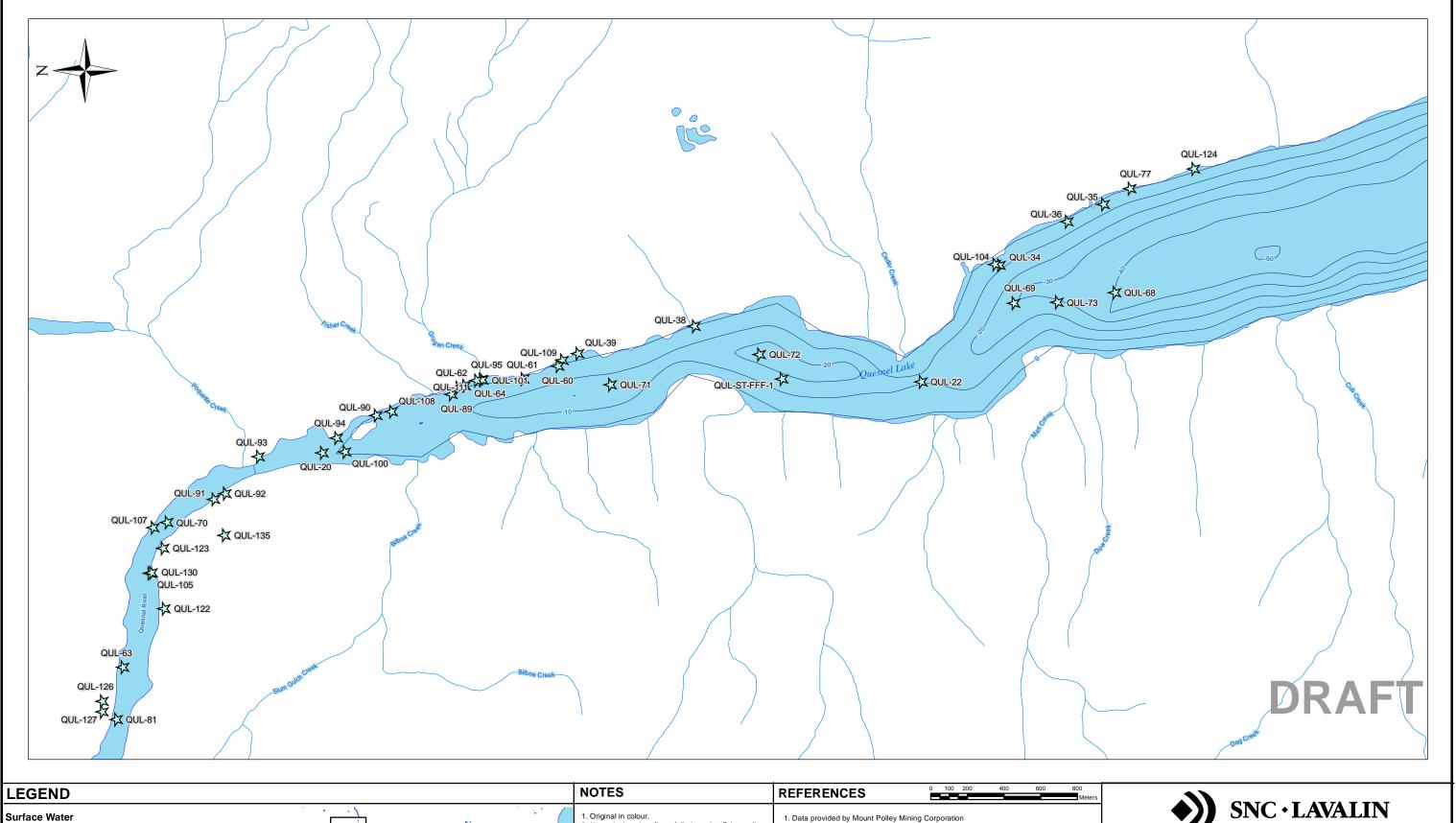
Appendix A: QA/QC Data Management Flow Chart

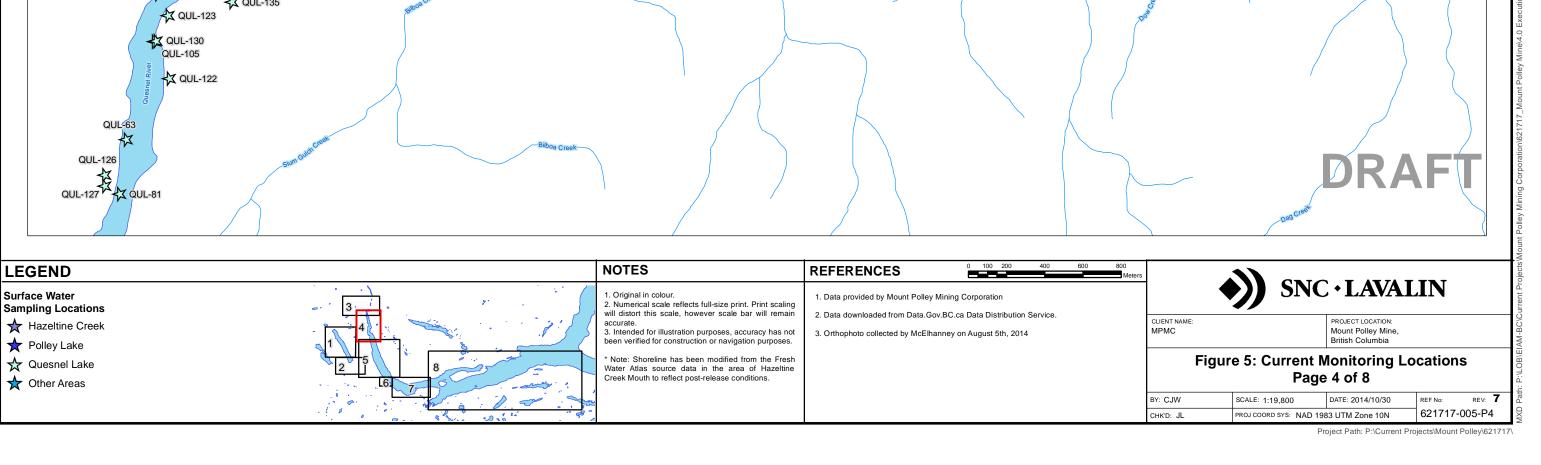


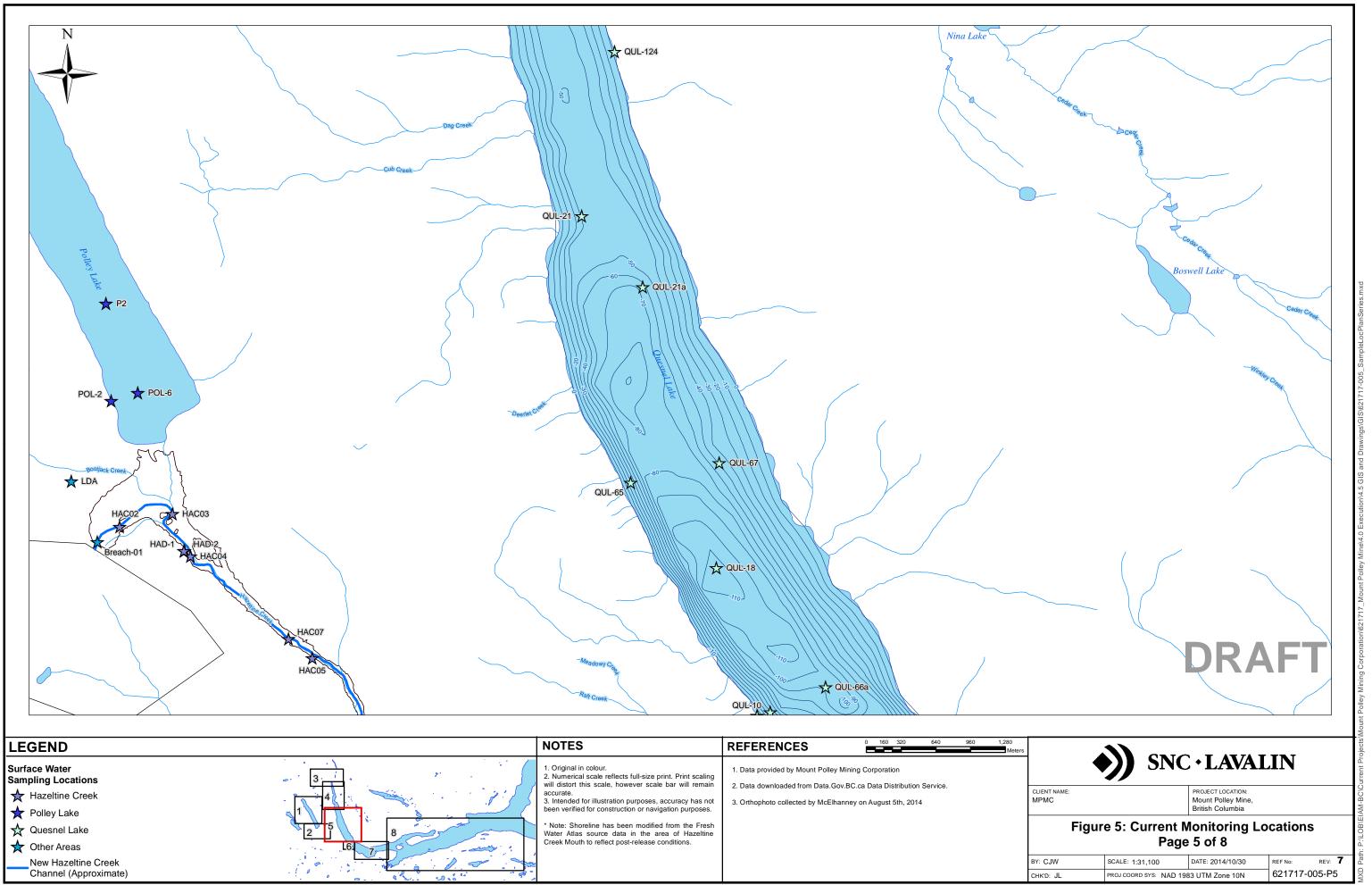


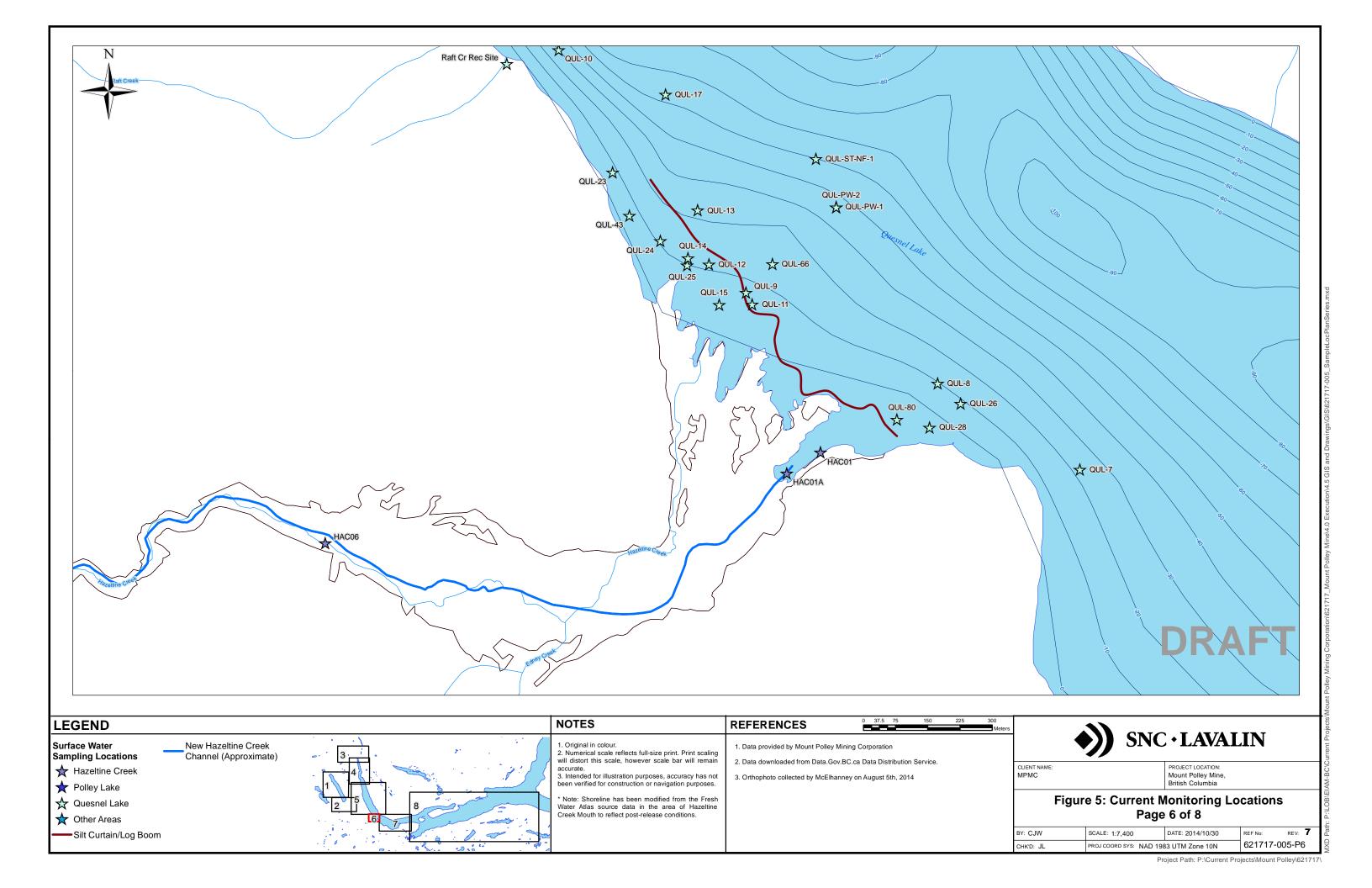


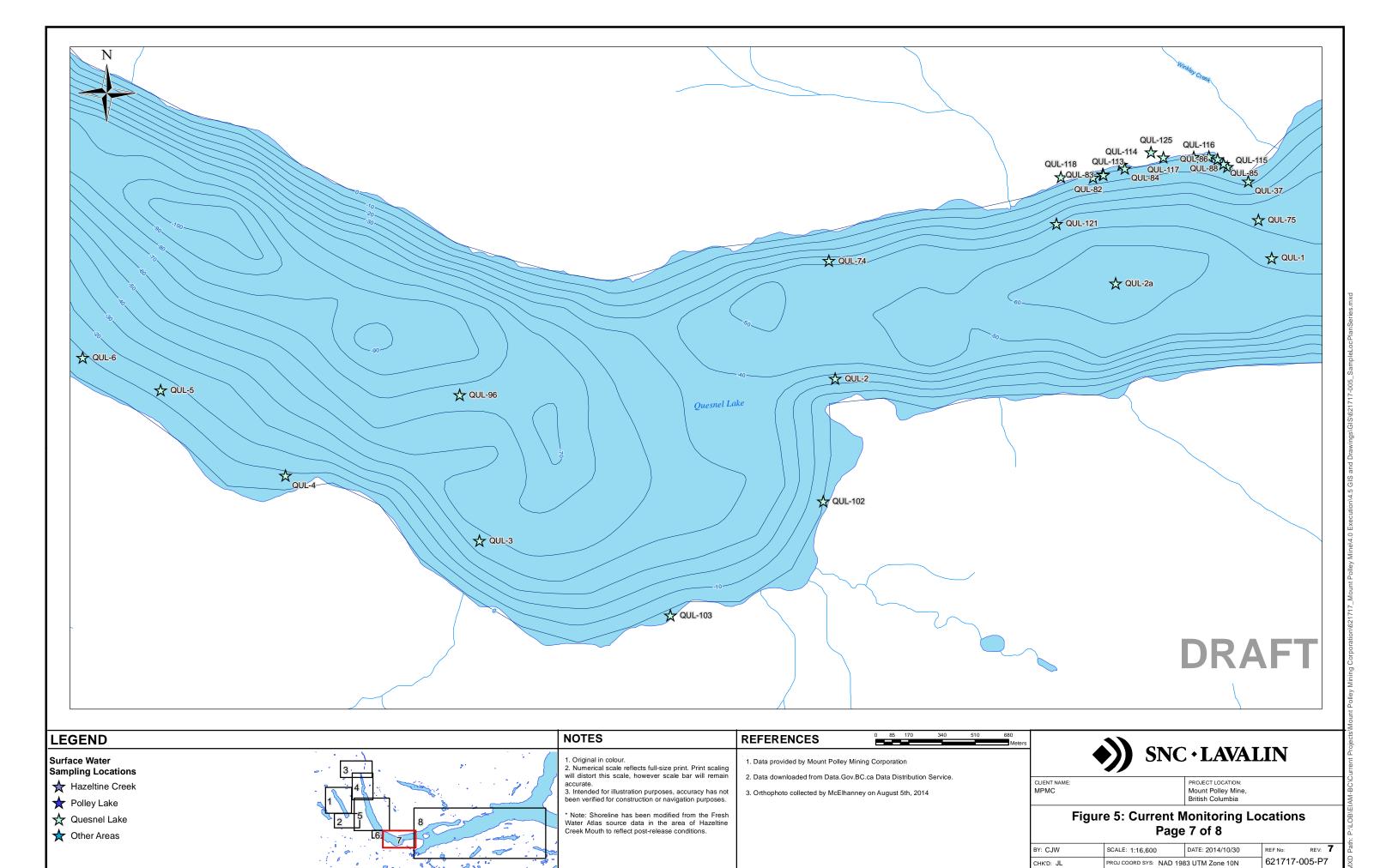


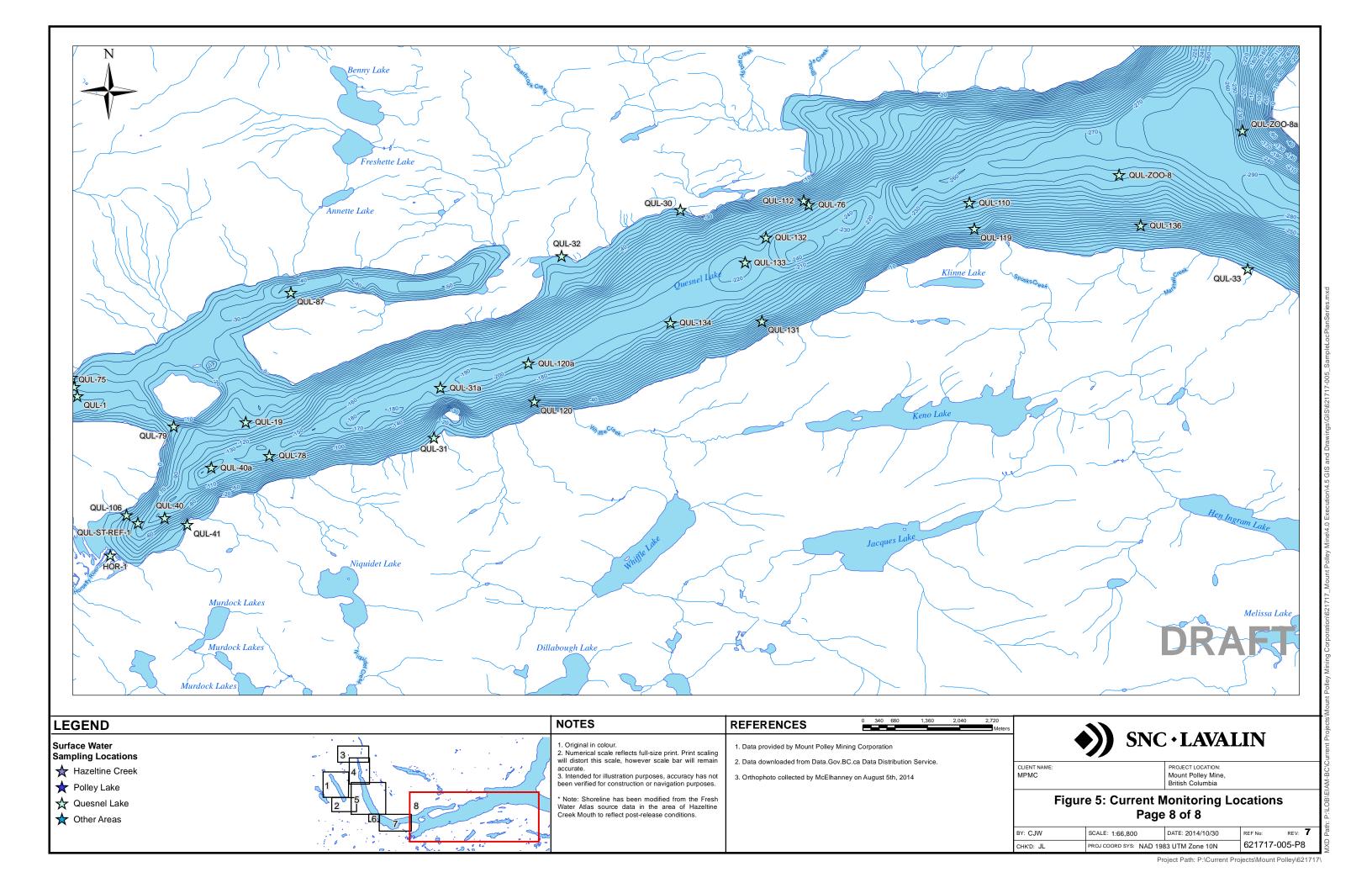


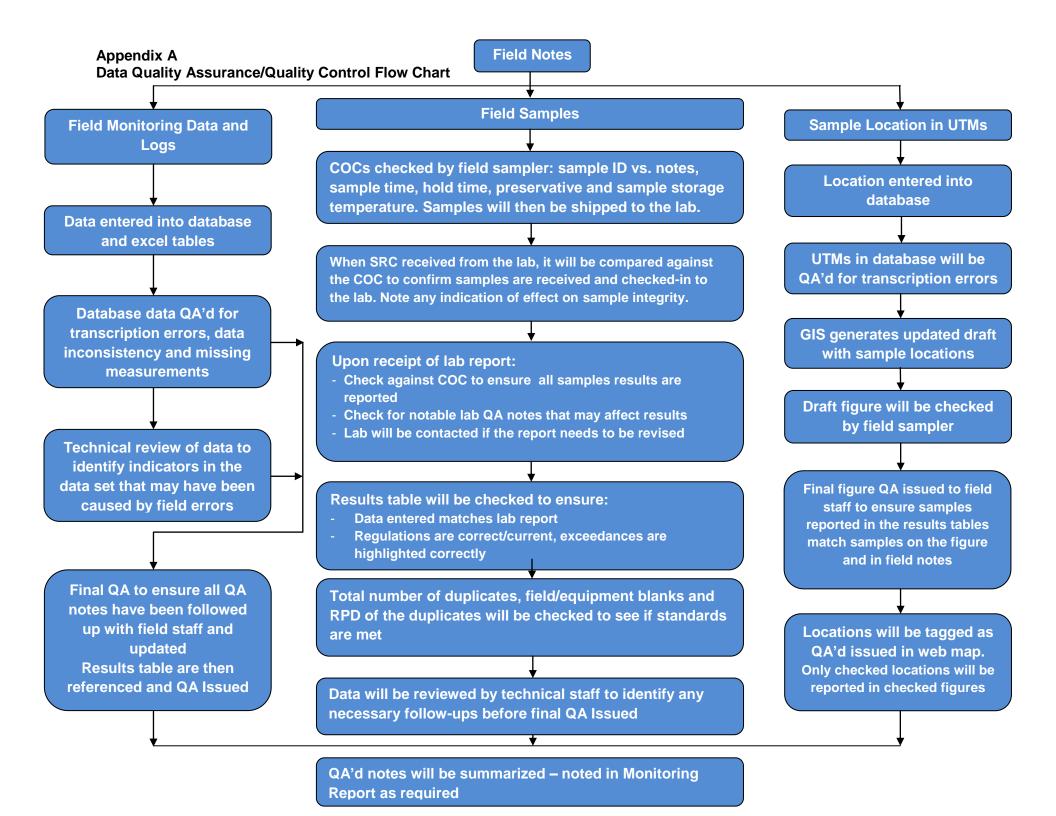












# Appendix A Data Quality Assurance/Quality Control Flow Chart

Legend
COC – Chain of Custody
GIS – Geology Information System
ID – Identification number
QA – quality assured
RPD - Relative Percent Difference

SRC – Sample Receive Confirmation UTM - Universal Transverse Mercator