WOLVERINE MINE

2015 ANNUAL REPORT

WATER USE LICENCE QZ04-065

QUARTZ MINING LICENCE QML-0006

Prepared for:

Yukon Energy, Mines and Resources

And

Yukon Water Board

Prepared by:

Yukon Zinc Corporation

Vancouver, British Columbia

February 26, 2016

Table of Contents

1 Introduction 1
2 Reporting Requirements 2
3 2015 Mine Activities 2
3.1 Underground Mine 3
3.2 Mill and Associated Infrastructure 4
3.3 Tailings Storage Facility 5
3.3.1 Tailings Storage Facility Monitoring 7
3.4 Access Road Operation 12
4 Water Use 12
5 Waste Discharges 13
6 Environmental Monitoring 14
6.1 Surface Water Monitoring 15
6.1.1 Tailings Facility 16
6.1.2 Wolverine Creek Watershed 16
6.1.3 Go Creek Watershed 19
6.1.4 Money Creek Watershed 22
6.1.5 Access Road Route 24
6.2 Groundwater Sampling Program 25
6.2.1 Tailings Storage Facility 25
6.2.2 Wolverine Creek 28
6.2.3 Go Creek 41
6.3 Piezometer Monitoring 43
6.4 Aquatic Life and Sediment 44
6.5 Weather Monitoring Program 44
6.6 Wildlife Monitoring 45
7 Progressive Reclamation Effectiveness Monitoring Program 45
8 Biopass System 45
9 Geochemical Testwork 46
10 Environmental Incidents 46
11 Socio-Economic Assessment 46
12 Project Development and Production for 2016 46

List of Tables

Table 3-1: Mining and Milling Activities Summary 3
Table 3-2: 2015 Access Road Vehicle Usage 12
Table 4-1: Wolverine Creek and Go Creek Watershed Water Use 2015 13
Table 4-2: Underground, Sewage Treatment Plant and Surface Runoff Discharged to TSF 2015 13
Table 5-1: Seepage Pond Discharge Water Quality (September 9, 2015) 14
Table 6-1: Temporary Closure Surface Water Quality Sampling Program 15
Table 6-2: Temporary Closure Groundwater Quality Sampling Program 15
Table 6-4: Wolverine Mine Daily Precipitation and Average Daily Temperature 2007 – 2015 45
Table 11-1: Goods and Services Procured From and Payments Made to Ross River, Watson Lake and Yukon for 2014 46

List of Figures

Figure 3-1: Tailings Facility Piezometer PZ10-01 2015 Results 8
Figure 3-2: Tailings Facility Piezometer PZ10-02 2015 Results 9
Figure 3-3: Tailings Facility Piezometer PZ10-03 2015 Results 9
Figure 3-4: Tailings Facility Piezometer PZ10-04 2015 Results 10
Figure 3-5: Inclinometer IN10-01 Incremental Deviation 11
Figure 3-6: Inclinometer IN10-01 Checksum 11
Figure 6-1: Copper, Selenium and Zinc Concentrations at Station T1 16
Figure 6-2: Copper, Selenium and Zinc Concentrations Compared to Baseline in Upper Wolverine Creek (Station W82) 17
Figure 6-3: W82 Discharge Hydrograph 17
Figure 6-4: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Wolverine Creek (Station W9) 18
Figure 6-5: W9 Discharge Hydrograph 18
Figure 6-6: Copper, Selenium and Zinc Concentrations Compared to Baseline in Wolverine Lake (Station L1) 19
Figure 6-7: Copper, Selenium and Zinc Concentrations Compared to Baseline in Hawkowl Creek (Station W15) 20
Figure 6-8: Copper, Selenium and Zinc Concentrations Compared to Baseline in Upper Go Creek (Station W31) 20
Figure 6-9: Copper, Selenium and Zinc Concentrations Compared to Baseline in Go Creek (Station W81) 21
Figure 6-10: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Go Creek (Station W80) 21
Figure 6-11: W80 Discharge Hydrograph 22

Figure 6-12: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Money Creek (Station W22) 23
Figure 6-13: W22 Discharge Hydrograph 23
Figure 6-14: Copper, Selenium and Zinc Concentrations Compared to Baseline in Pitch Creek (Station W71) 24
Figure 6-15: Copper, Selenium and Zinc Concentrations Compared to Baseline in Putt Creek (Station W72) 24
Figure 6-16: Copper, Selenium and Zinc Concentrations Compared to Baseline in Bunker Creek (Station W73) 25
Figure 6-17: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-2A and MW05-2B 26
Figure 6-18: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW05-7 .. 27
Figure 6-19: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW08-13 27
Figure 6-20: Water Levels and Temperature in Groundwater Monitoring Well MW08-13 28
Figure 6-21: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-3A and MW05-3B 29
Figure 6-22: Water Levels and Temperature in Groundwater Monitoring Well MW05-3A 30
Figure 6-23: Water Levels and Temperature in Groundwater Monitoring Well MW05-3B 30
Figure 6-24: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-4A and MW05-4B 31
Figure 6-25: Water Levels and Temperature in Groundwater Monitoring Well MW05-4A 31
Figure 6-26: Water Levels and Temperature in Groundwater Monitoring Well MW05-4B 32
Figure 6-27: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-5A and MW05-5B 32
Figure 6-28: Water Levels and Temperature in Groundwater Monitoring Well MW05-5A 33
Figure 6-29: Water Levels and Temperature in Groundwater Monitoring Well MW05-5B 33
Figure 6-30: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-8S, MW06-8M and MW06-8D 34
Figure 6-31: Water Levels and Temperature in Groundwater Monitoring Well MW06-8S 34
Figure 6-32: Water Levels and Temperature in Groundwater Monitoring Well MW06-8M 35
Figure 6-33: Water Levels and Temperature in Groundwater Monitoring Well MW06-8M 35
Figure 6-34: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-9S and MW06-9M 36
Figure 6-35: Water Levels and Temperature in Groundwater Monitoring Well MW06-9S 36
Figure 6-36: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-10S, MW06-10M and MW06-10D 37
Figure 6-37: Water Levels and Temperature in Groundwater Monitoring Well MW06-10S 37
Figure 6-38: Water Levels and Temperature in Groundwater Monitoring Well MW06-10M 38
Figure 6-39: Water Levels and Temperature in Groundwater Monitoring Well MW06-10M 38
Figure 6-40: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW06-11S39

Figure 6-41: Water Levels and Temperature in Groundwater Monitoring Well MW06-11S 39
Figure 6-42: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW06-12S40
Figure 6-43: Water Levels and Temperature in Groundwater Monitoring Well MW06-12S 40
Figure 6-44: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-1A and MW05-1B 41
Figure 6-45: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-6A and MW05-6B 42
Figure 6-46: Water Levels and Temperature in Groundwater Monitoring Well MW05-1B..... 42
Figure 6-47: 2005-2015 Pieziometric Precipitation Data 43

List of Appendices

Appendix A: 2015 Annual Physical Inspection of TSF and On-Site Earth Structures, Klohn Crippen Berger Ltd. August 11, 2015
Appendix B: Summary of Water Quality Results
Appendix C: Water Quality Lab Reports

1 Introduction

The Wolverine Mine, owned and operated by Yukon Zinc Corporation (YZC), is a zinc-silver-copper-lead-gold underground mine, with on-site milling capabilities of 1,700 tonnes per day (tpd) to produce copper, lead and zinc concentrates. The Wolverine Mine is located in the southeastern Yukon near the headwaters of the Wolverine Lake watershed within the Kaska Nation Traditional Territory. The original estimated life-of-mine (LOM) was nine years, based on a 5.2 M tonne mineable reserve. YZC completed major site construction throughout 2009 and 2010. Mill commissioning commenced in 2011 and commercial production of 1,020 tpd or 60% of rate mill capacity over a 30-day period was achieved on March 1, 2012. Production first achieved 1,700 tpd in January 2013. Site access is via air, or over a 24 km long, all season access road, which connects with the Robert Campbell Highway at km 190.

On January 27, 2015, YZC announced that it was temporarily shutting down operations at the Wolverine Mine, due to unfavourable market conditions; putting the site in "Temporary Closure". A notice of change of operations was submitted to the Yukon Government to that effect. Most employees and contractors were laid off at this time and the mine was put into care and maintenance.

On July 16, 2015 YZC submitted an updated Reclamation and Closure Plan (RCP2015-06), which was approved by Yukon Government on December 23, 2015. This Annual Report summarizes the activities conduced in 2015 under the updated plan, and under the active operating licences, Quartz Mining License QML-0006 (QML), and Yukon Water Board Type A Water Licence QZ04-065 (WUL Licence) and their appurtenant Operating and Environmental Plans.

Temporary closure conditions for 2015 were characterized by a reduction of liabilities at the mine site, including shut down of site buildings, removal of hazardous materials, transfer of waste material to a lined facility, and the cessation of water discharge from the underground mine. All water collected at the site (i.e., contact water) was pumped, or trucked, to the Tailings Storage Facility (TSF) for storage, which has approximately 7 years of storage at the current rate of filling. The access road was not maintained in winter, and the site became a fly-in/fly-out operation, with regular flights to change out employees every three weeks.

To date, all industrial activity has ceased at site:

- The underground mine is closed and gated;
- There are no industrial activities, or processes, occurring in the mill;
- No tailings are being added to the TSF; and
- No waste or ore is being created or added to existing waste piles.

A 4-man crew is on-site to maintain the site and ensure environmental compliance.

The Temporary Closure Section of RCP2015-06 includes the following activities, which have been conducted in some capacity, to date:

- Consolidation of all temporary ore and waste stockpiles to Waste Pad #2 – COMPLETED.
- Maintenance of airstrip and site roads – ONGOING.
- Flooding of underground mine workings – ONGOING, detailed plan for installation of hydraulic plugs and downstream monitoring plan to be completed in 2016.

- Experimental Biopass system testwork – in-situ pilot scale system installed between Waste Pad #2 and TSF in September 2015. Detailed construction and monitoring plan to be submitted in spring 2016.
- Evaluation of water treatment options for the tailings storage facility – conducted by EMR, to be completed in April 2016.

Ongoing monitoring of environmental conditions, surface water, groundwater and wildlife was continued in 2015, with some reduced sampling frequencies and consolidation of sampling sites. The results of this monitoring is provided herein.

2 Reporting Requirements

This Annual Report has been prepared to satisfy requirements contained within Quartz Mining License QML-0006 (QML) Condition 10.5, and Yukon Water Board Type A Water Licence QZ04-065 (WUL), and specifically provides information with respect to WUL Conditions 12, 13, 16, 33, 34, 41 & 42 and Schedule A for activities that occurred during the period of January 1 to December 31, 2015 at the Wolverine Mine.

Environmental monitoring and surveillance activities conducted in 2015 are also summarized, including:

- Surface water including water quality sampling and hydrology;
- Groundwater including water quality sampling, water levels and water table (piezometers);
- Piezometric monitoring of the water table above the underground mine;
- Aquatic life and sediment monitoring on the Metal Mine Effluent Regulations (MMER) Environmental Effects Monitoring (EEM) program;
- Weather;
- Wildlife monitoring;
- Tailings storage facility monitoring;
- Engineering inspections;
- Reclamation program effectiveness and Bio-pass system design monitoring;
- Geochemical testwork; and
- Underground mine monitoring.

Assessments to compare 2015 data to previous data are provided to indicate the stability of the receiving environment under current conditions.

3 2015 Mine Activities

Temporary closure of the Wolverine Mine commenced on January 27, 2015, followed by a gradual transition of the mine site to care and maintenance conditions, characterized by a reduction of liabilities at the mine site, including shut down of site buildings, removal of hazardous materials, transfer of waste material to a lined facility, and the cessation of water discharge from the underground mine. All water collected at the site (i.e., contact water) has been pumped, or trucked, to the Tailings Storage Facility (TSF) for storage, which has approximately 7 years of storage at the current rate of filling. The access road is not maintained in winter, and the site is a fly-in/fly-out operation.

Minimal mining and milling activities were conducted in January 2015, and a summary of production, paste and tailings produced in 2015, compared to previous years, is provided in Table 3-1.

Table 3-1: Mining and Milling Activities Summary

Year	Mined Ore (t)	Milled Ore (t)	Concentrate (t)	Paste (t)	Tailings (t)
2010	26,826	0	0	0	0
2011	142,315	153,352	26,723	0	126,629
2012	441,095	428,955	82,486	86,506	259,963
2013	505,942	419,625	112,629	146,903	260,093
2014	443,867	413,879	100,952	134,502	196,425
2015	35,207	19,594	6,095	2,927	10,572
Total	**1,595,253**	**1,553,405**	**328,885**	**370,838**	**853,682**

2015 activities at the underground mine, mill and associated facilities, tailings storage facility and access road, are summarized in Sections 3.1, 3.2, 3.3 and 3.4, respectively.

Other activities at the site consisted of winterizing the site in preparation for winter, storage of on-site reagents in the Concentrate Load-Out building, the Mill building basement and the Crusher basement in accordance with a storage plan presented in September 2015, storage of mine owned equipment, general vehicle repair and maintenance and locking out of all buildings not in use. The road is no longer accessible in winter, as it is not being maintained through snow removal and grading.

3.1 Underground Mine

While continuous dewatering of the underground mine was originally contemplated in previous versions of the temporary closure plan, failure of the Ramp in the lower section of the mine precluded personnel travelling to the bottom of the decline safely without significant rehabilitation work.

Mr. Woo Shin, P.Eng, a former YZC site geo-technical engineer, was retained in late April 2015 to conduct a geotechnical investigation of underground workings, to assess the stability of the main ramp and review the water inflow status, for the purpose of preparing a ramp rehabilitation plan and a mine de-watering plan. Woo Shin's May 6, 2015 report details proposed rehabilitation work in over 20 locations on the main ramp and associated infrastructure that must be completed before access can be established to the lower levels of the mine, to allow pumping to recommence.

YZC does not have the necessary funds to complete the rehabilitation work required to access the bottom of the mine and thus carry out this pumping work at present. To prevent unlawful personnel from accessing the underground workings, gates have been installed on the portal and locked, as was the manway ventilation raise door. The only equipment left in the underground mine are the electrical transformers, switch gear and communications equipment, a single refuge station, plus some pumps and fans.

The underground geotechnical assessment by Mr. Woo Shin, P.Eng., estimated that the remaining capacity of the underground mine is 134,000 m^3 of free space, at the time of the report in May 2015. Concurrently, an estimate was made of the water inflow rate (150 m^3/d), resulting in a projected duration of 30 months to completely flood the mine to the portal elevation (October 2017).

3.2 Mill and Associated Infrastructure

A metallurgical and processing crew of ten mill workers and a metallurgical engineer was brought back into site in May 2015, for three weeks, to secure the processing plant and to secure the remaining reagents left on site. Their work was completed by June 4, 2015.

The work completed included the following:

- Clean up of the mill area and other safety-related jobs essential to good housekeeping;
- Wash down of all areas and sumps;
- Emptying the ball mill and rod mill of charge and jacking them onto their cradles and off their pinions;
- Emptying of all flotation cells;
- All pumps were split and left open as appropriate;
- Identified and segregated any equipment that requires warm storage for potential removal from site, or warm storage;
- Filled all gear boxes with oil for long term preservation;
- Emptied all reagent tanks, flushed any chemicals remaining in the reagent holding tanks to the TSF;
- Ensured that all stored reagents on site are appropriately identified and labelled, repackaged as required, and stored in a secure area (such as the CLO, or prepared lined storage areas); and
- Disposed of any other small amounts of reagents that could be effectively washed to the TSF.

In summer 2015 approximately 2,400 tonnes of zinc concentrate stored in the Concentrate Load Out building (CLO) was shipped out to the owner of the concentrate, Transamine. Once the CLO was cleared of zinc concentrate, it was swept and cleaned out, and subsequently used for secure storage of reagents as appropriate, as it is fully concreted and easy to clean up in the unlikely event of a spill. All reagents have been securely packaged and stored, such that they can be shipped to other operations for use elsewhere if possible, or retained on site for future use. There are also less than 20 bags of lead and copper concentrate left over from prior shipments. These have been re-bagged and stored in the CLO, pending possible sale.

Two temporary ore piles and one waste pile were moved to Waste Dump #2 in July and August 2015. The volumes of material moved includes:

- A 28,300 tonne ore pile and 10,600 tonne waste pile located adjacent to the Portal; and
- A 13,600 tonne ore pile located immediately north of the crusher building.

Visual inspections of on-site earth structures listed below was conducted as part of the inspection by Klohn Crippen Berger Ltd. (Appendix A) on July 6-8, 2015. Visual observations indicated the cut and fill slopes and the liner (where present) were generally in good condition. Large erosion gullies, tension cracks were observed in several cut and fill slopes and a number of culvert inlets were completely plugged with debris. A brief summary of field observations is provided below. Further details are provided in Appendix A.

- Mill building – large erosion channel along the southeast corner of downslope observed in 2014 was not repaired; there was no photo record available from 2014 inspection for comparison, but

it appears to be deteriorated as surface runoff from the Mill pad accumulates and drain through this gulley.

- Sinkhole around a manhole upslope of the MSE wall – This manhole is located up slope of the MSE wall by the conveyor belt which collects surface runoff from Ditch 5. A sinkhole was developed around this manhole after a recent heavy rainstorm. The sinkhole was backfilled with rock fill at the time of the inspection. The reason for the sinkhole formation is unknown, but it could be caused by leakage in the manhole or the culvert that outflows into the manhole. YZC should monitor this area and identify the root cause of the sinkhole to prevent future washouts.
- Sump 2 – The liner was in good condition but a bulge was visible in the cross dam due to groundwater. A high water level could destabilize the dam and should be lowered by pumping.
- Ditch 1 – A 20 m long tension crack was visible along crest of the ditch embankment. There was no sign of instability in the down slope or in the toe, but this area should be monitored and repaired as required. The inlet of the culvert that diverts surface runoff to downslope of the Mill pad was completely plugged with debris and should be cleaned. There was construction litter and debris in the ditch bottom, which should also be cleaned to maintain the flow capacity of the ditch.
- Ditch 2 –The inlet end of the culvert that diverts surface runoff downslope of the Mill pad was completely plugged and should be cleaned to convey runoff from the Mill pad, particularly after spring melt and heavy rainfall events.
- Ditch 4 – This ditch was lined in 2014 and 2015, but the liner was not anchored properly. The end of liner on the channel crest was covered with un-compacted fill, which may erode during a large rain event. The liner should be keyed to the channel crest to prevent further damage. The ditch bottom was filled in with debris washed from the upslope and should be cleaned to promote flow.
- Camp pad – Five large erosion gullies in the downslope along the south side back were backfilled with rock fill, but need to be monitored and repaired as required.
- Vent Raise and Propane Tank pad – The cut slope behind the underground mine office is very steep but there was no signs of instability (crest of the slope was not inspected). This slope should be monitored for instabilities, particularly in the upper part where bedrock overlies more erodible surficial units.
- Truck Shop pad – A large erosion channel in the fill slope near the west corner of the Truck Shop building should be repaired.

All of these areas of concern were subsequently remediated or dealt with to the satisfaction of the inspecting engineer.

3.3 Tailings Storage Facility

The total amount of tailings deposited into the tailings impoundment in 2015 was 10,572 tonnes derived from 19,594 tonnes milled (Table 3-1). The total amount of tailings stored in the facility is estimated at 853,682 tonnes.

The volume of tailings and water at the time of the site visit was approximately 566,000 m^3 and 452,000 m^3 respectively, based on a pond bathymetric survey completed May 28, 2015. The most recent pond level was at elevation 1307.7 measured August 5, 2015, which corresponds to a volume of 1,013,455 m^3. Therefore, the total volume of water in the TSF is approximately 711,801 m^3. This water would be a combination of pore water within the settled tailings and free water above it. The “as built” pond

capacity of the TSF facility is estimated to be 1,378,100 m^3 to the minimum compliant freeboard (1 m below spillway) and 1,552,600 m^3 to the spillway. The remaining capacity within the TSF is therefore estimated to be 399,100 m^3 to the minimum compliant freeboard and 539,200 m^3 to the spillway.

July 6 – 8, 2015 Klohn Crippen Berger Ltd. carried out a site inspection of the tailings storage facility (Appendix A). And a summary of the findings is provided below.

Dam

The south and west side of the TSF was raised with a homogeneous earth fill section. The height of the dam varies between 8 m and 26 m with the maximum height along the southwest corner. The slope of the dam is 2H:1V and the design crest width varies between 5m and 6 m. Both the south and west dam are in good condition and there was no sign of settlement, cracking or slope movement that could be a slope stability concern.

There were signs of localized erosion along the dam crest and downstream slopes. Erosion gullies originated along the downstream edge of the dam crest were in the order of 10 cm to 30 cm wide and 10 cm deep. Most of the erosion was observed along the south dam and north side of the west dam. The crest width of the dam was approximately 4 m at several spots along the north side of the west dam indicating continuing erosion of the dam crest. There were 10 cm to 15 cm deep ruts on the dam crest which can pond water after rain storm. Erosion of the dam crest and downstream slope will continue and may cause significant crest loss if some erosion protection measures (such as vegetation) are not undertaken. The crest of dam should be graded to avoid ponding water and further erosion.

Stage 2 Dam Emergency Spillway

The spillway would only be used during an extreme event (e.g. >200 year flood) when the impoundment is near full storage capacity. The spillway is located within natural ground. The spillway outlet consists of a riprap lined channel through the dam crest.

Currently the spillway channel reports to the east ditch along the Mine Haul Road. The closure spillway design extends the flow channel across the Mine Haul Road to report to the existing catch basin above Go Creek. YZC will extend the spillway to the catch basin for closure. The rip-rap in the spillway was in good condition. There is a piece of 8 inch insulated tailings line left at the downstream end of the spillway which is blocking the flow path and should be removed.

Impoundment Area and LLDPE Geomembrane Liner

The liner was generally in good condition with no sign of tear or puncture. Anchor of the liner along the crest was in good condition except at the north end where anchor is damaged due to a slip in the TSF wall. Further details on this slip along the north slope are provided in Section 4. YZC inspects the liner for defects as a part of routine surveillance as laid out in the OMS. Defects are not considered a concern provided they are small and patched when they are found.

Liner Underdrains

The liner underdrains, which consist of a French drain with a perforated pipe under the liner and two solid pipes under the dam, are performing as designed. At the time of the site visit there was no inflow into the underdrains at the upstream end of the impoundment.

The flow out of the underdrains daylighting downstream of the seepage dam is approximately 5- 7 L/s, similar to flows observed during the 2014 DSI. Rip rap along the outlet area was in good condition.

The purpose of the underdrains was to relieve uplift pressure on the liner during construction. As the impoundment becomes full, and the weight of water and tailings increases, the requirement for the underdrain diminishes and they could be decommissioned at a later stage of operations.

Seepage Recovery Pond and Dyke

The seepage recovery pond is a contingency structure which was installed to provide further security against the very low risk of impoundment seepage. The dam is formed by the mine access road and extreme flood flows are routed through a spillway culvert through the dam. The seepage impoundment area consists of an irregular pond partially shaped by areas excavated for construction of the main dam and the natural topography. No water quality data was reviewed but YZC's monthly monitoring reports for the current reporting period indicates water in the seepage collection pond were pumped back into the tailings impoundment at an average rate of 370 m3 per month during the month of June and July 2014 and there were no pumping between August 2014 and April 2015.

The spillway culverts in the seepage pond exits into a rockfill channel-stilling area, which flows towards Go Creek. The rockfill appeared to be in good condition and will function to control erosion during extreme events.

Seepage collection ditches along the toe of the dam were dry. There was ponded water along the south side of the west dam from recent rain but no seepage was observed from any of the dam faces or abutments.

Diversion Ditch A and Diversion Ditch B

Diversion Ditch B that runs along the east side of the tailings impoundment was dry. The soils in the base of the ditch and along the slope that the ditch traverses are relatively pervious and most of the runoff from the upslope area appears to infiltrate into the slope. The ditch exits into a culvert, which extends down the slope towards the toe of the seepage dam, where it outflows into a rockfill stilling basin. The stilling basin was in good condition and the observed flow from the culvert was approximately 0.1 L/s.

Diversion Ditch A was reconstructed in 2014. The stretch of the ditch that runs along the north end of the TSF was lined and a new stilling basin was constructed at upstream the end (Figure 1). The ditch was flowing at approximately 1 m wide by 10 cm deep. The liner was generally in good condition but was not anchored properly to the crest of the ditch. The liner was loose and was exposed to erosion and should be anchored. The channel bottom along the lined part should be cleaned of debris to maintain flow capacity. The ditch exits into a culvert and rockfill stilling basin. The stilling basin was in good condition.

Other Infrastructure

The tailings delivery pipelines were in place to the northwest side of the impoundment and there was no tailings discharge at the time of the site visit.

The tailings water reclaim pump barge and pumps are in place at the south end of the impoundment. A thick conveyor liner has been placed under the ramp to protect the geomembrane liner. No areas of liner damage were observed.

3.3.1 Tailings Storage Facility Monitoring

Following the cessation of milling and mining activities, routine inspection of the tailings storage facility was reduced to visual inspections conducted weekly. Instrumentation (e.g., piezometers, inclinometers casing and survey monuments) was monitoring periodically and the results are summarized below.

Piezometers produce potentiometric measurements of the water in the dam and dam foundation. The results are compared to yellow and red triggers (provided by dam design engineers Klohn Crippen Berger) to ensure the water levels are not nearing elevations where they may cause issues in dam stability. The results of the 2015 downloads are provided in Figure 3-1, Figure 3-2, Figure 3-3 and Figure 3-4.

In general, piezometric levels in the foundation are about 2 m below the foundation elevation. Piezometric levels in the dam fill are about 2 m above the foundation level. Elevated groundwater levels in April, May and June are due to seasonal changes, and there appears to be a pattern to these fluctuations over the past four years. All water levels are within parameters required for stability (i.e. below "yellow trigger" levels defined in the OMS Manual) except the following:

- PZ-10-03 indicated a spike in pore water pressure reading in May and June, 2012 has now dropped below the yellow trigger level.
- PZ-10-02 located close to the left abutment (southeast corner) indicating a gradual increase in pore pressure in the dam since early 2012. The pore pressure level was elevated approximately 2m between June 2014 and December 2014 and has dropped since then. This increase in pore pressure does not appear to be related to the Stage 2 dam raise which occurred between June and August 2012. The elevated pore pressure is still below the "yellow trigger" level. The pore pressure level in this piezometer should be closely monitored and the reason for this gradual increase should be considered.

See Appendix A for more details, and for the locations of the piezometer installations.

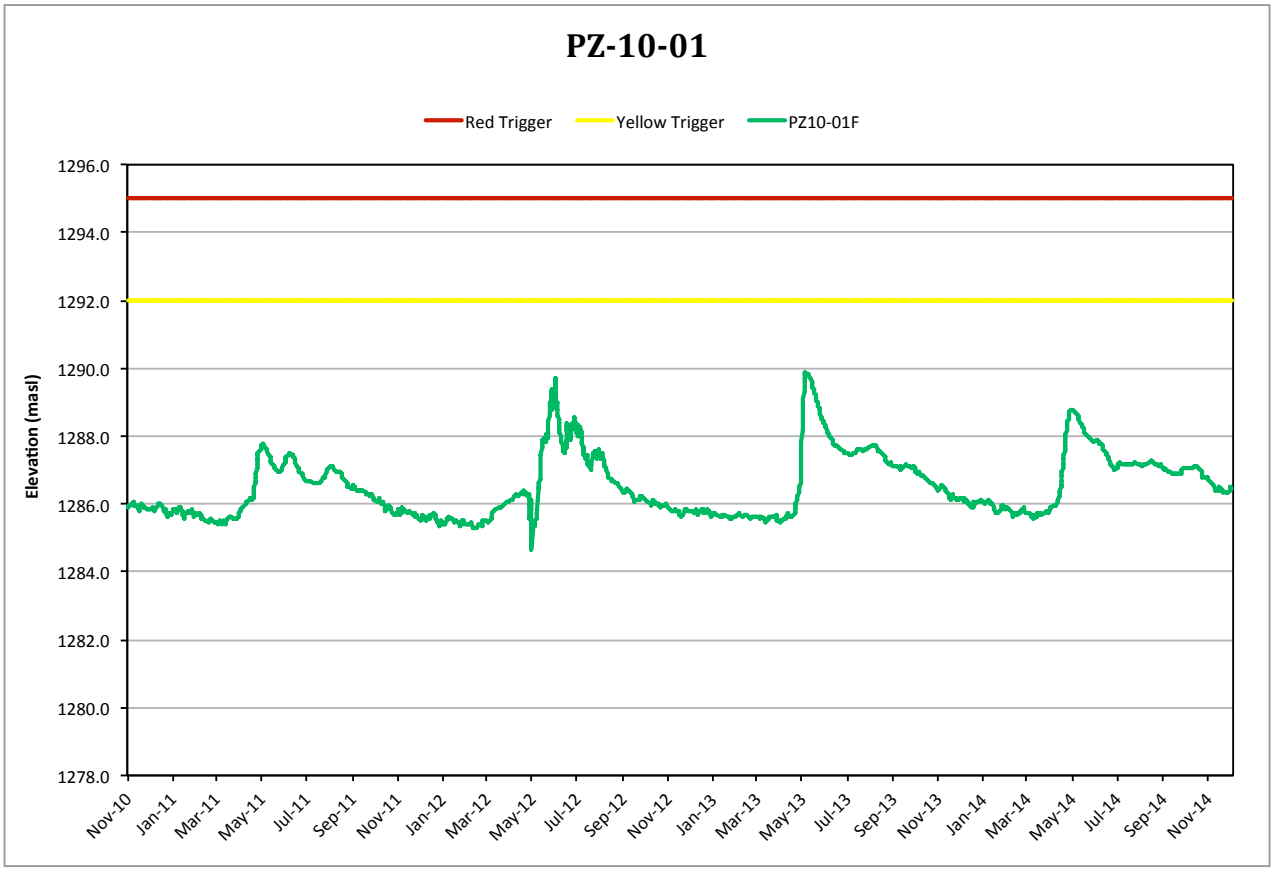


Figure 3-1: Tailings Facility Piezometer PZ10-01 2015 Results

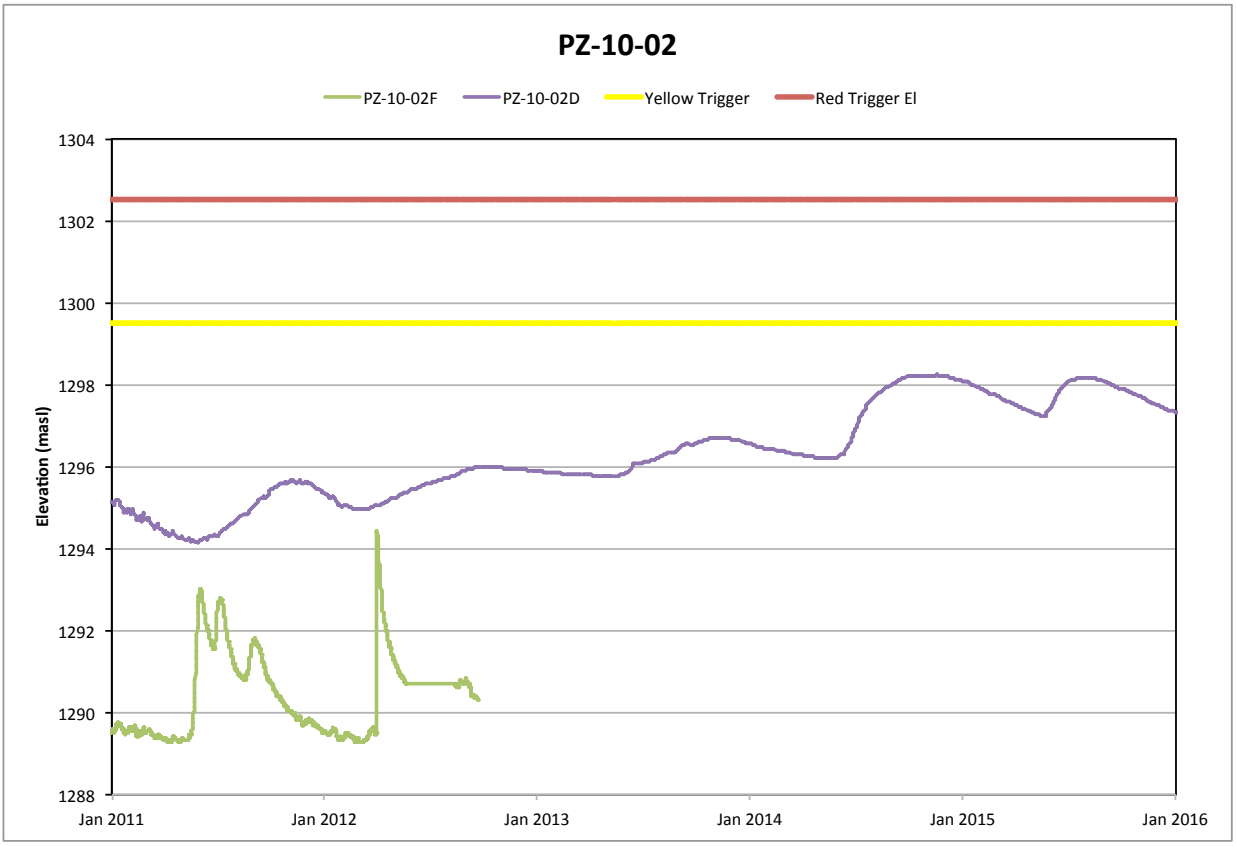


Figure 3-2: Tailings Facility Piezometer PZ10-02 2015 Results

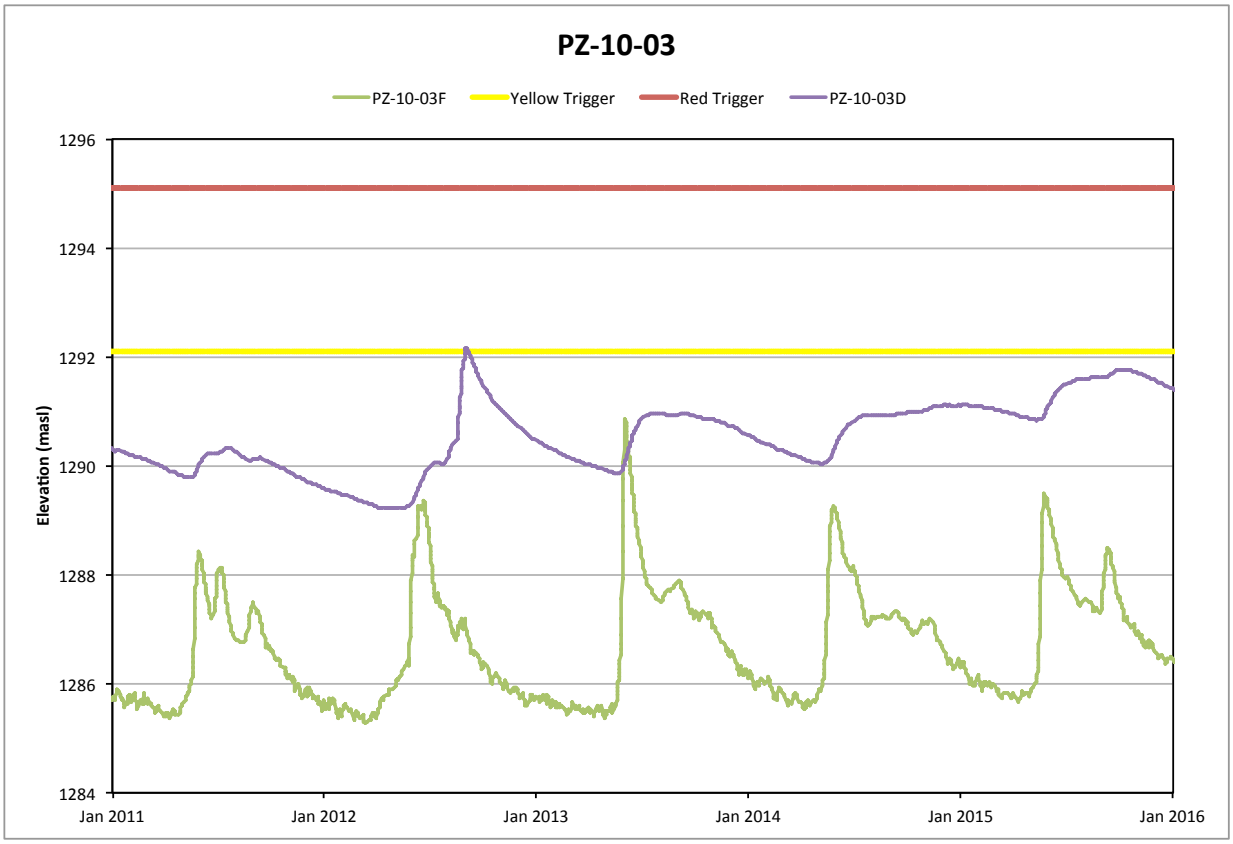


Figure 3-3: Tailings Facility Piezometer PZ10-03 2015 Results

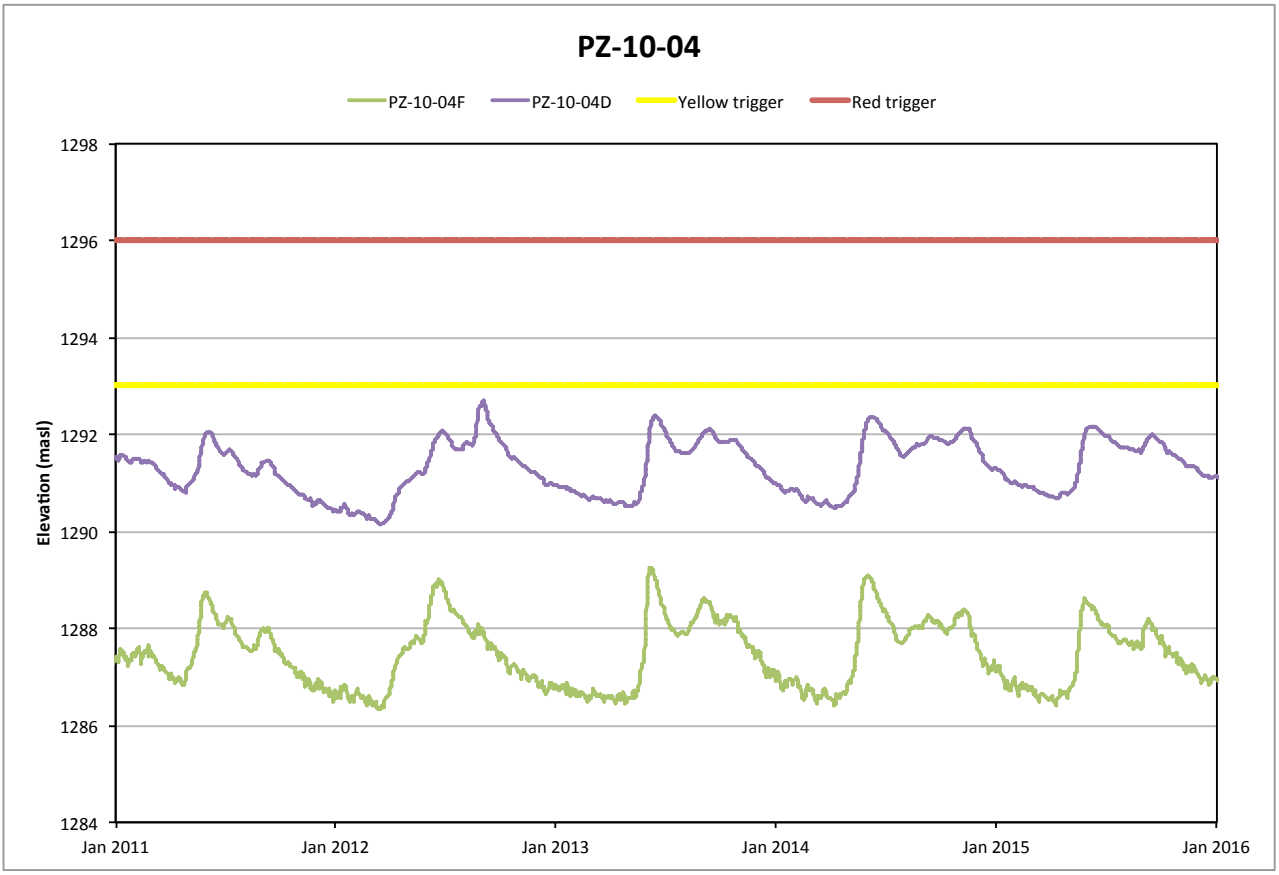


Figure 3-4: Tailings Facility Piezometer PZ10-04 2015 Results

Inclinometers (IN10-01 and IN10-02) were monitored in 2011 but monitoring was cancelled during 2012, due to the tailings dam construction project. Results from 2011 indicate strong consistency between readings, which is important for the identification of potential movement in the dam. After the tailings construction was complete and the casing for the inclinometers extended, monitoring was re-established in May 2013. IN10-02 casing had been damaged too severely during construction and was decommissioned, while IN10-01 was still considered viable. Monitoring of IN10-01 was conducted in 2014, but not again until January 2016. For interpretation, the 2016 results are compared to the 2014 results in Figure 3-5 and Figure 3-6.

Results for 2014 and 2016, between 12m and 20m depths below the surface, continue to indicate a strong consistency between readings. However, some variability occurred in the data around the 8m and 12m depths. This is believed to be a result of damage to the casing during construction. Physical resistance was apparent at these two depths when inserting and removing the sensor when monitoring.

YZC installed five survey monuments September 2014. Surveys were conducted monthly while underground surveyors were on-site. Surveys were discontinued once site personnel was reduced.

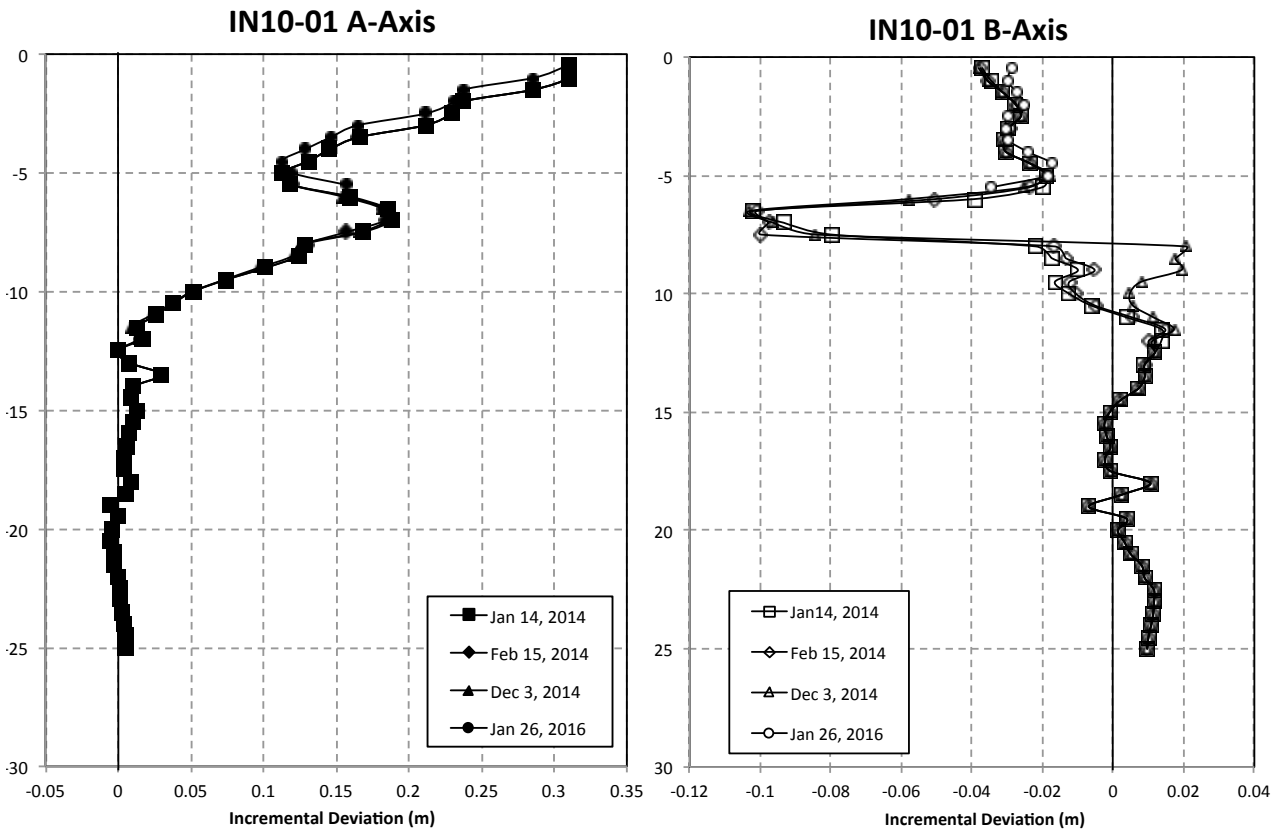


Figure 3-5: Inclinometer IN10-01 Incremental Deviation

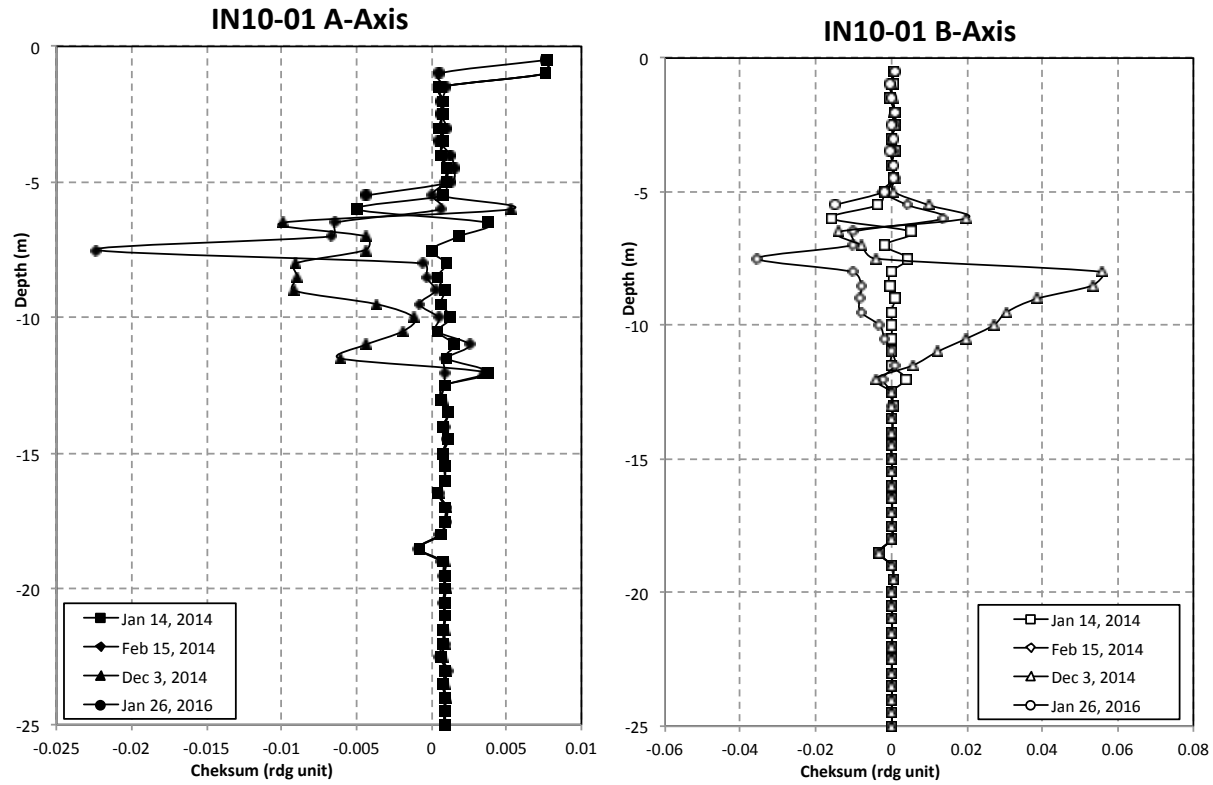


Figure 3-6: Inclinometer IN10-01 Checksum

3.4 Access Road Operation

The very limited freight requirements of the temporary care and maintenance program, particularly the reduced diesel consumption, allow for seasonal operation of the access road, eliminating the need for winter road maintenance.

Year round operation of the winter road is only necessary if the mine decides to operate the larger generator sets during winter, or if it returns to full operations. This is because the quantity of diesel consumed could not be be stockpiled in the existing fuel farm. In this case, year-round operation of the access road would be necessary, assuming such operations are to be carried out in the winter season.

In 2015, the access road was maintained through to the end of October, when it was not long accessible due to snow accumulation.

There is one access control gate at km 0.1, to prevent public use of the access road. A radio-controlled automated gate opener was installed at the gate at km 0.1 in 2008 and is in use during road use periods. All vehicles entering and leaving the site are required to call security, via radio, to gain access/exit through the radio-controlled gate.

In 2015, all freight and service vehicles entering and exiting site were recorded by site personnel and are summarized by month in Table 3-2. The total annual access road usage for 2015 was 319 vehicles.

Table 3-2: 2015 Access Road Vehicle Usage

Month	January	February	March	April	May	June	July	August	September	October	November	December	Total
Vehicle Traffic	111	45	14	17	13	14	84	8	7	6	0	0	319

4 Water Use

The WUL permits the use of water from the Go Creek and Wolverine Creek watersheds, up to 7,230 m^3/day. In January and February, the Wolverine Mine used water from the Wolverine Creek watershed in the form of groundwater discharge to the underground mine (Wolverine Creek watershed). In February, underground dewatering ceased, and the underground is currently filling, with no mechanisms to measure inflow. However, as discussed above, the inflow rate is estimated at 150 m^3/day. For the remainder of the year, water use was only from the Go Creek watershed for the purposes of potable water (from a groundwater well upslope of the accommodation camp), water for dust control during the summer months and some minor use for the purposes of flushing the mill during the May shut down. The total water use from both watersheds in 2015 was 7616 m^3 or on average 20 m^3/day (Table 4-1).

Table 4-1: Wolverine Creek and Go Creek Watershed Water Use 2015

		January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
Wolverine Creek Watershed	**Underground Mine**	4525	1098	0	0	0	0	0	0	0	0	0	0	**5,623**
Go Creek Watershed	**Road Dewatering**	0	0	0	20	138	0	0	0	0	9	11	29	**207**
	Potable Water	854	198	119	84	145	65	63	55	52	49	51	52	**1,786**

All potentially contaminated water is collected from the underground, surface runoff, and sewage treatment plant, and is pumped to the tailings storage facility. The monthly volumes pumped and/or trucked to the TSF are summarized in Table 4-2. Volumes in January and February were significantly higher due to discharges from the underground mine. The volume in June was also higher, as runoff collected in Sump #2 and in the seepage pond downslope of the TSF embankment were trucked to the TSF.

Overall, in 2015 12,400 m^3 of water was pumped to the TSF, excluding precipitation and runoff from the catchment around the TSF. The most recent pond level was at elevation 1307.7 measured August 5, 2015, which corresponds to a volume of 1,013,455 m^3.

Table 4-2: Underground, Sewage Treatment Plant and Surface Runoff Discharged to TSF 2015

	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
Water to TSF (m^3)	5,379	1,296	119	84	736	4,037	63	55	347	182	51	52	**12,400**

5 Waste Discharges

To maximize the amount of storage available in the TSF, YZC discharged water collected in the seepage pond downstream of the TSF embankment. The 1838 m^3 of collected precipitation was discharged September 9, 2015. The water quality results are summarized in Table 5-1, compared to the discharge limits for discharge to Go Creek outlined in Type A Water Use Licence QZ04-065. The full laboratory analytical report is attached below. All parameters were well below the discharge criteria. The pond has been totally discharged, and with the onset of freezing conditions, not further discharge will be conducted from this area in 2015.

Table 5-1: Seepage Pond Discharge Water Quality (September 9, 2015)

Parameter	Unit	Type A WUL QZ04-065 Discharge Limits	Water Quality
Total Aluminum (Al)	mg/L	0.8	0.0264
Total Antimony (Sb)	mg/L	0.08	0.000151
Total Arsenic (As)	mg/L	0.05	0.000558
Total Cadmium (Cd)	mg/L	0.002	0.0000760
Total Copper (Cu)	mg/L	0.15	0.00102
Total Cyanide (CN)	mg/L	0.05	0.00078
WAD Cyanide (CN)	mg/L	0.02	0.00095
Total Iron (Fe)	mg/L	0.5	0.135
Total Lead (Pb)	mg/L	0.02	0.000185
Total Mercury (Hg)	mg/L	0.0001	<0.00001
Total Molybdenum (Mo)	mg/L	0.73	0.000170
Radium-226	Bq/L	0.37	<0.010
Total Nickel (Ni)	mg/L	0.5	0.00318
Total Selenium (Se)	mg/L	0.02	0.00242
Total Silver (Ag)	mg/L	0.001	0.0000110
Total Zinc (Zn)	mg/L	0.5	0.0185
Ammonial Nitrogen	mg/L	5	0.025
Sulphate	mg/L	1800	67.7
Nitrate Nitrogen	mg/L	10	0.25
Nitrite Nitrogen	mg/L	0.6	<0.20
Total Suspended Solids	mg/L	15	<4.0
Biochemical Oxygen Demand	mg/L	25	<6.0
Fecal Coliforms	CFU/100mL	20,000	1
pH	pH units	6.5 - 9.0	7.58

No other discharges were conducted in 2015.

6 Environmental Monitoring

Environmental monitoring at the Wolverine Mine is conducted as per Schedule A of the WUL QZ04-065, and as per the program details outlined in the *Monitoring and Surveillance Plan V2011-03* and in the *Wildlife Protection Plan V2009-01* (WPP). The program includes:

- Surface water including water quality sampling and hydrology;
- Groundwater including water quality sampling, water levels and water table (piezometers);
- Piezometric monitoring of the water table above the underground mine;
- Aquatic life and sediment monitoring on the Metal Mine Effluent Regulations (MMER) Environmental Effects Monitoring (EEM) program;
- Weather; and
- Wildlife monitoring.

In August, a request was made to the Yukon Water Board to reduce the sampling and monitoring frequency required at the Wolverine Mine in the temporary closure period to reflect the reduction in site activities, and in light of the consistent water chemistry at the water quality monitoring stations. On September 25, 2015, YZC received approval to reduce sampling and monitoring frequency to those

proposed, as summarized in Table 6-1 and Table 6-2. The results of the monitoring conducted at those sites is summarized below, and water quality results are compared to the historic (1995-2008) baseline average and 95th percentile values provided in the Lorax Environmental *Baseline Characterization Summary Report* provided in Appendix A of *Monitoring and Surveillance Plan V2011-03* (*Baseline Report*).

Table 6-1: Temporary Closure Surface Water Quality Sampling Program

Station Number	Station Location	Watershed	Sampling Frequency
T1	Tailings Barge	TSF	Quarterly
W82	Upper Wolverine Creek	Wolverine Creek	Quarterly
W9	Wolverine Creek at Little Wolverine Lake		Quarterly
L1	Little Wolverine Lake	Go Creek	Quarterly
W15	Hawkowl Creek above Go Creek		Quarterly
W81	Go Creek below Hawkowl Creek		Quarterly
W31	Go Creek above Tailings Facility		Quarterly
W80	Go Creek		Quarterly
W22	Money Creek above Robert Campbell Highway	Money Creek	Seasonally
W71	Pitch Creek below road crossing	Access Road Route	Seasonally
W72	Light Creek		Seasonally
W73	Bunker Creek at road crossing		Seasonally

Table 6-2: Temporary Closure Groundwater Quality Sampling Program

Station Number	Station Location	Watershed	Sampling Frequency
MW05-1A, 1B	Airstrip North	Go Creek	Quarterly
MW05-2A, 2B	Tailings Facility – South	Tailings Facility	Quarterly
MW05-3A, 3B	Mine	Wolverine Creek	Quarterly
MW05-4A, 4B	Mine	Wolverine Creek	Quarterly
MW05-5A, 5B	Mine	Wolverine Creek	Monthly
MW05-6A, 6B	Airstrip East	Go Creek	Quarterly
MW05-7B	Mine	Tailings Facility	Quarterly
MW06-8S, 8M, 8D	Mine	Wolverine Creek	Quarterly
MW06-9S, 9M	Mine	Wolverine Creek	Quarterly
MW06-10S, 10M, 10D	Mine	Wolverine Creek	Quarterly
MW06-11S	Mine	Wolverine Creek	Monthly
MW06-12S	Mine	Wolverine Creek	Quarterly
MW08-13	Tailings Facility - West	Tailings Facility	Quarterly

6.1 Surface Water Monitoring

Surface water monitoring includes surface water quality and hydrological monitoring in the Wolverine and Go Creek watersheds. The results of the water quality and hydrological monitoring at the Tailings Facility area, Wolverine Creek watershed, Go Creek watershed, Money Creek watershed and Access Road route are summarized below. Full water quality monitoring results are provided in Appendix B, and the full third party laboratory reports in Appendix C. Additionally, to enhance confidence in the stability and robustness of the water quality results at surface water monitoring stations, results are provided graphically below for key water quality parameters (e.g., copper, selenium and zinc).

As shown in the figures below, the present water quality in the surface water monitoring sites is consistent with baseline water chemistry (1998 – 2008). Site T1 is the tailings storage facility (sampled at the reclaim barge), and indicates generally increasing concentrations (most notably for copper) as operations progressed. Water chemistry in receiving environment sampling sites was consistent with past copper, selenium and zinc concentrations, which are generally indicative of overall water chemistry.

6.1.1 Tailings Facility

Tailings facility monitoring (station T1) commenced in July 2010 to examine the chemistry of the tailings supernatant. The results of sampling at station T1 is presented in Figure 6-1 for copper, selenium and zinc. As this station was not included in the *Baseline Report*, there are no average values or 95th percentile values against which to compare the data. The tailings supernatant (T1) indicates generally increasing concentrations (most notably for copper) as operations progressed, and selenium has continued to increase over 2015.

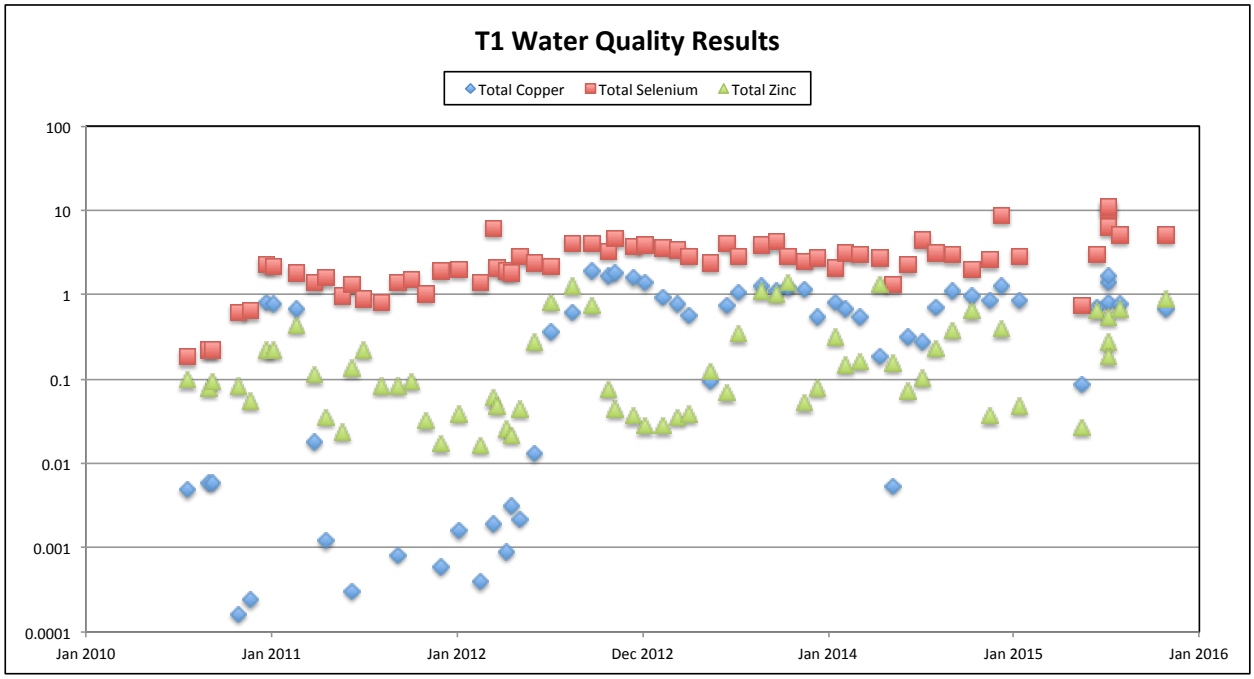


Figure 6-1: Copper, Selenium and Zinc Concentrations at Station T1

6.1.2 Wolverine Creek Watershed

Wolverine Creek water quality stations are located at upper Wolverine Creek (W82) to monitor the impact of mining on the immediate receiving environment, and progress downstream to the confluence of Wolverine Creek (W9) and to the confluence of Little Wolverine Lake and Wolverine Lake (L1). Ongoing hydrology monitoring is conducted at stations W82 and W9 with manual hydrological monitoring conducted to calibrate the in-situ loggers.

The water quality in the Wolverine Creek watershed has been extremely consistent over the operational period, which is in turn consistent with baseline water chemistry (Figure 6-2, Figure 6-4, and Figure 6-6). This chemistry has remained consistent during the Temporary Closure period.

The hydrology loggers at stations W82 and W9 (Figure 6-3 and Figure 6-5) are plagued by ice-pressure effects due to the low flows evident during the winter, often, flows are non-existent at station W82 in the late winter. Typically, the flows in Wolverine Creek are highest during spring freshet, level off during the late summer, and peak again in late fall during rain on snow events. Flow rates at station W82 and

W9 are not significantly different, indicating little groundwater or surface water inputs between the two stations.

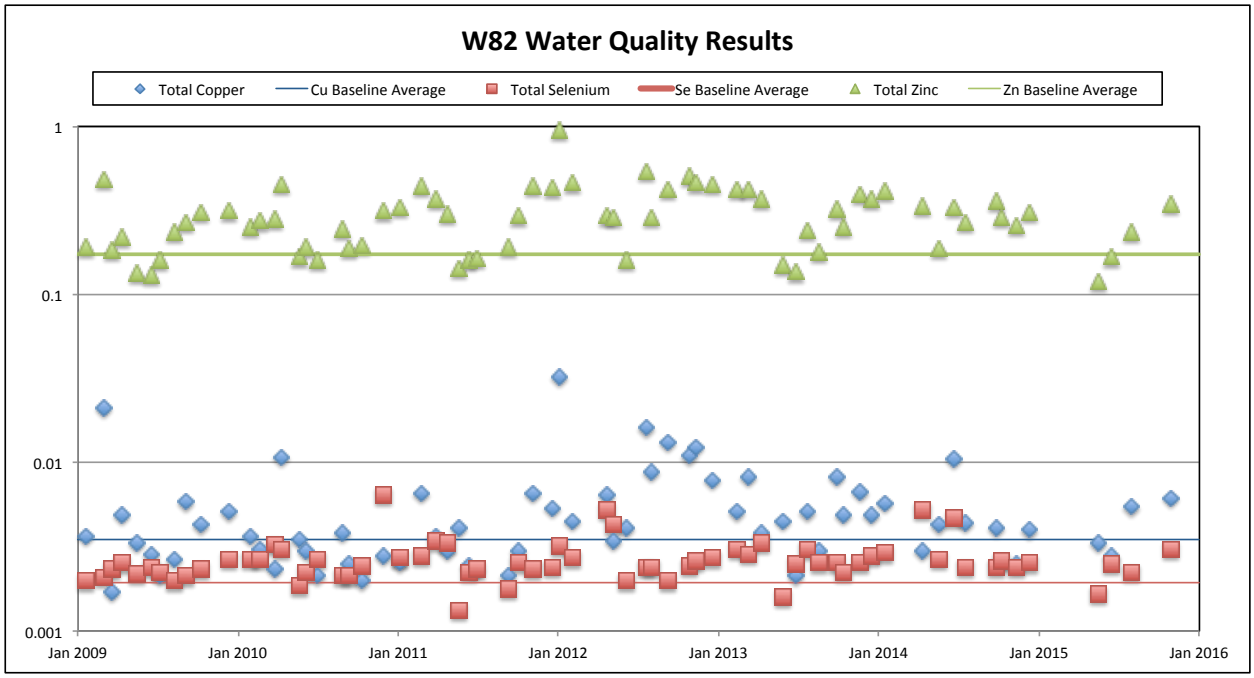


Figure 6-2: Copper, Selenium and Zinc Concentrations Compared to Baseline in Upper Wolverine Creek (Station W82)

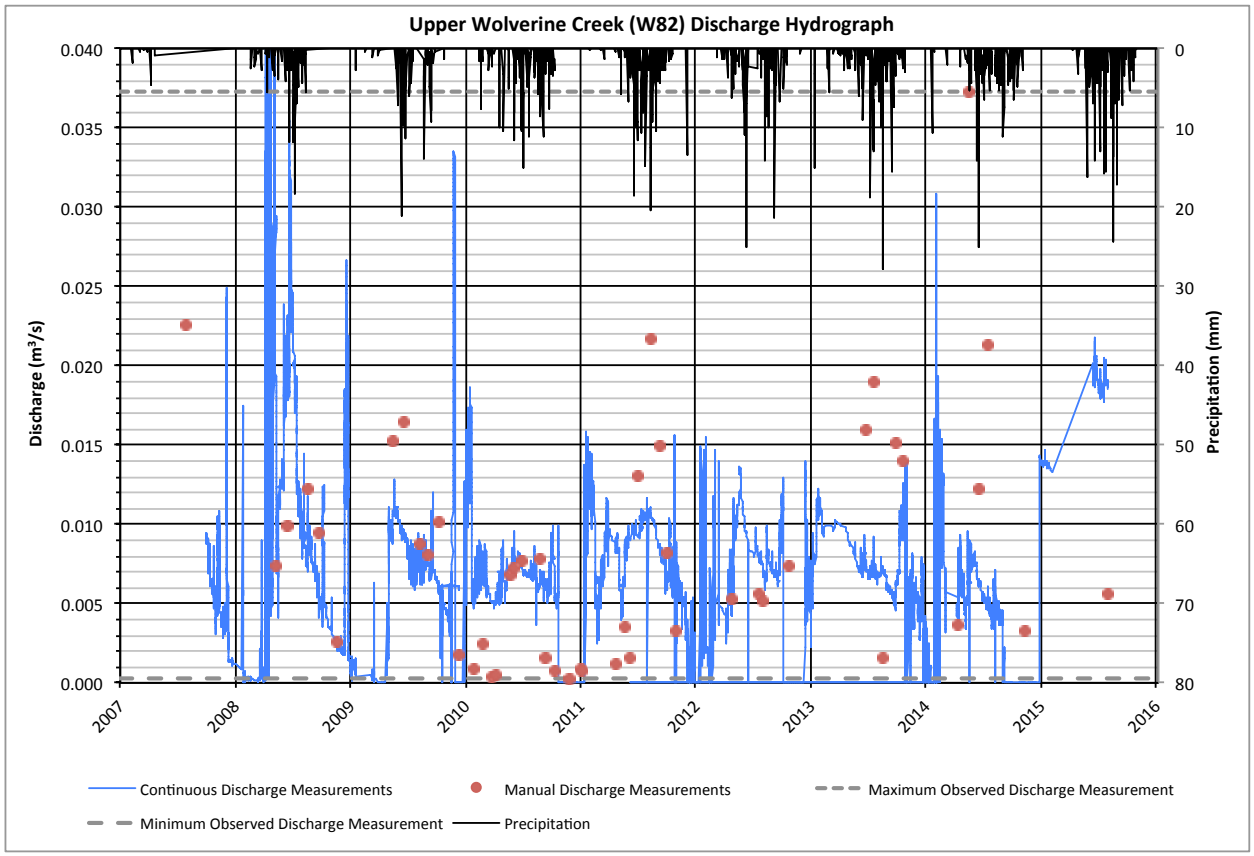


Figure 6-3: W82 Discharge Hydrograph

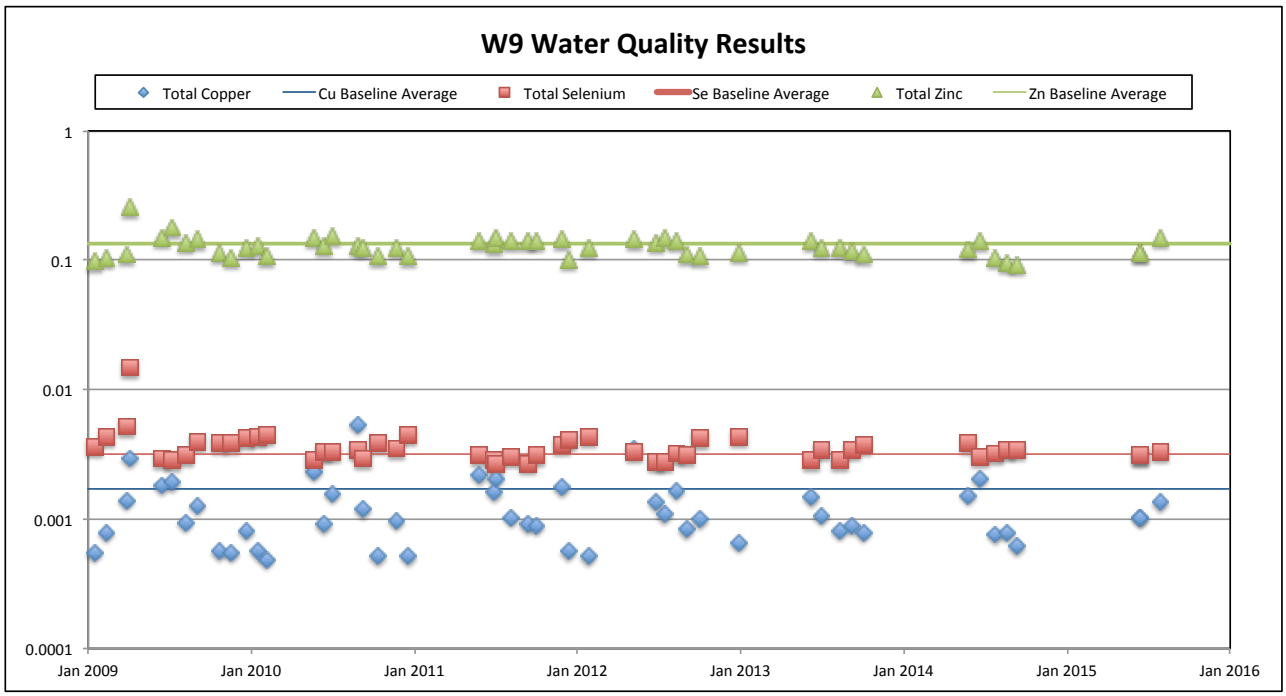


Figure 6-4: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Wolverine Creek (Station W9)

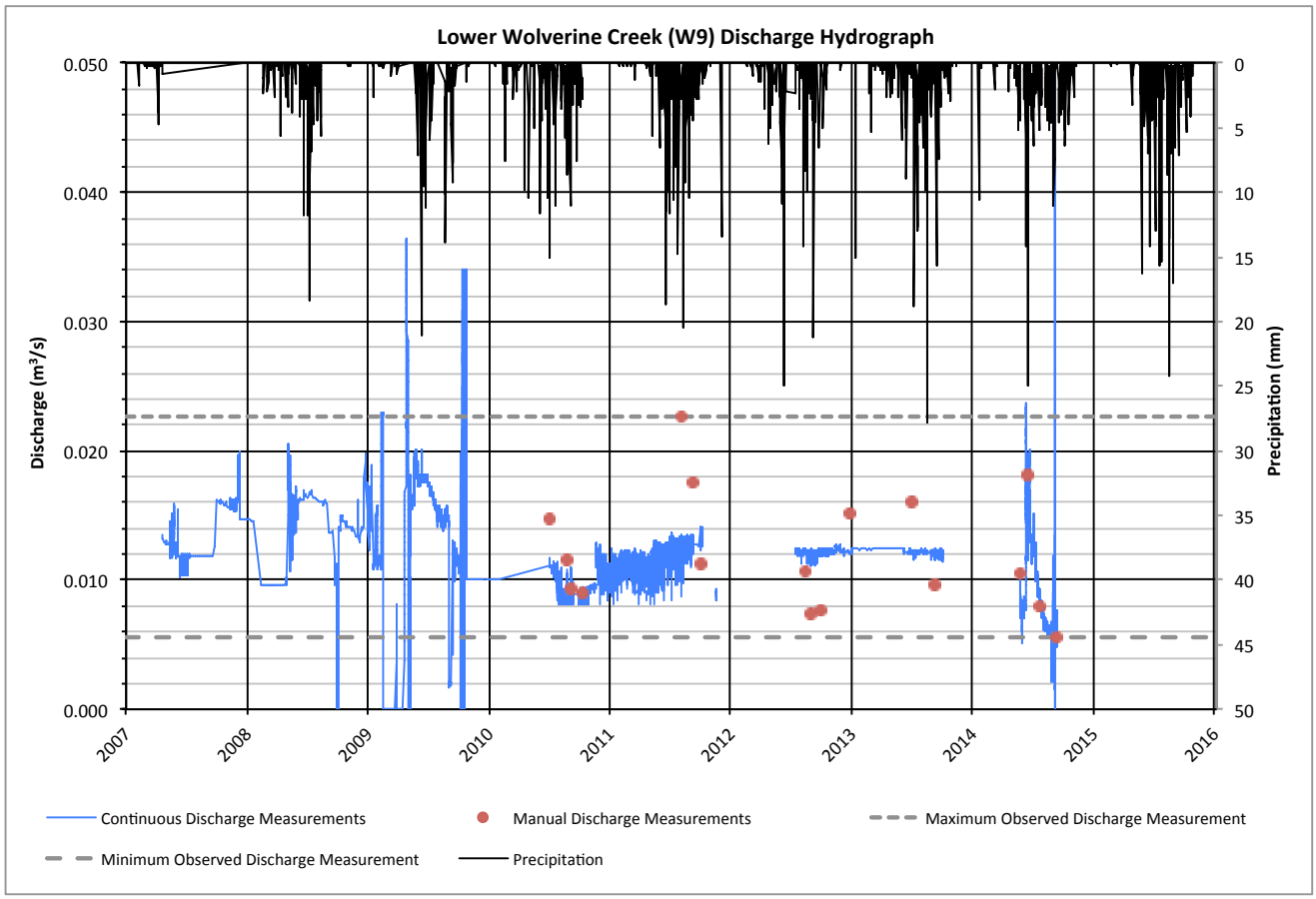


Figure 6-5: W9 Discharge Hydrograph

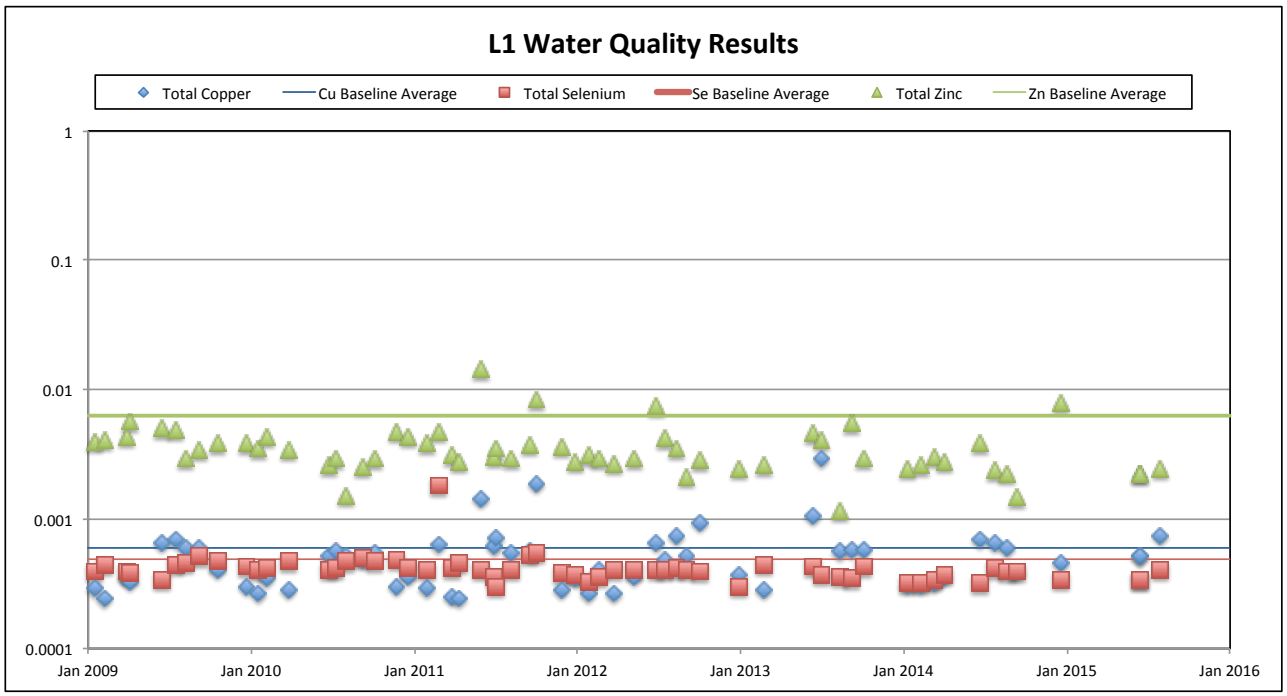


Figure 6-6: Copper, Selenium and Zinc Concentrations Compared to Baseline in Wolverine Lake (Station L1)

6.1.3 Go Creek Watershed

Go Creek surface water monitoring starts at upper Go Creek (W31) and progresses down Go Creek to the confluence with Hawkowl (W81), and to station W80, which is the upper limit of fish presence noted during baseline monitoring, as well as the water quality objective point. Go Creek watershed monitoring is also conducted at Hawkowl Creek (W15), which is a tributary to Go Creek above the Tailings Storage Facility.

Water quality in Go Creek is more variable than in Wolverine Creek, with larger seasonal fluctuations (Figure 6-7 through Figure 6-10). Water quality during the operational period and into Temporary Closure has remained consistent with baseline water chemistry for all Go Creek sites, except for selenium at station W81. At station W81 (Figure 6-9), selenium increased significantly in mid 2012, but has been decreasing since then, with the sample taken in mid 2015 comparable to pre-2012 sample selenium concentrations. Selenium concentrations at station W15 also spike in mid 2012, possibly due to the construction of the TSF raise at that time. Since then, however, concentrations have remained within the range of historic values. Additionally, the increased selenium concentrations are not apparent downstream at station W80 (Figure 6-10).

Hydrology in Go Creek is measured through a continuous logger at station W80 (Figure 6-11). While some ice pressure effects have obscured the 2015 data, the measured point in July 2015 was comparable to previous measurements. Hydrology in Go Creek is characterized by high flows in May and June with decreasing flows throughout the summer. Spikes in flow rate are evident again in October due to rain on snow events. Flows are lowest in the late winter months: February, March and April.

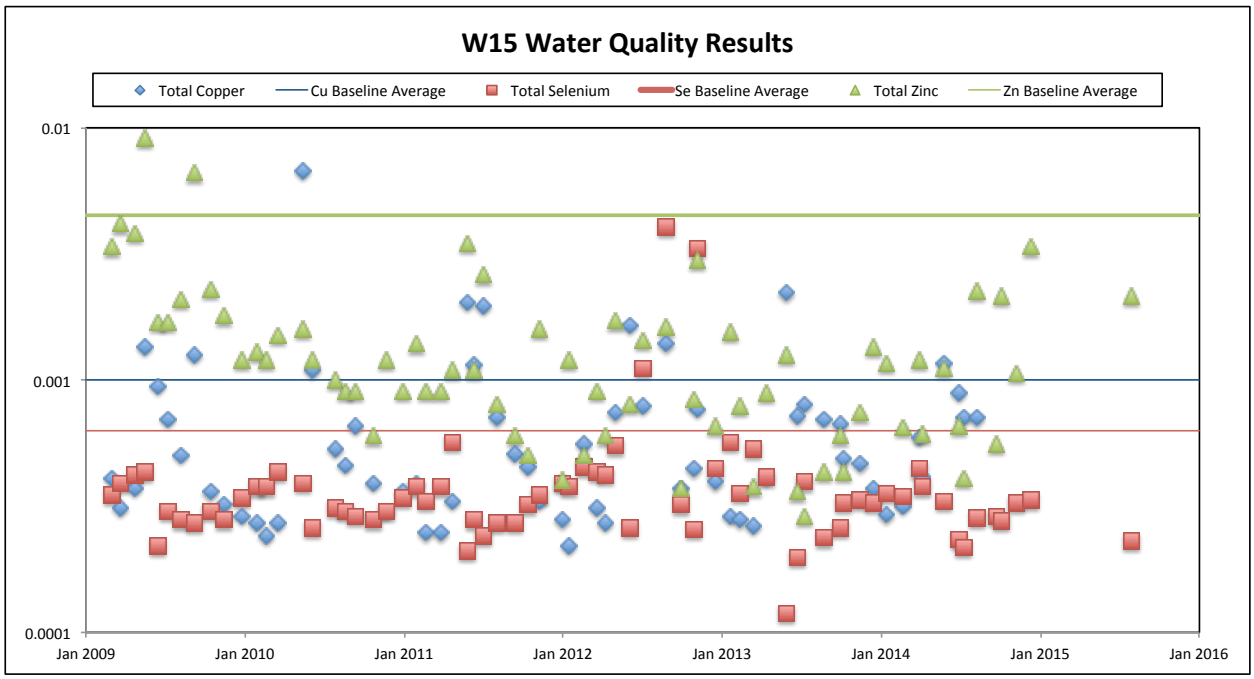


Figure 6-7: Copper, Selenium and Zinc Concentrations Compared to Baseline in Hawkowl Creek (Station W15)

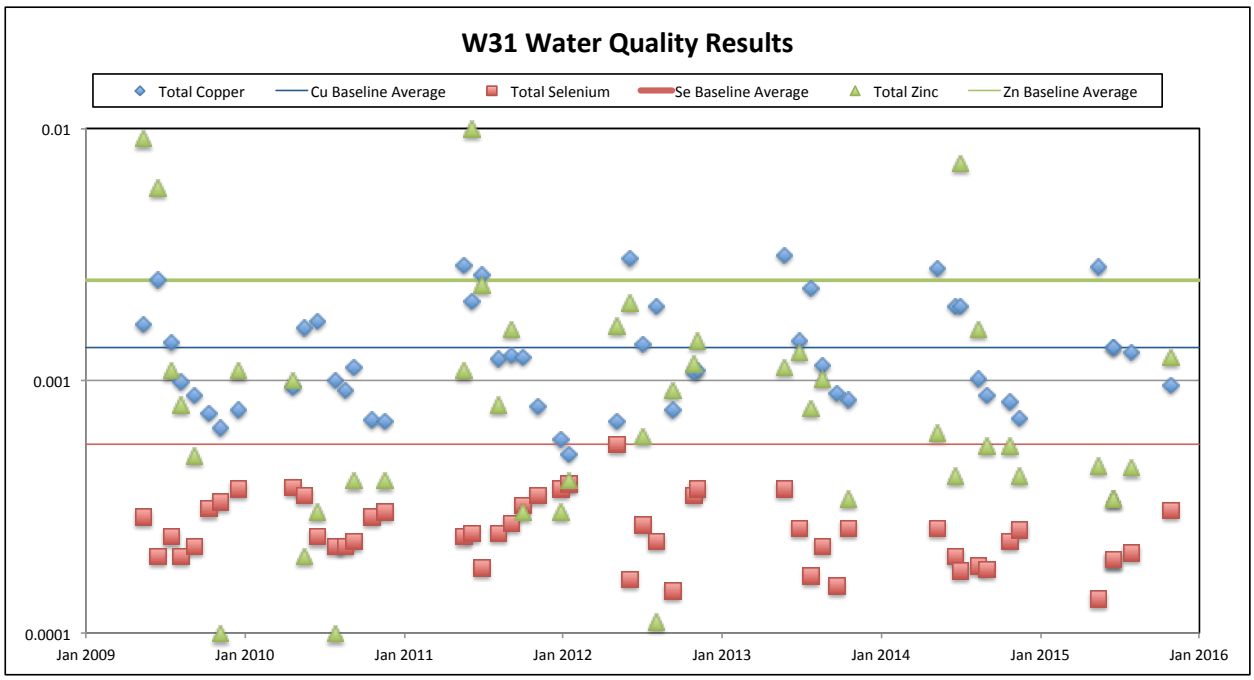


Figure 6-8: Copper, Selenium and Zinc Concentrations Compared to Baseline in Upper Go Creek (Station W31)

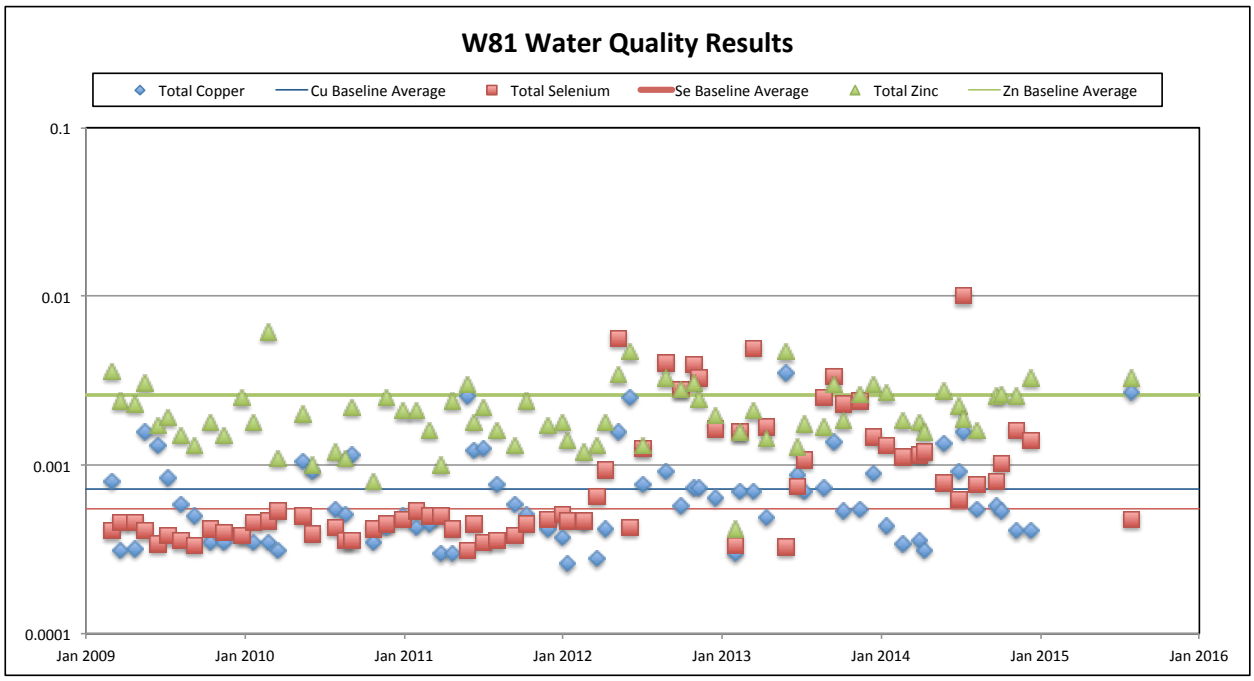


Figure 6-9: Copper, Selenium and Zinc Concentrations Compared to Baseline in Go Creek (Station W81)

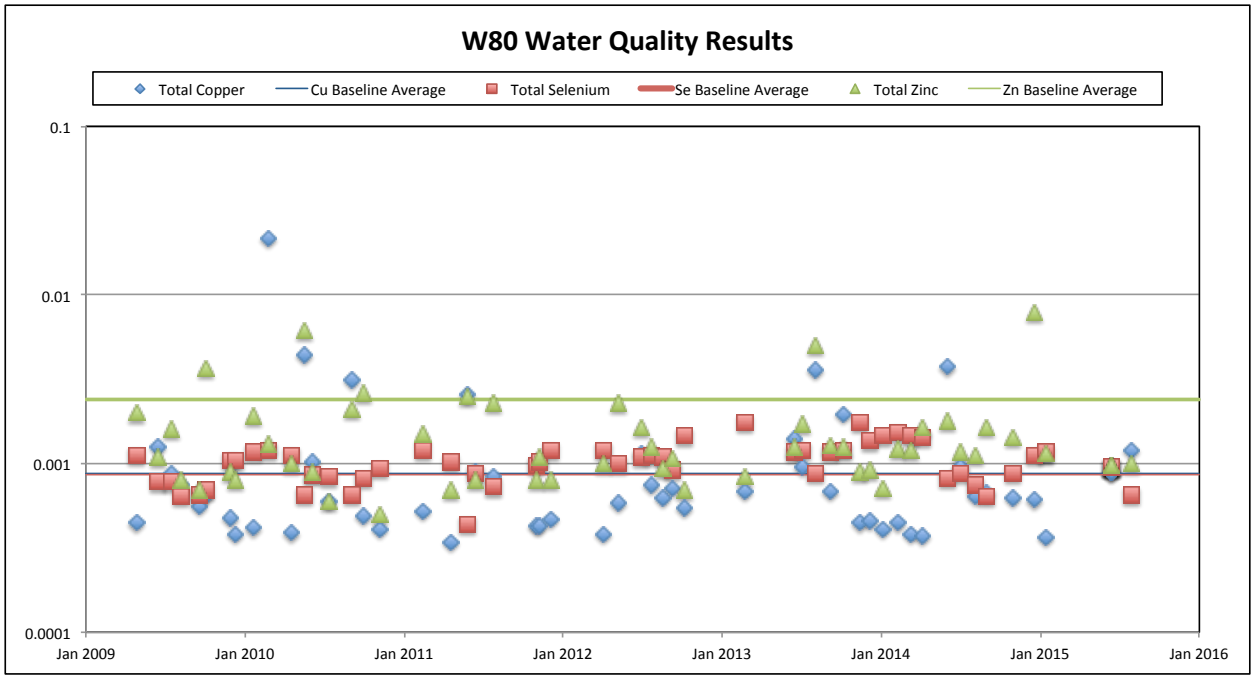


Figure 6-10: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Go Creek (Station W80)

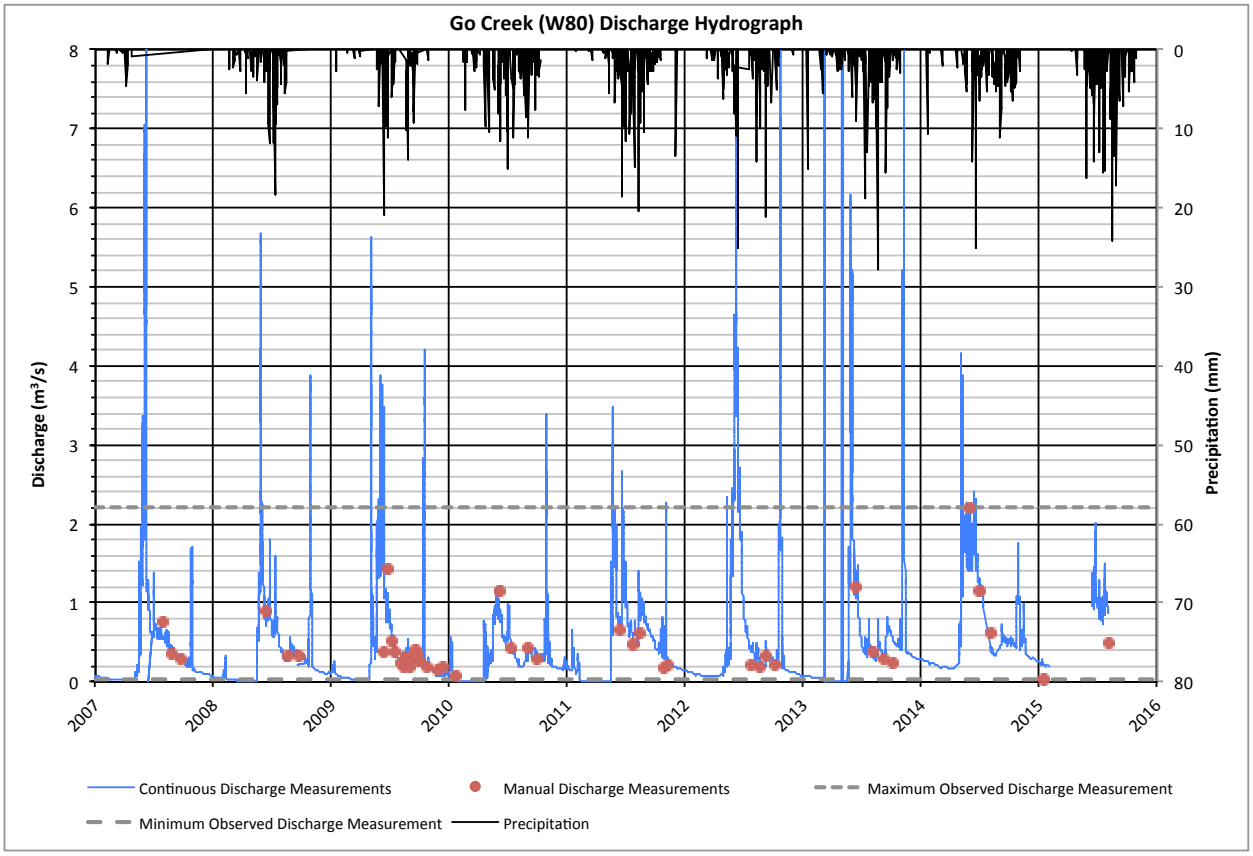


Figure 6-11: W80 Discharge Hydrograph

6.1.4 Money Creek Watershed

Water quality and hydrology in the Money Creek watershed is measured at the intersection of Money Creek with the Robert Campbell highway, on the upstream side of the road, just before the confluence with Frances Lake. Water chemistry has been consistent throughout the operational period (2009-2014) and has remained consistent in 2015 (Figure 6-12).

Hydrology is also relatively consistent, with measured flows ranging from ~4 m^3/s to ~20 m^3/s; although the data logger recorded some peak flows up to 148 m^3/s (Figure 6-13). The data logger was affected by ice pressure effects in 2015, resulting in some loss of data in May and June 2015. Similar to other creeks in the area, Money Creek is characterized by high flows in May and June, with decreasing flows throughout the summer, and spikes again in late fall, with the lowest flows in late winter (February through April).

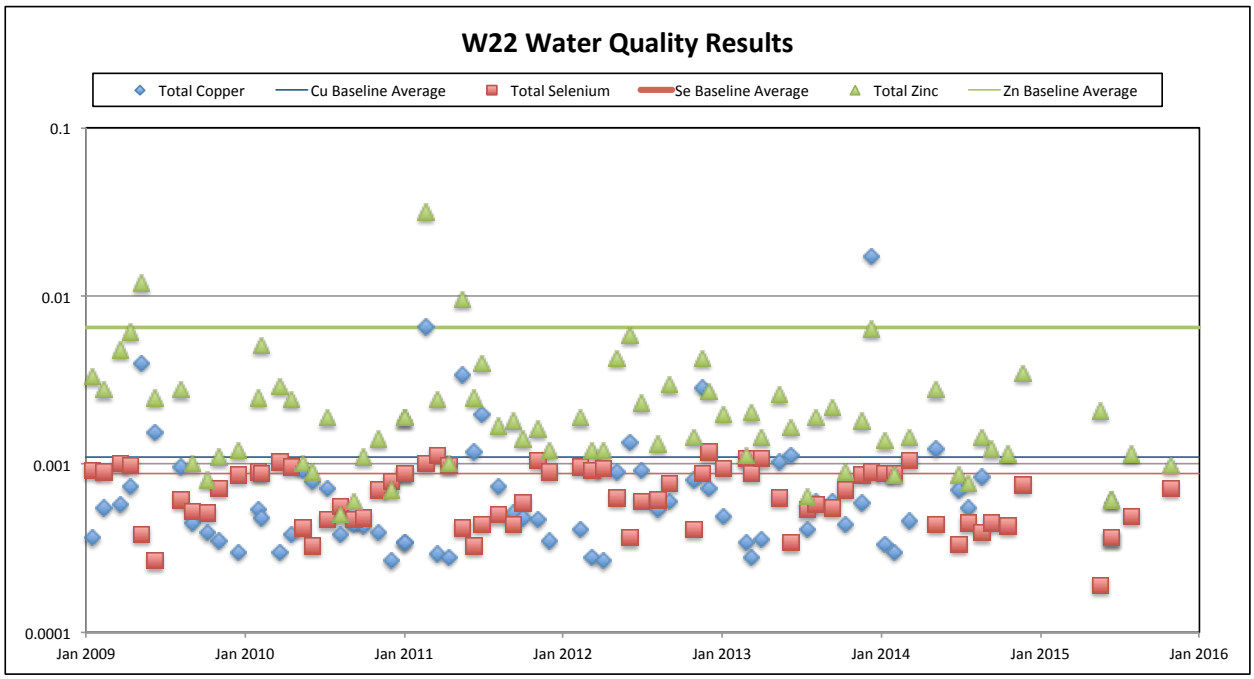


Figure 6-12: Copper, Selenium and Zinc Concentrations Compared to Baseline in Lower Money Creek (Station W22)

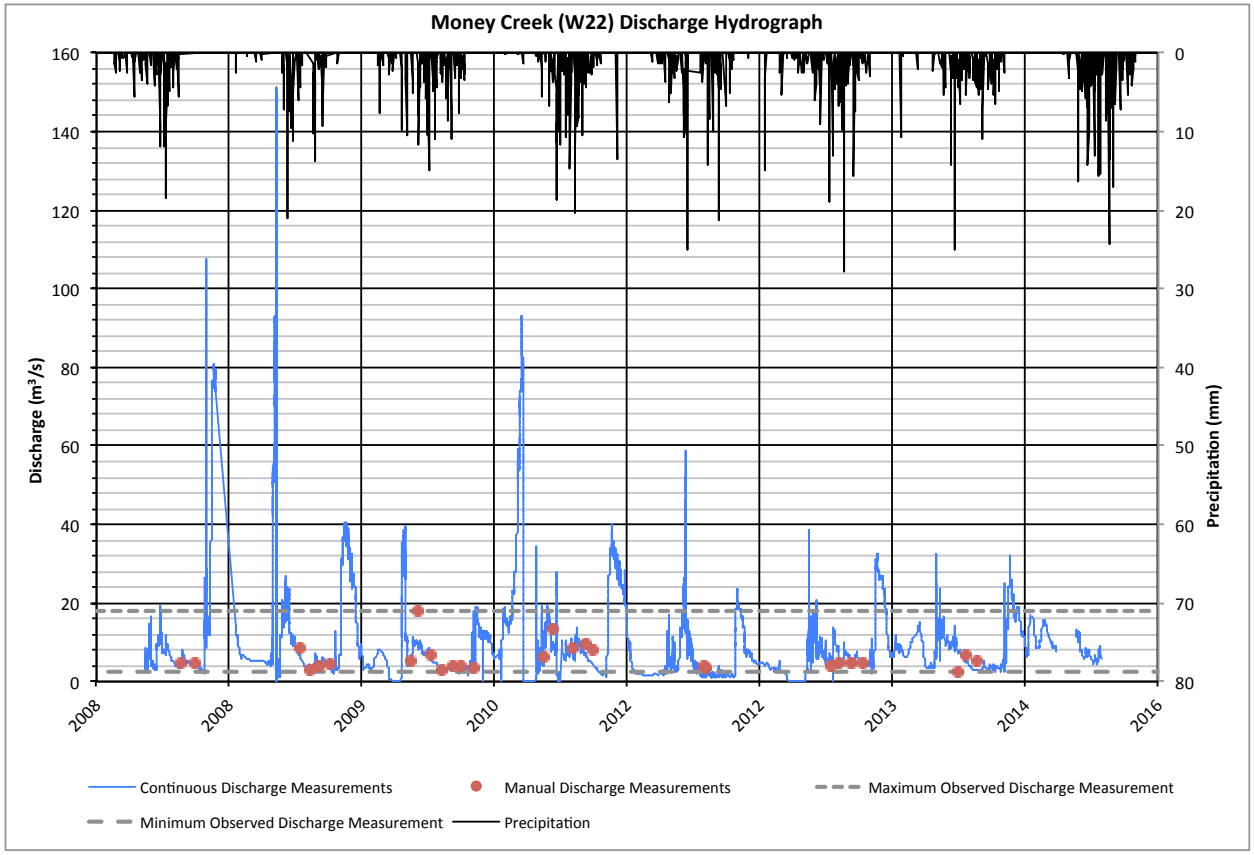


Figure 6-13: W22 Discharge Hydrograph

6.1.5 Access Road Route

Water quality monitoring is conducted at Pitch, Putt and Bunker Creeks that intersect the Access Road. Water chemistry at Pitch and Putt Creeks (Figure 6-14 and Figure 6-15) have been extremely consistent, with relatively little variability. Water chemistry at Bunker Creek is more variable (Figure 6-16) but has remained within the range of baseline chemistry over the operational period, and throughout Temporary Closure. Hydrology is not measured at any of the Access Road Route monitoring sites.

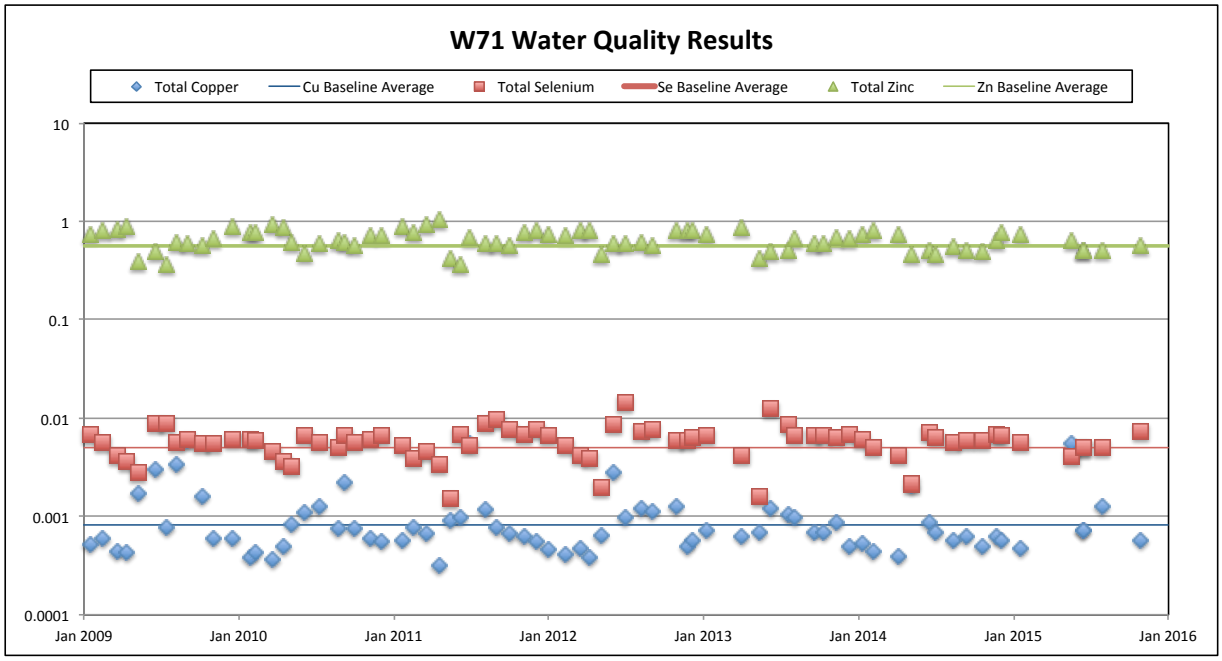


Figure 6-14: Copper, Selenium and Zinc Concentrations Compared to Baseline in Pitch Creek (Station W71)

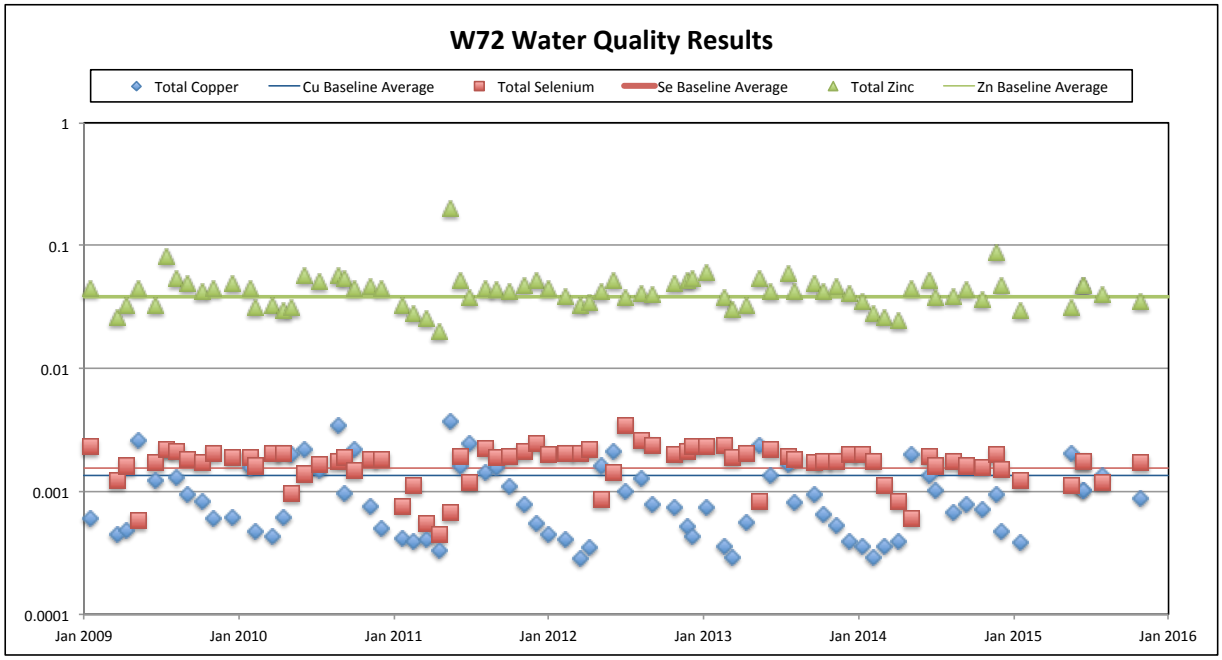


Figure 6-15: Copper, Selenium and Zinc Concentrations Compared to Baseline in Putt Creek (Station W72)

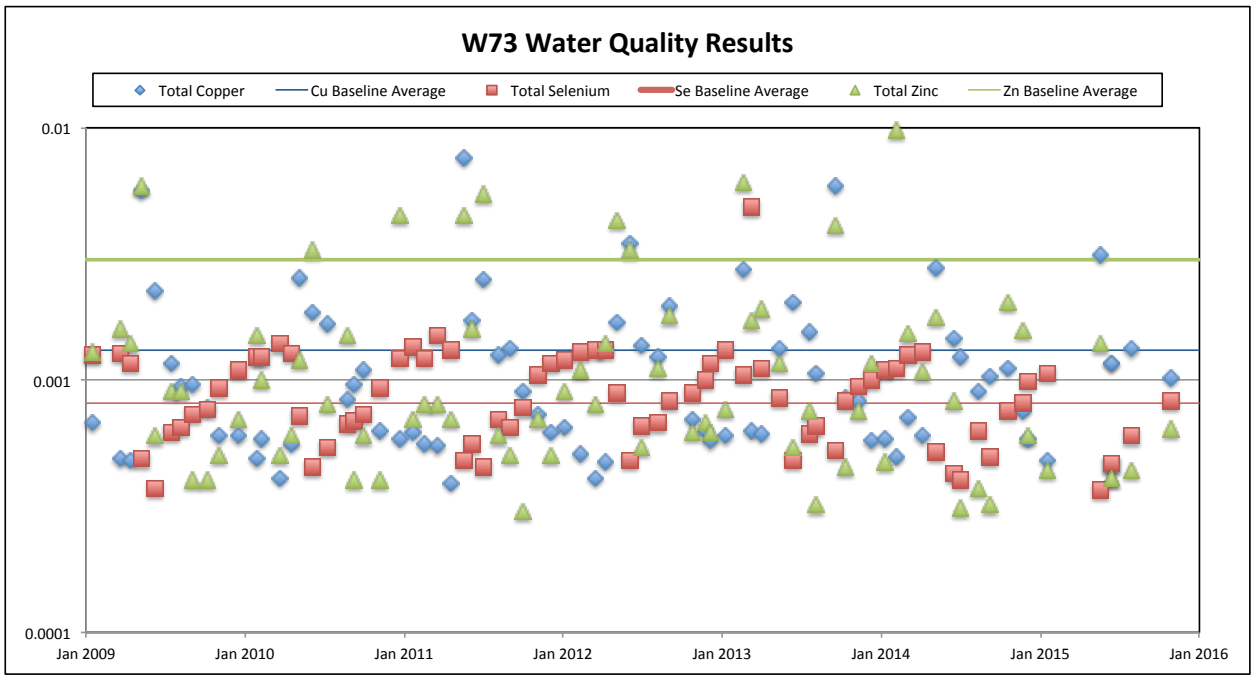


Figure 6-16: Copper, Selenium and Zinc Concentrations Compared to Baseline in Bunker Creek (Station W73)

6.2 Groundwater Sampling Program

The groundwater monitoring program for the Wolverine Mine includes the monitoring of water levels, temperature and water quality at 24 locations at the Wolverine Mine site in alluvial, shallow and deep bedrock in the Wolverine Lake and Go Creek watersheds. The results of the groundwater quality and water level monitoring at the Tailings Facility area, Wolverine Creek watershed and Go Creek watershed are summarized below. Full water quality monitoring results are provided in Appendix B, and the full third party laboratory reports in Appendix C. Additionally, to enhance confidence in the stability and robustness of the water quality results at groundwater monitoring stations, results are provided graphically below for key water quality parameters (e.g., copper, selenium and zinc).

As discussed above, the groundwater sampling program was reduced in 2015, and therefore sampling was only conducted in January, May and August. As shown in the figures below, the 2015 water quality in the groundwater monitoring sites is generally consistent with baseline water chemistry (1998 – 2008).

Water levels are also consistent with past measurements, although changes in loggers and the lack of calibration has resulted in some noticeable changes in results, which don't necessarily correlate to actual changes in water levels. The short lived spike lines in the graphs correspond to sampling periods, when the water levels decrease drastically and the temperatures increase. In general, the water levels increase each year around May/June, and decrease to the lowest seasonal levels in March/April. The water temperatures are highest around July/August, and lowest around December/January. Annual water levels in the various monitoring wells have remained relatively constant over the monitoring period.

6.2.1 Tailings Storage Facility

There are four groundwater monitoring wells downslope of the tailings impoundment: MW05-2A (shallow bedrock), MW05-2B, MW05-7B and MW08-13 (alluvial). Wells MW05-2 and MW05-7 are upslope of the TSF in the Go Creek valley, and MW08-13 is downslope of the TSF in Go Creek as well.

Water quality sampling is centered in the ice-free months as wells MW05-2A and -2B and MW05-7 are artesian, and frozen in the winter months. Water chemistry in upslope wells has been generally consistent over the monitoring period (Figure 6-17 and Figure 6-18), although selenium concentrations in well MW05-7 have increased significantly in 2014. Other than the 2014 concentrations, selenium concentrations at these two sets of wells is generally less than detection, shown as values ½ the detection limit in Figure 6-17 and Figure 6-18.

At downslope well MW08-13, copper and zinc concentrations have remained comparable over the operational period, but selenium concentrations have been steadily increasing since 2012, which reflects a similar trend to selenium concentrations measured at station W81 (Figure 6-9).

Water levels and temperatures are measured in groundwater well MW08-13 (Figure 6-20), and have been consistent over the monitoring period. Water level and temperature loggers are not installed in wells MW05-2 and MW05-7 as they are artesian, and consistently have a 0 m water level. At groundwater monitoring well MW08-13, water levels are highest in early spring (May and June) and decrease throughout the summer, fall and winter, with the lowest levels in late winter (February, March and April). Temperatures spike in summer (July and August) and decrease throughout fall and winter to reach a low point in late winter (February and March).

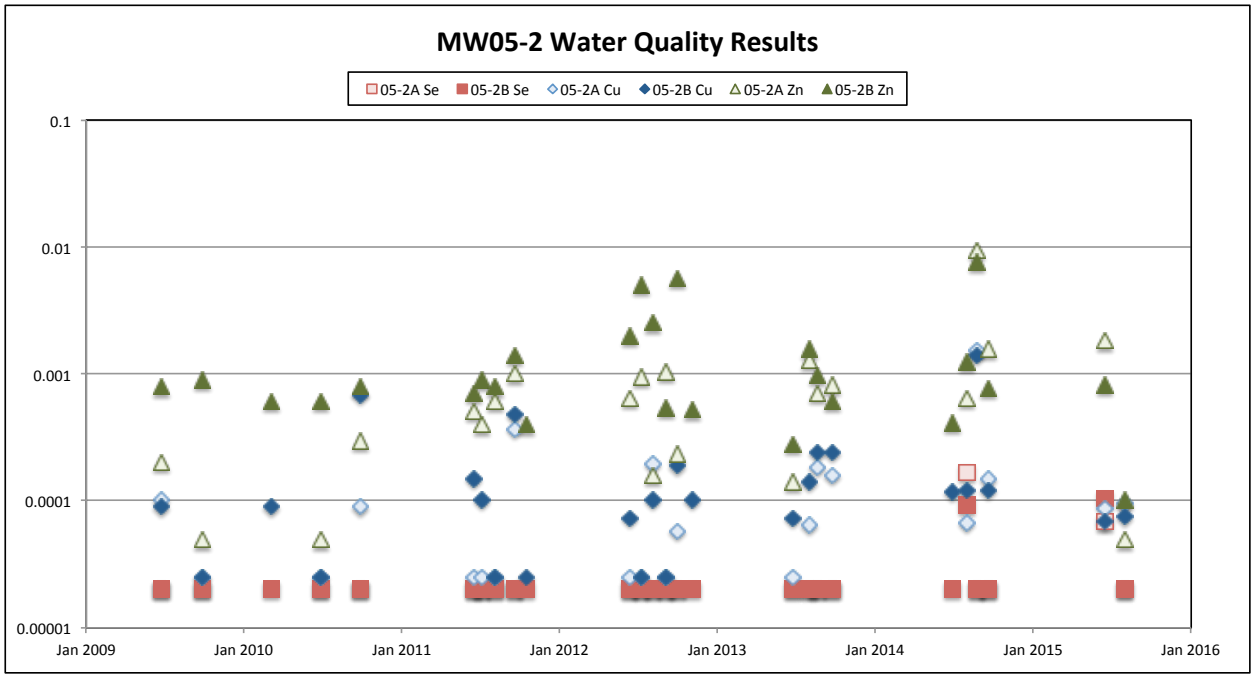


Figure 6-17: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-2A and MW05-2B

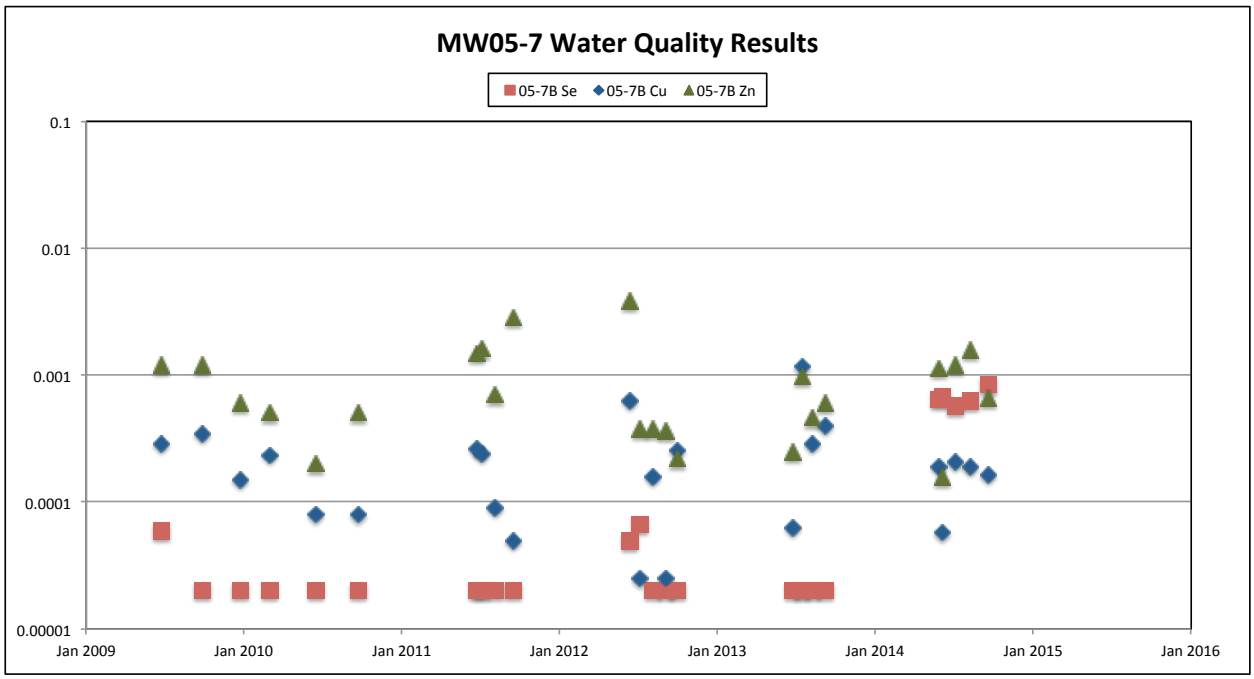


Figure 6-18: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW05-7

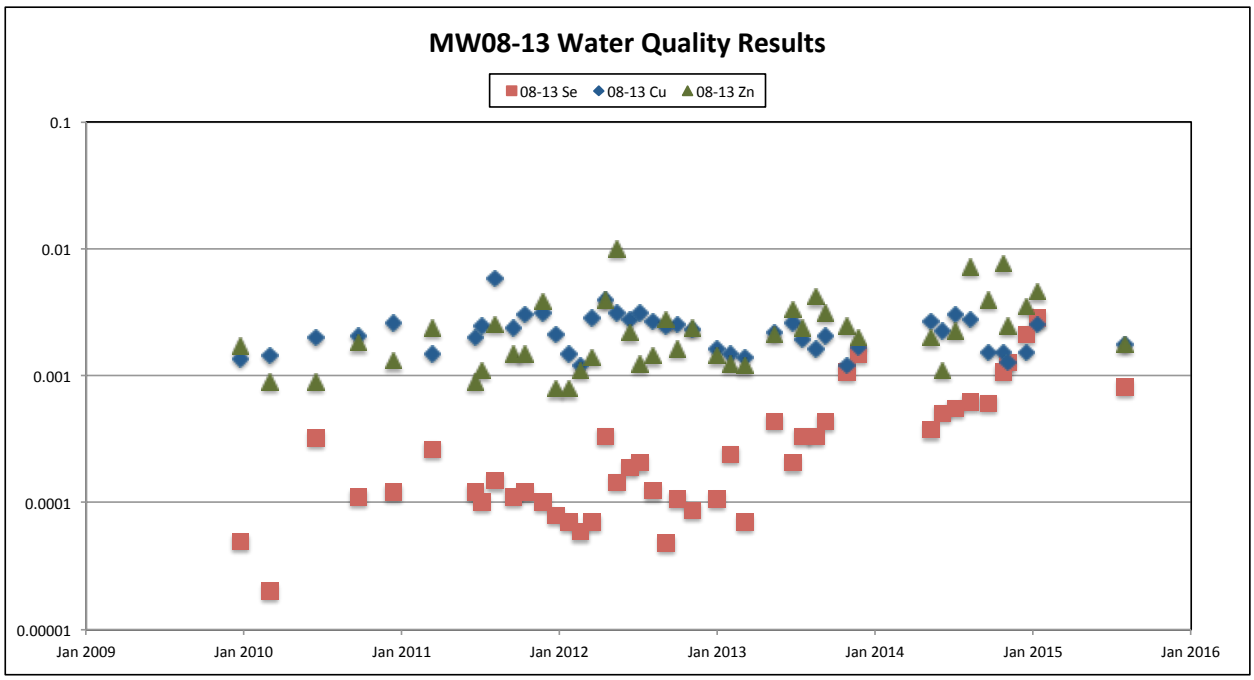


Figure 6-19: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW08-13

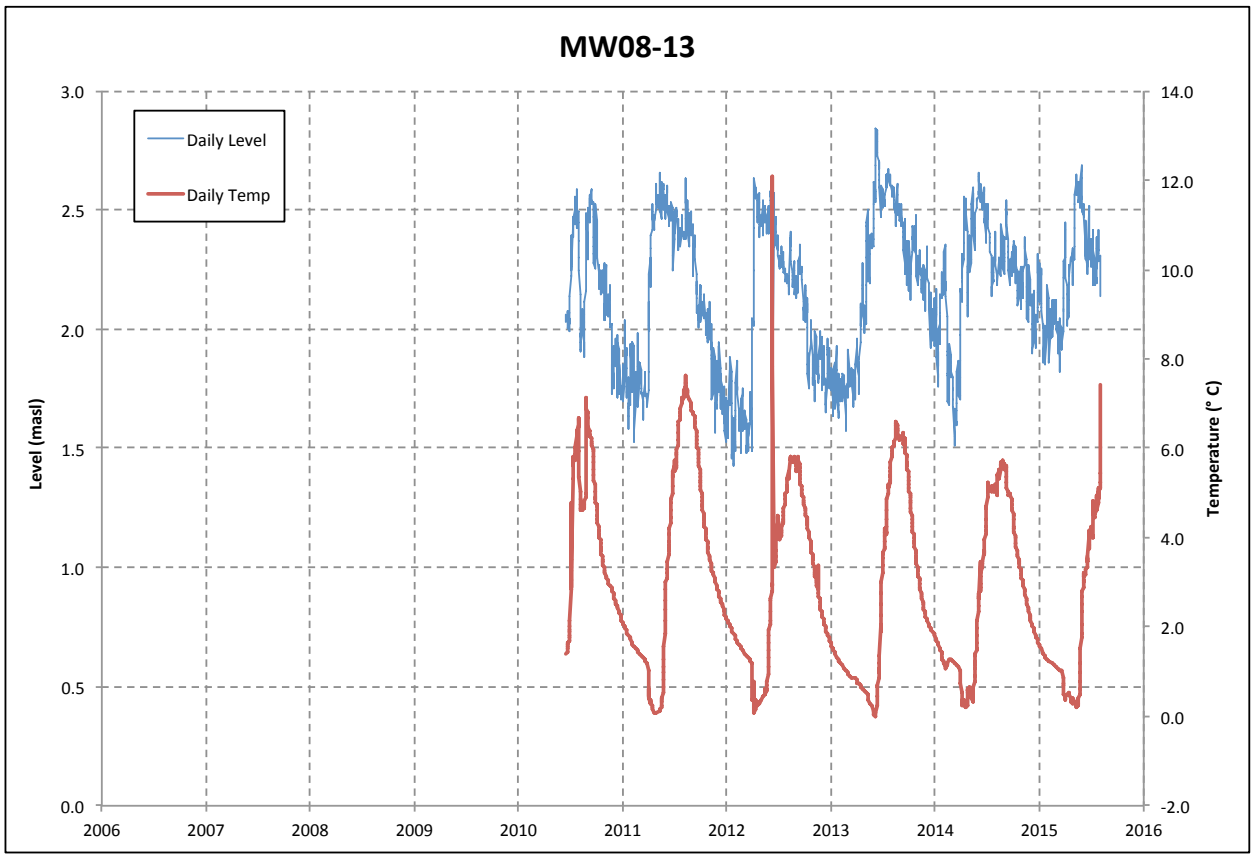


Figure 6-20: Water Levels and Temperature in Groundwater Monitoring Well MW08-13

6.2.2 Wolverine Creek

Alluvial groundwater wells in the Wolverine Creek drainage include wells MW05-3B, MW05-4B and MW05-5B. Shallow bedrock groundwater wells in the Wolverine Creek drainage include wells MW05-3A, MW05-4A, MW05-5A, MW06-8S, MW06-9S, MW06-10S, MW06-11S and MW06-12S. Deep bedrock groundwater wells in the Wolverine Creek drainage include wells MW06-8M, MW06-8D, MW06-9M, MW06-10M and MW06-10D.

Water quality results over the 2015 period have been generally comparable to past results for groundwater monitoring wells in the Wolverine Creek drainage (Figure 6-21, Figure 6-24, Figure 6-27, Figure 6-30, Figure 6-34, Figure 6-36, Figure 6-40, and Figure 6-42). Selenium concentrations are typically less than the detection limit, shown as a value ½ the detection limit in the graphs below. There were some increases in selenium, copper and zinc concentrations evident for the 2015 concentrations in MW05-5 (Figure 6-27). Otherwise, though variable, the metals concentrations remain consistently within the range of historic measurements.

Water levels have also been consistent over the monitoring period (Figure 6-22, Figure 6-23, Figure 6-25, Figure 6-26, Figure 6-28, Figure 6-29, Figure 6-31, Figure 6-32, Figure 6-33, Figure 6-35, Figure 6-37, Figure 6-38, Figure 6-39, Figure 6-41, and Figure 6-43). The majority of the wells commenced logging in September 2006. Wells MW05-4A, MW05-4B, MW06-8S, MW06-9S, MW06-10M and MW06-12S have had loggers replaced. Changes in loggers and the lack of calibration has resulted in some noticeable changes in results, which don't necessity correlate to actual changes in water levels. There is no logger in well MW05-9M as it is an artesian wells, and has a consistent water level of 0 m above ground level. Well MW06-8M was re-drilled in 2010; hence there are no data recorded prior to 2010.

The short lived spike lines in the graphs correspond to sampling periods, when the water levels decrease drastically and the temperatures increase. In general, the water levels increase each year around May/June, and decrease to the lowest seasonal levels in March/April. Annual water levels in the various monitoring wells have remained relatively constant over the monitoring period.

Temperatures in the wells have also remained generally consistent, with water temperatures highest around July/August, and lowest around December/January. Temperature in alluvial monitoring well MW05-5A has been steadily increasing over the monitoring period, from an annual low of ~1.7˚C in late 2006 to an annual low of ~2.1˚C in 2014 (Figure 6-28). The temperature in the shallow bedrock well (MW05-5B) has remained consistent over the 2006 – 2015 monitoring period (Figure 6-29). In shallow bedrock well MW06-8M, the temperature has been gradually decreasing from ~2.11˚C in 2010 to 2.09˚C in 2015 (Figure 6-32), whereas in the other nested wells at that location, the temperature has remained constant (Figure 6-31 and Figure 6-33).

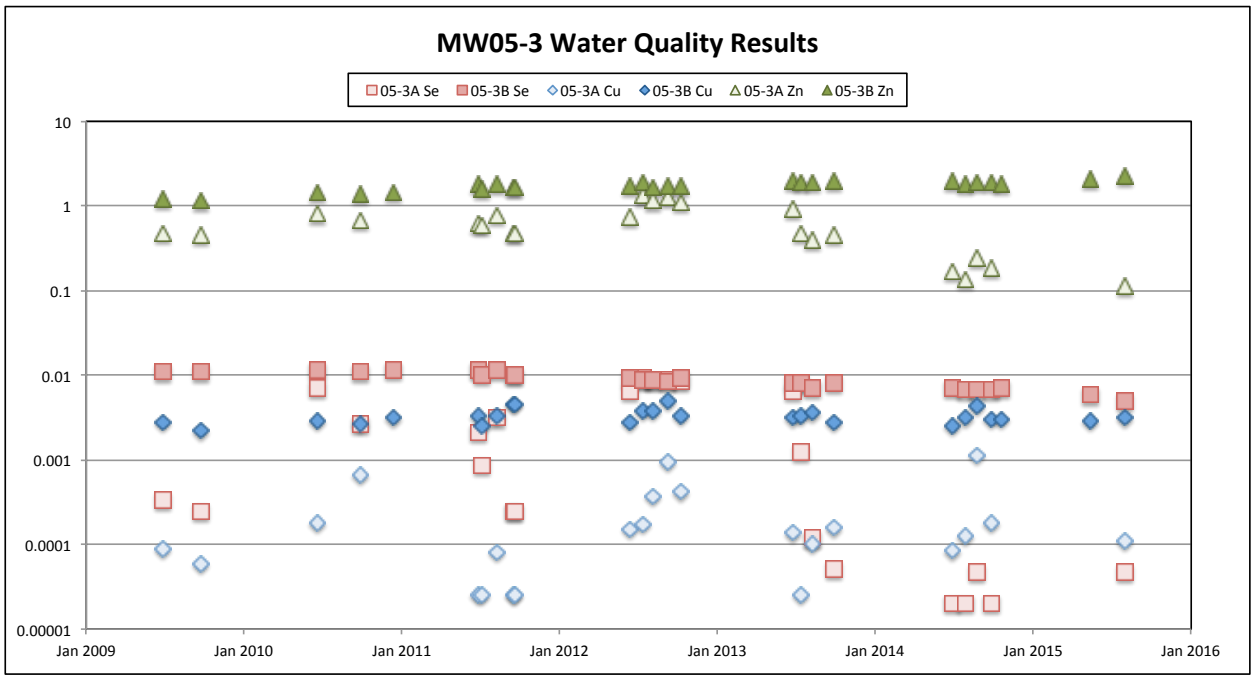


Figure 6-21: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-3A and MW05-3B

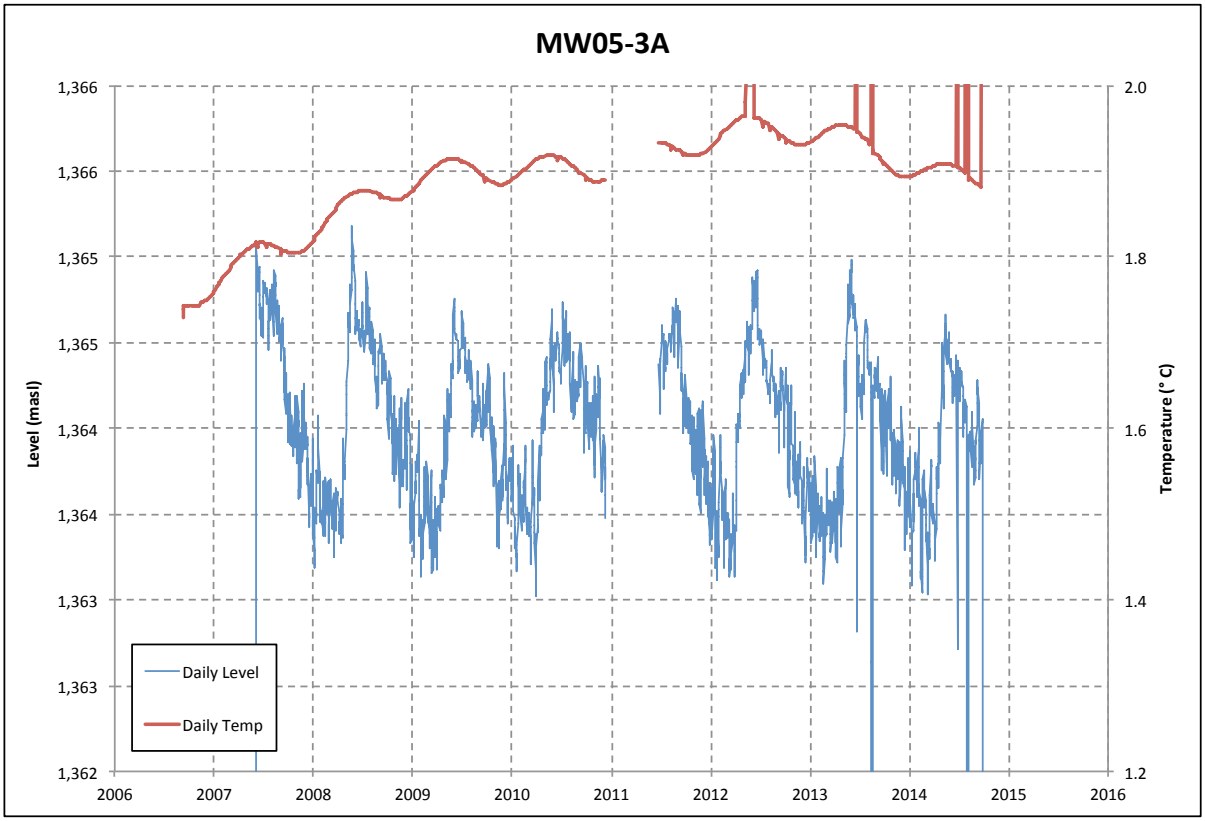


Figure 6-22: Water Levels and Temperature in Groundwater Monitoring Well MW05-3A

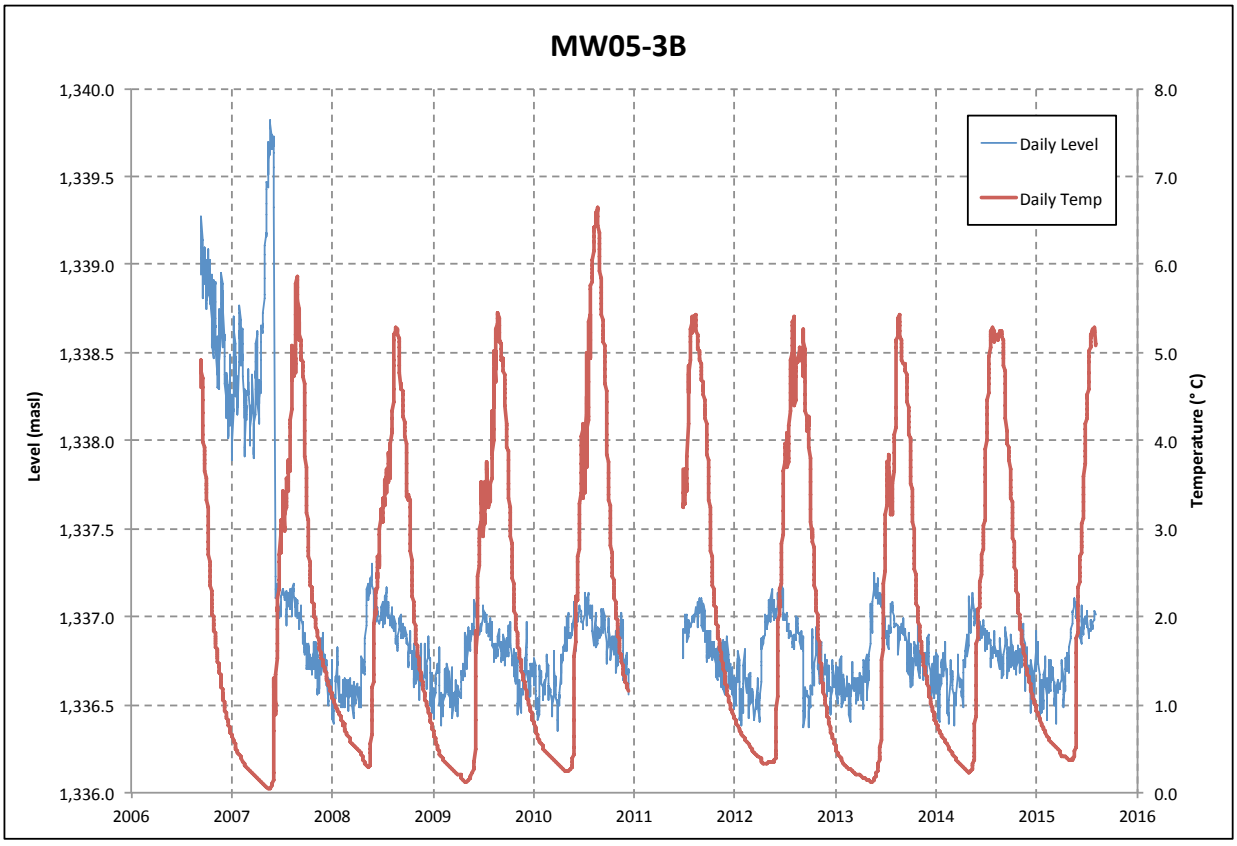


Figure 6-23: Water Levels and Temperature in Groundwater Monitoring Well MW05-3B

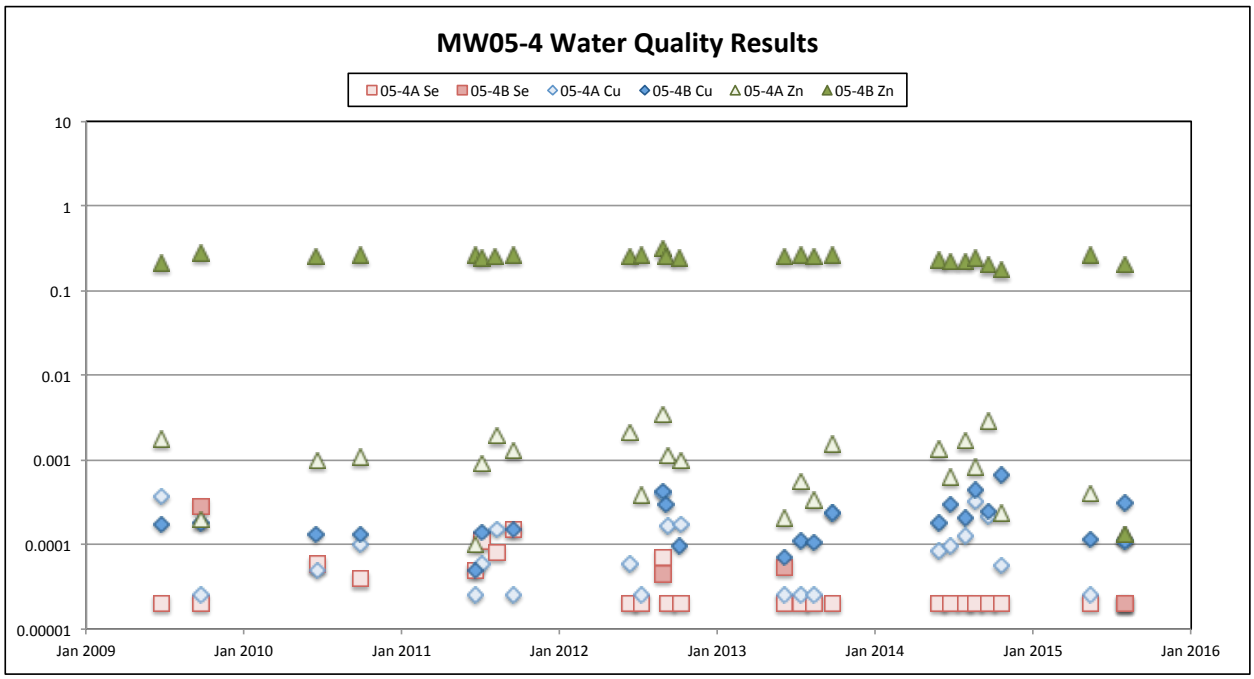


Figure 6-24: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-4A and MW05-4B

Figure 6-25: Water Levels and Temperature in Groundwater Monitoring Well MW05-4A

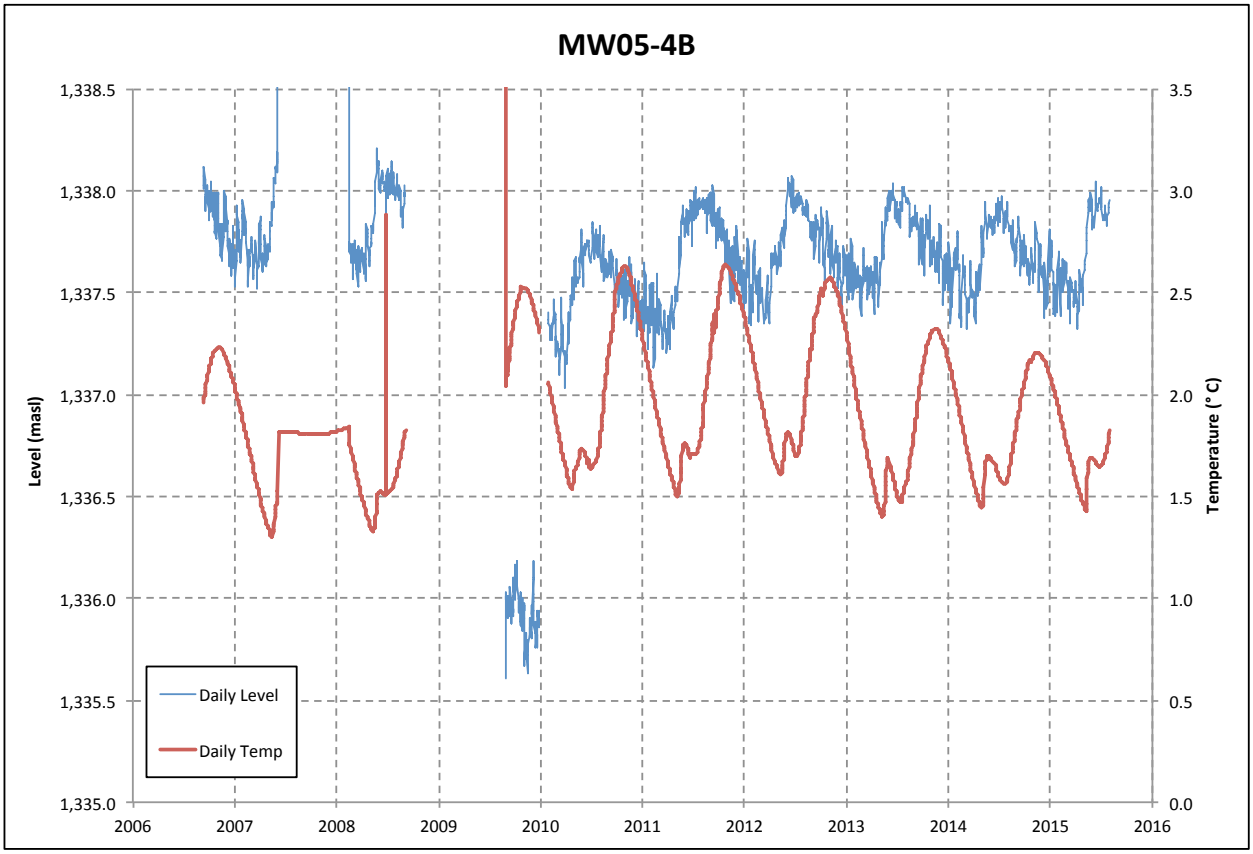


Figure 6-26: Water Levels and Temperature in Groundwater Monitoring Well MW05-4B

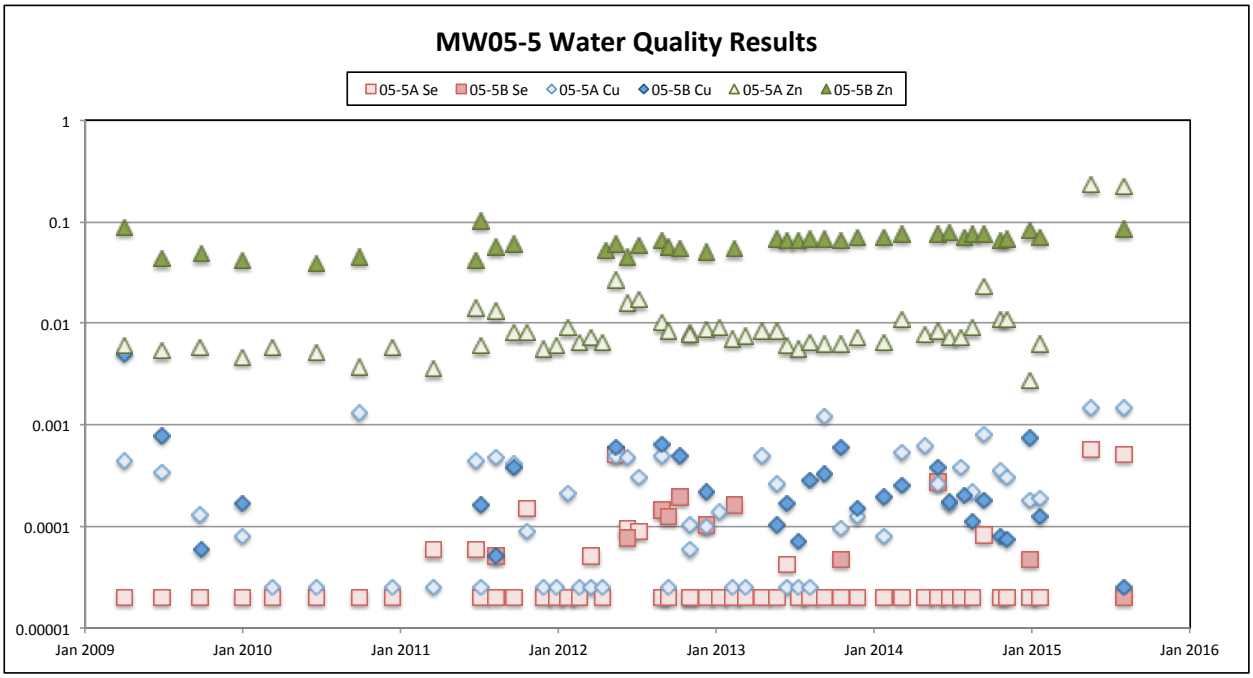


Figure 6-27: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-5A and MW05-5B

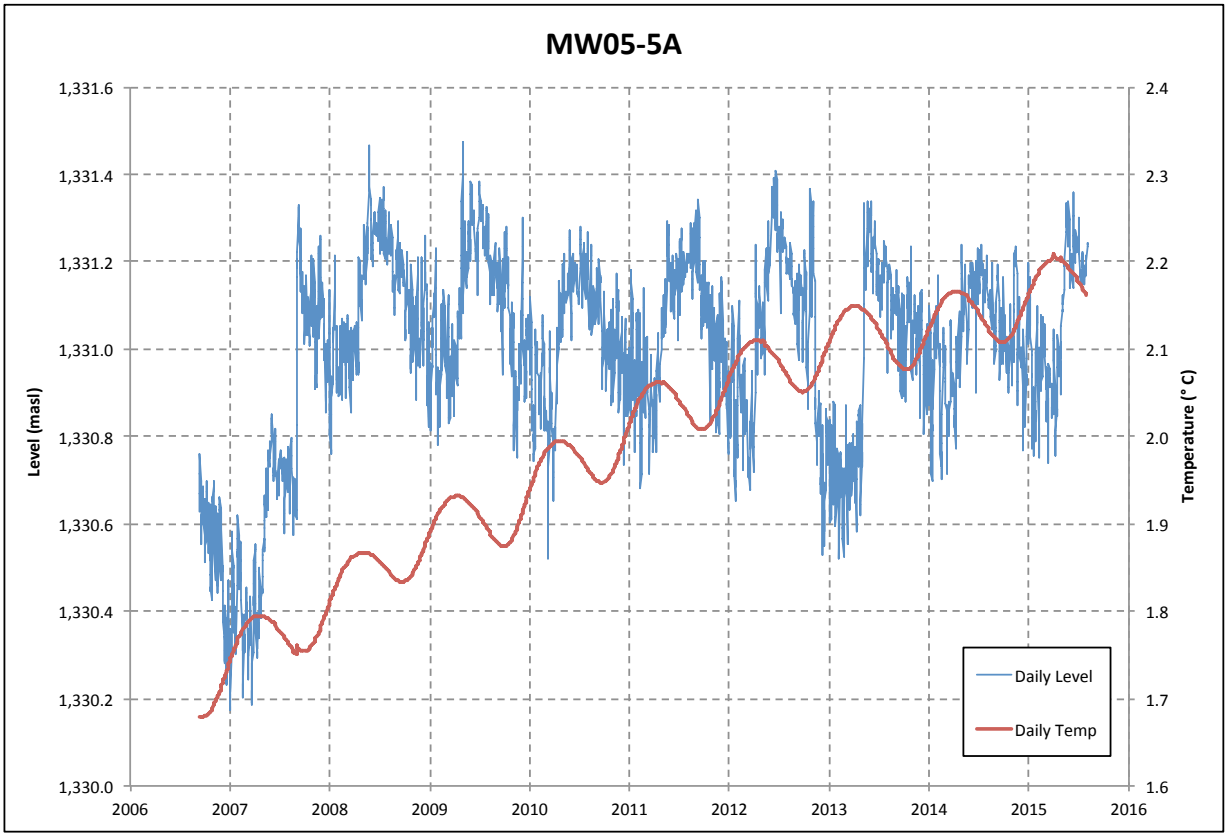


Figure 6-28: Water Levels and Temperature in Groundwater Monitoring Well MW05-5A

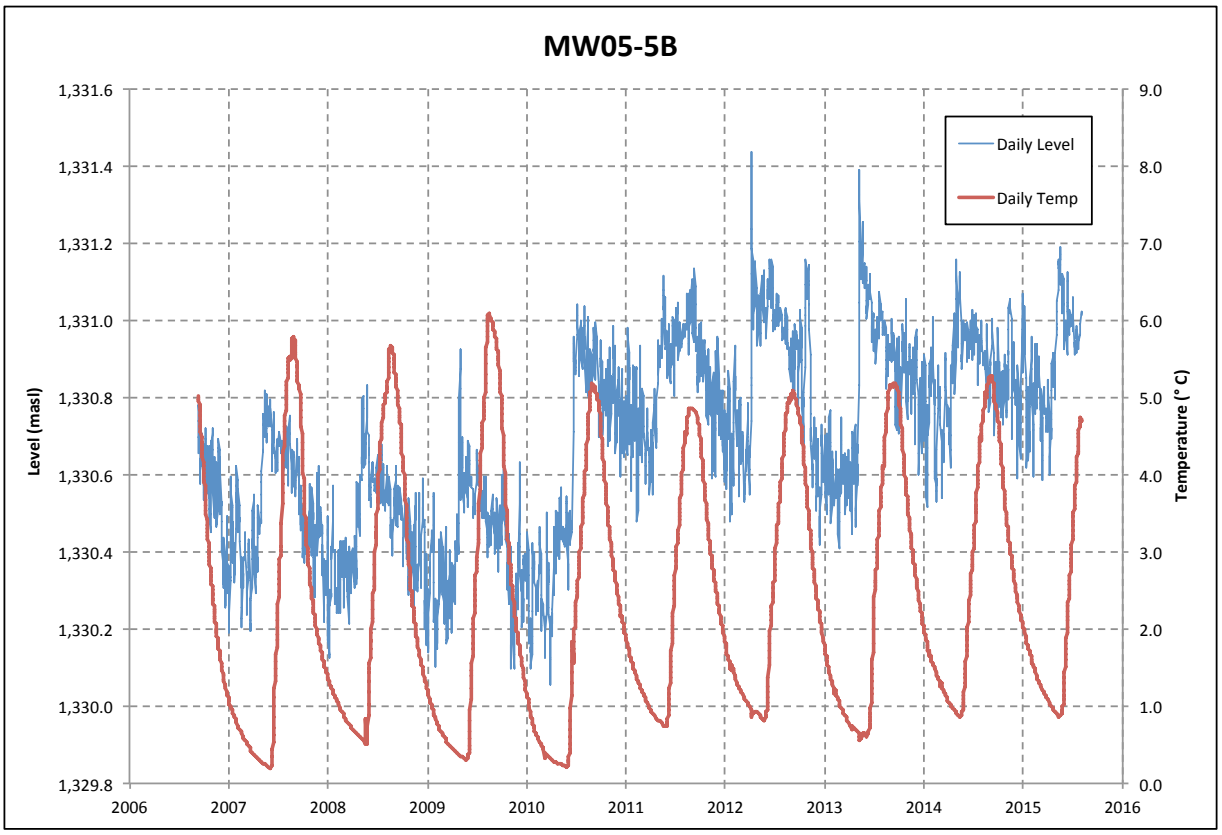


Figure 6-29: Water Levels and Temperature in Groundwater Monitoring Well MW05-5B

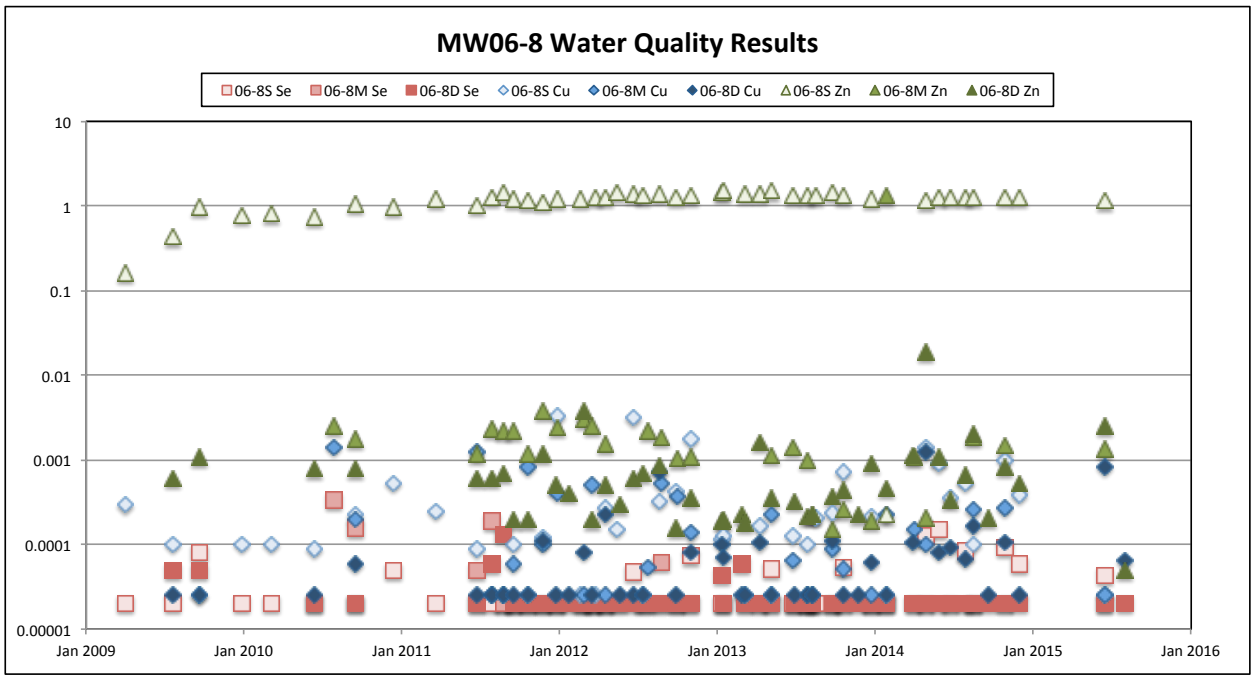


Figure 6-30: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-8S, MW06-8M and MW06-8D

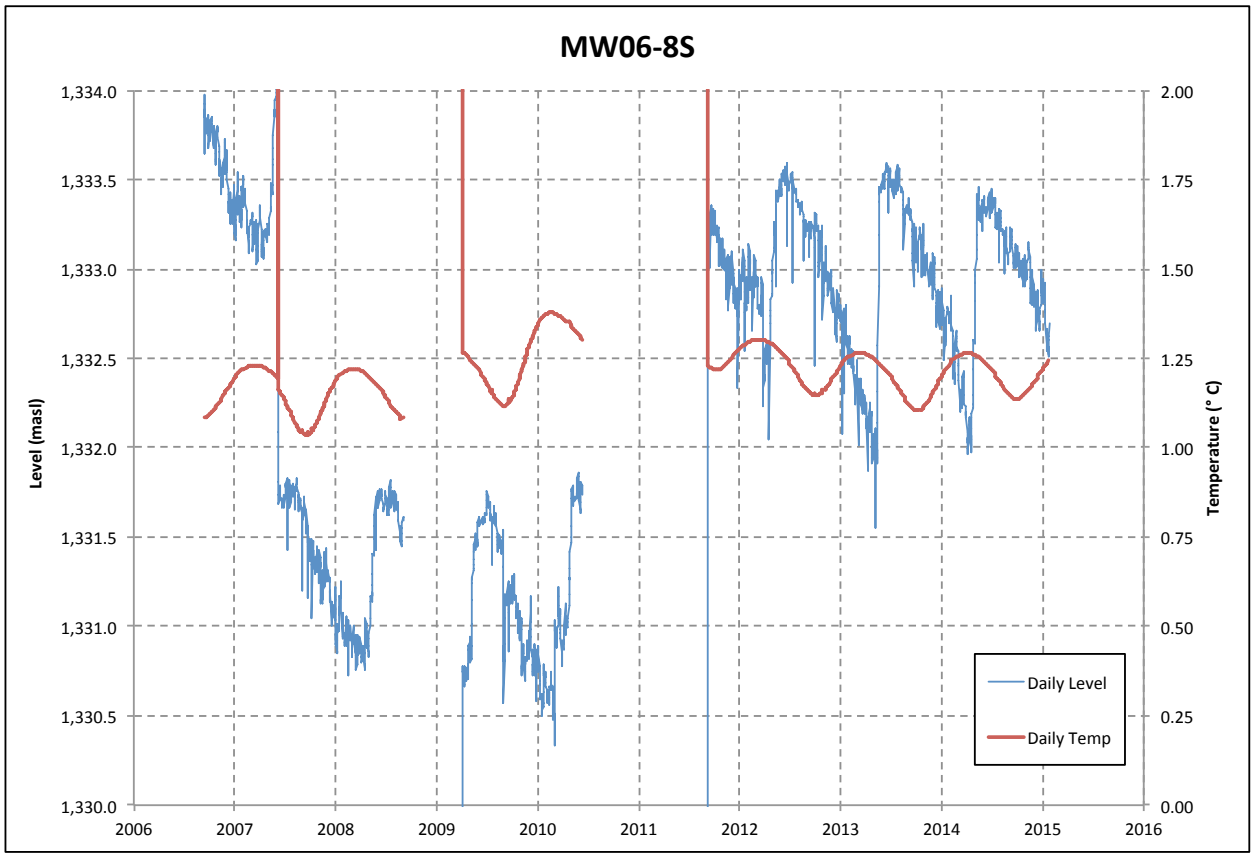


Figure 6-31: Water Levels and Temperature in Groundwater Monitoring Well MW06-8S

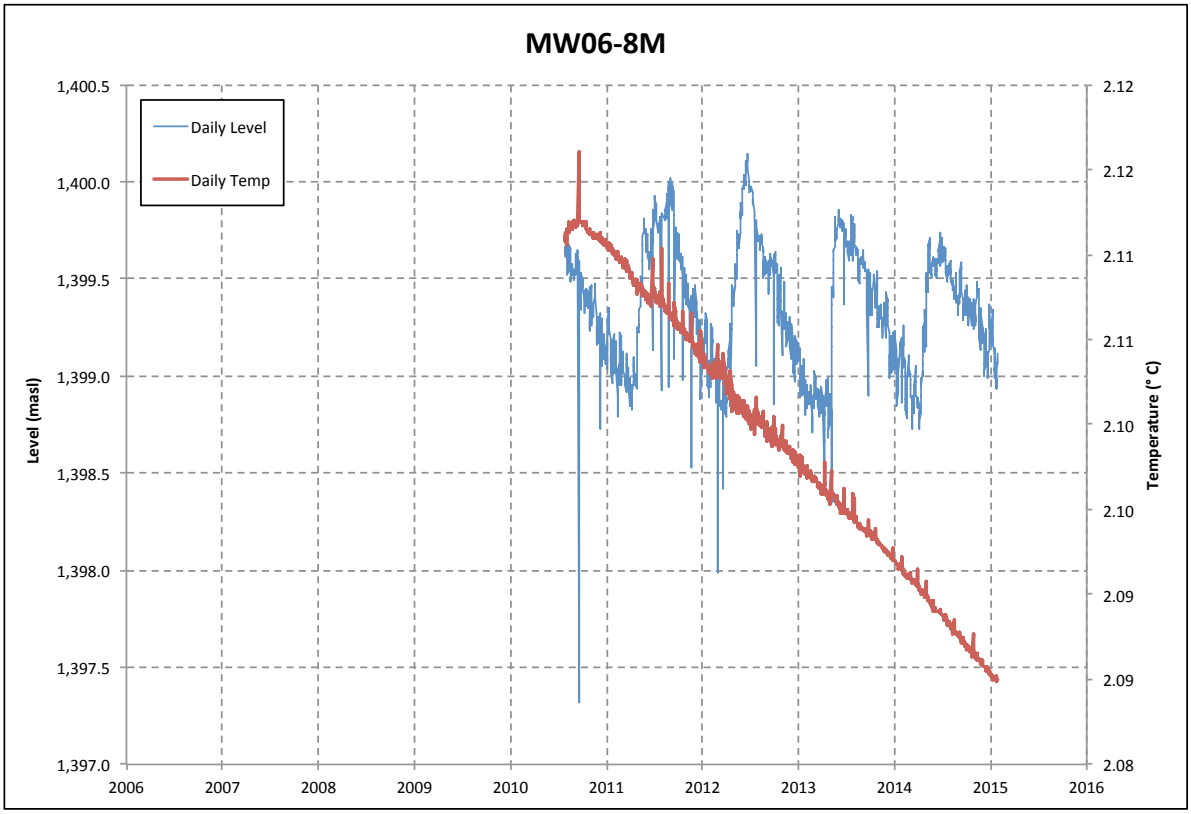


Figure 6-32: Water Levels and Temperature in Groundwater Monitoring Well MW06-8M

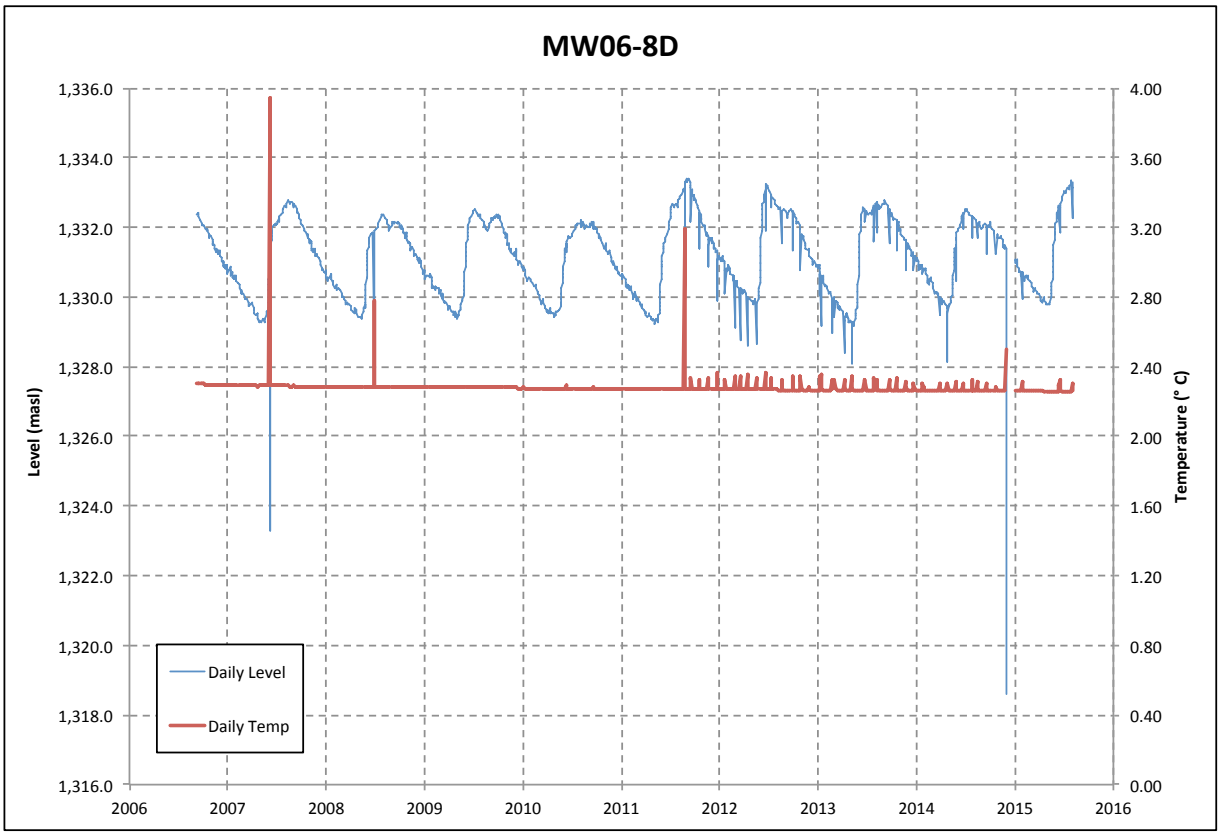


Figure 6-33: Water Levels and Temperature in Groundwater Monitoring Well MW06-8M

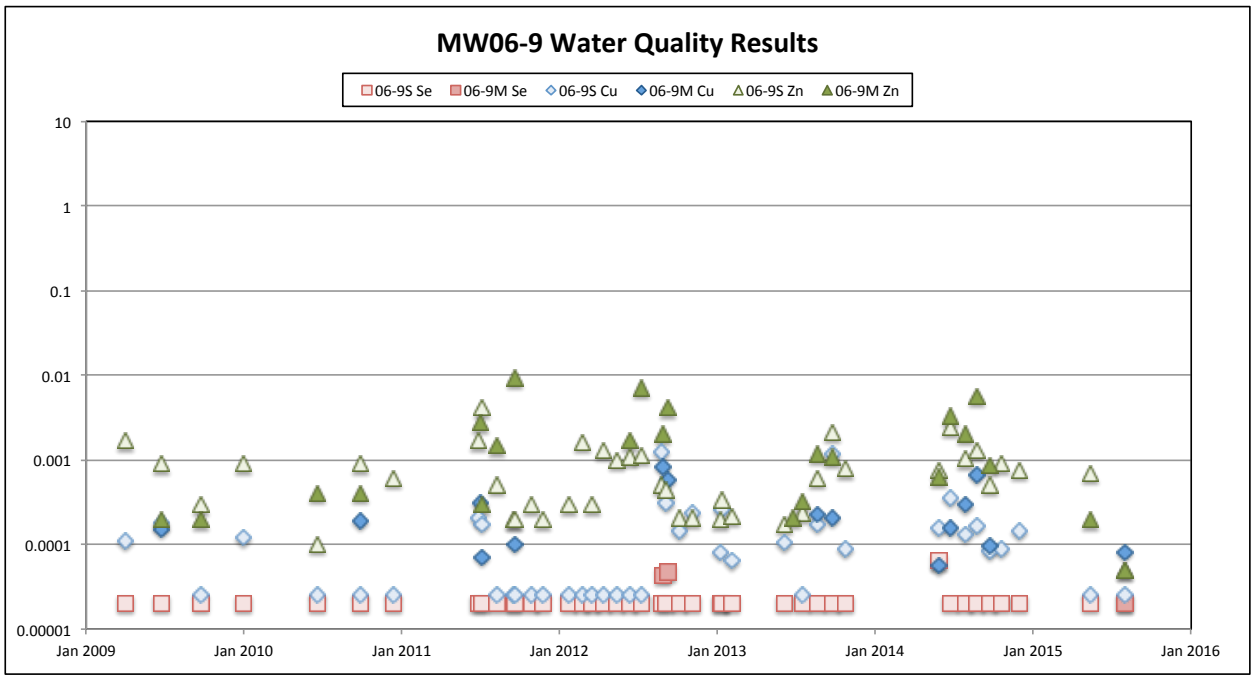


Figure 6-34: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-9S and MW06-9M

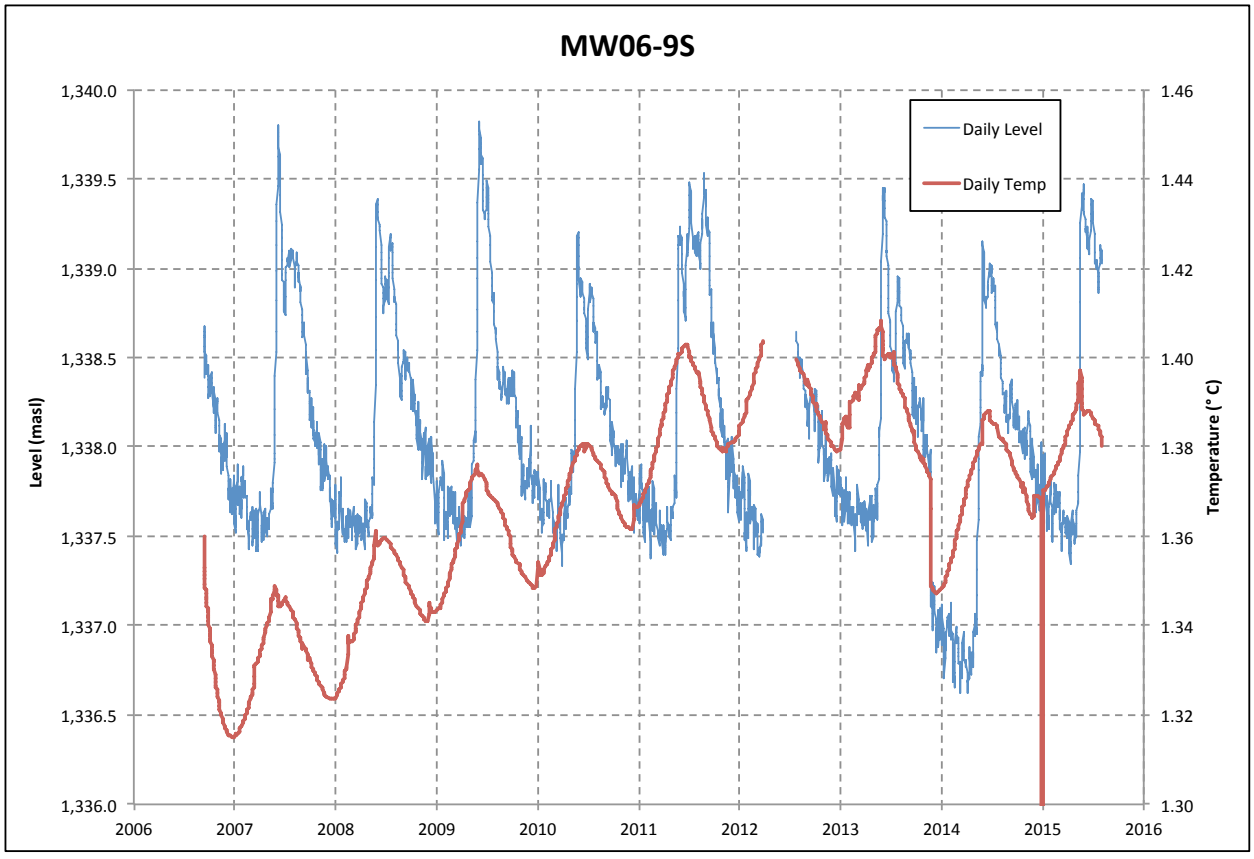


Figure 6-35: Water Levels and Temperature in Groundwater Monitoring Well MW06-9S

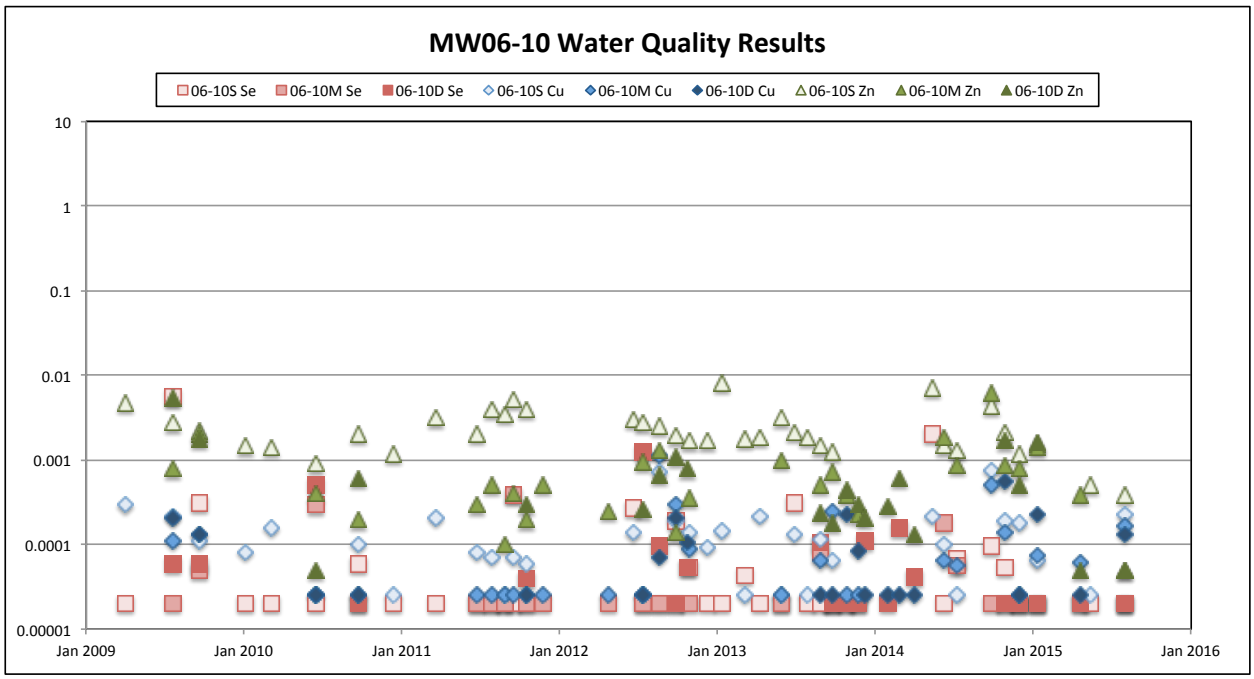


Figure 6-36: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW06-10S, MW06-10M and MW06-10D

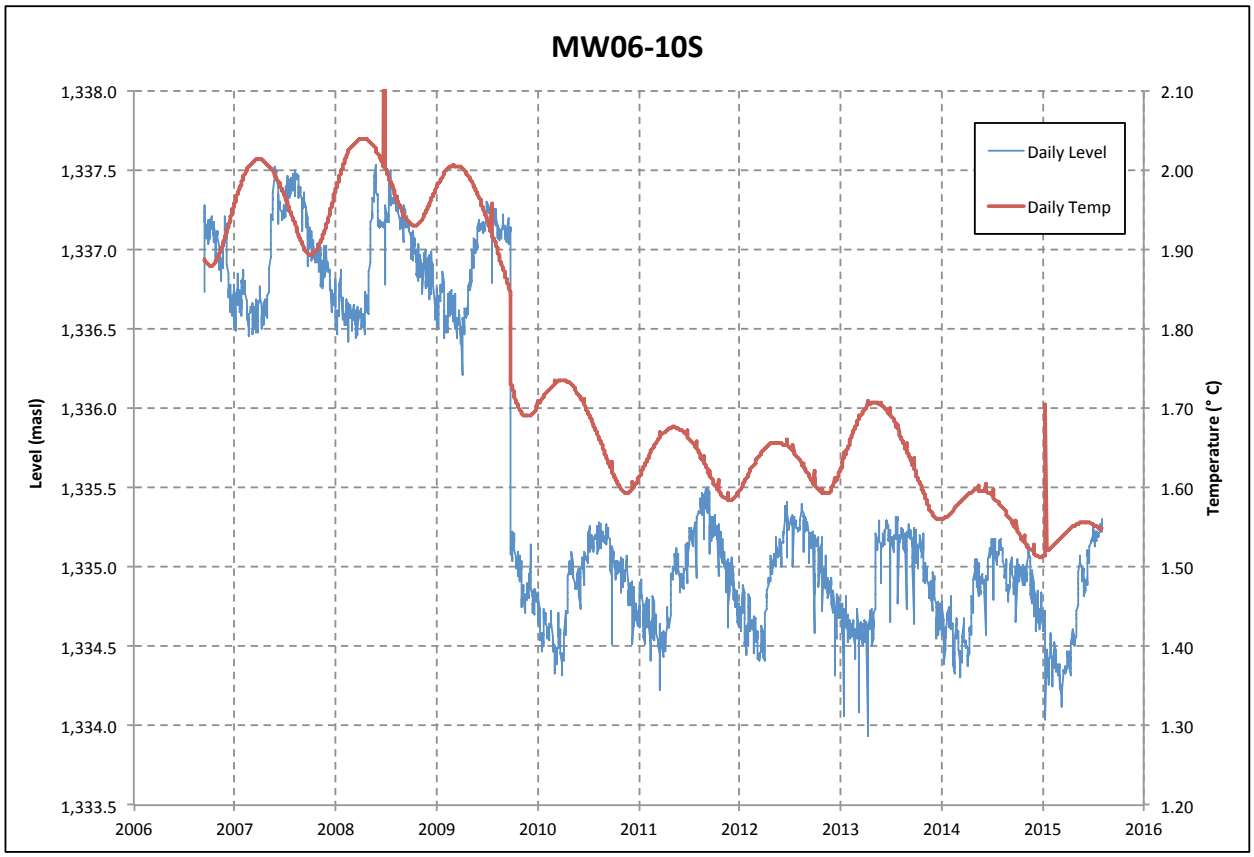


Figure 6-37: Water Levels and Temperature in Groundwater Monitoring Well MW06-10S

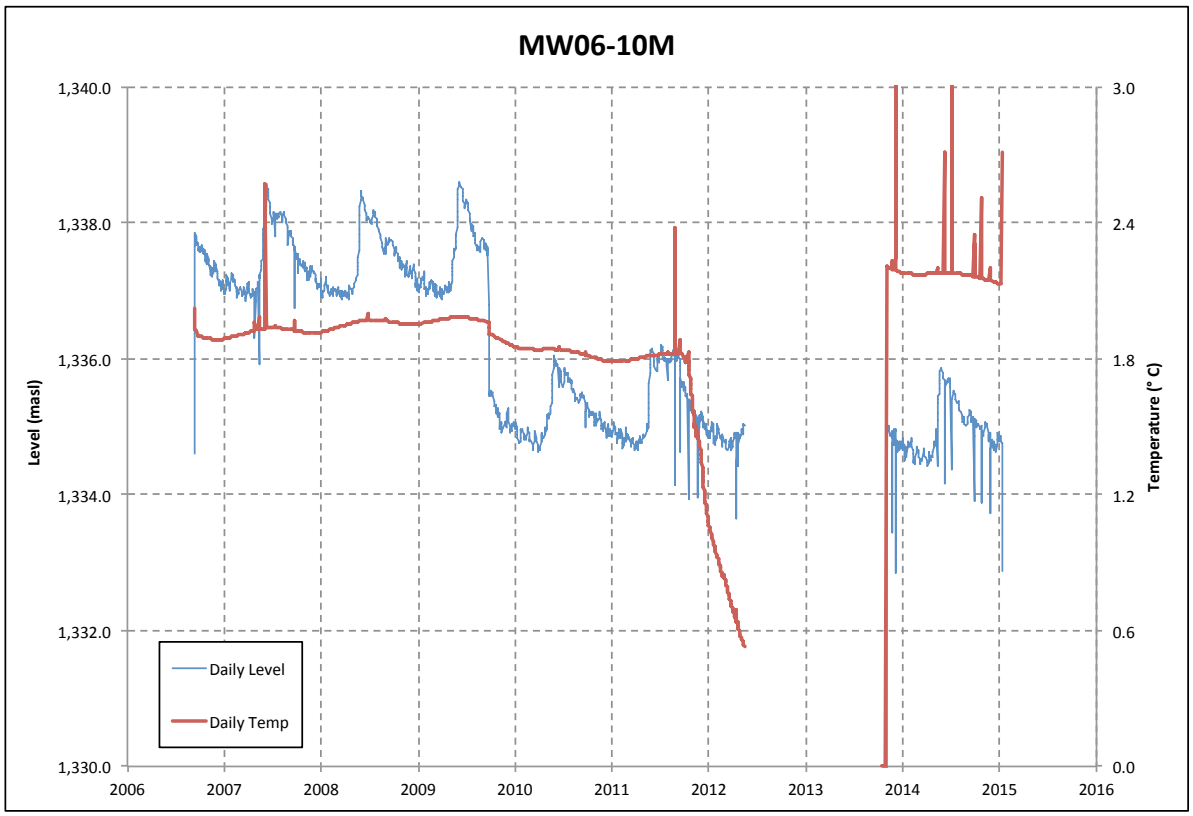


Figure 6-38: Water Levels and Temperature in Groundwater Monitoring Well MW06-10M

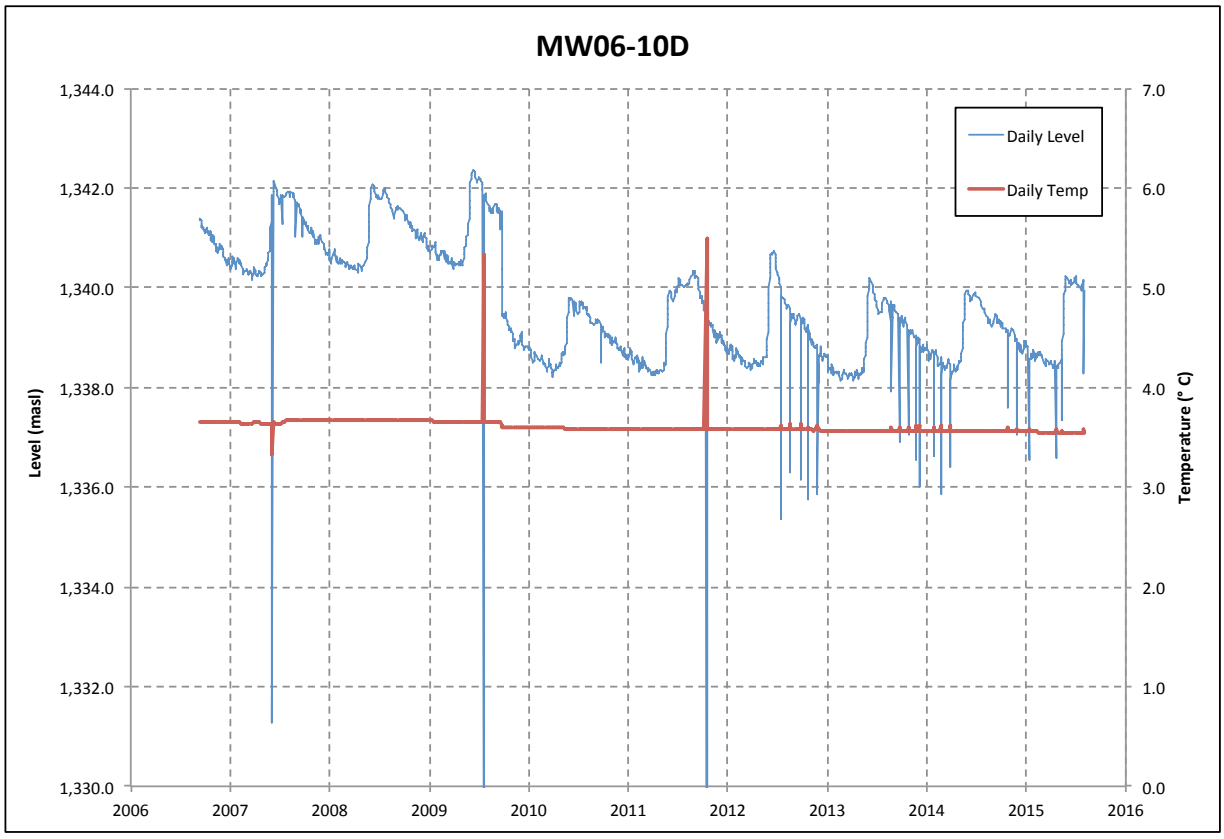


Figure 6-39: Water Levels and Temperature in Groundwater Monitoring Well MW06-10M

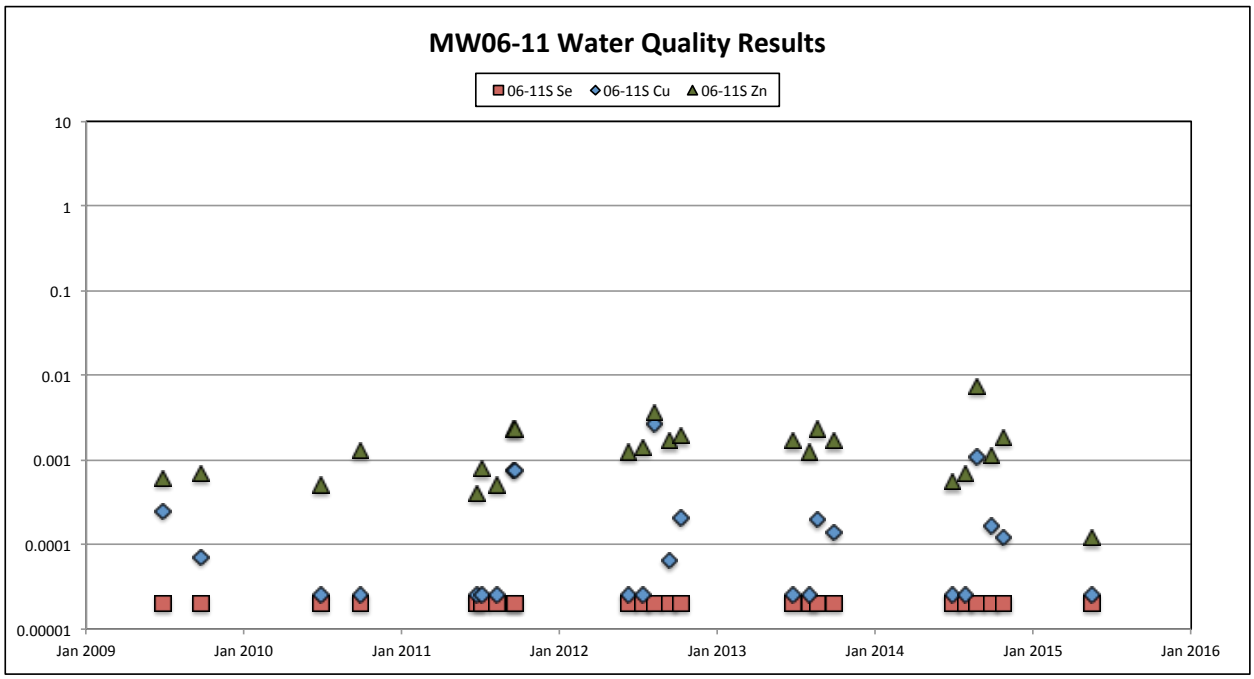


Figure 6-40: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW06-11S

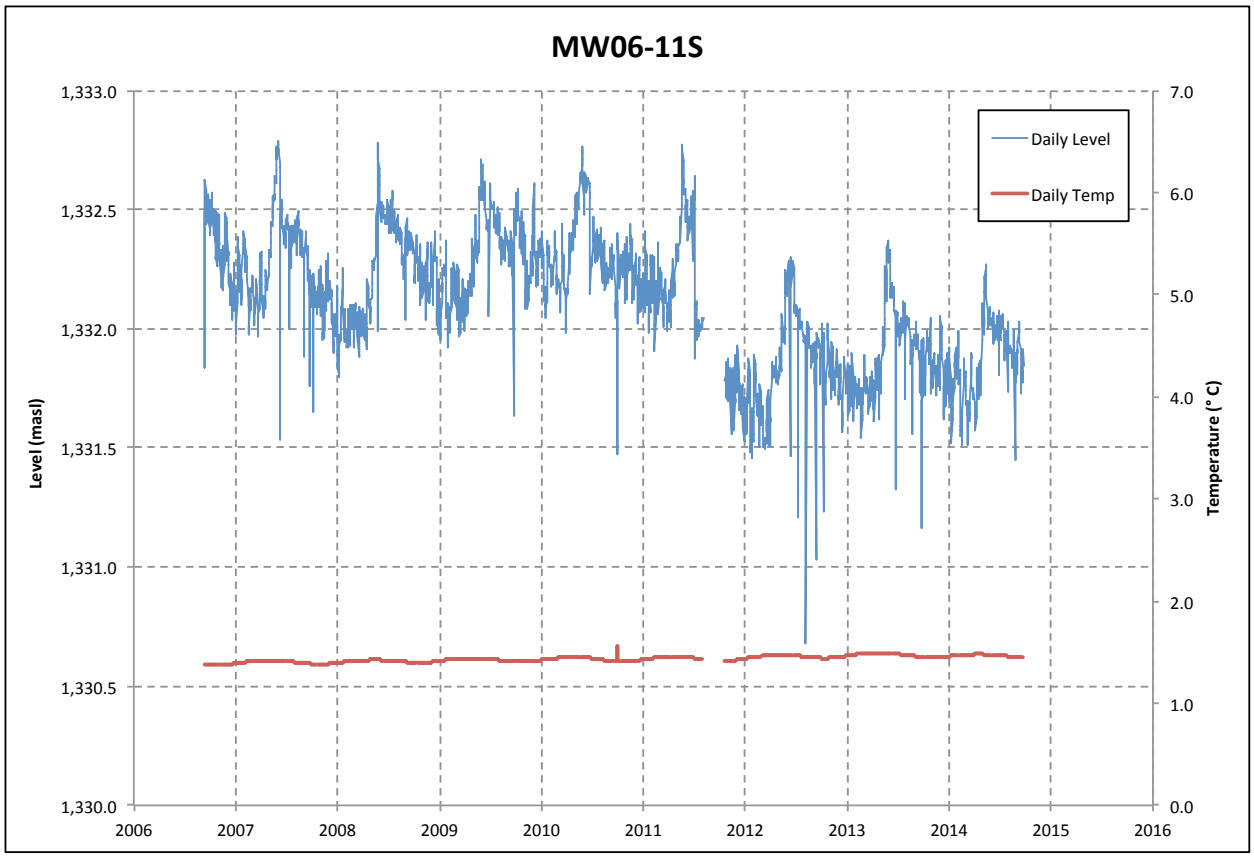


Figure 6-41: Water Levels and Temperature in Groundwater Monitoring Well MW06-11S

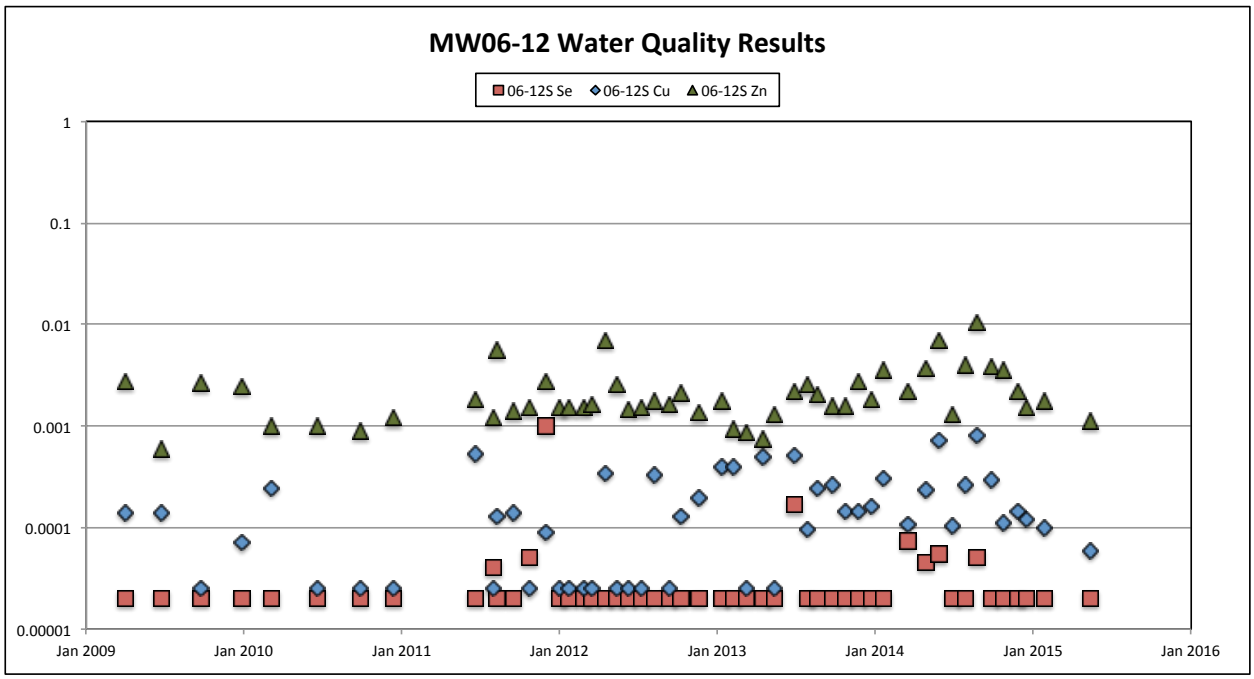


Figure 6-42: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Well MW06-12S

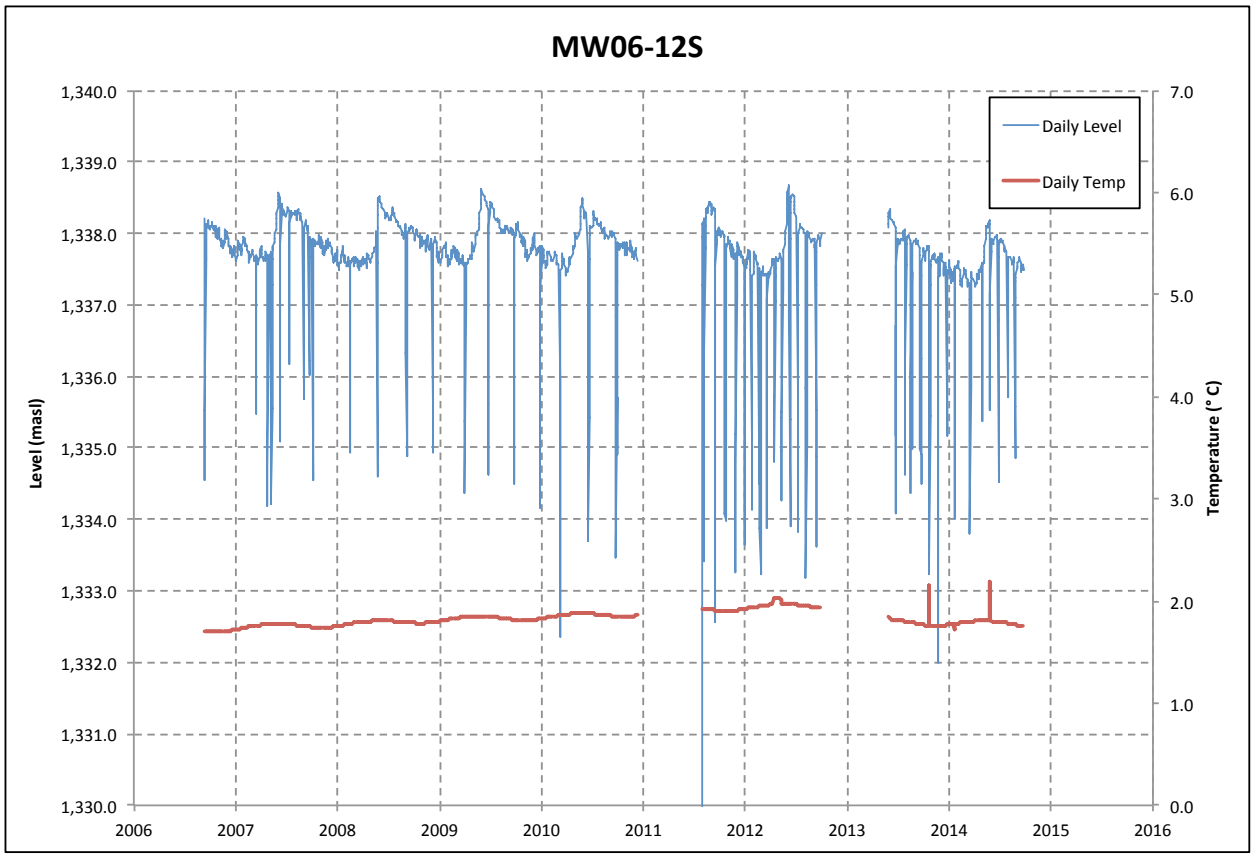


Figure 6-43: Water Levels and Temperature in Groundwater Monitoring Well MW06-12S

6.2.3 Go Creek

Groundwater monitoring is conducted in the Go Creek watershed in the headwaters of Go Creek (MW05-1) and upstream of the tailings facility on the north side of the access road (MW05-6). Water quality and levels are measured from the shallow bedrock (MW05-1A and MW05-6A) and alluvial (MW05-1B and MW05-6B) groundwater systems. Loggers are not installed in monitoring wells MW05-1A, MW05-6A, of MW05-6B as they are artesian, and have consistent water levels of 0 m above ground level.

Although variable, water quality in wells MW05-1 and MW05-6 have been comparable over the 2009 – 2015 monitoring period. Selenium concentrations in the shallow bedrock systems are typically less than the reportable detection limit, shown as ½ the detection limit in Figure 6-44 and Figure 6-45.

Water level and temperature in MW05-1B has been relatively consistent over the monitoring period. The gap in the data from 2013 and 2014 is due to removal of the logger in late 2012 and re-installation in the fall of 2014.

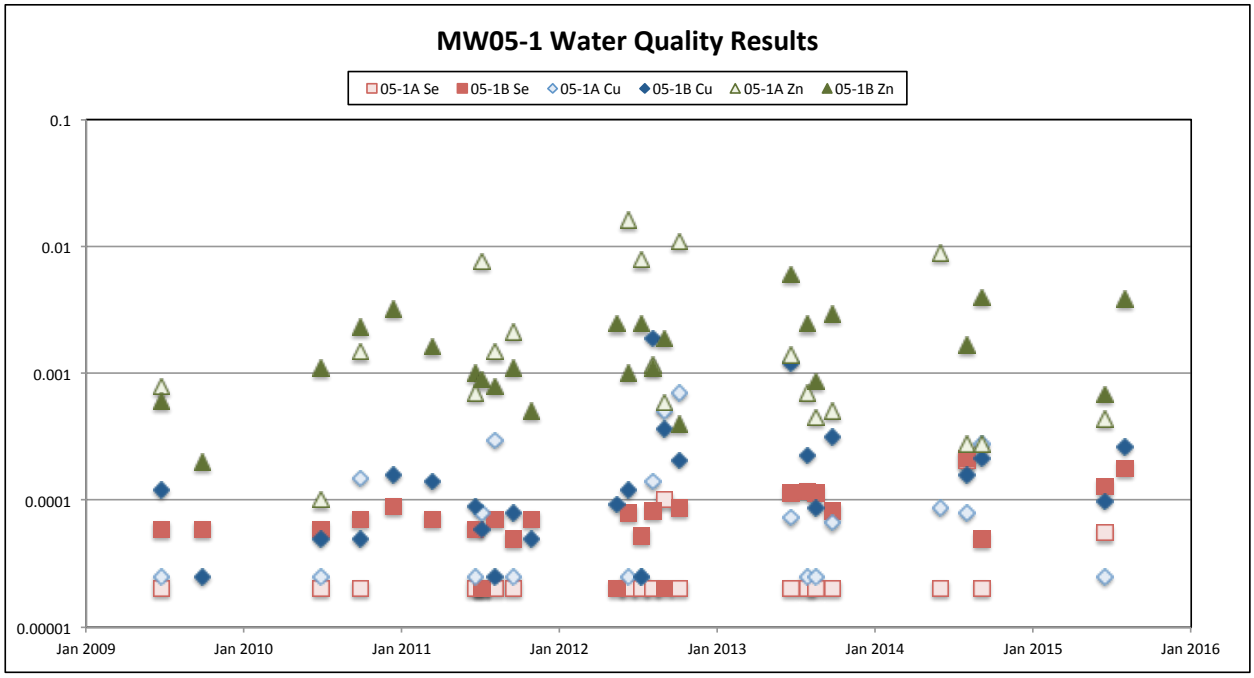


Figure 6-44: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-1A and MW05-1B

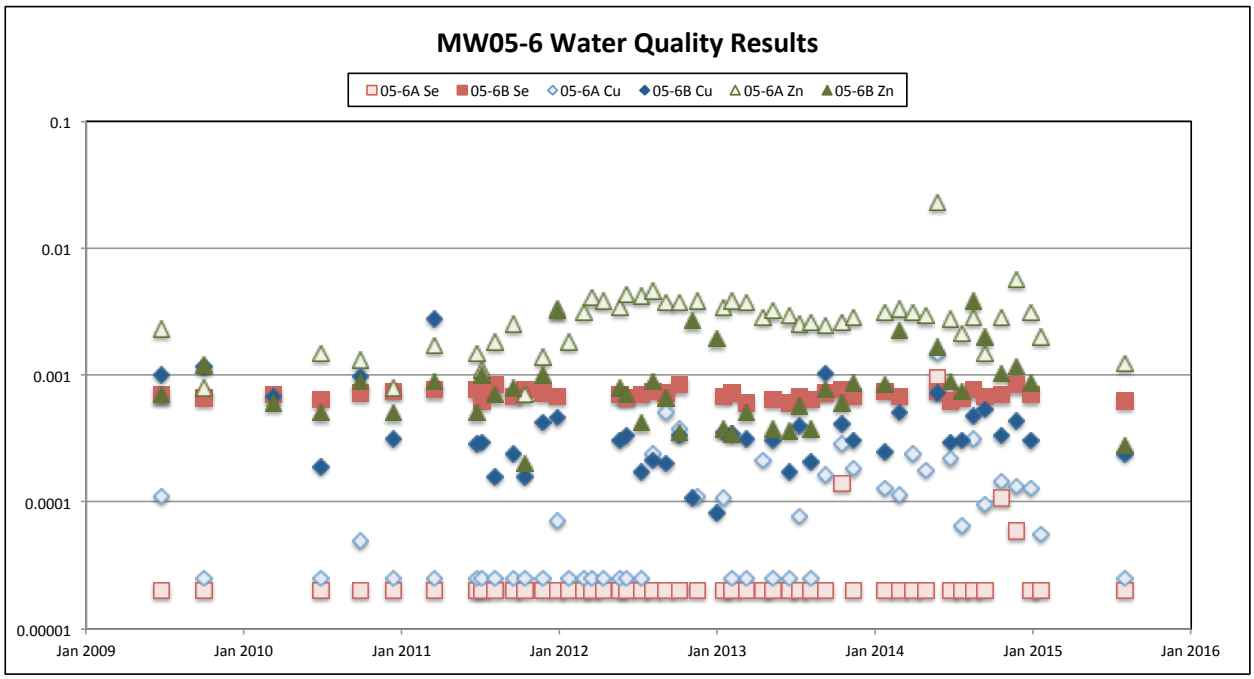


Figure 6-45: Copper, Selenium and Zinc Concentrations in Groundwater Monitoring Wells MW05-6A and MW05-6B

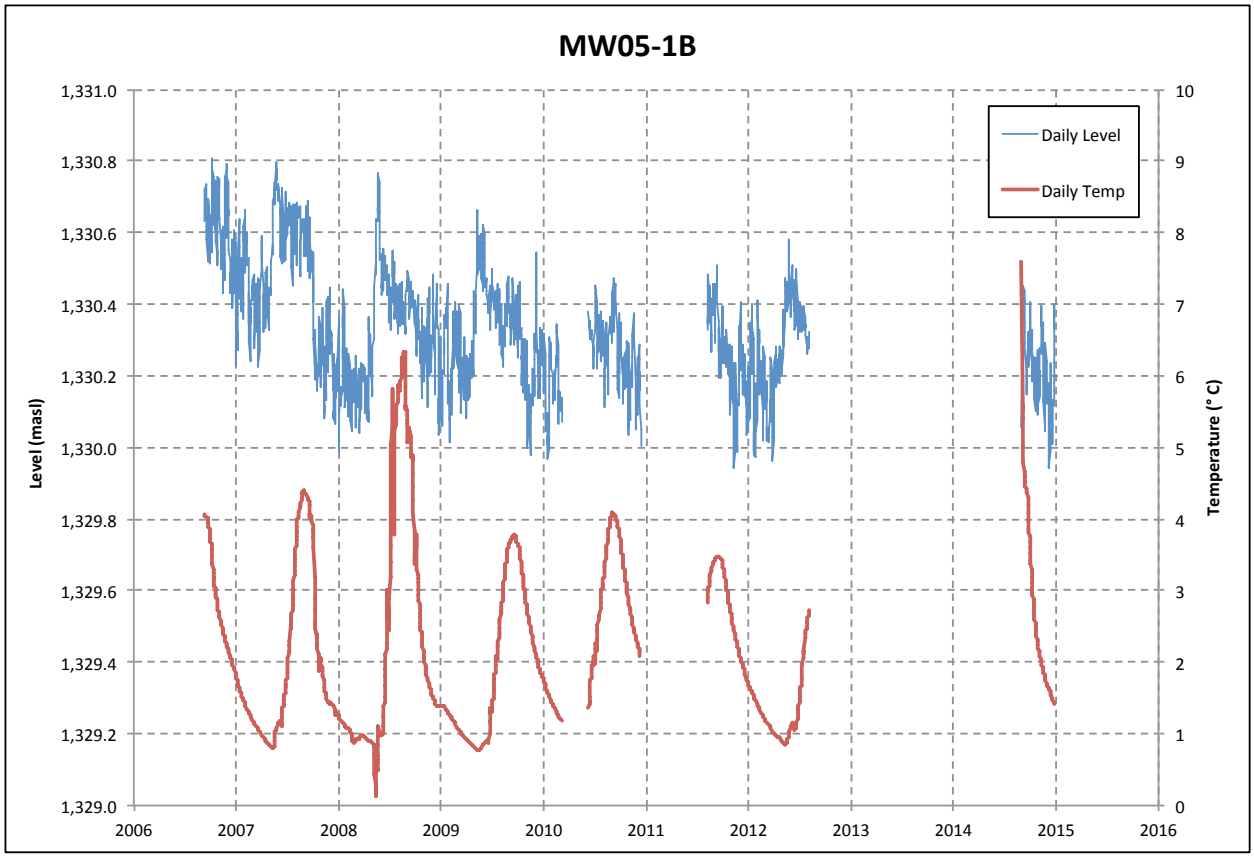


Figure 6-46: Water Levels and Temperature in Groundwater Monitoring Well MW05-1B

6.3 Piezometer Monitoring

Four vibrating wire piezometers are installed at two locations (PZA and PZB) above the underground mine. The piezometers measure the water table above the mine and results reveal the effect of underground mining on the water table. Both locations have one shallow and one deep piezometer, and the results for 2005 to 2015 are provided in Figure 3-7. Battery failure of the piezometers in 2009 resulted in gaps in the data. A malfunction was discovered with the PZA Deep sensor and data is corrupted after June 26th, 2014, therefore data is not continued to be presented.

The shallow PZA and PZB wells showed a slight decrease in elevation between 2007-2013. However, the deep PZA and PZB wells showed a marked decrease from 2009, which may be attributed to an intersection of the mining operations with the well, as noted by the mining personnel. PZB Deep showed a steady decline from 2008 to 2013, markedly decreasing in 2009 and 2013. PZA Deep shows the most significant decline of the four piezometers since 2008. The majority of this decline occurred during 2010 and 2011. Water level increases are seen shortly after summer rain events, even in the deep well installations.

Overall the underground development (started in September 2009) seems to have had a significant overall effect on the lower (or deep) aquifers, with little to no effect on the upper (or shallow) aquifers.

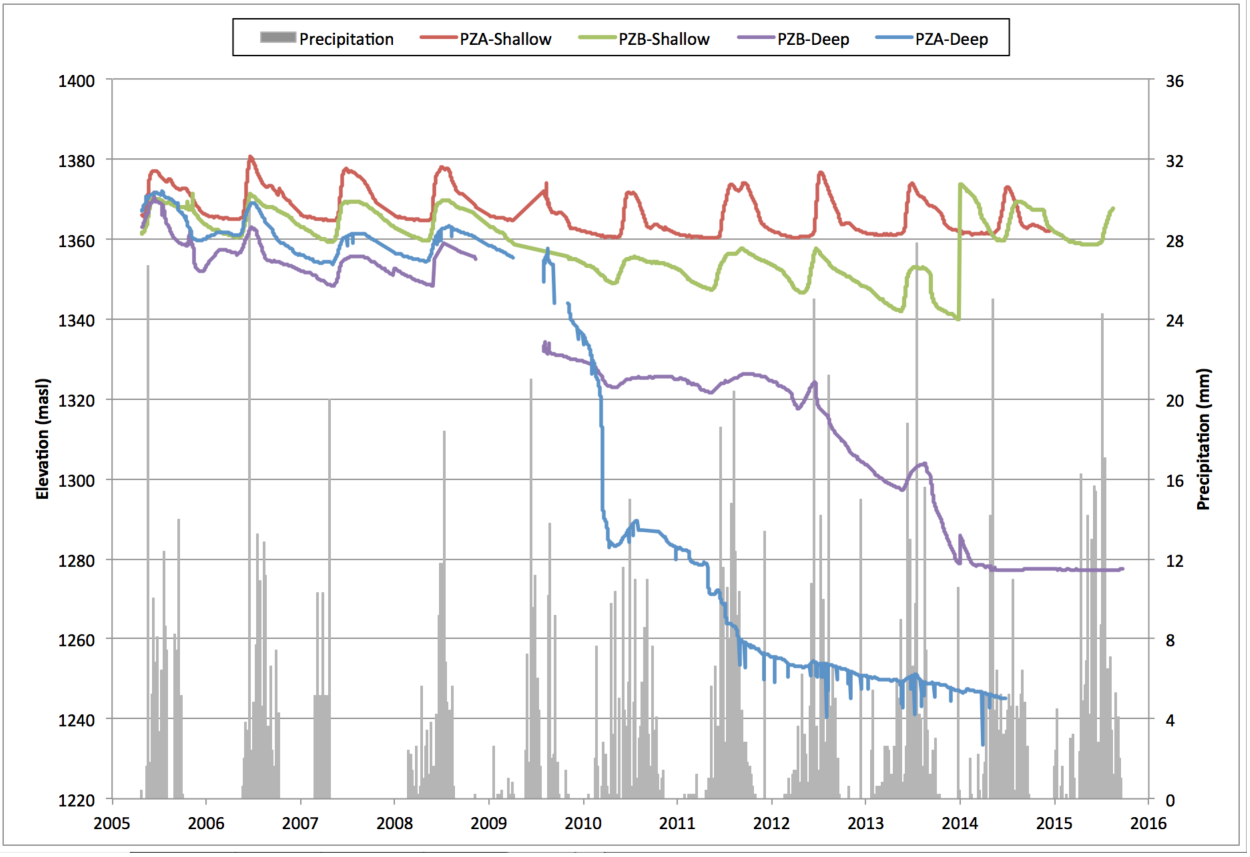


Figure 6-47: 2005-2015 Pieziometric Precipitation Data

6.4 Aquatic Life and Sediment

The Wolverine Mine triggered Environmental Effects Monitoring under the *Metal Mine Effluent Regulations* (MMER) in 2009. The MMER requires iterative cycles of EEM for the life of a mine project, with a particular focus on fish population and fish health studies, and water quality and benthic invertebrates. YZC submitted the *First Interpretive Report* in 2011 and a *Second Interpretive Report* in 2014. The *Third Interpretive Report* is due December 3, 2017, with the study design due 6 months in advance of the field study.

As such, no aquatic life and sediment sampling was conducted in 2015; but may be conducted in 2016 or 2017, depending on the MMER requirements.

6.5 Weather Monitoring Program

Weather monitoring at the Wolverine Mine consists of weather data, collected from an on-site weather station. Weather station data is collected from a HOBO Weather Station installed at the south end of the airstrip. Data collected from the weather station includes:

- Temperature;
- Pressure;
- Precipitation;
- Radiation in and out;
- Wind speed and direction; and
- Relative humidity.

Overall, as shown in Table 6-3, temperature and precipitation have been fairly similar at the Wolverine Mine since consistent recording started in 2007.

The mean monthly temperature for 2015 was 0.4 °C. Mean monthly temperatures were below freezing from January through April and October through December, and above freezing May through September. The minimum recorded temperature was -23°C and the maximum recorded temperature was 17 °C.

The daily precipitation as rain for 2015 is presented in Table 6-3. The HOBO weather station does not record precipitation that falls as snow, consequently only precipitation as rain is provided in Table 6-3. In 2014, June was the wettest month during the summer with 114 mm. The annual cumulative precipitation recorded as rain was 374 mm.

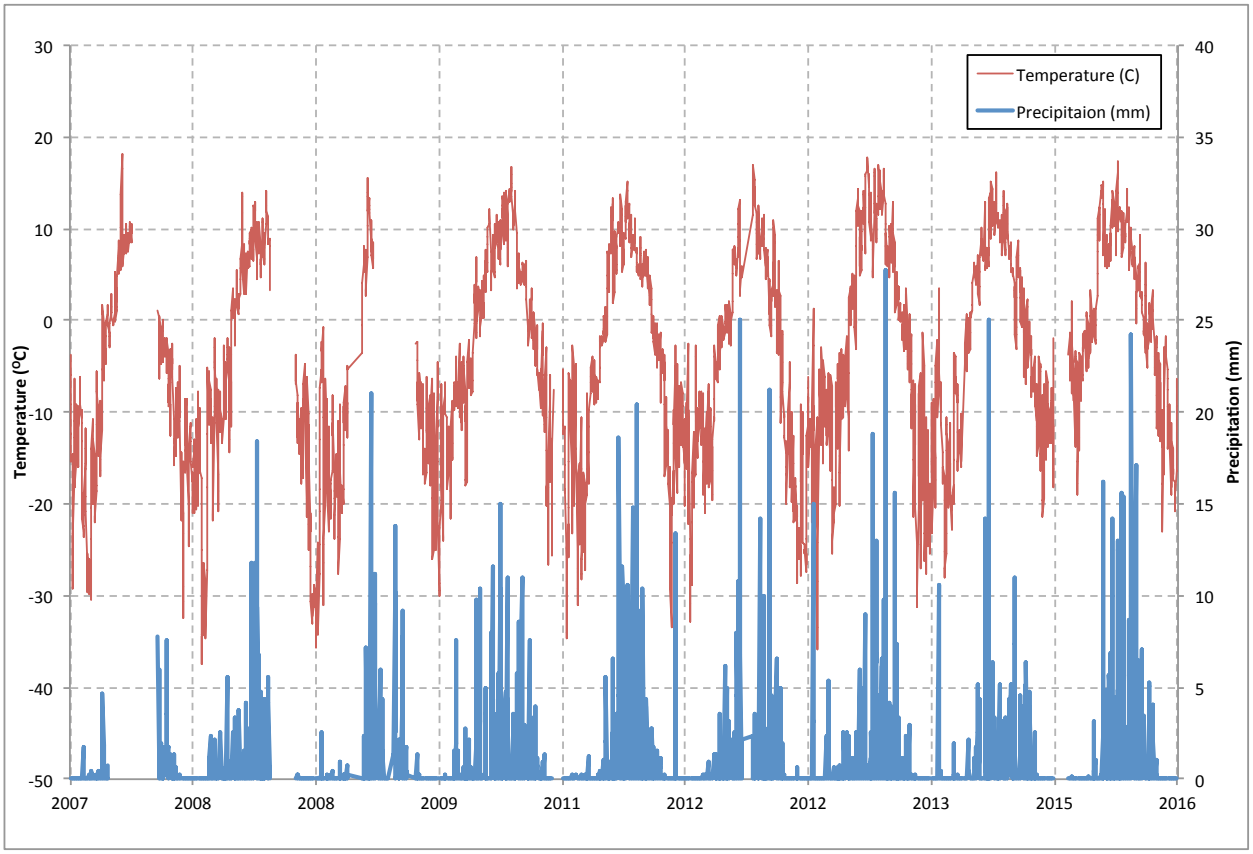


Table 6-3: Wolverine Mine Daily Precipitation and Average Daily Temperature 2007 – 2015

6.6 Wildlife Monitoring

Wildlife monitoring conducted during 2015 consisted of on-site recording of incidental wildlife observations, and documentation of any wildlife related incidents. In 2015 there was a single incident of a moose in the Tailing Storage Facility on top of the ice in December 2015. The moose escaped without interference from on-site staff and appeared to be unharmed.

7 Progressive Reclamation Effectiveness Monitoring Program

No progressive reclamation effectiveness monitoring has been conducted in 2015. Site activities were focused on minimizing liability under Temporary Closure conditions.

8 Biopass System

As outlined in RCP2015-06, the current closure plan includes various biopass systems to intercept contact water from various sources around the site. The systems will be based on the previous testwork completed by the Yukon College. The design of these proposed systems will be completed in 2016 with test systems installed on-site to evaluate the effects of in-situ conditions. More details are provided in Section 4.2.2 of the RCP2015-06.

9 Geochemical Testwork

Geochemical testwork at the Wolverine Mine was limited to humidity cell testwork, during construction. There were no construction activities in 2015, and no geochemical characterization samples were taken. These humidity cells have since been decommissioned. Humidity cells OA and OD were decommissioned February 3, 2012 and in April 2012 a request was sent to the Yukon Government Department of Energy, Mines and Resources to for approval to shut down the remaining seven operating cells. Approval to shut down the cells was received on May 11, 2012, and the cells were shut down in June 2012.

10 Environmental Incidents

There was one reportable spill (defined by the *Yukon Spills Regulations* as "a release of a hazardous substance to the environment in quantities above the spill reporting thresholds, or any amount of spill onto a watercourse") of glycol on June 8, 2015. The spill was immediately reported and the full spill report submitted to EMR within 10 days. A follow up report was submitted on June 17, which confirmed the complete excavation of the contaminated material

11 Socio-Economic Assessment

The EA Screening Report requires that YZC report annually on the following:

- The number of Yukoners and non-Yukoners employed at the mine; and,
- The value of goods and services procured from and payments made to Ross River, Watson Lake and the Yukon as a whole

Over the course of the year, 4 Yukoners and 5 non-Yukoners were employed at the Wolverine Mine by YZC and contracting companies.

The value of goods and services procured from and payments made to Watson Lake and the Yukon as a whole in 2015 is estimated at $5,284,503, not including outstanding payments (see Table 11-1). No payments were made to Ross River service providers in 2015 and the remaining suppliers were almost exclusively in support of C&M operations, including such major items as spare parts and supplies for site maintenance, fuel and food, plus a modest program of rock movement on site. Approximately 20 Yukon vendors were utilized during the year.

Table 11-1: Goods and Services Procured From and Payments Made to Ross River, Watson Lake and Yukon for 2014

Location	Amount
Ross River	-
Watson Lake	~ $204,815
Yukon	~ $5,079,688

*Outstanding payments are not included in this table.

12 Project Development and Production for 2016

There is currently no plan for development and production for 2016.

Appendix A: 2015 Annual Physical Inspection of TSF and On-Site Earth Structures, Klohn Crippen Berger Ltd. August 11, 2015

August 11, 2015

Yukon Zinc Corp.
#701 – 475 Howe Street
Vancouver, British Columbia
V6C 2B3

Malcom Swallow
Consulting Mining Engineer

Dear Mr. Swallow:

Wolverine Mine
2015 Annual Physical Inspection of TSF and On-site Earth Structures

1 INTRODUCTION

1.1 General

Wolverine Mine is a zinc-silver-copper-lead-gold underground mine, located in southeast Yukon within Kaska Traditional Territory approximately halfway between Watson Lake, B.C. and Ross River, Yukon. The mine reached its current production capacity of 1,700 tonnes per day in January 2013. Yukon Zinc Corporation (YZC), owner of Wolverine Mine, placed the mine into care and maintenance on January 21, 2015. As a result, there has been no mining or milling operation or tailings discharge in the Tailings Storage Facility (TSF) since January, 2015.

YZC is required to submit an annual Dam Safety Inspection (DSI) report on the TSF and an annual report on the visual observations of earth structures located on-site throughout the Wolverine Mine site as per Quartz Mining License QML-0006. Mr. Mohammad Al-Mamun of Klohn Crippen Berger Ltd. (KCB) carried out a site inspection on July 6 to 8, 2015. This letter report presents the findings from this inspection and includes a summary of the stability and status of inspected structures, and provides recommendations for remedial actions where necessary. Recommendations made in this report are compiled in Table 5.1 and Table 5.2.

1.2 Tailings Storage Facility

The TSF (Figure 1) was constructed to its current crest elevation of 1313.5 m in two stages. In Stage 1, the starter dam was constructed between 2009 and 2010 to elevation 1306.5 m and was commissioned in October 2009. The main facility components that were constructed in 2009 include:

- a 19 m high homogeneous earthfill dam constructed with borrow material excavated from the impoundment area;
- a 40 mil LLDP geomembrane liner over the impoundment area. The liner is anchored into the dam crest and perimeter of the impoundment in a ditch backfilled with soil; and,

Klohn Crippen Berger Ltd. • 500 - 2955 Virtual Way • Vancouver BC V5M 4X6 • CANADA
604.669.3800 t • 604.669.3835 f • www.klohn.com

CANADA'S BEST MANAGED COMPANIES Platinum member

- Diversion Ditch A and Diversion Ditch B, which direct non-contact runoff water around the impoundment.

The main facility components that were constructed in 2010 included:

- the reclaim pump barge and access ramp;
- tailings delivery pipelines and water reclaim pipelines;
- starter dam emergency spillway;
- seepage recovery pond dyke and water pump-back system; and,
- monitoring instrumentation.

In Stage 2 the dam was then raised to the crest elevation of 1313.5 m in 2012. The main facility components that were constructed in 2012 include:

- a 7 m high downstream dam raise;
- a 60-mil LLDPE liner on the raised impoundment;
- relocated Diversion Ditch A, to direct non-contact surface water around the impoundment; and,
- riprap lined emergency spillway.

The tailings impoundment has been accumulating water from runoff, mine discharge, and the sewage treatment plant since October 2009. Tailings were discharged to the impoundment from September 2010 to December, 2014. The volume of tailings and water at the time of the site visit was approximately 566,000 m^3 and 452,000 m^3 respectively, based on a pond bathymetric survey completed May 28, 2015 by YZC. The pond level was at elevation 1307.6 measured May 14, 2015 by YZC.

1.3 On-site Earth Structures

The list of other earth structures that was inspected was taken from Tetra Tech (2014)[1] and the scope of the inspection was limited to visual observation of the slopes of earth structures for signs of instability (cracks, erosion features etc.) and to take photos to compare with the Tetra Tech (2014) report. The on-site earth structures that were inspected are shown on Figure 2 and are listed below:

- Industrial Complex: Mill building pad, Fuel Tank and Genset pad – cut and fill slopes.
- Industrial Complex: Surface and underground water treatment Sumps (1, 2 and 5) - liners and slopes.

[1] Tetra Tech EBA Inc. 2014. "2014 Annual Observations of the On-site Earth Structures – Wolverine Mine Site, Southeastern Yukon", July 2014.

- Industrial Complex: Diversion Ditch 1 – cut and fill slopes.
- Industrial Complex: Collection Ditches (2, 3, 4 and 5) – liners, cut and fill slopes.
- Mine Camp pad area including upper generator and potable water treatment pad, Sewage Treatment Plant pad and Sewage Effluent Pond – liner, cut and fill slopes.
- Waste Rock and Ore Storage Facility including seepage collection sump and ore waste stockpile contained within the facility – liners, cut and fill slopes.
- Land Treatment Facility (hydrocarbon contaminated material) including runoff collection sump – liners and fill slopes.
- Vent Raise and Propane Tank pad – cut slopes.
- Truck Shop pad – cut and fill slopes.

1.4 Dam Classification

The Canadian Dam Association Dam Safety Guidelines (CDA 2007) were adopted to confirm the classification of the tailings dam for the TSF for seismic and flood protection criteria. The selected dam classification, based on the dam break analysis and assessment of consequences of failure is "High" to "Very High", and the criteria for Very High has been selected for design. The use of the Very High rating provides additional security for the long term performance of the tailings facility after closure.

The impoundment is designed to safely route the 1:10,000 year return period flood through the Stage 2 spillway located at the north end of the west dam. During operations, the tailings facility would also store the 1:200 year return-period flood event, without the release of water. The design earthquake is a 1:10,000 year return period, with a peak ground acceleration of 0.22 g. The minimum geotechnical factors of safety during operations are 1.5 for static stability and 1.1 for pseudo-static stability.

1.5 Documentation

The main documentation for the TSF includes:

- Yukon Zinc Corp., Wolverine Project, Tailings Facility, *Operations, Maintenance and Surveillance (OMS) Manual*, V2010-01, August 2010.
- Klohn Crippen Berger Ltd. (2009). *Wolverine Project - Tailings and Related Infrastructure Design and Construction Plan, V2009-02.* Vancouver: Klohn Crippen Berger Ltd.
- Klohn Crippen Berger Ltd. (2010). *Wolverine Project – Starter Tailings Storage Facility – 2009 Civil Works Construction Summary Report.* Vancouver: Klohn Crippen Berger Ltd.
- Klohn Crippen Berger Ltd. (2011). 2010 Civil Works Addendum to *Starter Tailings Storage Facility – 2009 Civil Works Construction Summary Report.* Vancouver: Klohn Crippen Berger Ltd.

- Klohn Crippen Berger Ltd. (2012). *2012 Civil Works Construction Summary Report.* Vancouver: Klohn Crippen Berger Ltd.
- Klohn Crippen Berger Ltd. (2014). *2014 Annual Tailings Facility Physical Inspection*. Vancouver: Klohn Crippen Berger Ltd.
- Yukon Water Board. (2007, October 4). Type A Water Use Licence QZ04-065. Whitehorse, YT, Canada.

YZC provided KCB with Monthly Impoundment Monitoring Reports for the TSF which conform to Operations, Maintenance and Surveillance (OMS) Manual requirements. The OMS Manual was last updated in July 2010, before the facility was raised to its current crest elevation. A review of the OMS Manual to reflect the current state of the TSF is recommended.

For the on-site earth structures the following document was reviewed:

- Tetra Tech EBA Inc. (2014). *2014 Annual Observations of the On-site Earth Structures – Wolverine Mine Site, Southeastern Yukon*. Whitehorse, YT.

2 SITE INSPECTION OBSERVATIONS

2.1 General

A walkover inspection was carried out during the July 6 to 8, 2015 site visit. Visual observations of various components of the TSF and on-site earth structures were made. Weather during the walkover was sunny. Select photos of the TSF and on-site earth structures are provided in Appendix I and Appendix II, respectively and detailed field notes and inspection checklist is provided in Appendix III. This section provides a brief summary of key observations for the TSF and on-site earth structures.

2.2 Tailings Storage Facility

2.2.1 Dam

The south and west side of the TSF was raised with a homogeneous earth fill section. The height of the dam varies between 8 m and 26 m with the maximum height along the southwest corner. The slope of the dam is 2H:1V and the design crest width varies between 5m and 6 m. Both the south and west dam are in good condition and there was no sign of settlement, cracking or slope movement that could be a slope stability concern.

There were signs of localized erosion along the dam crest and downstream slopes. Erosion gullies originated along the downstream edge of the dam crest were in the order of 10 cm to 30 cm wide and 10 cm deep. Most of the erosion was observed along the south dam and north side of the west dam. The crest width of the dam was approximately 4 m at several spots along the north side of the west dam indicating continuing erosion of the dam crest. There were 10 cm to 15 cm deep ruts on the dam crest which can pond water after rain storm. Erosion of the dam crest and downstream slope will continue and may cause significant crest loss if some erosion protection measures (such as

vegetation) are not undertaken. The crest of dam should be graded to avoid ponding water and further erosion.

2.2.2 Stage 2 Dam Emergency Spillway

The spillway would only be used during an extreme event (e.g. >200 year flood) when the impoundment is near full storage capacity. The spillway is located within natural ground. The spillway outlet consists of a riprap lined channel through the dam crest.

Currently the spillway channel reports to the east ditch along the Mine Haul Road. The closure spillway design extends the flow channel across the Mine Haul Road to report to the existing catch basin above Go Creek. YZC will extend the spillway to the catch basin for closure. The rip-rap in the spillway was in good condition. There is a piece of 8 inch insulated tailings line left at the downstream end of the spillway which is blocking the flow path and should be removed.

2.2.3 Impoundment Area and LLDPE Geomembrane Liner

The liner was generally in good condition with no sign of tear or puncture. Anchor of the liner along the crest was in good condition except at the north end where anchor is damaged due to a slip in the TSF wall. Further details on this slip along the north slope are provided in Section 4. YZC inspects the liner for defects as a part of routine surveillance as laid out in the OMS. Defects are not considered a concern provided they are small and patched when they are found.

2.2.4 Liner Underdrains

The liner underdrains, which consist of a French drain with a perforated pipe under the liner and two solid pipes under the dam, are performing as designed. At the time of the site visit there was no inflow into the underdrains at the upstream end of the impoundment.

The flow out of the underdrains daylighting downstream of the seepage dam is approximately 5- 7 L/s, similar to flows observed during the 2014 DSI. Rip rap along the outlet area was in good condition.

The purpose of the underdrains was to relieve uplift pressure on the liner during construction. As the impoundment becomes full, and the weight of water and tailings increases, the requirement for the underdrain diminishes and they could be decommissioned at a later stage of operations.

2.2.5 Seepage Recovery Pond and Dyke

The seepage recovery pond is a contingency structure which was installed to provide further security against the very low risk of impoundment seepage. The dam is formed by the mine access road and extreme flood flows are routed through a spillway culvert through the dam. The seepage impoundment area consists of an irregular pond partially shaped by areas excavated for construction of the main dam and the natural topography. No water quality data was reviewed but YZC's monthly monitoring reports for the current reporting period indicates water in the seepage collection pond were pumped back into the tailings impoundment at an average rate of 370 m^3 per month during the month of June and July 2014 and there were no pumping between August 2014 and April 2015.

The spillway culverts in the seepage pond exits into a rockfill channel-stilling area, which flows towards Go Creek. The rockfill appeared to be in good condition and will function to control erosion during extreme events.

Seepage collection ditches along the toe of the dam were dry. There was ponded water along the south side of the west dam from recent rain but no seepage was observed from any of the dam faces or abutments.

2.2.6 Diversion Ditch A and Diversion Ditch B

Diversion Ditch B that runs along the east side of the tailings impoundment was dry. The soils in the base of the ditch and along the slope that the ditch traverses are relatively pervious and most of the runoff from the upslope area appears to infiltrate into the slope. The ditch exits into a culvert, which extends down the slope towards the toe of the seepage dam, where it outflows into a rockfill stilling basin. The stilling basin was in good condition and the observed flow from the culvert was approximately 0.1 L/s.

Diversion Ditch A was reconstructed in 2014. The stretch of the ditch that runs along the north end of the TSF was lined and a new stilling basin was constructed at upstream the end (Figure 1). The ditch was flowing at approximately 1 m wide by 10 cm deep. The liner was generally in good condition but was not anchored properly to the crest of the ditch. The liner was loose and was exposed to erosion and should be anchored. The channel bottom along the lined part should be cleaned of debris to maintain flow capacity. The ditch exits into a culvert and rockfill stilling basin. The stilling basin was in good condition.

2.2.7 Other Infrastructure

The tailings delivery pipelines were in place to the northwest side of the impoundment and there was no tailings discharge at the time of the site visit.

The tailings water reclaim pump barge and pumps are in place at the south end of the impoundment. A thick conveyor liner has been placed under the ramp to protect the geomembrane liner. No areas of liner damage were observed.

2.2.8 Waste Rock Pad #2

North of the tailings facility is a temporary lined waste rock storage pad. The diversion ditches were dry but appeared to be functional. The service layer above the liner which had not been covered by waste rock was washed out and loose. Since the waste rock is currently being removed and complete removal of the stockpile is planned, remediation of the reduced service layer is not required, provided care is take during operations near the liner, and any damage to the liner is repaired. Seepage collected from the waste rock pad is discharged to TSF via a 4 inch line.

2.3 On-site Earth Structures

Visual observations of all on-site earth structures listed in Section 1.3 indicated the cut and fill slopes and the liner (where present) were generally in good condition. Large erosion gullies, tension cracks

were observed in several cut and fill slopes and a number of culvert inlets were completely plugged with debris. A brief summary of field observations are provided below. Further details on the field observations for all earth structures are provided in Appendix III.

- Mill building – large erosion channel along the southeast corner of downslope observed in 2014 was not repaired; there was no photo record available from 2014 inspection for comparison, but it appears to be deteriorated as surface runoff from the Mill pad accumulates and drain through this gulley.
- Sinkhole around a manhole upslope of the MSE wall – This manhole is located up slope of the MSE wall by the conveyor belt which collects surface runoff from Ditch 5. A sinkhole was developed around this manhole after a recent heavy rainstorm. The sinkhole was backfilled with rock fill at the time of the inspection. The reason for the sinkhole formation is unknown, but it could be caused by leakage in the manhole or the culvert that outflows into the manhole. YZC should monitor this area and identify the root cause of the sinkhole to prevent future washouts.
- Sump 2 – The liner was in good condition but a bulge was visible in the cross dam due to groundwater. A high water level could destabilize the dam and should be lowered by pumping.
- Ditch 1 – A 20 m long tension crack was visible along crest of the ditch embankment. There was no sign of instability in the down slope or in the toe, but this area should be monitored and repaired as required. The inlet of the culvert that diverts surface runoff to downslope of the Mill pad was completely plugged with debris and should be cleaned. There was construction litter and debris in the ditch bottom, which should also be cleaned to maintain the flow capacity of the ditch.
- Ditch 2 –The inlet end of the culvert that diverts surface runoff downslope of the Mill pad was completely plugged and should be cleaned to convey runoff from the Mill pad, particularly after spring melt and heavy rainfall events.
- Ditch 4 – This ditch was lined in 2014 and 2015, but the liner was not anchored properly. The end of liner on the channel crest was covered with un-compacted fill, which may erode during a large rain event. The liner should be keyed to the channel crest to prevent further damage. The ditch bottom was filled in with debris washed from the upslope and should be cleaned to promote flow.
- Camp pad – Five large erosion gullies in the downslope along the south side back were backfilled with rock fill, but need to be monitored and repaired as required.
- Vent Raise and Propane Tank pad – The cut slope behind the underground mine office is very steep but there was no signs of instability (crest of the slope was not inspected). This slope should be monitored for instabilities, particularly in the upper part where bedrock overlies more erodible surficial units.
- Truck Shop pad – A large erosion channel in the fill slope near the west corner of the Truck Shop building should be repaired.

3 INSTRUMENTATION REVIEW AND WATER BALANCE UPDATE FOR TSF

3.1 Instrumentation

Instrumentation for the dam consists of piezometers, survey pins and inclinometers. Piezometers (Figure 1) were installed in both the dam foundation and the dam fill. In general, piezometric levels in the foundation are about 2 m below the foundation elevation. Piezometric levels in the dam fill are about 2 m above the foundation level. Elevated groundwater levels in April, May and June are due to seasonal changes, and there appears to be a pattern to these fluctuations over the past four years. All water levels are within parameters required for stability (i.e. below "yellow trigger" levels defined in the OMS Manual) except the following:

- PZ-10-03 indicated a spike in pore water pressure reading in May and June, 2012 has now dropped below the yellow trigger level.
- PZ-10-02 located close to the left abutment (southeast corner) indicating a gradual increase in pore pressure in the dam since early 2012. The pore pressure level was elevated approximately 2m between June 2014 and December 2014 and has dropped since then. This increase in pore pressure does not appear to be related to the Stage 2 dam raise which occurred between June and August 2012. The elevated pore pressure is still below the "yellow trigger" level. The pore pressure level in this piezometer should be closely monitored and the reason for this gradual increase should be considered.

The piezometer data is presented in Appendix IV.

Two inclinometers (Figure 1) were installed in the downstream slope of the dam. Both inclinometers have been damaged. The inclinometer data collected to date has not indicated any significant slope movement. Since there is no new data since 2013, inclinometer data are not added to this report.

YZC installed five survey monuments September 2014 (Figure 1). These survey monuments were surveyed on a monthly basis until January, 2015. The complete data set was not available for review at the time of the preparation of this report.

3.2 Water balance

The water balance was reviewed and updated with as-built data from the Monthly Monitoring Reports, pond bathymetric survey and updated forecasts were made for current care and maintenance state. It was assumed that there will be no pumping of water from the underground operations to the TSF and inflow from the Sewage Treatment Plant (STP) would be much less during care and maintenance period. The water balance indicated that the TSF can hold all inflows until July 2020 without an overtopping of the Stage 2 spillway. This includes 0.3 m of storage for 200 year flood event. If the water treatment plant is operational by May, 2019, the pond elevation can be maintained to elevation 1311 m by treating at an average rate of 35 m^3/hr for 6 months out of the year. This will allow YZC to manage release times to best take advantage of natural high flow periods to limit the impact of introducing additional flows.

The updated water balance is presented in Appendix V.

4 ASSESSMENT OF SLUMP ALONG NORTH WALL OF THE TSF

4.1 Progression of Slump

A slump along the north wall of the TSF has progressed to its current state over the last few years. A brief summary of field observations since 2013 is provided below and shown on Figure 3:

- 2013 observations: In the 2013 DSI cracking ranged from 1 mm to 7 mm wide was observed in this area along the crest of the impoundment. These cracks were not deeper and there was no slump or damage to the anchor of the liner noted.
- 2014 observations: In the 2014 DSI both a slump and tension cracks were reported in this area. The length of the liner affected by the slump was approximately 3 m along the anchor trench. Cracking observed in 2013 was reported to be reopened and was approximately 100 m long parallel to the crest and was 1 mm to 10 cm wide.
- 2015 observations: Slump along the anchor trench noticed in 2014 has deteriorated in 2014/15 and was approximately 14 m wide. The crest of the impoundment has been completely eroded with complete loss of anchor. Approximately 1.5 m of crest has been lost along the slump. The total height of tailings and water at the toe of the impoundment slope along the north end is less than 2 m and there was visible sign of distress in the slope underneath the liner under the slump and approximately 75 m west of the slump along the crest. At the slump location it appears soil underneath the liner has slid towards the downslope and created a bulge shape. No damage to the liner was visible due to this bulge except a puncture from an exposed rock (<5 cm). Tension cracks approximately 30 m long are visible upstream of the slump area but appear to be filled in with soil and are less than 10 cm deep.

4.2 Cause of Slump

During 2013 and 2014 DSI observations, the slump was primarily attributed to poor surface water control and it was assumed that seepage through the bottom of unlined Ditch A and surface cracks was causing this slump. In 2014 YZC re-graded this area and lined Ditch A which improved overall surface water control and prevented seepage through the ditch bottom. However, the slump has deteriorated further since then, indicating that surface water may not be the only cause for this ongoing cracking and slump. The groundwater table in this area was known to be elevated as observed during the construction stage. A number of seeps were observed along the impoundment slope during construction and an underdrain system was placed to collect and convey this seepage. Currently there is no monitoring well upstream of the north end of the TSF to estimate the groundwater level and it is unknown how effective the underdrain system has been. Since there is no tailings to buttress the impoundment slope a higher groundwater table can destabilize the slope. In addition surface water can still seep through the open cracks and the slump area particularly during

the spring melt and the near surface soils may undergo freeze and thaw cycles that exacerbate the slump.

The slump appears to be localized along the TSF slope and caused by an elevated water level. No tension cracks were observed upslope of the slump area in the crest or the waste dump during the site visit indicating a deep seated failure mechanism.

4.3 Potential Risks

The progression of the slump observed over the last three years indicates it can further widen laterally (along east west direction) which would cause further crest and anchor loss. If the slump becomes very wide (in the order to 50 m to 100 m) a larger portion of the TSF slope could fail casing a severe distress in the liner. Soil from upslope may slide towards the toe and can damage the liner. A leakage in the liner could allow seepage from the TSF to groundwater. Although the depth of tailings and water is quite low along the north end, a larger crack or a large number of punctures may compromise the integrity of the liner.

The potential risk to the TSF due to this slump should be reviewed in the context of YZC's plan for potential use of the facility going forward. In the short term (order of one to two years) the slump is expected to further deteriorate if no remedial measures are taken, but this would not cause any obvious risk to the TSF if the liner is not damaged severely. However, in the longer term, if YZC wants to deposit tailings as planned following a re-opening of the operation, the risk to the TSF due to the deteriorating slope will need to be reviewed within the context of its ability to safely store tailings and water.

4.4 Remediation Options

Selection of remediation options depends on understanding of the root cause of the slip and YZC's plan for the TSF. Preliminary assessment completed for this letter indicates groundwater level in this area may be one of the key contributing factors. But further monitoring is required to confirm this which may include installation of monitoring wells and or piezometers along the upstream of the slump.

In the short term YZC should do the following:

- Cover the entire slump area and cracks with a liner or equivalent product to prevent ingress of water from heavy rain events and spring melt. This cover should be placed before the winter season begins.
- Monthly survey of the slump area during the summer months.
- Visual monitoring on a weekly basis during the summer months.
- Immediately repair any damage to the liner caused by the slump.

In the long term, if the monitoring data confirms elevated ground water level as the root cause of the slump; then the following remedial measures may be considered to repair the slump area:

- Upstream remediation: install a pumping system upstream of the slump area to lower the groundwater table.
- Downstream remediation: cut the existing liner from the slump area, excavate the slope, rebuild the slope with granular backfill to drain ground water to the existing underdrain system and replace the liner.

Long term remedial measures are not recommended at this stage and YZC should implement the short term measures and monitor the slump area as outlined above.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 TSF

The tailings facility is performing as expected. The dam structure appears stable and no dam safety concerns were observed.

The main recommendations are summarized in Table 5.1. Deadlines for action on the recommendations have been categorized as:

(A) requiring attention within 3 months; or

(B) requiring attention within 12 months.

Table 5.1 List of Recommendations from 2015 Annual Inspection-TSF

No.	Recommendation	Deadline for Action
TSF-15-1	Continue to operate the facility as described in the Operation, Maintenance and Surveillance Manual V2010-01.	B
TSF-15-2	Include regular monitoring of the slumping and cracking at the north end as a part of regular surveillance of the facility. Cover the slumped area with geomembrane liner or similar product to prevent ingress of water from rainfall and spring melt.	A
TSF-15-3	Prepare a plan for erosion control for dam crest and downstream slope.	B
TSF-15-4	Monitor Piezometer PZ-10-02 to confirm the trend in the pore pressure response. If the pore pressure continues to rise review the risk of elevated pore pressure on dam stability and develop a mitigation plan as required.	B
TSF-15-5	Review OMS Manual and Update to reflect current status.	B
TSF-15-6	The next Dam Safety Inspection should be in 1 year.	B

5.2 On-site Earth Structures

The cut and fill slopes for the on-site earth structures are performing as expected with no sign of major instabilities. The erosion gullies, tension cracks and sloughing noted in this report should be

monitored and repaired to prevent any significant slope loss that can lead to a slope failure. The liners in the ditches and sumps were in good condition; however, debris build up in the ditch bottom and the culvert inlets should be cleaned periodically to maintain good flow conditions. The main recommendations from this inspection are summarized in Table 5.2.

Table 5.2 List of Recommendations from 2015 Annual Inspection – On-site Earth Structures

No.	Structure	Recommendation	Deadline for Action
M-15-1	Mill Building pad	Repair the large erosion gully in the downslope (south east corner) to prevent further deterioration from spring melt and runoff from heavy rainfall event.	A
M-15-2	Sump 2	Monitor the bulge in the liner in the cross dam and develop a mitigation measure to lower groundwater table, such as pumping.	B
M-15-3	Ditch 1	Monitor the tension crack on the ditch embankment and repair as required. Clean the culvert inlet and the construction litters and debris from the ditch bottom.	A
M-15-4	Ditch 2	Clean the plugged culvert inlet.	A
M-15-5	Ditch 4	Properly anchor the ditch liner by keying in along the ditch crest.	A
M-15-6	Camp Pad	Monitor five erosion gullies located along the south slope and repair as required.	B
M-15-7	Truck Shop pad	Repair the erosion gulley in the downslope located west corner of the Truck Shop pad.	A

6 CLOSING

This report is an instrument of service of Klohn Crippen Berger Ltd. The report has been prepared for the exclusive use of Yukon Zinc Corp. (Client) for the specific application to the dam safety inspection of the Wolverine Mine Tailings Facility and an annual report on the visual observations of earth structures located on-site throughout the Wolverine Mine site as per Quartz Mining License QML-0006. The report's contents may not be relied upon by any other party without the express written permission of Klohn Crippen Berger. In this report, Klohn Crippen Berger has endeavored to comply with generally-accepted professional practice common to the local area. Klohn Crippen Berger makes no warranty, express or implied.

Yours truly,

KLOHN CRIPPEN BERGER LTD.

Mohammad Al-Mamun, M.Eng., P.Eng. (B.C.)
Senior Geotechnical Engineer

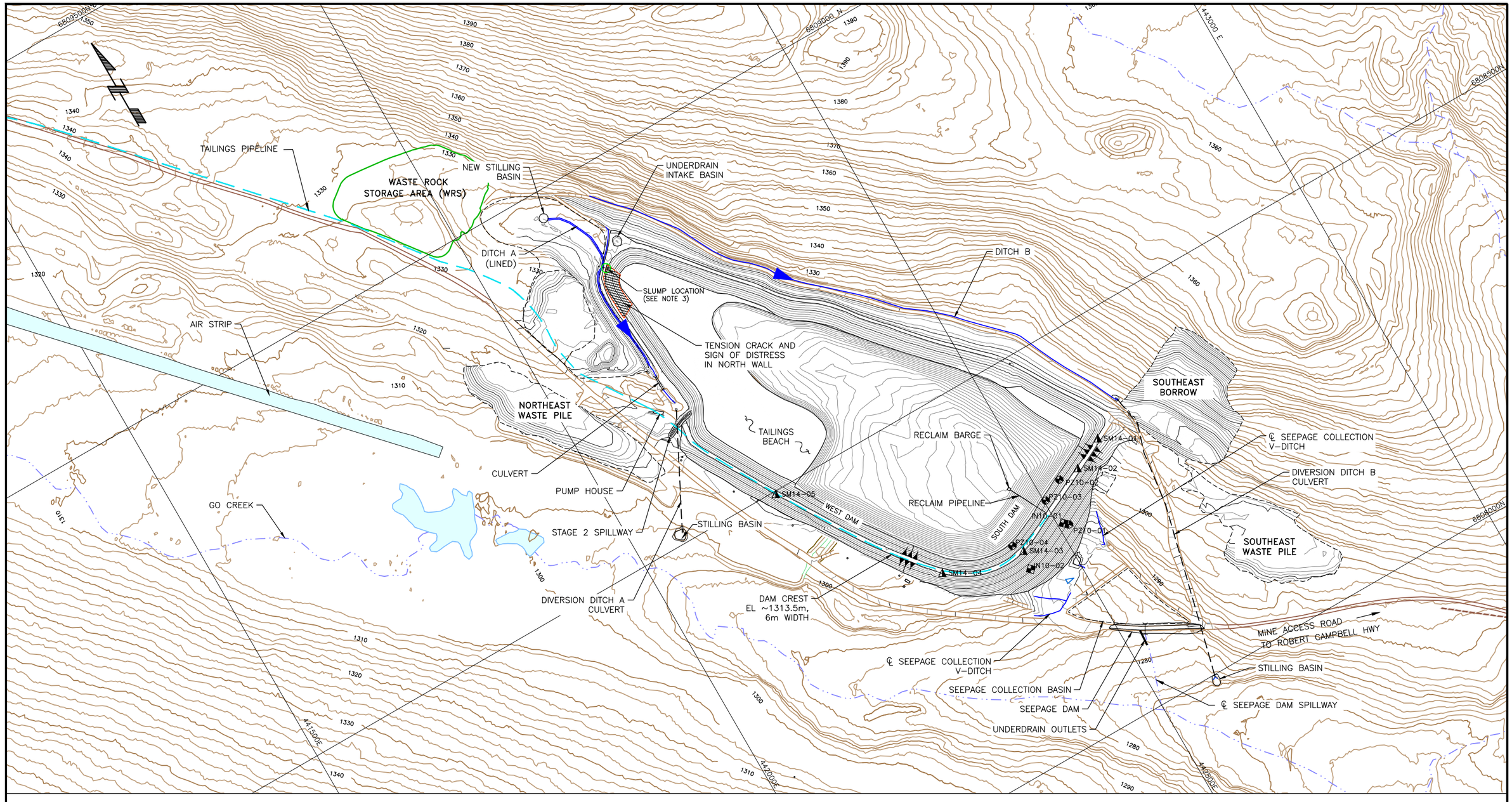
PROFESSIONAL ENGINEER YUKON H. N. McLEOD TERRITORY

Harvey McLeod, P.Eng. (Yukon)
Project Director

LC: jcp

Attachments: Figures 1 to 3
Appendix I - Photo Record -TSF
Appendix II – Photo Record – On-site Earth Structures
Appendix III –2015 Annual Inspection- Checklists and Field Notes
Appendix IV – Piezometric Water Levels
Appendix V – Water Balance

FIGURES



LEGEND

- PIEZOMETER
- INCLINOMETER
- SURVEY MONUMENT
- DITCH (LINED)
- DITCH (UNLINED)

NOTES:

1. NOT ALL CULVERTS HAVE BEEN SHOWN.
2. ALL ELEVATIONS IN METRES.
3. LOCATION OF THE SLUMP WAS TAKEN BY HANDHELD GPS UNIT.
4. TSF AS-BUILT PROVIDED BY YZC SEPT. 2012.

AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.

CLIENT: Yukon Zinc CORPORATION

Klohn Crippen Berger

PROJECT: WOLVERINE MINE 2015 ANNUAL INSPECTION

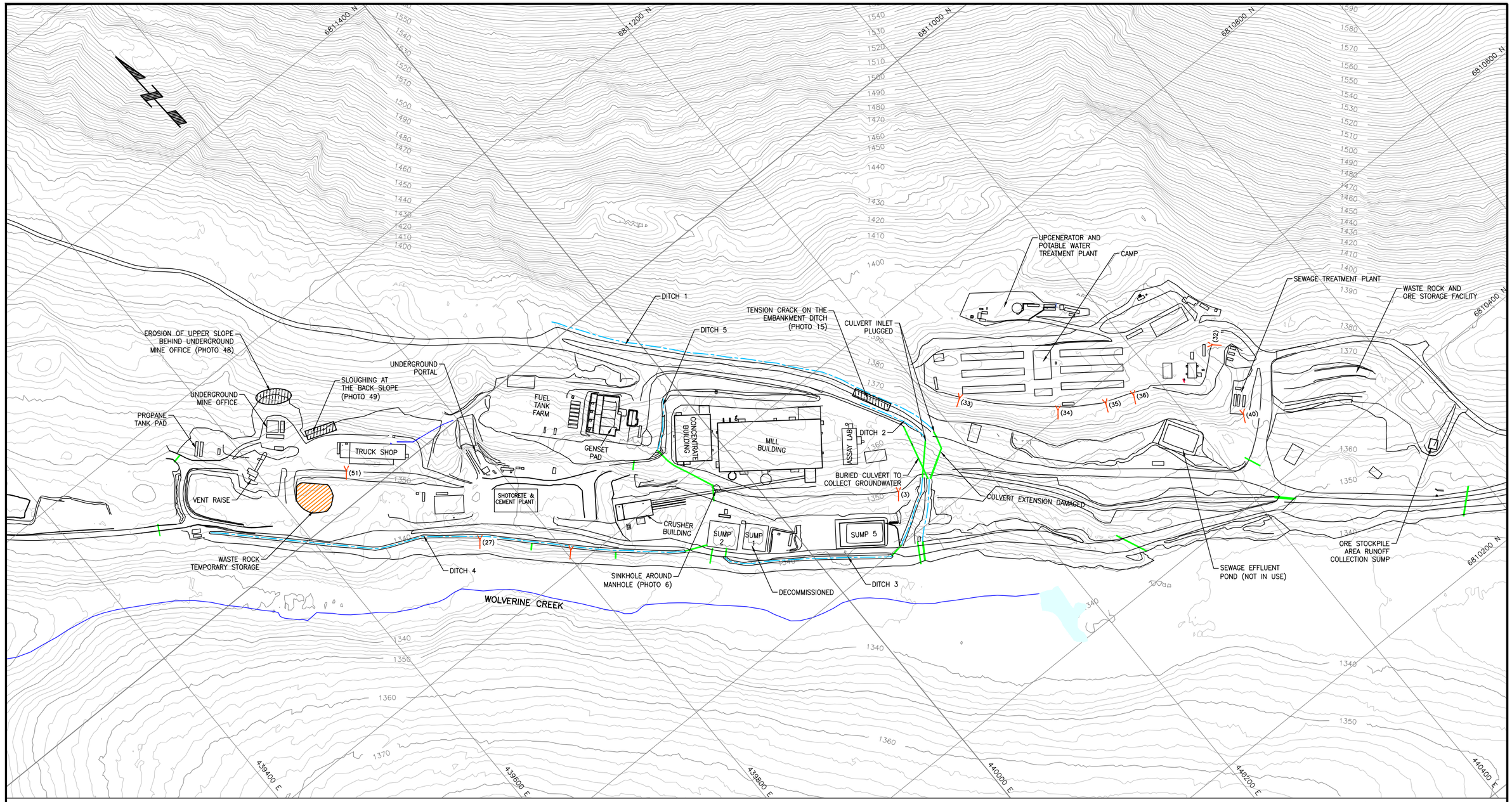
TITLE: SITE PLAN
TAILINGS STORAGE FACILITY (TSF)

SCALE	PROJECT NO.	FIG. NO.
AS SHOWN	M09234A11	1

CANCEL PRINTS BEARING PREVIOUS REVISION

KCB-DWG-D-L

Time: 13:30:55
Date: 7/27/2015
Scale: 1:1(PS)
Drawing File: Z:\M\VCR\M09234A11-YZC-Wolverine Annual Inspec\400 Drawings\Fig 1 - Plan.dwg (dhu)



SCALE 0 100 m

LEGEND

- CULVERT
- DITCH ℄
- (51) EROSION GULLEY (PHOTO NUMBER)

NOTES:

1. THE SITE PLAN WAS PROVIDED BY YZC.
2. PHOTOS ARE PROVIDED IN APPENDIX II.
3. EROSION LOCATION SHOWN ARE APPROXMATE TAKEN BY HANDHELD GPS UNIT.

AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.

CLIENT: Yukon Zinc CORPORATION

Klohn Crippen Berger

PROJECT: WOLVERINE MINE 2015 ANNUAL INSPECTION

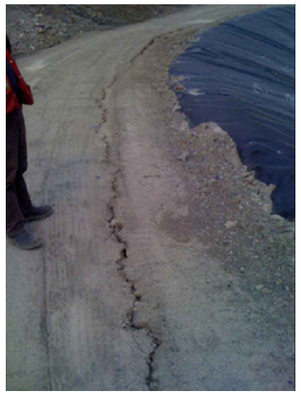
TITLE: SITE PLAN ON-SITE EARTH STRUCTURES

SCALE	PROJECT NO.	FIG. NO.
AS SHOWN	M09234A11	2

CANCEL PRINTS BEARING PREVIOUS REVISION

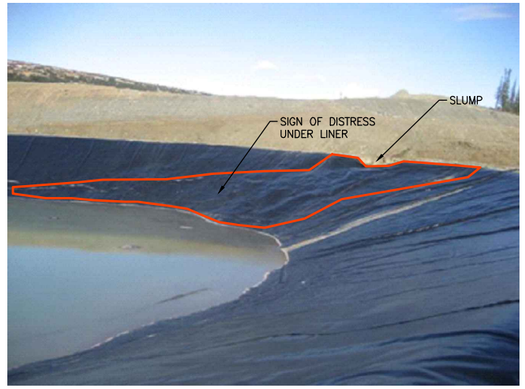
KCB-DWG-D-L

Time: 14:11:44
Date: 7/2/2015
Scale: 1:2(PS)
Drawing File: Z:\M\VCR\M09234A11-YZC-Wolverine Annual Inspec\400 Drawings\Fig 2 - Surface As Built June 2013.dwg (dhu)



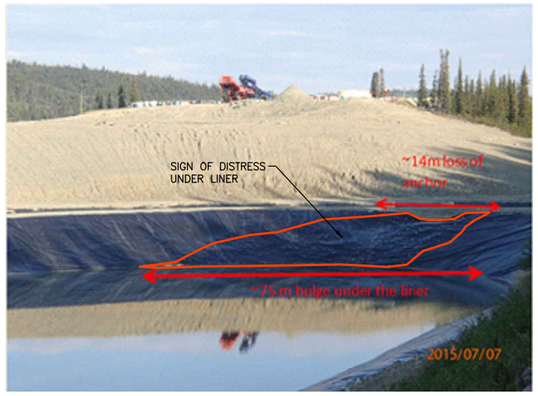
2013: CRACKS AT NORTH
END OF IMPOUNDMENT ON CREST

2014: CRACKS
AT NORTH END OF IMPOUNDMENT



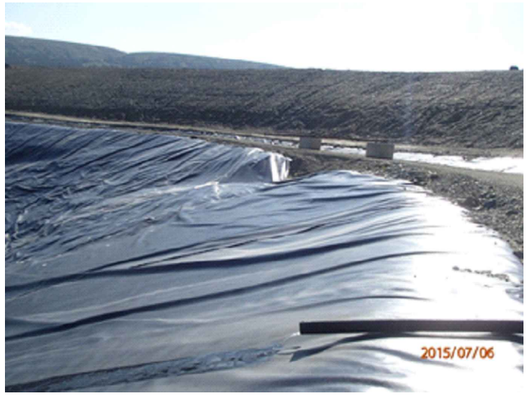
2014: SLUMPING
IN NORTH END OF IMPOUNDMENT

2014: CRACKS
AROUND SLUMPING AREA



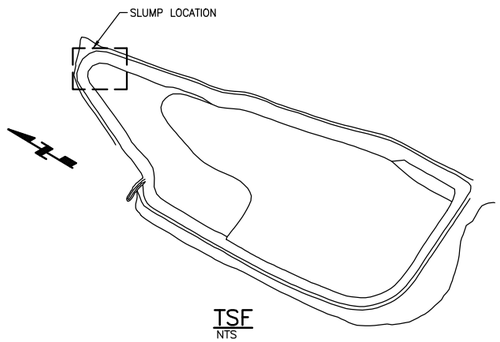
2015: SLUMP
IN THE NORTH END OF IMPOUNDMENT

2015: CREST LOSS
ALONG THE 2014 SLUMP AREA



2015: ANCHOR FAILED
IN 2014 CRACK AND SLUMP AREA

2015: TENSION CRACK UPSTREAM
OF SLUMP APPERED TO BE FILLED IN



AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.

CLIENT: Yukon Zinc CORPORATION

Klohn Crippen Berger

PROJECT: WOLVERINE MINE 2015 ANNUAL INSPECTION

TITLE: PROGRESSION OF SLUMP IN THE TSF NORTH WALL

SCALE	PROJECT NO.	FIG. NO.
NTS	M09234A11	3

CANCEL PRINTS BEARING PREVIOUS REVISION

KCB-DWG-D-L

Time: 14:21:15
Date: 7/27/2015
Scale: 1:2(P2)
Drawing File: Z:\VM\VGR\M09234A11-YZC-Wolverine Annual Inspec\400 Drawings\Fig 3 - Progression Along North Wall.dwg (dhu)

APPENDIX I

TSF Photos

Appendix I
TSF Photographs

Photo 1 South dam crest - looking west; ruts on the crest surface

Photo 2 **South dam –erosion gulley on downstream edge**

Photo 3 **South dam –downstream slope looking east, erosion gulley, minor grass grown naturally**

Photo 4 South dam – downstream slope, looking west

Photo 5 South dam and east abutment – upstream slope

Photo 6 **West dam crest - looking north between access ramp and spillway, tailings line and reclaim line**

Photo 7 **West dam – erosion on downstream slope north of the access ramp, 10 m wide area; crest width is approximately 4 m**

Photo 8 **West dam crest - looking south, south of access ramp, less erosion and no crest loss**

Photo 9 **West dam – downstream slope, looking north, north of access ramp, ponded rain water at the toe**

Photo 10 West dam –downstream slope, looking south, south of access ramp

Photo 11 West dam – upstream slope, looking north

Photo 12 West dam – upstream slope, looking south

Photo 13 TSF east side liner –looking south

Photo 14 TSF east side liner– from west berm, minor bulging

Photo 15 East (right) abutment – downstream side, looking north east

Photo 16 Spillway – looking upstream

Photo 17 Spillway –looking downstream- rip rap ends upstream of the haul road and 12 inch redundant tailings line blocking the spillway

Photo 18 Underdrain intake basin – north end of the TSF

Photo 19 Underdrain outlet – downstream of seepage berm

Photo 20 Seepage Collection Basin

Photo 21 Seepage Collection Basin – V-ditch and wetland in the basin

Photo 22 Seepage berm- looking north

Photo 23 Ditch A – inlet to Ditch A culvert

Photo 24 Ditch A – outlet end of the upper culvert for Ditch A

Photo 25 Ditch A – unlined part beyond the west end of TSF

Photo 26 Ditch A – Rip-rapped section south of upper culvert

Photo 27 Ditch A – lined part

Photo 28 Ditch A – lined part – no anchoring of geotextile

Photo 29 Fill slope upstream of Ditch A – graded in 2014, signs of erosion

Photo 30 Ditch B – inlet of Ditch B culvert; no flow

Photo 31 Ditch B – parallel to the TSF looking north

Photo 32 Ditch B – culvert outlet at stilling basin

Photo 33 South Dam – Access ramp to reclaim barge on upstream slope

Photo 34 4 inch line discharging underdrain flow from waste rock storage area

Photo 35 8 inch tailings line over the spillway

Photo 36 Waste Rock Storage Area – seepage collection area

Photo 37 Waste Rock Storage Area - seepage and underdrain outlet

Photo 38 Southeast borrow

Photo 39 Southeast waste pile

Photo 40 Northwest waste pile

Photo 41 Northwest waste pile – erosion gulley at the slope by the air strip

Photo 42 Non-functional Inclinometer on the downstream slope

APPENDIX II

On-site Earth Structures Photos

Appendix II
On-site Photos

Photo 1 Mill building pad – upslope behind the Mill building

Photo 2 **Mill building – downslope, minor erosion**

Photo 3 **Mill building pad – downslope at southeast corner, large erosion gulley from previous year, not repaired**

Photo 4 MSE wall – by the crusher building

Photo 5 MSE wall – below the conveyor belt

Photo 6 **Manhole upslope of MSE wall corner of Mill building and Concentrate building, this manhole is outlet for culvert from Ditch 5, a large sinkhole developed around this manhole after a recent rain storm, backfilled with rock fill**

Photo 7 **Fuel Tank farm and Genset Pad – downslope at south side looking towards crusher building, minor erosion gulley**

Photo 8 **Fuel Tank Farm and Genset Pad –downslope at east side, half culvert with rockfill slope, good condition**

Photo 9 **Sump 1 – decommissioned and backfilled, now used as covered laydown area**

Photo 10 Sump 2 – culvert outlet from Ditch 4 in west sump, dry

Photo 11 Sump 2 – culver outlet from Ditch 3 in east sump, dry

Photo 12 Sump 2 – bulge in the liner in the cross dyke, caused by groundwater

Photo 13 Sump 5

Photo 14 Sump 5 – puncture in the liner

Photo 15 Ditch 1 – 26 m long crack in the Ditch 1 embankment, looking north from corner of Mill building

Photo 16 Ditch 1 –looking north, litter in the channel bottom

Photo 17 Ditch 1- culvert inlet completely blocked

Photo 18 Ditch 1 – culvert damaged

Photo 19 Ditch 2 – inlet for upper culvert, completely plugged, non-functional

Photo 20 **Ditch 2 – rip-rapped outlet for upper culvert on the left; gravel swale for groundwater culvert and Ditch 1 outlets on the right**

Photo 21 **Ditch 3 – culvert inlet at the end of Ditch 2, channel bottom of Ditch 2 filled with silt, reduced flow capacity**

Photo 22 Ditch 3 – culvert outlet; channel bottom filled in and liner loose

Photo 23 Ditch 3 – looking west, channel bed filled with silt and gravel

Photo 24 **Culvert inlet to Sump 2- damaged and blocked**

Photo 25 **Ditch 4 – lined channel looking east, liner along the downstream side loosely anchored by uncompacted fill, may wash away after large rainfall event (2015 construction)**

Photo 26 Ditch 4 – ditch bottom silted and filled with washed rock, reduced flow capacity

Photo 27 Ditch 4 – erosion channel in the downslope

Photo 28 **Ditch 4 – area of undercutting in the upslope noted in 2014 report was repaired (downslope of shotcrete and cement plant)**

Photo 29 **Ditch 4 – inlet for culvert, channel bottom and culver invert filled with sand, silt and gravel**

Photo 30 Ditch 5 –looking south

Photo 31 Ditch 5 – culvert inlet, channel bottom filled in and partially blocked with litter

Photo 32 **Camp Pad – large erosion channel in cut slope east wall, partially filled with rock, surface runoff from camp pad area accumulates at low point and drain through this area**

Photo 33 **Camp pad – erosion channel in cut slope in south wall, partially backfilled with rock (west end)**

Photo 34 **Camp pad – erosion channel in cut slope in south wall, partially backfilled with rock (centre part)**

Photo 35 **Camp pad – erosion channel in cut slope in south wall, partially backfilled with rock (centre part)**

Photo 36 **Camp pad – erosion channel in cut slope in south wall, partially backfilled with rock (east end), this channel was backfilled with rock to work as a French drain for surface runoff after large storm event**

Photo 37 **Upper generator and potable water treatment pad – cut slope looking west, minor erosion gullies**

Photo 38 **Upper generator and potable water treatment pad – cut slope, slumping along the water line corridor**

Photo 39 **Sewage Treatment Plan Pad – Back slope**

Photo 40 Sewage Treatment Plant Pad – erosion channel in the down slope south east corner

Photo 41 Sewage Effluent Pond

Photo 42 Waste Rock and Ore Storage Facility – outside slope

Photo 43 Waste Rock and Ore Storage Facility – inside slope

Photo 44 Ore stockpile area runoff collection sump – looking from the waste rock area

Photo 45 Land Treatment Facility – cover

Photo 46 Land Treatment Facility – sump

Photo 47 Propane Tank Pad – back slope, surface water cutting a small channel at the toe

Photo 48 **Vent Raise and Underground Mine Office – back slope, very steep cut slope, minor signs of erosion, crest of the slope not checked**

Photo 49 **Truck shop pad – back slope, signs of sloughing**

Photo 50 **Truck shop pad – downslope, looking west**

Photo 51 **Truck shop pad – downslope, erosion channel near the west corner of truck shop building**

Photo 52: Crusher Building - sloughing and erosion around the pipe line corridor in the back slope

APPENDIX III

Checklists and Field Notes

TAILINGS DAM INSPECTION REPORT
Wolverine Tailings Dam

All parts of inspection sheet should be completed. Adverse conditions should be described. Additional information may be put on attached pages.

PROJECT NO.	M09234A11	**INSPECTION DATE**	July 6 and 7, 2015
DAM NO.	Wolverine Tailings Dam	**LOCATION**	Southeast Yukon, YT
PERSONNEL			
Engineer	Mohammad Al-Mamun	Others	
Company Representative	Josh Norbjerg (July 6) Dave Lewis (July 7)		
WEATHER			
	Current	Last 3 Days	Last 2 Weeks
Dry	☒	☐	☐
Frost	☐	☐	☐
Rain	☐	☒	☐
Heavy Rain	☐	☐	☒
STATUS OF DISPOSAL FACILITY			
Active	☐	Closed ☒	Notes: Care and maintenance
DAM INFORMATION			
Pond Elevation	1307.6 (measured May 24, 215)	Freeboard	
Crest Elevation	1313.5 m	Distance from Ponds to Crest	N/A
DAM CONSTRUCTION METHOD			
Upstream	☐		
Centreline	☐		
Downstream	☒		
LOCAL CONSTRUCTION ACTIVITIES			
Spigotting	☐		
Cycloning	☐		
End Discharge	☐		
Dam Raising	☐		
Other	☒	No construction activity	
REASON FOR INSPECTION			
Routine	☒	Annual Dam Safety Inspection	
Special Condition	☐		
NOTES			

Upstream Slope / Tailings Beach

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Slope Protection	Y	Y	Upstream slope lined	5, 11, 12
2.	Surface Erosion	Y	S	Except along the north end slip location. See notes below.	
3.	Surface Settlements/ Depressions	Y	S	Except along the north end slip location. See notes below	
4.	Sinkholes	Y	S		
5.	Cracks/Movements	Y	S		
6.	Debris	Y	S		
7.	Vegetation	N	N		
8.	Evidence of High Water Table	Y	N		
9.	Other Unusual Conditions	Y	S		

Notes:
Slump along the north end on the upstream slope has deteriorated since 2014 observation. Liner anchor damaged for approximately 14 m wide area. Crest loss approximately 1.5 m. Soil from the upper part of the slope appears to slumped and slide towards the toe and formed a bulge under the liner. Slope immediately west of the slumped area also showing some sign of distress underneath the liner for an approximate 75 m wide area.

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Dam Crest

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Surface Cracks (a) Transverse (b) Longitudinal	Y	S	Except area along the slip in north wall; see notes below	
2.	Settlements/Depressions	Y	F	10 cm to 15 cm deep ruts on the slope	1
3.	Sinkholes	Y	S		
4.	Lateral Movements	Y	S		
5.	Surface Protections	Y	F	Requires grading to fill depressions.	
6.	Erosion	Y	F	erosion along the d/s edge of the crest; causing crest loss; approximately 4 m at several locations along the north side of west dam	2, 7
7.	Vegetation	Y	F	No vegetation on the dam crest	
8.	Animal Burrows	Y	S		

Notes:
Tension crack upstream of the slump in the north wall, approximately 30 m long, but appear to be filled in with soil.

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Downstream Dam Slope

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Slope Protection	Y	S		
2.	Surface Erosion	Y	F	Erosion gullies in the south dam and north part of west dam	3, 4
3.	Surface Settlements/ Depressions	Y	S		
4.	Sinkholes	Y	S		
5.	Cracks/Slope Movements	Y	S		
6.	Seepage/Wet Areas	Y	S		
7.	Animal Burrows	Y	S		
8.	Vegetation	Y	F	Grass starting to grow but rate of growth appear to be quite slow and sporadic	4, 7-10
9.	Slope Angle				
10.	Other Unusual Conditions				

Notes:
Slope should be protected from surface erosion. Potential protection measure – hydro seeding. Dam crest is quite narrow 4 to 5 m and can erode relatively quickly, if no erosion protection measures are undertaken.

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Left Abutment – At Spillway

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Surface Condition	Y	S		
2.	Vegetation and Debris	Y	F	No vegetation, grass growing sporadically	
3.	Slope Protection	Y	S		
4.	Movements	Y	S		
5.	Erosion	Y	S		
6.	Seepage/Wet Areas	Y	S		
7.	Other Unusual Conditions	Y	S		

Notes:
Spillway is aligned along left abutment.

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Right Abutment

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Surface Condition	Y	S		
2.	Vegetation and Debris	Y	F	No vegetation, grass growing sporadically	15
3.	Slope Protection	Y	S		
4.	Movements	Y	S		
5.	Erosion	Y	S		
6.	Seepage/Wet Areas	Y	S		
7.	Other Unusual Conditions	Y	S		

Notes:

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Toe Drainage and Seepage Collection Ditches / Ponds

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Seepage/Wet Areas	Y	S		
2.	Signs of Instability	Y	S		
3.	Vegetation	Y	S	Thick vegetation in the Seepage Collection Pond	20, 21
4.	Other Unusual Conditions				

Notes:

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Instrumentation

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Piezometers	Y	S	5 data logger found and data was downloaded	
2.	Standpipes	N	N		
3.	Survey Monuments	Y	N	Site Personnel could not show the locations	
4.	Inclinometers	Y	U	Non-functional	42
5.	Relief Wells	N	N	None Present	
6.	Weirs	N	N	None Present	
7.	Other	N	N		

Notes:

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.

Spillway

No.	Item	Chkd	Condition		
			Rating *	Remarks / Description	Photograph No.
1.	Slope Protection	Y	S	Rip rap in good condition	16
2.	Surface Erosion	Y	S		
3.	Surface Settlements/ Depressions	Y	S		
4.	Sinkholes	Y	S		
5.	Cracks/Movements	Y	S		
6.	Debris	Y	F	8 inch insulated tailings line left at the d/s end – can block flow	17
7.	Vegetation	Y	S	None	
8.	Evidence of High Water Table	Y	S	None	
9.	Other Unusual Conditions				

Notes:

(If space insufficient, continue on separate sheet)

* Legend
S = Satisfactory. Will fulfill intended purpose.
F = Fair. Will fulfill intended purpose. Maintenance or further study required.
P = Poor. May not fulfill intended purpose. Repair or modification required.
U = Unsatisfactory. Will not fulfill purpose. Repair or modification required.
N = Not inspected.
N/A = Not Applicable.

On-Site Earth Structure INSPECTION REPORT
Wolverine Mine

All parts of inspection sheet should be completed. Adverse conditions should be described. Additional information may be put on attached pages.

PROJECT NO.	M09234A11	**INSPECTION DATE**	July 7 and 8, 2015
PROJECT SITE	Wolverine Mine	**LOCATION**	Yukon Territory
PERSONNEL			
Engineer	Mohammad Al-Mamun	Others	
Company Representative	Dave Lewis		
WEATHER			
	Current	Last 3 Days	Last 2 Weeks
Dry	☒	☐	☐
Frost	☐	☐	☐
Rain	☐	☒	☐
Heavy Rain	☐	☐	☒
REASON FOR INSPECTION			
Routine	☒	Annual Inspection	
Special Condition	☐		
NOTES			

No.	Item	Chkd	Condition		
			Slope	Liner	Photograph No.
1.	Industrial Complex: **Mill** –cut and fill slopes	Y	• The 1H:V cut slope behind the Mill building considered stable. • 2H:1V fill slope along the western side consider stable with minor erosion gullies. • The large erosion channel along the southeast corner of the down slope (cut) observed in 2014 not repaired. • MSE wall below the conveyor belt area and crusher building had no signs of bulging or zones of failure; some rocks from wire mesh appear loose and some of the rocks may fall in course of time. • A large sinkhole developed after recent rain storm around a manhole upslope of the MSE wall located corner of Mill and Concentrate building. Sinkhole was backfilled with rock fill.	None	1 2 3 4,5 6
2.	Industrial Complex: **Fuel Tank Farm and Genset Pad**–cut and fill slopes	Y	•Small erosion gullies observed in south fill slope •The erosion channel below the half CSP culvert above the west side fill slope was backfilled with rock fill and is in good condition.	None	7 8
3.	Industrial Complex: **Sump 1** – liners and slopes.	Y	•Decommissioned and backfilled with rock fill. Will be used as heated lay down area	None	9
4.	Industrial Complex: **Sump 2** - liners and slopes.	Y	•Was half full but no visible flow from any out let (Ditch 3 and 4); the crest area was wet and muddy; •There was areas of bulging in the liner in the cross dyke indicating presence of high groundwater level impacting	•Liner looks dirty, but no sign of tear or puncture	10, 11 12

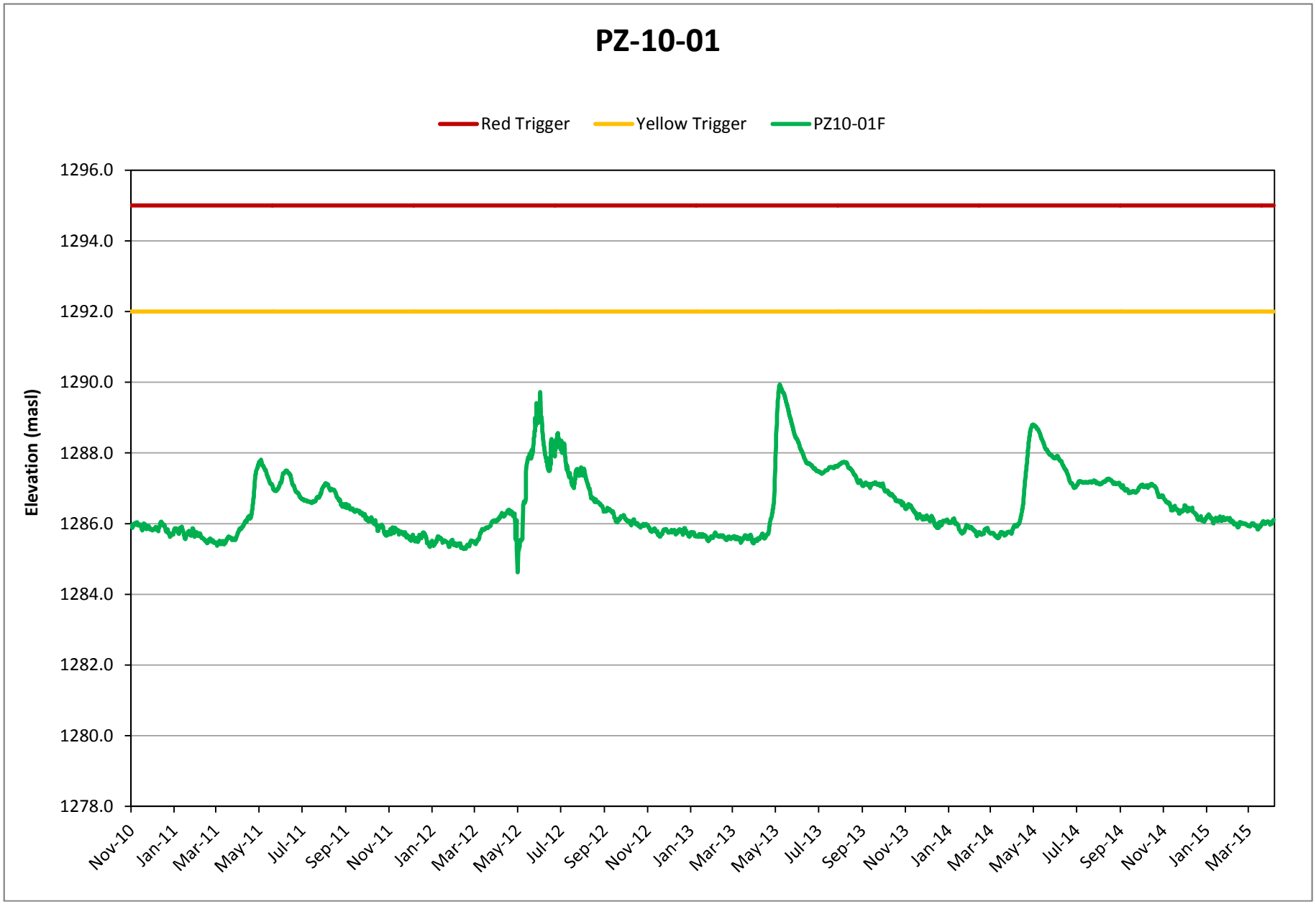
No.	Item	Chkd	Condition		
			Slope	Liner	Photograph No.
			liner		
5.	Industrial Complex: **Sump 5** - liners and slopes.	Y	• No flows in the sump, mostly holding inflows from precipitations. Good condition.	• Anchor is in good condition, but there was some small puncture noted along the upstream edge	13, 14
6.	Industrial Complex Diversion **Ditch 1** – cut and fill slopes.	Y	• Cut slope of the ditch embankment generally in good condition but there are tension crack along the crest, 26 m long 2 to 10 cm wide • There are litters in the ditch than can block the flows; need to be cleaned • Culvert inlet completely plugged with debris, need to be cleaned • Culvert that diverting flow downslope was ploughed and completely destroyed	• Part of the ditch bottom was lined towards east, partly eroded and covered by debris;	15 16 17 18
7.	Industrial Complex Collection **Ditch 2** – liners, cut and fill slopes	Y	• The inlet of the culvert coming from the Mill pad is completely plugged and need to be cleaned • Lower portion of the ditch is liner and culvert outlet is in good condition		19 20
8.	Industrial Complex Collection **Ditch 3** – liners, cut and fill slopes	Y	• Culvert inlet and outlet at the end of Ditch 2 is in good shape with some silting in the ditch bottom • Inlet of culver to Sump 2 is damaged and should be checked;	• Liner anchor generally in good condition; ditch bottom filled with debris	21, 22 23 24
9.	Industrial Complex Collection **Ditch 4** – liners, cut and fill slopes	Y	• Ditch bottom silted and filled in with materials form up slope at a number of locations, need to be cleaned to promote flow • Downslope is generally in good	• Ditch 4 was lined in 2014 and 2015. Liner is in good condition but is not anchored	25 26 27

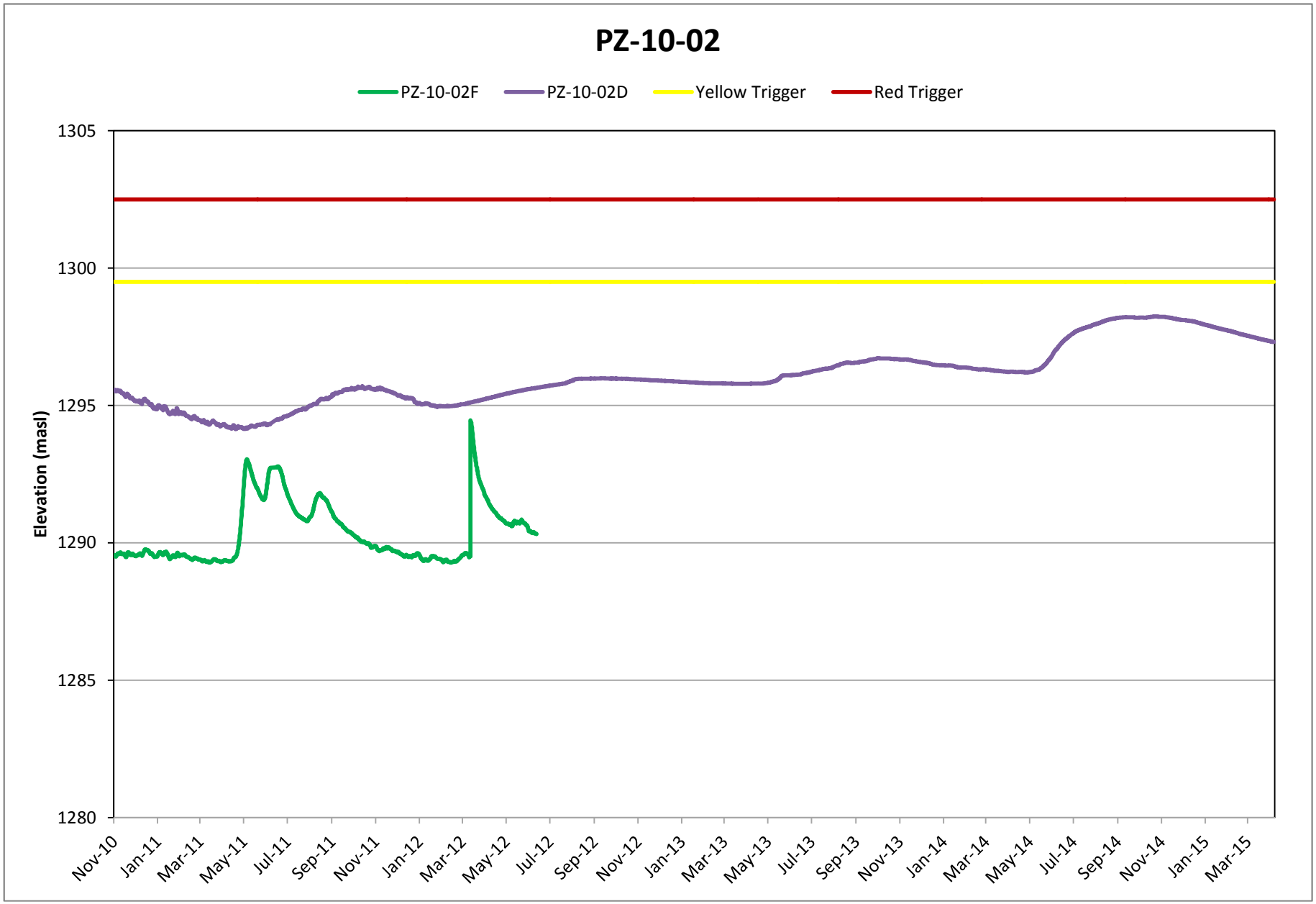
No.	Item	Chkd	Condition		
			Slope	**Liner**	**Photograph No.**
			condition with minor erosion gullies •A large sloughing area in the upslope that was repaired in previous year •Culvert inlet to Sump 2 is in good condition with minor silting	properly, covered with uncompacted fill and may washed away	28 29
10.	Industrial Complex Collection **Ditch 5** – liners, cut and fill slopes	Y	•It is an unlined ditch partially filled with washed material from the surroundings but can carry the flow to the culver •Inlet to culver in plugged but construction debris around the pipe need to be cleaned	None	30 31
11.	**Mine Camp Pad Area** – liner, cut and fill slopes.	Y	•There are 5 erosion gullies along the south side of 1.5H:1V down (fill) slope; these gullies were partially backfilled with rock fill	None	32-36
12.	**Upper generator Potable water Treatment Pad** – liner, cut and fill slopes.	Y	•2H:!V cut slope in good condition with minor erosion gullies •Minor slumping along the water line corridor in cut slope		37 38
13.	**Sewage treatment Plant pad**– liner, cut and fill slopes.	Y	•Cut slope generally in good condition •Erosion gulley partially filled with rock fill in the down (fill) slope –south east corner		39 40
14.	**Sewage Effluent Pond**– liner, cut and fill slopes.	Y	•Good condition; full off surface water from precipitation	•Good condition	41
15.	**Waste Rock and Ore Storage Facility** including seepage collection sump – liners, cut	Y	•Cut and fill slopes in the waste rock pile observed were stable	•Liner in the seepage collection sump is in good condition	42-43 44

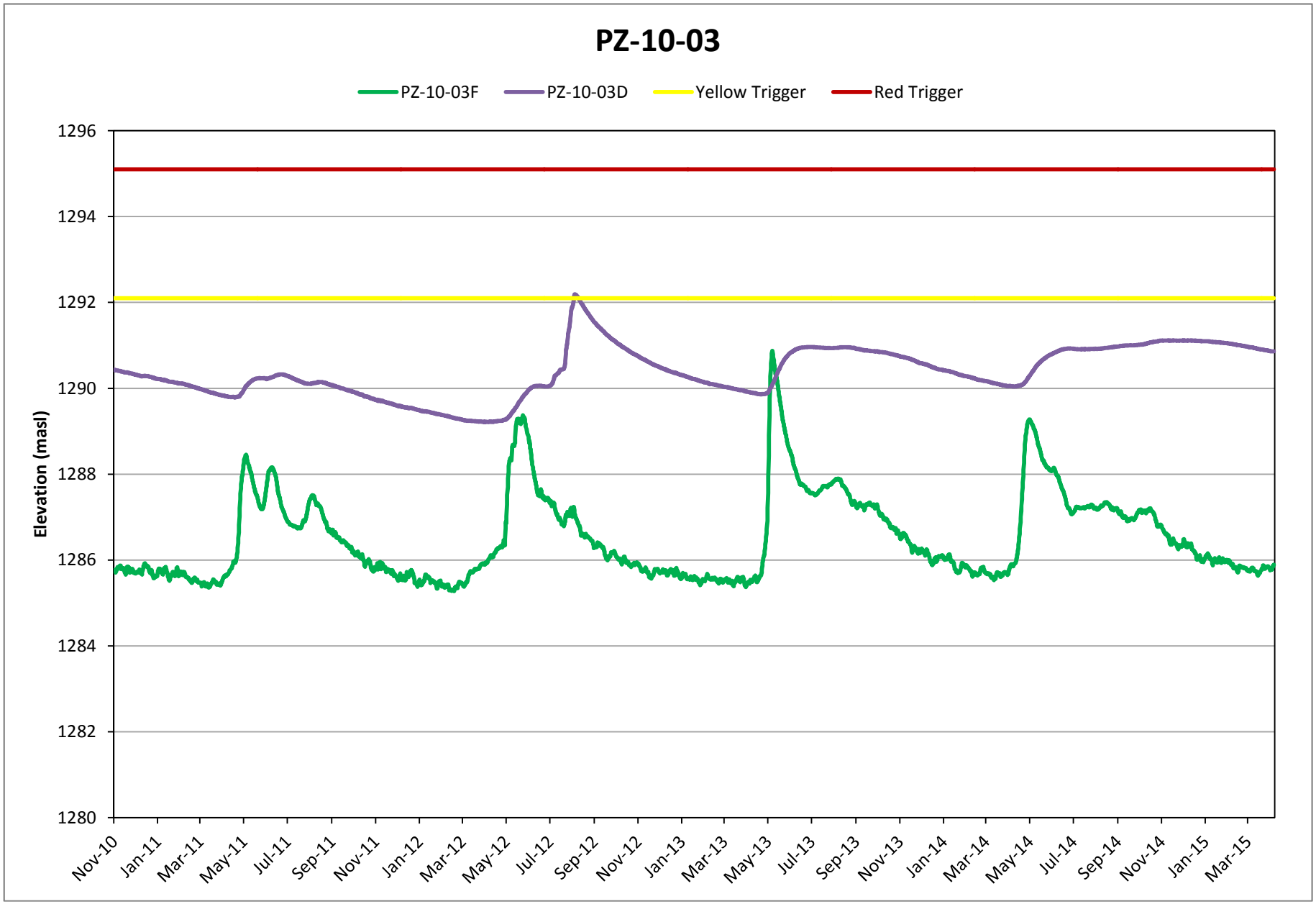
No.	Item	Chkd	Condition		
			Slope	Liner	Photograph No.
	and fill slopes				
16.	**Land Treatment Facility** (hydrocarbon contaminated material) including runoff collection sump – liners and fill slopes.	Y	• No noticeable deterioration to the berm and the cover	• No noticeable damage to the liner	45 46
17.	**Vent Raise and Propane Tank Pad** – cut slopes	Y	• Cut slope behind the Propane Tank is stable with minor erosion • Cut slope behind the Vent Rise and Underground Mine Office is considered very steep, but stable with signs of erosion in upper part (surficial units)	None	47 48
18.	**Truck Shop Pad** – cut and fill slopes	Y	• The cut slope at the back of the Truck Shop building is considered stable, but there are signs of sloughing at the lower part of the slope • Fill slope considered stable • Larger erosion gully in the fill slope near the west corner of the Truck Shop building	None	49 50 51
19.	**Crusher Building -** fill slope	Y	• Erosion gullies and sloughing along the pipe line corridor in the back slope	None	52
Notes:					

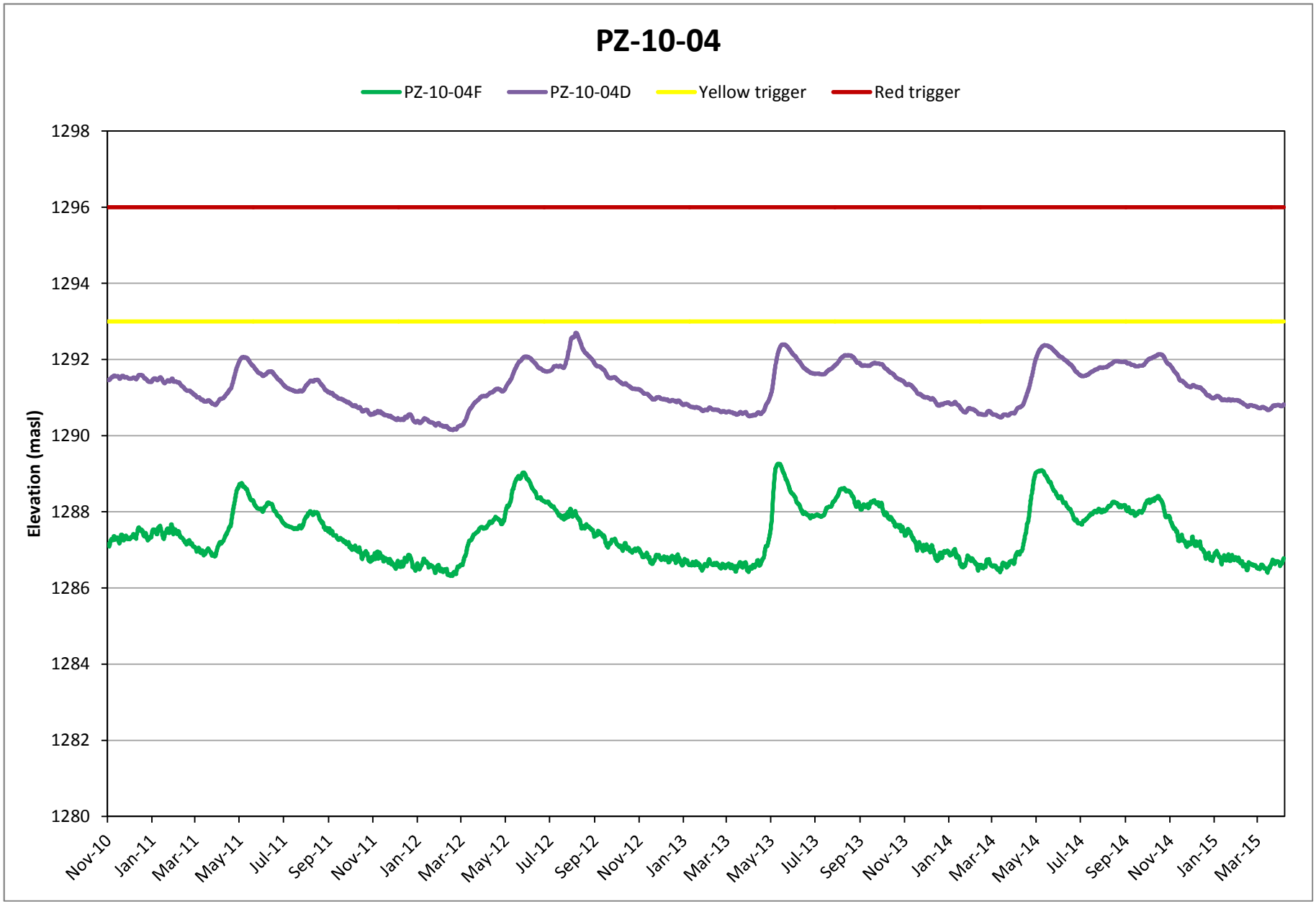
APPENDIX IV

Piezometric Water Level


PZ-10-01
Red Trigger
Yellow Trigger
PZ10-01F
Elevation (masl)
1296.0
1294.0
1292.0
1290.0
1288.0
1286.0
1284.0
1282.0
1280.0
1278.0
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15


PZ-10-02
PZ-10-02F
PZ-10-02D
Yellow Trigger
Red Trigger
Elevation (masl)
1305
1300
1295
1290
1285
1280
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15


PZ-10-03
PZ-10-03F
PZ-10-03D
Yellow Trigger
Red Trigger
Elevation (masl)
1296
1294
1292
1290
1288
1286
1284
1282
1280
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15


PZ-10-04
PZ-10-04F
PZ-10-04D
Yellow trigger
Red trigger
Elevation (masl)
1298
1296
1294
1292
1290
1288
1286
1284
1282
1280
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15

APPENDIX V

TSF Water Balance

WOLVERINE TAILINGS FACILITY WATER BALANCE
AVERAGE CLIMATE CONDITIONS

Update for Wolverine Annual Inspection - As of July 2015

DATA

	% Solids		
	Transport	Starter	Final
Tailings production	18.9%	74%	79%
Paste production	74.1%	74.1%	74.9%

Annual Precipitation (mm)	570
Runoff Coefficient	0.23
Precipitation area (lined) (km²)	0.105 (Starter) / 0.13 (Ultimate)
Precipitation area (unlined) (km²)	0.053 (Starter) / 0.036 (Ultimate)
Evaporation area (km²)	0.084 (Starter) / 0.104 (Ultimate)
Uphill catchment area (km²)	0.751
% Diversion ditch seepage	25%
Preproduction % Diversion Water	75%

100 yr wet 795 mm
100 yr dry 279 mm

As Built Input
Monthly Monitoring Report Input

Assume full diversion but 75% of precip. To allow for dry year

Mine Year														1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Calendar Year	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012
Month	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
Mean Monthly Temperature	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12
Monthly percent of annual precip.	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%
Monthly Precipitation (mm)	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5
Average monthly runoff (% of annual)	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%
Monthly Evaporation (mm)	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5
Incremental ice thickness on pond (m)	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1
Tailings to TSF (tpd)											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.0	235.4	342.0	303.3	511.9	40.4	567.7	414.6	433.4	522.4	619.0	573.3	788.4	805.8
Tailings to paste (tpd)											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Inputs (m³/hr)																																	
Tailings water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.93	138.94	136.40	131.43	113.46	7.39	141.81	116.32	85.89	101.67	108.88	134.94	159.33	149.52
Paste plant overflow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balance of process plant	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	6.00	6.00	6.00	6.00	8.55	8.55	8.55	8.55	8.55	8.55	9.84	8.32	9.54	19.18	18.99	21.31	20.52	16.77	18.32	12.61	15.70	14.29	12.79	11.64	12.01
Climate — Direct precipitation	10.96	8.79	8.32	6.89	6.80	6.69	6.03	5.18	3.74	2.92	5.97	9.52	10.96	8.79	8.32	6.89	6.80	6.69	6.03	5.18	3.74	2.92	5.97	9.52	10.96	8.79	8.32	8.53	8.42	8.28	7.47	6.41	4.64
Climate — Runoff from unlined area	1.27	1.02	0.97	0.12	0.00	0.00	0.00	0.00	0.03	0.05	0.69	1.10	1.27	1.02	0.97	0.12	0.00	0.00	0.00	0.00	0.03	0.05	0.69	1.10	1.27	1.02	0.97	0.08	0.00	0.00	0.00	0.00	0.02
Climate — Snowmelt runoff from unlined area	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	1.24	1.28	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	1.24	1.28	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seepage from diversion ditch	16.87	8.93	8.96	5.89	3.49	0.99	0.00	0.00	0.00	1.03	18.86	11.97	5.62	2.98	2.99	1.96	1.16	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seepage reclaim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Subtotal: All Inputs	30	19	18	13	10	8	12	11	10	10	33	31	29	22	22	19	18	17	17	61	153	160	159	148	42	169	145	108	127	132	156	178	167
Water Losses (m³/hr)																																	
Tailing voids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	3.45	5.01	4.44	7.49	0.59	8.31	6.07	6.35	7.65	9.06	8.39	11.54	11.80
Water reclaim to process plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.29	147.84	141.37	137.19	164.39	7.67	180.51	123.33	85.85	104.39	119.82	134.08	155.29	153.84
Estimated pond area (m²)					*4,000*	*7,000*	*8,400*	*9,400*	*10,300*	*11,400*	*16,000*	*22,000*	*26,000*	*30,000*	*60,000*	*61,000*	*62,000*	*62,000*	*62,000*	*63,000*	*63,000*	*64,000*	*65,000*	*66,000*	*68,000*	*68,000*	*68,000*						
Climate — Pond evapor.	0.00	0.00	0.00	0.00	0.03	0.02	0.06	0.06	0.13	0.33	1.55	2.64	3.15	2.48	2.67	1.19	0.52	0.17	0.42	0.42	0.80	1.87	6.29	7.93	8.23	5.62	3.02	2.03	0.87	0.28	0.70	0.70	1.33
Seepage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Subtotal: All Losses	0	0	0	0	0	0	0	0	0	0	2	4	4	3	4	2	2	1	1	54	153	149	149	181	17	195	133	95	114	130	144	169	168
Net water surplus (deficit)	**30**	**19**	**18**	**13**	**10**	**8**	**12**	**11**	**10**	**10**	**31**	**27**	**25**	**19**	**18**	**16**	**16**	**15**	**15**	**7**	**0**	**11**	**10**	**-33**	**25**	**-26**	**12**	**13**	**13**	**2**	**12**	**10**	**-1**
Discharge period water surplus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	8.1	8.1	8.1	8.1	8.1	0.0	0.0	0.0	0.0	0.0
Actual water treatment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incremental pond volume (m3)	-	-	-	-	-	5,698	8,911	7,472	7,176	7,265	23,222	19,604	18,235	14,031	13,075	12,149	11,520	11,457	11,500	4,816	130	7,733	7,734	(23,857)	18,527	(19,385)	8,290	9,585	9,277	1,698	8,952	6,621	(576)
Seasonal pond volume (m3)	-	-	-	-	15,500	21,198	30,109	37,581	44,757	52,022	75,243	94,847	113,082	127,113	140,188	152,338	163,858	175,315	186,815	191,631	191,761	199,494	207,227	183,371	201,897	182,512	190,802	200,387	209,665	211,363	220,315	226,936	226,360
Overall Mass Balance																																	
Tailings Input (Tonnes)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,968	7,296	10,261	9,401	15,357	1,252	17,600	12,438	13,436	15,672	19,188	17,771	22,075	24,980
Cumulative Tailings Tonnage (tonnes)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,968	10,264	20,525	29,926	45,283	46,535	64,135	76,572	90,008	105,680	124,868	142,639	164,714	189,694
Tailings Input (m³)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,855	4,560	6,413	5,876	9,598	783	11,000	7,774	8,398	9,795	11,992	11,107	13,797	15,613
Cumulative Tailings Volume (m3)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,855	6,415	12,828	18,704	28,302	29,084	40,084	47,858	56,255	66,050	78,042	89,149	102,946	118,559
Total Volume (Waste + Water) (m3)					15,500	21,198	30,109	37,581	44,757	52,022	75,243	94,847	113,082	127,113	140,188	152,338	163,858	175,315	186,815	193,486	198,176	212,322	225,931	211,672	230,981	222,597	238,660	256,643	275,715	289,405	309,464	329,882	344,919
Check total volume waste + water (m3)											75,243	94,847	113,082	127,113	140,188	152,338	163,858	175,315	186,815	193,486	198,176	212,322	225,931	211,672	230,981	222,597	238,660	256,643	275,715	289,405	309,464	329,882	344,919

WOLVERINE TAILINGS FACILITY WATER BALANCE
AVERAGE CLIMATE CONDITIONS
Update for Wolverine Annual Inspection - As of July 2015

								--> Stage 2 construction complete																												
Mine Year		3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5			0	0	0	0	0	0
Calendar Year		2012	2012	2012	2012	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
Month		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
	Mean Monthly Temperature	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18
	Monthly percent of annual precip.	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%
	Monthly Precipitation (mm)	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4
	Average monthly runoff (% of annual)	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%
	Monthly Evaporation (mm)	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2
	Incremental ice thickness on pond (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
	Tailings to TSF (tpd)	1044.6	822.1	542.3	413.7	641.8	652.1	711.2	857.0	859.5	752.3	810.8	1055.4	715.7	811.2	1068.6	710.5	426.6	489.7	616.4	448.9	597.6	347.6	500.0	657.9	557.5	507.8	443.5	581.1	640.7	567.3	589.5	684.3	414.1
	Tailings to paste (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Inputs (m³/hr)																																		
	Tailings water	206.30	177.68	162.57	143.92	180.70	148.87	153.30	152.65	149.17	147.62	152.61	201.95	196.82	183.60	180.94	140.49	103.46	101.81	125.83	107.66	85.87	59.99	121.6	120.5	113.60	92.10	90.73	103.95	148.50	130.28	127.34	115.09	67.86
	Paste plant overflow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Balance of process plant	25.33	16.71	23.44	16.57	19.44	15.76	14.79	15.44	16.44	11.32	9.93	8.68	9.85	34.44	14.90	15.00	15.07	15.13	14.82	12.50	6.56	12.83	15.5	17.1	32.86	27.60	14.30	16.21	19.22	15.74	13.19	9.71	10.38
	Direct precipitation	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28
Climate	Runoff from unlined area	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00
	Snowmelt runoff from unlined area	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00
	Seepage from diversion ditch	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.29	11.97	5.62	2.98	2.99	1.96	1.16	0.33
	Seepage reclaim	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Subtotal: All Inputs	237	204	200	177	213	177	178	178	175	167	170	216	212	228	210.2	172	131	129	150	130	102	81	144	143	151	136	131	142	183	161	152	135	88
Water Losses (m³/hr)																																		
	Tailing voids	15.29	12.03	7.94	6.06	9.40	9.55	10.41	12.55	12.58	11.01	11.87	15.45	10.48	11.88	15.64	10.40	6.25	7.17	9.02	6.57	8.75	5.09	7.32	9.63	8.16	7.43	6.49	8.51	9.38	8.30	8.63	10.02	6.06
	Water reclaim to process plant	203.26	165.84	154.78	138.00	174.32	139.50	148.24	140.34	156.35	153.33	180.83	186.78	186.53	171.93	165.58	130.28	97.33	94.77	116.97	121.18	96.68	54.99	114.4	111.0	105.59	71.2	90.9	95.7	139.1	104.1	94.1	105.3	61.9
	Estimated pond area (m²)																																	
Climate	Pond evapor.	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28
	Seepage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Subtotal: All Losses	223	189	176	158	193	155	162	155	170	166	194	205	201	195	194.7	154	113	108	129	130	107	62	123	123	118	90	111	118	158	118	106	117	69
Net water surplus (deficit)		**14**	**15**	**24**	**19**	**19**	**22**	**16**	**23**	**5**	**1**	**-24**	**12**	**11**	**33**	**16**	**18**	**18**	**21**	**21**	**0**	**-5**	**20**	**21**	**20**	**34**	**46**	**21**	**24**	**25**	**43**	**46**	**18**	**19**
Discharge period water surplus		0.0	29.5	29.5	29.5	29.5	29.5	29.5	0.0	0.0	0.0	0.0	0.0	0.0	19.9	19.9	19.9	19.9	19.9	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Actual water treatment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incremental pond volume (m3)		10,065	11,267	17,428	14,236	14,436	15,784	11,923	16,390	3,475	1,014	(16,424)	8,720	7,601	24,455	11,182	13,030	13,341	15,366	15,799	(27)	(3,724)	14,519	14,182	15,094	24,203	34,190	14,792	18,099	18,743	30,897	34,485	13,070	13,848
Seasonal pond volume (m3)		236,425	247,692	265,120	279,356	293,792	309,577	321,500	337,890	341,365	342,379	325,955	334,675	342,277	366,732	377,914	390,944	404,285	419,651	435,450	435,423	431,700	446,219	460,401	475,495	499,698	533,889	548,681	566,779	585,523	616,420	650,905	663,975	677,823
Overall Mass Balance																																		
	Tailings Input (Tonnes)	31,338	25,484	16,268	12,825	19,895	19,563	22,046	25,710	26,646	23,322	22,702	32,718	21,470	25,148	32,057	22,025	13,225	14,692	19,109	13,468	18,527	10,775	14,000	20,394	16,726	15,741	13,305	18,015	19,861	17,018	18,273	20,529	12,837
	Cumulative Tailings Tonnage (tonnes)	221,033	246,517	262,785	275,610	295,505	315,068	337,114	362,824	389,470	412,792	435,494	468,212	489,682	514,830	546,887	568,912	582,137	596,829	615,938	629,406	647,933	658,708	672,708	693,102	709,828	725,569	738,874	756,888	776,749	793,767	812,041	832,569	845,406
	Tailings Input (m³)	19,587	15,928	10,168	8,016	12,434	12,227	13,779	16,069	16,654	14,576	14,189	20,449	13,419	15,718	20,036	13,766	8,266	9,183	11,943	8,417	11,579	6,734	8,750	12,746	10,454	9,838	8,316	11,259	12,413	10,636	11,421	12,830	8,023
	Cumulative Tailings Volume (m3)	138,145	154,073	164,240	172,256	184,690	196,917	210,696	226,765	243,419	257,995	272,184	292,632	306,051	321,769	341,804	355,570	363,836	373,018	384,961	393,379	404,958	411,692	420,442	433,189	443,643	453,481	461,796	473,055	485,468	496,105	507,525	520,356	528,379
	Total Volume (Waste + Water) (m3)	374,571	401,765	429,361	451,612	478,483	506,494	532,196	564,655	584,784	600,374	598,139	627,308	648,328	688,501	719,719	746,514	768,121	792,669	820,411	828,802	836,658	857,911	880,843	908,684	943,341	987,370	1,010,477	1,039,835	1,070,991	1,112,525	1,158,431	1,184,331	1,206,202
	Check total volume waste + water (m3)	374,571	401,765	429,361	451,612	478,483	506,494	532,196	564,655	584,784	600,374	598,139	627,308	648,328	688,501	719,719	746,514	768,121	792,669	820,411	828,802	836,658	857,911	880,843	908,684	943,341	987,370	1,010,477	1,039,835	1,070,991	1,112,525	1,158,431	1,184,331	1,206,202

WOLVERINE TAILINGS FACILITY WATER BALANCE
AVERAGE CLIMATE CONDITIONS
Update for Wolverine Annual Inspection - As of July 2015

Mine Year	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	
Calendar Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2017	2017	2017	2017	2017	2017	
Month	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	
Mean Monthly Temperature	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	
Monthly percent of annual precip.	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	
Monthly Precipitation (mm)	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	
Average monthly runoff (% of annual)	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	
Monthly Evaporation (mm)	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	
Incremental ice thickness on pond (m)	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	
Tailings to TSF (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailings to paste (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Water Inputs (m³/hr)																															
Tailings water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paste plant overflow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Balance of process plant	0.0392473	0.0421131	2	15	15.722245	5.21	1.4965726	1.143414	2.1017361	0.0518145	0.044375	0.03521505	0.0392473	0.0421131	2	15	15.7222446	5.21	1.4965726	1.143414	2.1017361	0.0518145	0.044375	0.0352151	0.03924731	0.0421131	2	15	15.722245	5.21	
Direct precipitation	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	
Climate Runoff from unlined area	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	
Snowmelt runoff from unlined area	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	
Seepage from diversion ditch	0.00	0.00	0.00	0.34	6.29	11.97	5.62	2.98	2.99	1.96	1.16	0.33	0.00	0.00	0.00	0.34	6.29	11.97	5.62	2.98	2.99	1.96	1.16	0.33	0.00	0.00	0.00	0.34	6.29	11.97	
Seepage reclaim	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Subtotal: All Inputs	9	7	7	20	32	32	23	17	17	12	11	10	9	7	7	20	32	32	23	17	17	12	11	10	9	7	7	20	32	32	
Water Losses (m³/hr)																															
Tailing voids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water reclaim to process plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Estimated pond area (m²)																															
Climate Pond evapor.	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	
Seepage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Subtotal: All Losses	2	2	2	4	11	13	14	10	6	3	2	1	2	2	2	4	11	13	14	10	6	3	2	1	2	2	2	4	11	13	
Net water surplus (deficit)	**7**	**6**	**5**	**16**	**21**	**18**	**10**	**7**	**11**	**9**	**9**	**8**	**7**	**6**	**5**	**16**	**21**	**18**	**10**	**7**	**11**	**9**	**9**	**8**	**7**	**6**	**5**	**16**	**21**	**18**	
Discharge period water surplus	0.0	0.0	0.0	0.0	20.9	20.9	20.9	20.9	20.9	20.9	0.0	0.0	0.0	0.0	0.0	0.0	20.9	20.9	20.9	20.9	20.9	20.9	0.0	0.0	0.0	0.0	0.0	0.0	20.9	20.9	
Actual water treatment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Incremental pond volume (m3)	5,067	3,871	3,782	11,359	15,361	13,019	7,309	5,283	8,228	6,394	6,311	6,222	5,067	3,871	3,782	11,359	15,361	13,019	7,309	5,283	8,228	6,394	6,311	6,222	5,067	3,871	3,782	11,359	15,361	13,019	
Seasonal pond volume (m3)	682,890	686,761	690,543	701,902	452,000	465,019	472,329	477,612	485,840	492,234	498,545	504,767	509,834	513,705	517,487	528,846	544,207	557,226	564,536	569,819	578,047	584,441	590,752	596,974	602,041	605,912	609,694	621,053	636,414	649,433	
Overall Mass Balance																															
Tailings Input (Tonnes)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Tailings Tonnage (tonnes)	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	
Tailings Input (m³)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Tailings Volume (m3)	528,379	528,379	528,379	528,379	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	
Total Volume (Waste + Water) (m3)	1,211,268	1,215,140	1,218,922	1,230,281	1,018,000	1,031,019	1,038,329	1,043,612	1,051,840	1,058,234	1,064,545	1,070,767	1,075,834	1,079,705	1,083,487	1,094,846	1,110,207	1,123,226	1,130,536	1,135,819	1,144,047	1,150,441	1,156,752	1,162,974	1,168,041	1,171,912	1,175,694	1,187,053	1,202,414	1,215,433	
Check total volume waste + water (m3)	1,211,268	1,215,140	1,218,922	1,230,281	1,018,000	1,031,019	1,038,329	1,043,612	1,051,840	1,058,234	1,064,545	1,070,767	1,075,834	1,079,705	1,083,487	1,094,846	1,110,207	1,123,226	1,130,536	1,135,819	1,144,047	1,150,441	1,156,752	1,162,974	1,168,041	1,171,912	1,175,694	1,187,053	1,202,414	1,215,433	

Note: May 2015 water, tailings and total volume values updated based on May 24, 2015 bathymetric survey.

WOLVERINE TAILINGS FACILITY WATER BALANCE
AVERAGE CLIMATE CONDITIONS
Update for Wolverine Annual Inspection - As of July 2015

(With diversions)

Mine Year	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5
Calendar Year	2017	2017	2017	2017	2017	2017	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
Month	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	
Mean Monthly Temperature	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	
Monthly percent of annual precip.	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	
Monthly Precipitation (mm)	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	
Average monthly runoff (% of annual)	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	
Monthly Evaporation (mm)	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	
Incremental ice thickness on pond (m)	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
Tailings to TSF (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailings to paste (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Water Inputs (m³/hr)																														
Tailings water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paste plant overflow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Balance of process plant	1.4965726	1.14341398	2.1017361	0.05181452	0.044375	0.03521505	0.03924731	0.0421131	2	15	15.722245	5.21	1.49657258	1.14341398	2.10173611	0.05181452	0.044375	0.03521505	0.03924731	0.0421131	2	15	15.722245	5.21	1.4965726	1.143414	2.10173611	0.05181452	0.044375	
Direct precipitation	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	
Climate Runoff from unlined area	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	
Snowmelt runoff from unlined area	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	
Seepage from diversion ditch	5.62	2.98	2.99	1.96	1.16	0.33	0.00	0.00	0.00	0.34	6.29	11.97	5.62	2.98	2.99	1.96	1.16	0.33	0.00	0.00	0.00	0.34	6.29	11.97	5.62	2.98	2.99	1.96	1.16	
Seepage reclaim	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Subtotal: All Inputs	23	17	17	12	11	10	9	7	7	20	32	32	23	17	17	12	11	10	9	7	7	20	32	32	23	17	17	12	11	
Water Losses (m³/hr)																														
Tailing voids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water reclaim to process plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Estimated pond area (m²)																														
Climate Pond evapor.	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	
Seepage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Subtotal: All Losses	14	10	6	3	2	1	2	2	2	4	11	13	14	10	6	3	2	1	2	2	2	4	11	13	14	10	6	3	2	
Net water surplus (deficit)	**10**	**7**	**11**	**9**	**9**	**8**	**7**	**6**	**5**	**16**	**21**	**18**	**10**	**7**	**11**	**9**	**9**	**8**	**7**	**6**	**5**	**16**	**21**	**18**	**10**	**7**	**11**	**9**	**9**	
Discharge period water surplus	20.9	20.9	20.9	20.9	0.0	0.0	0.0	0.0	0.0	0.0	20.9	20.9	20.9	20.9	20.9	20.9	0.0	0.0	0.0	0.0	0.0	0.0	20.9	20.9	20.9	20.9	20.9	20.9	0.0	
Actual water treatment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.9	34.9	34.9	34.9	34.9	34.9	0.0	
Incremental pond volume (m3)	7,309	5,283	8,228	6,394	6,311	6,222	5,067	3,871	3,782	11,359	15,361	13,019	7,309	5,283	8,228	6,394	6,311	6,222	5,067	3,871	3,782	11,359	(10,581)	(12,085)	(18,632)	(20,658)	(16,877)	(19,547)	6,311	
Seasonal pond volume (m3)	656,742	662,026	670,254	676,648	682,959	689,181	694,248	698,119	701,901	713,260	728,621	741,640	748,949	754,233	762,461	768,855	775,166	781,388	786,455	790,326	794,108	805,467	794,886	782,801	764,169	743,510	726,634	707,086	713,397	
Overall Mass Balance																														
Tailings Input (Tonnes)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Tailings Tonnage (tonnes)	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	
Tailings Input (m³)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Tailings Volume (m3)	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	
Total Volume (Waste + Water) (m3)	1,222,742	1,228,026	1,236,254	1,242,648	1,248,959	1,255,181	1,260,248	1,264,119	1,267,901	1,279,260	1,294,621	1,307,640	1,314,949	1,320,233	1,328,461	1,334,855	1,341,166	1,347,388	1,352,455	1,356,326	1,360,108	1,371,467	1,360,886	1,348,801	1,330,169	1,309,510	1,292,634	1,273,086	1,279,397	
Check total volume waste + water (m3)	1,222,742	1,228,026	1,236,254	1,242,648	1,248,959	1,255,181	1,260,248	1,264,119	1,267,901	1,279,260	1,294,621	1,307,640	1,314,949	1,320,233	1,328,461	1,334,855	1,341,166	1,347,388	1,352,455	1,356,326	1,360,108	1,371,467	1,360,886	1,348,801	1,330,169	1,309,510	1,292,634	1,273,086	1,279,397	

WOLVERINE TAILINGS FACILITY WATER BALANCE
AVERAGE CLIMATE CONDITIONS
Update for Wolverine Annual Inspection - As of July 2015

(With diversions)

	Mine Year	5	Closure	Closure	Closure	Closure	Closure	Closure	Closure	Closure	Closure	Closure	Closure	Closure
	Calendar Year	2019	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
	Month	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
	Mean Monthly Temperature	-18	-15	-16	-12	-8	2	9	11	8	2	-7	-10	-18
	Monthly percent of annual precip.	8%	8%	6%	5%	4%	7%	11%	14%	11%	10%	9%	8%	8%
	Monthly Precipitation (mm)	47.4	42.8	33.2	26.5	20.0	42.3	65.3	77.7	62.3	57.1	48.8	46.7	47.4
	Average monthly runoff (% of annual)	1%	0%	0%	0%	1%	19%	35%	17%	9%	9%	6%	3%	1%
	Monthly Evaporation (mm)	2	5	4.5	9.5	21	72	86.5	90	61.5	32	14.5	6	2
	Incremental ice thickness on pond (m)	0.4	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
	Tailings to TSF (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tailings to paste (tpd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Inputs (m³/hr)														
	Tailings water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paste plant overflow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Balance of process plant	0.03521505	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Direct precipitation	8.28	7.47	6.41	4.64	3.61	7.39	11.78	13.57	10.88	10.31	8.53	8.42	8.28
Climate	Runoff from unlined area	0.00	0.00	0.00	0.02	0.03	0.47	0.75	0.86	0.69	0.66	0.08	0.00	0.00
	Snowmelt runoff from unlined area	0.00	0.00	0.00	0.00	0.29	0.84	0.87	0.84	0.00	0.00	0.00	0.00	0.00
	Seepage from diversion ditch	0.33	0.00	0.00	0.00	0.34	6.29	11.97	5.62	2.98	2.99	1.96	1.16	0.33
	Seepage reclaim	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Subtotal: All Inputs	10	8	7	6	5	16	26	22	16	15	12	11	10
Water Losses (m³/hr)														
	Tailing voids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Water reclaim to process plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Estimated pond area (m²)													
Climate	Pond evapor.	0.28	0.70	0.70	1.33	3.03	10.06	12.49	12.58	8.60	4.62	2.03	0.87	0.28
	Seepage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Subtotal: All Losses	1	2	2	2	4	11	13	14	10	6	3	2	1
Net water surplus (deficit)		**8**	**7**	**6**	**3**	**1**	**5**	**13**	**8**	**6**	**9**	**9**	**9**	**8**
Discharge period water surplus		0.0	0.0	0.0	0.0	0.0	13.9	13.9	13.9	13.9	13.9	13.9	0.0	0.0
Actual water treatment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incremental pond volume (m3)		6,222	5,038	3,843	2,477	898	3,663	9,270	6,196	4,433	6,715	6,356	6,279	6,196
Seasonal pond volume (m3)		719,619	724,657	728,500	730,977	731,875	735,538	744,808	751,004	755,437	762,151	768,507	774,786	780,982
Overall Mass Balance														
	Tailings Input (Tonnes)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cumulative Tailings Tonnage (tonnes)	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406	845,406
	Tailings Input (m³)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cumulative Tailings Volume (m3)	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000	566,000
	Total Volume (Waste + Water) (m3)	1,285,619	1,290,657	1,294,500	1,296,977	1,297,875	1,301,538	1,310,808	1,317,004	1,321,437	1,328,151	1,334,507	1,340,786	1,346,982
	Check total volume waste + water (m3)	1,285,619	1,290,657	1,294,500	1,296,977	1,297,875	1,301,538	1,310,808	1,317,004	1,321,437	1,328,151	1,334,507	1,340,786	1,346,982

Appendix B: Summary of Water Quality Results

Sample Location	L1	L1	T1	T1	T1	T1	T1	W8	W9	W9	W12	W14	W15	W16	W21
Sampling Date	15-06-16	15-07-30	12-1-15	15-05-15	15-06-15	15-07-30	15-10-28	15-07-30	15-06-16	15-07-30	16-1-15	16-1-15	15-07-30	15-07-30	17-1-15
Lab Report ID	B552114	B567563	B503783	B542529	B552114	B567563	B597096	B567563	B552114	B567563	B505726	B505726	B567563	B567563	B505726
Field Parameters															
Temperature (°C)			1.5	5.2		15.19	2.01				-0.07	-0.15			-0.15
pH		8.08	10.33	8.35			7.01	7.41		7.84	7.38	6.25	7.55	7.43	7.71
Specific Conductivity (µS/cm^3)		122	2518	790		3416	2138	182		319	180	150	117	168	247
Conductivity (µS/cm)		98	1268	383		2775	3812	109		186	94	78	74	104	128
Physical Parameters															
Temperature (°C)	4	4	4	2.7	4	4	1.7	4	4	4	1.2	1.2	4	4	1.2
Conductivity (µS/cm)	109	122	4850	762	3230	3390	3440	179	295	309	176	145	117	164	240
Hardness (mg/L)	51.8	59.5	2270	329	1590	1670	2020	86.9	146	161	86.7	67.9	55.5	84	122
Total Suspended Solids (mg/L)	<4.0	<4.0	8.5	12.3	4	5.5	6.8	6.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Total Dissolved Solids (mg/L)	72	74	4510	582	3020	3180	3240	114	166	188	110	94	66	92	148
pH	7.82	7.83	7.52	7.21	7.34	7.67	7.08	7.99	8.07	8.13	7.9	7.71	7.84	7.96	8.02
Turbidity (NTU)	0.83	0.63	7.44	10.4	1.38	4.28	7.51	1.4	0.1	0.19	0.27	0.27	0.12	0.42	0.34
DOC (mg/L)	3.42	1.9	27.5	3.57	21.1	25	22.3		1.45	6.6	2.04			1.8	
Major Anions (mg/L)															
Alkalinity-Total	43.9	50.2	39.6	16.3	29.3	40.1	30.2	73.2	107	113	67.6	54.7	49.5	70.1	101
Acidity-Total	<0.50	<0.50	<0.50	0.64	3.25	1.06	3.86	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromide	<0.010	<0.010	0.12	<0.10	<0.10		0.11	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	<0.50	<0.50	1100	58	620		510	<0.50	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Fluoride	0.068	0.066	0.29	0.062	0.2		0.21	0.04	0.12	0.11	0.05	0.082	0.028	0.039	0.12
Sulphate	9.35		1930	283	1360		1580		42.9		20.2	16			22.2
Nutrient Parameters (mg/L)															
Ammonial Nitrogen	<0.0050	0.0156	2.6	0.22	2		1.1	<0.0050	0.0095	<0.0050	0.012	0.019	<0.0050	<0.0050	0.027
Nitrate Nitrogen	<0.0020	<0.20	5.36	0.45	2.23		<0.20	<0.20	0.0863	<0.20	<0.20	<0.20	<0.20	0.37	<0.20
Nitrite Nitrogen	<0.0020	<0.20	2.45	<0.20	0.205		0.65	<0.20	0.0122	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Total Phosphate			<0.0050								<0.0050	<0.0050			0.0225
Dissolved Ortho-Phosphate	0.0034		<0.0010	<0.0010	<0.0010		0.0034		0.0024		0.0023	0.0024			0.011
Total Metals (mg/L)															
Aluminum (Al)	0.0245	0.0141	0.193	0.602	0.324	0.0825	0.0741	0.0887	0.00742	0.0105	0.00417	0.00958	0.00679	0.0136	0.00816
Antimony (Sb)	0.000038	0.000052	0.0503	0.00347	0.0458	0.0539	0.0474	0.000061	0.000179	0.000205	0.000043	0.000047	0.000024	0.000049	0.00007
Arsenic (As)	0.0013	0.00161	0.0103	0.00197	0.0104	0.0117	0.0135	0.000218	0.000252	0.000278	0.000185	0.000166	0.000134	0.000157	0.00145
Cadmium (Cd)	0.000019	0.0000246	0.000399	0.000403	0.00973	0.0108	0.0119	0.0000436	0.00129	0.00165	0.0000144	0.000101	0.0000138	0.0000912	0.0000113
Calcium (Ca)	15.4	17.7	907	130	633	665	804	29.3	43.2	47.6	26.4	19.2	20	27.8	30.9
Chromium (Cr)	<0.00010	<0.00010	0.001	0.00229	<0.00010	<0.00050	0.00011	<0.00050	<0.00010	<0.00010	<0.00010	0.00032	0.00022	<0.00010	0.00012
Cobalt (Co)	0.000018	0.0000217	0.00101	0.000863	0.00167	0.00175	0.00212	0.000127	0.0000133	0.000027	0.0000271	0.0000179	0.0000246	0.0000562	0.0000248
Copper (Cu)	0.000519	0.000731	0.832	0.086	0.721	0.764	0.67	0.00199	0.00104	0.00133	0.000344	0.000624	0.000925	0.000794	0.00062
Iron (Fe)	0.0732	0.081	0.286	1.12	0.0481	0.0817	0.163	0.192	0.0104	0.0458	0.0979	0.065	0.0078	0.0582	0.0989
Lead (Pb)	0.0000201	0.000053	0.114	0.00571	0.157	0.211	0.191	0.000295	0.000183	0.000274	0.0000443	0.000702	0.000198	0.0000582	0.0000739
Magnesium (Mg)	3.2	3.75	0.89	1.07	2.06	1.92	2.51	3.36	9.2	10.2	5.06	4.89	1.37	3.51	10.9
Manganese (Mn)	0.0132	0.0202	0.00672	0.132	0.152	0.2	0.279	0.00475	0.000465	0.00498	0.0206	0.00856	0.000698	0.0199	0.00839
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000963	0.00111	0.222	0.0155	0.0915	0.152	0.112	0.000511	0.000822	0.00081	0.00042	0.000419	0.000236	0.000403	0.00137
Nickel (Ni)	0.000501	0.000544	0.0042	0.00241	0.00543	0.00575	0.00765	0.00087	0.00352	0.00454	0.000246	0.00052	0.000143	0.000294	0.00153

Sample Location	L1	L1	T1	T1	T1	T1	T1	W8	W9	W9	W12	W14	W15	W16	W21
Sampling Date	15-06-16	15-07-30	12-1-15	15-05-15	15-06-15	15-07-30	15-10-28	15-07-30	15-06-16	15-07-30	16-1-15	16-1-15	15-07-30	15-07-30	17-1-15
Lab Report ID	B552114	B567563	B503783	B542529	B552114	B567563	B597096	B567563	B552114	B567563	B505726	B505726	B567563	B567563	B505726
Phosphorus (P)	0.035	0.0114	0.161		0.146		0.157		0.0096	0.0055	0.0069	0.0081	0.0026	0.0045	0.0198
Potassium (K)	0.743	0.724	77.1	4.67	47.5	49.1	64.4	0.29	1.02	1.11	0.623	1.02	0.381	0.52	1.21
Selenium (Se)	0.000336	0.000407	2.86	0.757	2.94	5.05	5.22	0.000453	0.00314	0.00332	0.0012	0.000463	0.00023	0.00107	0.000476
Silicon (Si)	2.41	2.21	1.33	1.82	1.24	1.64	2.01	2.67	3.41	3.44	3.83	4.84	2.5	3.1	3.34
Silver (Ag)	<0.0000050	<0.0000050	0.0014	0.00253	0.00496	0.0235	0.00931	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	0.875	1.05	272	14.3	176	185	239	1.12	1.43	1.58	1.2	1.61	0.998	1.25	1.65
Strontium (Sr)	0.0394	0.0471	3.51	0.378	2.42	2.36	3.14	0.0582	0.129	0.144	0.0564	0.0547	0.0305	0.0538	0.122
Thallium (Tl)	<0.0000020	0.0000048	0.000761	0.000083	0.00107	0.00171	0.00155	<0.0000020	0.0000024	0.0000084	<0.0000020	<0.0000020	0.0000033	0.0000022	<0.0000020
Vanadium (V)	<0.00020	<0.00020	<0.0010	0.00226	<0.00020	<0.00050	<0.00020	0.0005	<0.00020	<0.00020	<0.00020	<0.00020	0.00028	<0.00020	<0.00020
Zinc (Zn)	0.00227	0.00243	0.0491	0.0264	0.639	0.669	0.904	0.0051	0.113	0.148	0.00159	0.00374	0.00217	0.00429	0.00147
Dissolved Metals (mg/L)															
Aluminum (Al)	0.0149	0.00722	0.138	0.00917	0.067	0.0622	0.0413	0.00873	0.0178	0.00326	0.00171	0.00372	0.00454	0.00431	0.00197
Antimony (Sb)	0.000045	0.000051	0.0517	0.00367	0.0409	0.0546	0.0462	0.000053	0.000168	0.000189	0.000049	0.000046	0.000038	0.000052	0.000075
Arsenic (As)	0.00126	0.00152	0.0116	0.00145	0.00942	0.0127	0.0123	0.000195	0.000265	0.000234	0.000142	0.000171	0.000138	0.000142	0.00118
Cadmium (Cd)	0.0000163	0.0000064	0.000264	0.000354	0.011	0.01	0.0112	0.0000294	0.0013	0.0015	0.0000143	0.000103	0.0000232	0.0000712	0.0000077
Calcium (Ca)	15	17.6	965	137	662	733	747	30.3	43.8	48.7	24.8	18.8	20.3	26.8	29.9
Chromium (Cr)	<0.00010	<0.00010	0.00062	<0.00010	<0.00010	<0.00010	0.00015	<0.00010	<0.00010	<0.00010	0.00067	0.00037	0.00017	<0.00010	0.00018
Cobalt (Co)	0.0000139	0.000008	0.00103	0.000249	0.00164	0.00168	0.00184	0.0000307	0.0000099	0.0000101	0.0000168	0.0000159	0.0000149	0.0000145	0.0000115
Copper (Cu)	0.00053	0.000454	0.853	0.082	0.707	0.616	0.613	0.000909	0.00109	0.000892	0.000522	0.000637	0.00114	0.000626	0.000632
Iron (Fe)	0.039	0.005	0.029	0.011	0.023	0.014	0.087	0.016	0.005	0.004	0.033	0.031	0.002	0.009	0.051
Lead (Pb)	0.000024	<0.0000050	0.0564	0.000846	0.138	0.173	0.156	0.0000221	0.0000737	0.0000142	0.000115	0.000238	0.000115	<0.0000050	0.0000767
Magnesium (Mg)	3.4	3.78	0.858	0.841	1.95	1.96	2.26	3.59	9.66	10.1	5.3	5.1	1.35	3.5	10.8
Manganese (Mn)	0.00391	0.000125	<0.000050	0.109	0.164	0.202	0.255	0.0018	0.000121	0.000228	0.0123	0.00638	0.000106	0.00478	0.00256
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00107	0.00106	0.235	0.0161	0.0843	0.144	0.0973	0.000497	0.000826	0.00079	0.000425	0.00041	0.000236	0.000407	0.00135
Nickel (Ni)	0.00116	0.000426	0.00391	0.000809	0.0055	0.0055	0.00663	0.000587	0.0036	0.00413	0.0003	0.000569	0.00018	0.000314	0.00141
Phosphorus (P)	0.0096	0.0065	0.139	0.0184	0.14	0.129	0.117	<0.0020	0.0067	<0.0020	0.0078	0.0055	<0.0020	<0.0020	0.0147
Potassium (K)	0.723	0.751	71.5	5.07	50.7	53.1	58.5	0.336	1.01	1.16	0.774	1.06	0.425	0.528	1.21
Selenium (Se)	0.000342	0.000421	3.18	0.765	2.71	6.78	5.08	0.000555	0.00382	0.00336	0.00105	0.000418	0.000236	0.00117	0.000415
Silicon (Si)	2.72	2.32	1.31	0.925	1.31	1.49	1.8	2.7	3.23	3.41	3.46	4.51	2.35	3.17	3.05
Silver (Ag)	<0.0000050	<0.0000050	0.00279	0.0013	0.00235	0.0251	0.00971	<0.0000050	0.0000218	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	0.997	1.13	271	15.7	185	193	220	1.32	1.56	1.61	1.49	1.68	1.07	1.31	1.7
Strontium (Sr)	0.0468	0.0471	3.51	0.399	2.67	2.65	2.84	0.064	0.134	0.143	0.0555	0.052	0.0314	0.0537	0.113
Thallium (Tl)	<0.0000020	<0.0000020	0.000677	0.000072	0.00109	0.00169	0.00149	<0.0000020	0.0000022	0.0000026	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020
Vanadium (V)	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00023	<0.00020	0.00021
Zinc (Zn)	0.00192	0.00051	0.0271	0.0138	0.629	0.604	0.825	0.00201	0.116	0.135	0.00166	0.00431	0.00132	0.00312	0.00106
SAD and WAD Cyanide															
Cyanide + Thiocynate															
Weak Acid Dissoc. Cyanide (CN)			0.342	0.00153	0.0524	0.0817	0.0526							0.00112	

Sample Location	W22	W22	W22	W22	W22	W31	W31	W31	W31	W31-96	W40
Sampling Date	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	15-05-16	15-06-17	15-07-30	15-10-28	15-06-17	17-1-15
Lab Report ID	B524799	B542529	B552114	B567563	B597096	B542529	B552114	B567563	B597096	B552114	B505726
Field Parameters											
Temperature (°C)		3.76		8.87	-0.93	2.21			-0.92		-0.14
pH		7.55		7.96	8.09	6.47		7.75	8.12		7.55
Specific Conductivity (µS/cm^3)		90		215	147	60		135	82		317
Conductivity (µS/cm)		54		149	291	34		87	163		164
Physical Parameters											
Temperature (°C)	1	2.7	4	4	1.7	2.7	4	4	1.7	4	1.2
Conductivity (µS/cm)	312	88.9	164	211	269	60.7	116	134	152	117	315
Hardness (mg/L)	157	43.3	79.4	104	130	28.8	57.3	64.4	71.8	57.6	166
Total Suspended Solids (mg/L)	<4.0	6.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	16.5
Total Dissolved Solids (mg/L)	166	86	94	110	164	60	84	64	104	68	184
pH	8.07	7.58	7.95	8.15	8.08	7.54	7.9	7.9	7.95	7.91	8.07
Turbidity (NTU)	0.6	1.11	0.19	0.26	0.15	0.25	0.18	0.17	<0.10	0.12	0.15
DOC (mg/L)					1.97	4.78	3.07	1.5	0.93	1.62	
Major Anions (mg/L)											
Alkalinity-Total	126	34.8	62	84.3	105	28.3	53.2	58.5	67	52.8	127
Acidity-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromide	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	<0.50	0.57	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	0.6	<0.50	0.54
Fluoride	0.072	0.046	0.068	0.063	0.07	0.02	0.023	0.027	0.021	0.021	0.075
Sulphate	35.1	8.31	17.7		31.8	0.97	6.84		9.65	6.87	37.4
Nutrient Parameters (mg/L)											
Ammonial Nitrogen	0.0068	0.016	0.012	0.0081	0.015	0.0096	0.0081	0.0056	0.013	0.0078	0.023
Nitrate Nitrogen	0.37	<0.20	0.0044	<0.20	<0.20	<0.20	0.0052	<0.20	<0.20	0.0041	<0.20
Nitrite Nitrogen	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.0020	<0.20
Total Phosphate	<0.0050										0.0109
Dissolved Ortho-Phosphate	0.0028	<0.0010	<0.0010		<0.0010	0.0016	<0.0010		0.0026	<0.0010	0.0019
Total Metals (mg/L)											
Aluminum (Al)	0.0158	0.15	0.0168	0.00762	0.00713	0.0764	0.0164	0.0109	0.00833	0.0145	0.0268
Antimony (Sb)	0.000061	0.000035	0.000049	0.000063	0.00007	0.000022	<0.000020	<0.000020	<0.000020	<0.000020	0.000096
Arsenic (As)	0.000236	0.000297	0.000194	0.000236	0.000185	0.000138	0.000168	0.000151	0.00014	0.000164	0.000271
Cadmium (Cd)	0.0000121	0.000025	0.0000093	0.000016	0.000012	0.000007	<0.0000050	0.0000084	0.000006	<0.0000050	0.000107
Calcium (Ca)	40.8	11.9	21.4	26.8	33.2	10.5	21	23.4	26	21.1	43.4
Chromium (Cr)	0.00027	0.00052	0.00017	0.00019	0.00024	0.00016	<0.00010	<0.00010	<0.00010	<0.00010	0.00053
Cobalt (Co)	0.0000202	0.00014	0.000026	0.0000242	0.000023	0.000037	0.0000239	0.0000235	0.000024	0.0000217	0.000078
Copper (Cu)	0.000265	0.00129	0.000548	0.000742	0.000481	0.00282	0.00136	0.0013	0.000956	0.00138	0.00141
Iron (Fe)	0.0226	0.334	0.0379	0.036	0.0204	0.0247	0.0043	0.0042	0.0023	0.0033	0.0976
Lead (Pb)	0.000104	0.000159	0.0000194	0.0000605	0.000016	0.000051	0.0000487	0.0000525	0.000054	0.0000148	0.00095
Magnesium (Mg)	13.4	3.29	6.26	8.87	11.4	0.61	1.17	1.44	1.68	1.18	14
Manganese (Mn)	0.00121	0.0267	0.00345	0.00414	0.00325	0.000679	0.000188	0.000148	0.000187	0.000069	0.015
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000839	0.000319	0.000555	0.000626	0.000776	0.000166	0.00036	0.000353	0.000374	0.000369	0.000829
Nickel (Ni)	0.000684	0.00162	0.000748	0.000912	0.000842	0.000258	0.000109	0.000164	0.000068	0.00014	0.00108

Sample Location	W22	W22	W22	W22	W22	W31	W31	W31	W31	W31-96	W40
Sampling Date	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	15-05-16	15-06-17	15-07-30	15-10-28	15-06-17	17-1-15
Lab Report ID	B524799	B542529	B552114	B567563	B597096	B542529	B552114	B567563	B597096	B552114	B505726
Phosphorus (P)	0.0055	0.0204	0.0044	0.0023	<0.0020	0.0151	0.0043	<0.0020	<0.0020	0.006	0.0173
Potassium (K)	0.996	0.793	0.764	0.819	0.837	0.442	0.398	0.386	0.439	0.386	1.1
Selenium (Se)	0.000728	0.000189	0.000362	0.000489	0.000724	0.000137	0.000195	0.000207	0.000308	0.000179	0.000999
Silicon (Si)	4.75	2.92	3.39	3.73	4.27	1.89	2.67	2.77	2.95	2.76	4.98
Silver (Ag)	<0.0000050	0.000006	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	2.22	0.744	1.24	1.6	1.88	0.587	0.99	1.17	1.25	0.992	2.23
Strontium (Sr)	0.179	0.0386	0.0869	0.115	0.151	0.00748	0.0145	0.0166	0.0181	0.0141	0.198
Thallium (Tl)	<0.0000020	0.000005	<0.0000020	0.0000021	<0.0000020	0.000002	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.0000022
Vanadium (V)	<0.00020	0.00048	<0.00020	<0.00020	<0.00020	0.00043	0.0005	0.00051	0.00038	0.0005	<0.00020
Zinc (Zn)	0.00146	0.00207	0.00061	0.00116	0.00098	0.00046	0.00034	0.00045	0.00124	0.00019	0.00632
Dissolved Metals (mg/L)											
Aluminum (Al)	0.00198	0.0237	0.0179	0.00395	0.0052	0.051	0.0415	0.00928	0.00732	0.0341	0.0017
Antimony (Sb)	0.000057	0.000038	0.000083	0.000103	0.000064	0.000034	<0.000020	<0.000020	<0.000020	<0.000020	0.000086
Arsenic (As)	0.000204	0.000162	0.000183	0.000232	0.0002	0.000133	0.000167	0.000151	0.00012	0.000165	0.000187
Cadmium (Cd)	0.0000113	0.00001	0.0000086	0.0000122	0.000011	0.000006	<0.0000050	<0.0000050	0.000006	<0.0000050	0.0000674
Calcium (Ca)	39.5	11.7	21.2	28.1	35.6	11.2	21.3	24.9	26.9	21.5	39.8
Chromium (Cr)	0.00023	0.00016	0.00014	0.00016	0.00021	0.00304	0.00013	<0.00010	<0.00010	0.00011	0.00029
Cobalt (Co)	0.0000088	0.000025	0.0000132	0.0000114	0.00002	0.000072	0.0000222	0.0000209	0.000019	0.0000238	0.0000111
Copper (Cu)	0.000263	0.00095	0.000528	0.00235	0.000578	0.00311	0.00124	0.00115	0.000833	0.00126	0.000741
Iron (Fe)	0.003	0.066	0.014	0.008	0.017	0.114	0.005	0.002	0.001	0.004	0.0045
Lead (Pb)	0.0000597	0.000028	0.0000176	0.0000322	0.000111	0.000043	0.0000198	0.0000154	0.000014	0.0000182	0.000665
Magnesium (Mg)	13.9	2.96	6.41	8.67	11.5	0.678	1.17	1.46	1.66	1.18	13.8
Manganese (Mn)	0.000345	0.00193	0.000913	0.000127	0.00247	0.00128	0.000063	<0.000050	0.000094	0.000087	0.000599
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000813	0.000341	0.000549	0.000725	0.000707	0.000231	0.000336	0.000335	0.000363	0.000341	0.000798
Nickel (Ni)	0.000542	0.0011	0.000712	0.000996	0.000865	0.00187	0.000096	0.000192	0.000056	0.000099	0.000777
Phosphorus (P)	0.0063	0.0036	0.0029	<0.0020	<0.0020	0.0077	0.0038	<0.0020	<0.0020	0.0046	0.0076
Potassium (K)	1.01	0.842	0.767	0.9	0.858	0.45	0.388	0.407	0.444	0.389	1.18
Selenium (Se)	0.000736	0.000208	0.000356	0.00125	0.000765	0.000132	0.000214	0.000205	0.000283	0.000217	0.000906
Silicon (Si)	4.83	2.88	3.24	3.72	4.51	1.96	2.54	2.89	2.98	2.59	4.47
Silver (Ag)	<0.0000050	<0.0000050	0.0000083	<0.0000050	<0.0000050	<0.0000050	0.0000066	<0.0000050	<0.0000050	0.0000053	<0.0000050
Sodium (Na)	2.26	0.703	1.36	1.73	1.94	0.65	1.01	1.25	1.24	1.03	2.32
Strontium (Sr)	0.182	0.0447	0.0824	0.115	0.15	0.00776	0.0145	0.0165	0.018	0.014	0.192
Thallium (Tl)	<0.0000020	0.000003	0.0000047	0.0000034	<0.0000020	0.000003	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020
Vanadium (V)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00035	0.00047	0.00048	0.00039	0.00048	<0.00020
Zinc (Zn)	0.00134	0.0008	0.00236	0.00101	0.0012	0.00044	0.0014	0.00019	0.00057	0.00173	0.00401
SAD and WAD Cyanide											
Cyanide + Thiocynate											
Weak Acid Dissoc. Cyanide (CN)					<0.00050	0.00059	<0.00050	<0.00050	<0.00050	0.00059	

Sample Location	W71	W71	W71	W71	W71	W71	W72	W72	W72	W72	W72	W72	W73	W73
Sampling Date	17-1-15	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	17-1-15	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	17-1-15	15-03-24
Lab Report ID	B505726	B524799	B542529	B552114	B567563	B597096	B505726	B524799	B542529	B552114	B567563	B597096	B505726	B524799
Field Parameters														
Temperature (°C)	-0.14		-0.35		1.18	-0.93	-0.17		3.48		6.23	-0.93	-0.13	
pH	7.41		6.98		7.49	7.88	7.64		7.82		7.67	8.05	7.68	
Specific Conductivity (µS/cm^3)	809		409		611	358	506		258		315	212	285	
Conductivity (µS/cm)	420		211		333	708	263		152		202	419	147	
Physical Parameters														
Temperature (°C)	1.2	1	2.7	4	4	1.7	1.2	1	2.7	4	4	1.7	1.2	1
Conductivity (µS/cm)	789	843	522	612	579	671	496	493	252	310	306	404	287	296
Hardness (mg/L)	453	487	256	341	308	365	266	249	118	158	155	237	147	147
Total Suspended Solids (mg/L)	<4.0	101	24.8	<4.0	<4.0	<4.0	<4.0	11	7	<4.0	<4.0	<4.0	<4.0	<4.0
Total Dissolved Solids (mg/L)	506	548	362	380	372	414	294	280	196	178	184	250	164	174
pH	8	8.03	8	8.16	8.31	8.15	8.05	8.11	7.89	8.08	8.12	8.12	8.05	8.14
Turbidity (NTU)	0.15	23.5	0.65	0.27	0.18	0.18	0.33	0.67	1.07	0.84	0.47	2.54	0.22	0.37
DOC (mg/L)						4.65						3.35		
Major Anions (mg/L)														
Alkalinity-Total	309	325	199	240	228	248	211	213	85.7	111	118	166	125	127
Acidity-Total	7	3.71	<0.50	<0.50	<0.50	<0.50	2.26	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromide	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	<0.50	0.54	0.76	0.51	<0.50	1	0.51	<0.50	0.89	0.53	<0.50	0.7	<0.50	<0.50
Fluoride	0.69	0.67	0.56	0.65	0.68	0.68	0.19	0.18	0.14	0.18	0.15	0.15	0.056	0.058
Sulphate	141	143	78.5	97.8		116	58.8	54.2	41.1	47.4		49.4	25.4	26.2
Nutrient Parameters (mg/L)														
Ammonial Nitrogen	0.0083	0.021	0.012	0.019	<0.0050	0.012	0.042	0.044	0.019	0.016	0.03	0.028	0.0098	0.013
Nitrate Nitrogen	<0.20	<0.20	<0.20	0.0192	<0.20	<0.20	<0.20	0.4	<0.20	0.0282	<0.20	<0.20	<0.20	0.24
Nitrite Nitrogen	<0.20	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20	<0.20	0.23	<0.0020	<0.20	<0.20	<0.20	<0.20
Total Phosphate	0.018	0.0505					0.0384	0.0177					0.01	<0.0050
Dissolved Ortho-Phosphate	0.012	0.016	0.034	0.0093		0.011	0.012	0.0089	0.0065	0.014		0.013	0.0033	0.0029
Total Metals (mg/L)														
Aluminum (Al)	0.00532	0.89	0.649	0.0411	0.0186	0.00609	0.0043	0.0134	0.109	0.0425	0.0228	0.0679	0.00498	0.00507
Antimony (Sb)	0.000509	0.00048	0.000586	0.000464	0.000463	0.000482	0.00012	0.000093	0.000187	0.000268	0.000217	0.000179	0.000104	0.000103
Arsenic (As)	0.000267	0.000764	0.00145	0.000473	0.000311	0.000352	0.00158	0.0017	0.00151	0.00126	0.00144	0.00174	0.000223	0.000246
Cadmium (Cd)	0.00329	0.00317	0.00437	0.00255	0.00271	0.00285	0.000276	0.000216	0.000243	0.000348	0.000304	0.000244	0.0000075	0.0000074
Calcium (Ca)	123	135	65.9	90.4	83.2	95.4	67.3	63.2	29.7	40.4	39.7	63.6	39	36.8
Chromium (Cr)	<0.00010	0.00265	0.00137	<0.00010	<0.00050	<0.00010	0.00014	<0.00010	<0.00050	0.00019	<0.00050	0.00014	0.0003	0.00043
Cobalt (Co)	0.0000208	0.000743	0.00181	0.000138	0.000072	0.00005	0.000124	0.0000969	0.000137	0.000084	0.000057	0.000095	0.0000133	0.0000138
Copper (Cu)	0.000476	0.00251	0.00543	0.000718	0.00126	0.000573	0.000378	0.000332	0.00206	0.00102	0.00136	0.000881	0.000482	0.000524
Iron (Fe)	0.0151	1.7	1.79	0.172	0.0601	0.0249	0.0677	0.139	0.315	0.161	0.113	0.226	0.0598	0.0503
Lead (Pb)	0.0000602	0.00106	0.00148	0.000168	<0.000050	0.000318	0.000142	0.0000875	0.000194	0.0000491	<0.000050	0.00019	0.0000097	0.0000392
Magnesium (Mg)	35.1	36.5	22.3	28	24.3	30.7	23.8	22.1	10.8	13.9	13.6	19	11.9	13.3
Manganese (Mn)	0.00785	0.0525	0.142	0.016	0.00524	0.00406	0.281	0.157	0.0668	0.0548	0.0488	0.0947	0.00742	0.00378
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00447	0.00405	0.00424	0.00544	0.00467	0.00518	0.00372	0.00348	0.00198	0.00284	0.00219	0.00271	0.000533	0.000521
Nickel (Ni)	0.0294	0.0355	0.0498	0.0292	0.0304	0.0297	0.00314	0.00246	0.00537	0.00534	0.00456	0.00319	0.000602	0.000667

Sample Location	W71	W71	W71	W71	W71	W71	W72	W72	W72	W72	W72	W72	W73	W73
Sampling Date	17-1-15	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	17-1-15	15-03-24	15-05-20	15-06-13	15-07-30	15-10-28	17-1-15	15-03-24
Lab Report ID	B505726	B524799	B542529	B552114	B567563	B597096	B505726	B524799	B542529	B552114	B567563	B597096	B505726	B524799
Phosphorus (P)	0.0164	0.0532		0.0277		0.0116	0.0203	0.0221		0.022		0.0195	0.0066	0.0079
Potassium (K)	0.866	1	0.82	0.824	0.66	0.707	1.1	0.909	0.76	0.657	0.48	0.701	0.393	0.442
Selenium (Se)	0.00572	0.0033	0.00405	0.00515	0.0051	0.00742	0.00124	0.000884	0.00114	0.00179	0.0012	0.00172	0.00107	0.000924
Silicon (Si)	4.65	5.6	3.34	4.01	3.63	4.03	5.8	5.29	2.4	3.31	3.21	5.07	4.88	4.94
Silver (Ag)	<0.0000050	0.0000134	0.00004	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.00001	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	0.953	0.982	0.74	0.818	0.76	0.936	2.47	2.24	1.07	1.27	1.26	1.85	1.36	1.55
Strontium (Sr)	0.343	0.348	0.203	0.247	0.219	0.277	0.347	0.315	0.147	0.189	0.179	0.254	0.166	0.177
Thallium (Tl)	0.0000022	0.0000093	0.000033	0.0000026	0.0000046	<0.0000020	<0.0000020	<0.0000020	0.000004	<0.0000020	<0.0000020	0.000002	<0.0000020	<0.0000020
Vanadium (V)	<0.00020	0.00199	0.00338	0.0004	<0.00050	<0.00020	<0.00020	<0.00020	0.00052	0.00034	<0.00050	0.00027	<0.00020	<0.00020
Zinc (Zn)	0.752	0.717	0.632	0.51	0.507	0.568	0.0297	0.0219	0.0318	0.0473	0.0402	0.0353	0.00044	0.00056
Dissolved Metals (mg/L)														
Aluminum (Al)	0.00125	0.00548	0.00332	0.0282	0.00277	0.00415	0.00178	0.00154	0.00961	0.0223	0.00601	0.00498	0.00129	0.00156
Antimony (Sb)	0.000499	0.00045	0.000424	0.000431	0.000555	0.000482	0.000121	0.000092	0.00021	0.000244	0.000258	0.000178	0.000109	0.000098
Arsenic (As)	0.000282	0.000319	0.000335	0.000337	0.000345	0.00032	0.00144	0.00143	0.00117	0.00113	0.0014	0.00148	0.000213	0.000202
Cadmium (Cd)	0.00338	0.00296	0.00231	0.00225	0.00273	0.00281	0.00026	0.000173	0.000138	0.000255	0.000234	0.000176	0.0000072	0.0000069
Calcium (Ca)	120	117	74.2	93.3	97.8	101	65.4	68.5	35.2	42	40.4	53.6	38.5	39.7
Chromium (Cr)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00021	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.0003	0.0003
Cobalt (Co)	0.0000167	0.0000304	0.000199	0.0000667	0.0000405	0.000033	0.000131	0.0000757	0.000048	0.0000322	0.0000139	0.000042	0.0000096	0.0000068
Copper (Cu)	0.000503	0.000393	0.00114	0.000551	0.00084	0.000606	0.000559	0.000228	0.0014	0.000846	0.00165	0.000678	0.000467	0.000384
Iron (Fe)	0.006	0.014	0.036	0.019	0.014	0.011	0.0307	0.044	0.098	0.063	0.030	0.050	0.0258	0.018
Lead (Pb)	0.0000206	0.0000943	0.000019	0.0000189	0.0000055	0.000026	0.000153	0.0000284	0.000131	0.0000274	<0.0000050	0.000024	0.0000256	0.000022
Magnesium (Mg)	35.7	35.9	21.2	27.5	28.5	30.8	24.3	23.2	10.7	14.5	14.7	19	11.8	12.1
Manganese (Mn)	0.00804	0.0149	0.0328	0.00904	0.00303	0.00304	0.282	0.147	0.0281	0.0354	0.00905	0.0811	0.00181	0.000483
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00455	0.00389	0.00437	0.00511	0.00495	0.00532	0.00366	0.00347	0.00213	0.00274	0.00221	0.00263	0.000518	0.000542
Nickel (Ni)	0.0306	0.0306	0.0258	0.0267	0.0333	0.0296	0.00318	0.00229	0.00458	0.00493	0.00437	0.003	0.000556	0.000473
Phosphorus (P)	0.0127	0.0167	0.0161	0.0157	0.0103	0.0122	0.0148	0.013	0.0155	0.0162	0.0088	0.0124	0.0051	0.0056
Potassium (K)	0.908	0.935	0.786	0.797	0.746	0.707	1.15	0.952	0.805	0.663	0.556	0.693	0.401	0.404
Selenium (Se)	0.00529	0.00304	0.00411	0.00509	0.00617	0.00766	0.00123	0.000881	0.00124	0.00177	0.00144	0.00147	0.001	0.000871
Silicon (Si)	4.25	4.51	3.39	3.8	3.79	4.03	5.4	5.44	2.98	3.06	3.32	4.79	4.62	4.74
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	1.02	0.973	0.686	0.836	0.946	0.94	2.49	2.43	1.03	1.34	1.44	1.93	1.48	1.38
Strontium (Sr)	0.342	0.339	0.201	0.256	0.256	0.282	0.333	0.311	0.159	0.201	0.185	0.251	0.16	0.162
Thallium (Tl)	<0.0000020	<0.0000020	0.000004	0.0000024	0.000007	0.000002	<0.0000020	<0.0000020	0.000002	<0.0000020	0.0000035	<0.0000020	<0.0000020	<0.0000020
Vanadium (V)	0.00025	<0.00020	0.00022	0.00028	0.00025	<0.00020	<0.00020	<0.00020	0.00024	0.00024	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.772	0.697	0.461	0.483	0.598	0.564	0.0294	0.0199	0.0317	0.0421	0.0351	0.0311	0.00047	0.00046
SAD and WAD Cyanide														
Cyanide + Thiocynate														
Weak Acid Dissoc. Cyanide (CN)						<0.00050						<0.00050		

Sample Location	W73	W73	W73	W73	W80	W80	W80	W81	W82	W82	W82	W82	W85
Sampling Date	15-05-20	15-06-13	15-07-30	15-10-28	16-1-15	15-06-14	15-07-30	15-07-30	15-05-16	15-06-17	15-07-30	15-10-28	15-07-30
Lab Report ID	B542529	B552114	B567563	B597096	B505726	B552114	B567563	B567563	B542529	B552114	B567563	B597096	B567563
Field Parameters													
Temperature (°C)	3.8		6.89	-0.93	-0.13		7.65	6.83	3.53			-0.8	7.18
pH	7.78		7.7	8.32	7.11		7.75	7.37	6.39		7.24	7.3	7.24
Specific Conductivity (µS/cm^3)	126		201	112	153		179	187	109		285	152	158
Conductivity (µS/cm)	75		131	221	80		120	123	64		202	300	104
Physical Parameters													
Temperature (°C)	2.7	4	4	1.7	1.2	4	4	4	2.7	4	4	1.7	4
Conductivity (µS/cm)	125	169	200	232	177	150	169	128	106	270	281	276	157
Hardness (mg/L)	59.2	83.4	101	117	86.5	71.7	78.4	63.2	48.1	130	132	133	81.2
Total Suspended Solids (mg/L)	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.5	<4.0
Total Dissolved Solids (mg/L)	92	106	102	132	100	92	82	66	82	166	172	150	76
pH	7.8	7.98	8.05	8.06	7.85	7.91	7.97	7.85	7.38	7.92	8.01	7.85	7.76
Turbidity (NTU)	0.4	0.69	0.33	0.18	0.31	0.42	0.23	0.22	1.12	1.04	2.13	4.05	0.46
DOC (mg/L)				2.14					4.89	1.43	3	0.95	1.8
Major Anions (mg/L)													
Alkalinity-Total	52	71.9	84.7	98	67.8	58.3	67.9	54.4	30.1	81.8	88.8	87.8	68.8
Acidity-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.58	<0.50	<0.50
Bromide	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	<0.50	<0.50	<0.50	0.92	<0.50	<0.50	<0.50	<0.50	0.71	0.74	<0.50	0.93	<0.50
Fluoride	0.035	0.044	0.044	0.047	0.079	0.043	0.042	0.029	0.1	0.15	0.15	0.13	0.037
Sulphate	9.49	13.5		21.4	20	16.2			16.9	49.4		44.2	
Nutrient Parameters (mg/L)													
Ammonial Nitrogen	0.016	0.0071	<0.0050	0.014	0.011	0.025	<0.0050	<0.0050	0.031	0.011	<0.0050	0.028	<0.0050
Nitrate Nitrogen	<0.20	0.0071	<0.20	<0.20	<0.20	0.002	<0.20	<0.20	<0.20	0.182	<0.20	<0.20	<0.20
Nitrite Nitrogen	<0.20	<0.0020	<0.20	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20
Total Phosphate					0.0057								
Dissolved Ortho-Phosphate	0.0016	<0.0010		0.0014	0.0034	0.0031			0.014	0.0075		0.0066	
Total Metals (mg/L)													
Aluminum (Al)	0.0609	0.0335	0.0122	0.00677	0.00463	0.046	0.0152	0.0122	0.0705	0.0422	0.0814	0.0663	0.0593
Antimony (Sb)	0.000085	0.000097	0.000098	0.000096	0.000043	0.000051	<0.000050	0.000042	0.000386	0.000326	0.000331	0.000284	0.000061
Arsenic (As)	0.000263	0.000237	0.000263	0.000201	0.00023	0.000239	0.000253	0.000149	0.000754	0.000315	0.000382	0.000333	0.000176
Cadmium (Cd)	0.000013	0.0000151	0.0000135	0.000009	0.0000267	0.0000212	0.0000166	0.0000398	0.00118	0.00178	0.00255	0.00354	0.0000557
Calcium (Ca)	15.9	23	28.5	31.3	26.1	22.7	24.4	22	15.1	44.9	45.4	45.6	27.1
Chromium (Cr)	0.00059	0.0003	0.00029	0.0003	<0.00010	0.00016	<0.00050	0.00016	0.00014	<0.00010	<0.00050	<0.00010	<0.00050
Cobalt (Co)	0.000054	0.0000312	0.0000361	0.000017	0.0000617	0.0000728	0.00005	0.0000309	0.000266	0.000349	0.000773	0.00174	0.0001
Copper (Cu)	0.00312	0.00116	0.00133	0.00102	0.000363	0.00089	0.0012	0.00267	0.00338	0.00277	0.00554	0.00613	0.00159
Iron (Fe)	0.138	0.0664	0.0923	0.0473	0.151	0.138	0.102	0.0261	0.411	0.22	0.44	0.502	0.12
Lead (Pb)	0.000121	0.0000176	0.0000214	0.000063	0.000056	0.0000442	<0.000050	0.000202	0.00161	0.000811	0.0024	0.00199	0.000092
Magnesium (Mg)	4.73	6.3	7.37	9.31	5.19	3.62	4.23	2.02	2.49	4.39	4.48	4.75	3.32
Manganese (Mn)	0.022	0.00911	0.0275	0.00877	0.0653	0.0169	0.023	0.00737	0.112	0.0817	0.157	0.329	0.00752
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000341	0.000426	0.000456	0.000483	0.000463	0.000395	0.000399	0.000348	0.000296	0.000436	0.000375	0.000372	0.000449
Nickel (Ni)	0.00155	0.000804	0.00088	0.000666	0.000277	0.000424	0.00035	0.000228	0.00785	0.0114	0.0162	0.0221	0.00055

Sample Location	W73	W73	W73	W73	W80	W80	W80	W81	W82	W82	W82	W82	W85
Sampling Date	15-05-20	15-06-13	15-07-30	15-10-28	16-1-15	15-06-14	15-07-30	15-07-30	15-05-16	15-06-17	15-07-30	15-10-28	15-07-30
Lab Report ID	B542529	B552114	B567563	B597096	B505726	B552114	B567563	B567563	B542529	B552114	B567563	B597096	B567563
Phosphorus (P)		0.0048	0.0043	0.0023	0.0092	0.0083		0.0054	0.0531	0.0209		0.0259	
Potassium (K)	0.33	0.247	0.242	0.282	0.628	0.517	0.5	0.453	0.981	1.15	1.03	1.16	0.51
Selenium (Se)	0.000368	0.000466	0.000605	0.000831	0.00116	0.000951	0.000656	0.000472	0.00165	0.0025	0.00224	0.00307	0.000535
Silicon (Si)	2.7	3.61	3.86	4.58	3.84	2.96	2.87	2.71	2.22	3.3	3.06	3.62	3.01
Silver (Ag)	0.000006	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.000023	0.0000055	0.0000074	<0.0000050	<0.0000050
Sodium (Na)	0.7	0.919	1.08	1.2	1.26	0.947	1.03	1.58	0.731	1.4	1.46	1.5	1.04
Strontium (Sr)	0.0549	0.0785	0.0956	0.118	0.0576	0.0434	0.0484	0.0381	0.0428	0.118	0.112	0.124	0.0499
Thallium (Tl)	0.000002	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000009	0.0000067	0.0000117	0.000005	<0.0000020
Vanadium (V)	<0.00050	0.00025	0.00022	<0.00020	<0.00020	0.00025	<0.00050	0.00027	<0.00020	<0.00020	<0.00050	<0.00020	<0.00050
Zinc (Zn)	0.0014	0.00041	0.00044	0.00064	0.00114	0.00097	0.001	0.00327	0.119	0.166	0.237	0.348	0.0034
Dissolved Metals (mg/L)													
Aluminum (Al)	0.00939	0.0168	0.00282	0.00365	0.00251	0.0146	0.00331	0.0044	0.0289	0.019	0.0161	0.0192	0.00516
Antimony (Sb)	0.00009	0.00009	0.000118	0.000096	0.000058	0.000052	0.000064	0.000028	0.00044	0.000308	0.000323	0.000255	0.000056
Arsenic (As)	0.000216	0.000206	0.000213	0.000192	0.000206	0.000216	0.000223	0.000119	0.000683	0.000202	0.000163	0.000108	0.000137
Cadmium (Cd)	0.000007	0.0000051	0.0000064	0.000007	0.000026	0.0000558	0.0000146	0.0000204	0.00111	0.00147	0.00242	0.00254	0.0000389
Calcium (Ca)	17.4	24.4	28.6	31.4	26.6	24	26	22.5	15.1	43.5	49.8	44.8	26.2
Chromium (Cr)	0.00038	0.00024	0.00022	0.00029	0.0006	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.0001	<0.00010	<0.00010
Cobalt (Co)	0.000023	0.0000128	0.0000116	0.00001	0.0000574	0.0000331	0.0000278	0.0000145	0.000213	0.000225	0.000116	0.0014	0.0000108
Copper (Cu)	0.00259	0.000968	0.0014	0.000798	0.000475	0.000693	0.00114	0.000563	0.00281	0.00189	0.00258	0.00242	0.000716
Iron (Fe)	0.057	0.030	0.013	0.028	0.06	0.061	0.043	0.005	0.258	0.079	0.024	0.138	0.009
Lead (Pb)	0.000024	0.0000053	<0.0000050	0.000007	0.000133	0.0000993	<0.0000050	<0.0000050	0.000876	0.000177	0.0000565	0.000067	0.0000124
Magnesium (Mg)	4.31	6.38	7.21	9.48	5.56	3.8	4.36	1.92	2.44	4.13	4.95	4.82	3.37
Manganese (Mn)	0.00281	0.00269	0.000463	0.00396	0.0645	0.0135	0.0162	0.00153	0.0938	0.0532	0.0603	0.267	0.000734
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000377	0.000416	0.000498	0.000502	0.000458	0.000398	0.000411	0.000272	0.000344	0.000377	0.000383	0.000398	0.000416
Nickel (Ni)	0.00132	0.000688	0.000718	0.000644	0.000314	0.000301	0.000384	0.000202	0.00775	0.0109	0.0149	0.0208	0.00032
Phosphorus (P)	0.006	0.0036	<0.0020	<0.0020	0.0067	0.0082	0.0024	<0.0020	0.0306	0.0108	0.0054	0.0028	<0.0020
Potassium (K)	0.359	0.245	0.248	0.281	0.738	0.548	0.573	0.4	1.05	1.07	1.19	1.15	0.554
Selenium (Se)	0.000409	0.000455	0.000653	0.000799	0.00116	0.000986	0.000781	0.00047	0.00171	0.00242	0.00292	0.00284	0.000609
Silicon (Si)	3.3	3.52	3.85	4.5	3.68	2.82	3.06	2.67	2.37	3.17	3.61	3.57	3.16
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.000008	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	0.667	0.934	1.08	1.22	1.47	1.03	1.09	1.02	0.711	1.34	1.54	1.47	1.07
Strontium (Sr)	0.0584	0.0793	0.0926	0.115	0.055	0.045	0.0511	0.0367	0.0462	0.117	0.127	0.123	0.0527
Thallium (Tl)	0.000002	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000006	0.0000057	0.0000065	0.000003	<0.0000020
Vanadium (V)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.00053	0.00078	0.00015	0.00049	0.00181	0.00157	0.00031	0.00075	0.13	0.154	0.21	0.305	0.00131
SAD and WAD Cyanide													
Cyanide + Thiocynate													
Weak Acid Dissoc. Cyanide (CN)				<0.00050								<0.00050	<0.00050

Sample Location	MW05-01A	MW05-01A	MW05-01B	MW05-01B	MW05-02A	MW05-02A	MW05-02B	MW05-02B	MW05-03A	MW05-03B	MW05-03B
Sampling Date	**15-06-17**	**15-08-02**	**15-06-17**	**15-08-02**	**15-06-15**	**15-08-02**	**15-06-15**	**15-08-02**	**15-08-02**	**15-05-13**	**15-08-02**
Lab Report ID	**B552115**	**B567761**	**B552115**	**B567761**	**B552115**	**B567761**	**B552115**	**B567761**	**B567761**	**B540498**	**B567761**
Field Parameters											
Temperature (°C)		3				2.31		2.14	2.29	6.5	3.17
pH		7.71				7.18		6.88	7.16	2.54	6.49
Specific Conductivity (µS/cm^3)		268				414		325	472	393	383
Conductivity (µS/cm)		156				234		186	267	224	223
Physical Parameters											
Temperature (°C)	4	5	4	5	4	5	4	5	5	2	5
Conductivity (µS/cm)	238	257	199	228	382	398	280	278	441	394	379
Hardness (mg/L)	121	123	102	108	201	200	133	149	228	169	168
Total Suspended Solids (mg/L)	<4.0	<4.0	<4.0	5.8	<4.0	<4.0	11.5	38.5	11	<4.0	<4.0
Total Dissolved Solids (mg/L)	134	146	144	124	254	236	166	154	308	242	242
pH	8.1	8.11	7.8	8.09	7.96	8.21	7.44	8.02	8.24	7.81	7.67
Turbidity (NTU)	1.56	0.45	3.48	6.2	11	11.2	182	186	76.7	<0.10	0.18
DOC (mg/L)											
Major Anions (mg/L)											
Alkalinity-Total	102	103	97.3	108	171	181	142	140	192	94.1	94
Acidity-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.21	3.13	0.72	7.51	9.3
Bromide	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010	<0.10	<0.10	0.014	0.024
Chloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53	2.6	2.8
Fluoride	0.49	0.47	0.12	0.16	0.26	0.26	0.065	0.062	0.95	0.13	0.13
Sulphate	18.3	25.8	3.59	8.13	30.6	32.5	6.3	7.01	40.3	87.8	84.1
Nutrient Parameters (mg/L)											
Ammonial Nitrogen	0.133	0.153	0.514	0.538	0.102	0.117	0.022	0.0139	0.0927	0.0055	0.012
Nitrate Nitrogen	<0.0020	<0.20	0.05	<0.20	<0.0020	<0.20	<0.0020	<0.20	<0.20	<0.20	0.35
Nitrite Nitrogen	<0.0020	<0.20	<0.0020	<0.20	<0.0020	<0.20	0.0024	<0.20	<0.20	0.22	<0.20
Dissolved Ortho-Phosphate	0.02	0.023	0.074	0.03	<0.0010	0.0031	<0.0010	0.075	<0.0010	0.0013	<0.0010
Dissolved Metals (mg/L)											
Aluminum (Al)	0.00342	0.00107	0.0125	0.00254	0.00392	<0.00050	0.00373	<0.00050	<0.00050	<0.00050	0.00055
Antimony (Sb)	<0.000020	<0.000020	0.000066	0.000051	0.000029	<0.000020	<0.000020	<0.000020	0.000131	0.000115	0.000115
Arsenic (As)	0.0101	0.00396	0.00465	0.00545	0.00117	0.000658	0.0506	0.00182	0.000303	0.000069	0.000078
Cadmium (Cd)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000214	<0.0000050	0.0000055	<0.0000050	0.000165	0.025	0.0254
Calcium (Ca)	40	40	35.5	36.5	52.3	47.3	41.7	46.2	76.1	56.4	56.1
Chromium (Cr)	<0.00010	<0.00010	0.00016	0.00024	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	<0.00010	<0.00010
Cobalt (Co)	<0.0000050	0.000006	0.0000468	0.0000335	0.0000089	<0.0000050	0.000141	0.000193	0.000166	0.0000256	0.0000252
Copper (Cu)	<0.000050	0.00228	0.000099	0.000265	0.000087	0.000095	0.000069	0.000076	0.000112	0.00285	0.00311
Iron (Fe)	0.525	0.0133	2.1	2.41	0.835	0.0031	15.9	0.0039	0.0029	0.0025	<0.0010
Lead (Pb)	<0.0000050	<0.0000050	0.0000966	0.0000068	0.00217	<0.0000050	0.000148	<0.0000050	<0.0000050	0.000124	0.0000278
Magnesium (Mg)	5.1	5.49	3.22	4	17	20	7.06	8.07	9.3	6.87	6.88
Manganese (Mn)	0.193	0.23	0.301	0.286	0.207	0.204	1.13	1.06	0.257	0.0039	0.00551
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00674	0.00598	0.00179	0.00259	0.00327	0.00288	0.00257	0.00265	0.0028	0.000523	0.000478
Nickel (Ni)	0.000038	0.000358	0.00069	0.000717	0.000058	0.000153	0.000241	0.00039	0.00181	0.00562	0.00631
Phosphorus (P)	0.106	0.0105	0.302	0.293	0.0113	<0.0020	0.262	0.003	<0.0020	0.003	<0.0020

Sample Location	MW05-01A	MW05-01A	MW05-01B	MW05-01B	MW05-02A	MW05-02A	MW05-02B	MW05-02B	MW05-03A	MW05-03B	MW05-03B
Sampling Date	15-06-17	15-08-02	15-06-17	15-08-02	15-06-15	15-08-02	15-06-15	15-08-02	15-08-02	15-05-13	15-08-02
Lab Report ID	B552115	B567761	B552115	B567761	B552115	B567761	B552115	B567761	B567761	B540498	B567761
Potassium (K)	1.21	1.34	1.35	1.35	1.86	2.26	0.365	0.43	1.72	1.47	1.53
Selenium (Se)	0.000056	<0.000040	0.000127	0.000177	0.000069	<0.000040	0.000104	<0.000040	0.000048	0.006	0.00497
Silicon (Si)	3.26	3.42	4.75	4.52	3.92	3.4	5.06	4.28	3.76	5.43	4.74
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	1.61	1.85	1.17	1.4	0.691	0.662	1.33	1.27	1.93	9	10.1
Strontium (Sr)	0.144	0.147	0.119	0.0968	0.171	0.175	0.0962	0.0901	0.195	0.196	0.184
Thallium (Tl)	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.0000037	0.0000095	0.0000106
Vanadium (V)	<0.00020	<0.00020	0.0011	0.00067	<0.00020	<0.00020	0.00035	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.00044	0.00185	0.00069	0.00382	0.00182	<0.00010	0.00081	0.0001	0.111	2.08	2.25

Sample Location	MW05-04A	MW05-04A	MW05-04B	MW05-04B	MW05-05A	MW05-05A	MW05-05A	MW05-05B	MW05-05B	MW05-06A	MW05-06A	MW05-06B
Sampling Date	**15-05-12**	**15-08-02**	**15-05-12**	**15-08-02**	**15-01-20**	**15-05-17**	**15-08-02**	**15-01-20**	**15-08-02**	**15-01-20**	**15-08-02**	**15-08-02**
Lab Report ID	**B540498**	**B567761**	**B540498**	**B567761**	**B505759**	**B542512**	**B567761**	**B505759**	**B567761**	**B505759**	**B567761**	**B567761**
Field Parameters												
Temperature (°C)	7.66	2.61	6.07	2.3	7.48	7.24	2.47	7.53	5.03	6.6	2.55	2.31
pH	2.75	7.66	1.8	6.53	1.93	3.46	6.96	0.03	7.04	1.28	6.57	6.68
Specific Conductivity (µS/cm^3)	338	344	169	255	509	415	421	286	301	173	176	187
Conductivity (µS/cm)	195	197	94	144	284	244	240	149	241	94	101	106
Physical Parameters												
Temperature (°C)	2	5	2	5	1.2	2.7	5	1.2	5	1.2	5	5
Conductivity (µS/cm)	334	246	165	332	462	375	412	273	309	158	168	183
Hardness (mg/L)	164	109	66.3	148	262	208	235	145	163	77.7	76.9	88.3
Total Suspended Solids (mg/L)	<4.0	<4.0	<4.0	<4.0	<8.0	<4.0	<4.0	<8.0	<4.0	<4.0	<4.0	<4.0
Total Dissolved Solids (mg/L)	196	154	106	210	278	186	270	160	198	120	108	94
pH	8.2	7.75	7.63	8.15	8.15	7.96	8.18	8.07	8.01	7.93	7.8	7.78
Turbidity (NTU)	5.04	11.2	1.11	4.38	12	0.14	0.98	5.6	5.29	6.25	8.53	0.11
DOC (mg/L)												
Major Anions (mg/L)												
Alkalinity-Total	112	80.6	50.5	118	206	162	185	98.9	116	60.4	65.3	83.6
Acidity-Total	<0.50	4.83	2.32	<0.50	<0.50	<0.50	1.48	0.54	1.51	0.81	1.6	<0.50
Bromide	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.68	0.56	<0.50	<0.50	0.52
Fluoride	1.1	0.39	0.23	1.1	0.14	1.4	1.6	0.2	0.2	2.1	0.13	0.034
Sulphate	48.2	35.1	24.4	35.6	36.2	30	31.2	40.6	39.2	16	15.3	7.95
Nutrient Parameters (mg/L)												
Ammonial Nitrogen	0.0304	0.0306	0.0222	0.075	0.0803	0.066	0.0952	0.0243	0.0243	0.0166	0.0141	<0.0050
Nitrate Nitrogen	0.24	<0.20	0.33	0.73	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nitrite Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.21
Dissolved Ortho-Phosphate	0.001	0.0013	0.0013	0.0025	0.0095	0.005	0.012	0.0048	0.0015	0.71	0.67	0.0038
Dissolved Metals (mg/L)												
Aluminum (Al)	0.00051	0.00247	0.00359	<0.00050	0.0026	0.00586	0.0035	0.00064	<0.00050	0.00074	<0.00050	0.00071
Antimony (Sb)	0.000069	0.000078	0.000102	0.000028	0.00503	0.00778	0.00318	0.000035	0.000033	0.000593	0.00103	0.000024
Arsenic (As)	0.00252	0.00331	0.00484	0.00118	0.00512	0.00319	0.00314	0.00145	0.00163	0.00574	0.00529	0.000057
Cadmium (Cd)	<0.0000050	0.00408	0.00232	<0.0000050	0.0000086	0.00285	0.00096	0.0000292	0.0000524	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)	59	38.4	22.8	52.4	68.5	57.7	61.8	46.6	50.8	25.9	25.5	30.7
Chromium (Cr)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00097
Cobalt (Co)	0.0000057	0.0041	0.00703	0.0000139	0.0000917	0.00169	0.00107	0.000737	0.00095	0.000348	0.000312	0.0000066
Copper (Cu)	<0.000050	0.000313	0.000116	0.000112	0.000191	0.00145	0.00148	0.000123	<0.000050	0.000056	<0.000050	0.000237
Iron (Fe)	1.02	0.104	2.56	0.0181	1.26	0.0351	0.0508	0.44	0.0024	1.46	0.479	<0.0010
Lead (Pb)	0.0000117	<0.0000050	0.000144	<0.0000050	0.000298	0.000586	0.0000297	0.0000998	<0.0000050	0.0000109	<0.0000050	<0.0000050
Magnesium (Mg)	4.08	3.26	2.26	4.2	22	15.4	19.5	6.98	8.66	3.18	3.19	2.86
Manganese (Mn)	0.137	2.83	2.2	0.282	0.0444	0.251	0.251	0.745	0.947	0.143	0.129	0.000102
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00421	0.00093	0.000316	0.00448	0.00753	0.00672	0.00567	0.000987	0.00121	0.0014	0.0014	0.00022

Sample Location	MW05-04A	MW05-04A	MW05-04B	MW05-04B	MW05-05A	MW05-05A	MW05-05A	MW05-05B	MW05-05B	MW05-06A	MW05-06A	MW05-06B
Sampling Date	15-05-12	15-08-02	15-05-12	15-08-02	15-01-20	15-05-17	15-08-02	15-01-20	15-08-02	15-01-20	15-08-02	15-08-02
Lab Report ID	B540498	B567761	B540498	B567761	B505759	B542512	B567761	B505759	B567761	B505759	B567761	B567761
Nickel (Ni)	0.000051	0.00645	0.00582	0.00028	0.000722	0.0112	0.00607	0.00389	0.00556	0.00109	0.00139	0.000115
Phosphorus (P)	0.0091	0.0023	0.0086	<0.0020	0.0134	0.0104	<0.0020	0.0067	0.0025	0.83	0.587	0.0052
Potassium (K)	2.11	2.03	1.32	2.15	1.51	2.54	2.03	0.569	0.8	1.13	1.26	0.836
Selenium (Se)	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	0.000579	0.000516	<0.000040	<0.000040	<0.000040	<0.000040	0.000627
Silicon (Si)	3.72	6.78	7.1	3.21	3.85	3.4	3.5	3.56	3.81	6.93	6.73	4.19
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	1.17	1.17	1.06	1.21	0.301	0.349	0.352	0.833	1.06	1.9	1.92	1.34
Strontium (Sr)	0.195	0.161	0.0909	0.187	0.133	0.121	0.12	0.112	0.134	0.0266	0.0254	0.0465
Thallium (Tl)	0.0000038	0.0000374	0.0000585	0.0000056	<0.0000020	0.000034	0.0000228	<0.0000020	0.0000063	<0.0000020	0.0000022	<0.0000020
Vanadium (V)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00028	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.0004	0.205	0.262	0.00013	0.00618	0.235	0.221	0.0703	0.085	0.00201	0.00123	0.00028

Sample Location	MW06-08S	MW06-08S	MW06-08M	MW06-08M	MW06-08D	MW06-08D	MW06-08D	MW06-09S	MW06-09S	MW06-09M	MW06-09M
Sampling Date	**15-06-16**	**15-08-03**	**15-06-16**	**15-08-03**	**15-01-28**	**15-06-16**	**15-08-03**	**15-05-13**	**15-08-03**	**15-05-13**	**15-08-03**
Lab Report ID	**B552115**	**B567779**	**B552115**	**B567779**	**B509272**	**B552115**	**B567779**	**B540498**	**B567779**	**B540498**	**B567779**
Field Parameters											
Temperature (°C)		2.93			7.96		2.71	7.51	1.94	7.39	2.52
pH		6.5		8.22	1.62		7.43	1.83	7.58	2.47	7.44
Specific Conductivity (µS/cm^3)		223		356	463		487	253	268	396	410
Conductivity (µS/cm)		128		201	255		289	141	150	255	234
Physical Parameters											
Temperature (°C)	4	2.3	4	2.3	7.7	4	2.3	2	2.3	2	2.3
Conductivity (µS/cm)	203	207	375	341	456	451	458	256	255	387	382
Hardness (mg/L)	96.7	97.8	225	172	246	246	252	119	130	222	207
Total Suspended Solids (mg/L)	<8.0	<4.0	<8.0	<4.0	<8.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Total Dissolved Solids (mg/L)	128	140	224	210	286	262	302	138	190	224	242
pH	7.1	7.72	8.12	8.31	8.25	7.95	8.3	8.13	8.16	8.28	8.29
Turbidity (NTU)	3.09	2.35	1.56	0.65	6.61	5.81	5.83	1.24	1.82	4.83	8.81
DOC (mg/L)											
Major Anions (mg/L)											
Alkalinity-Total	67.3	65.5	158	139	213	214	223	93.9	100	164	169
Acidity-Total	3.23	7.07	<0.50	<0.50	3.51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromide	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	0.68	0.77	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.52
Fluoride	0.27	0.26	1.3	1.3	0.88	0.88	0.91	0.88	0.78	1	0.96
Sulphate	30.6	31.2	38.5	34.7	31.9	28.7	25.6	27.3	25.4	34.1	31.6
Nutrient Parameters (mg/L)											
Ammonial Nitrogen	0.0343	<0.0050	0.0755	0.0819	0.12	0.0723	0.081	0.0494	0.0412	0.08	0.0691
Nitrate Nitrogen	<0.0020	<0.20	0.0111	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20	0.25	<0.20
Nitrite Nitrogen	0.0028	<0.20	0.002	<0.20	<0.20	<0.0020	<0.20	<0.20	<0.20	<0.20	<0.20
Dissolved Ortho-Phosphate	0.17	0.0044	0.0035	0.0025	0.013	<0.0010	0.0023	0.077	0.14	0.0013	0.011
Dissolved Metals (mg/L)											
Aluminum (Al)	0.00401	<0.00050	0.00168	0.00183	0.0038	0.00928	0.00062	0.00176	0.00094	0.0012	0.00082
Antimony (Sb)	0.00341	0.00227	0.000749	0.000179	0.000179	0.000163	0.000281	<0.000020	<0.000020	0.000261	0.000337
Arsenic (As)	0.0012	0.000249	0.0128	0.0134	0.00439	0.00452	0.0032	0.00443	0.0052	0.00193	0.00109
Cadmium (Cd)	0.0000914	0.000244	<0.0000050	0.0000215	0.0000059	0.0000299	<0.0000050	0.0000081	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)	32.7	32.8	51.5	36.3	56.9	57.2	58.8	39.2	43.7	66.8	63.1
Chromium (Cr)	<0.00010	0.00024	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Cobalt (Co)	0.00325	0.00148	0.000222	0.0000874	0.0000528	0.0000652	0.0000483	0.0000458	0.0000624	0.0000111	0.0000243
Copper (Cu)	<0.000050	0.000263	<0.000050	0.000345	0.000389	0.000828	0.000064	<0.000050	<0.000050	<0.000050	0.000081
Iron (Fe)	2.03	0.0068	0.433	0.113	0.63	0.606	<0.0010	0.602	<0.0010	0.95	<0.0010
Lead (Pb)	0.0000573	<0.0000050	0.0000352	0.0000917	0.000173	0.00189	0.0000183	<0.0000050	<0.0000050	0.0000787	<0.0000050
Magnesium (Mg)	3.66	3.88	23.3	19.8	25.3	25	25.6	5.12	5.11	13.4	12.1
Manganese (Mn)	0.317	0.137	0.0393	0.00808	0.0102	0.0116	0.00931	0.091	0.103	0.0214	0.0164
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.00254	0.00183	0.00499	0.00518	0.00137	0.00135	0.00148	0.00378	0.00436	0.00427	0.00455

Sample Location	MW06-08S	MW06-08S	MW06-08M	MW06-08M	MW06-08D	MW06-08D	MW06-08D	MW06-09S	MW06-09S	MW06-09M	MW06-09M
Sampling Date	15-06-16	15-08-03	15-06-16	15-08-03	15-01-28	15-06-16	15-08-03	15-05-13	15-08-03	15-05-13	15-08-03
Lab Report ID	B552115	B567779	B552115	B567779	B509272	B552115	B567779	B540498	B567779	B540498	B567779
Nickel (Ni)	0.0372	0.0423	0.00282	0.00172	0.000371	0.000276	0.000405	0.000129	0.000174	0.000042	0.000149
Phosphorus (P)	0.252	<0.0020	0.0114	0.0077	0.0097	0.0064	<0.0020	0.189	0.0748	0.017	<0.0020
Potassium (K)	0.944	1.01	2.18	2.09	1.79	1.77	1.74	1.09	1.1	2.07	1.81
Selenium (Se)	0.000043	0.000074	<0.000040	0.000259	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040
Silicon (Si)	5.49	5.66	3.7	2.99	4.37	4.77	4.27	4.69	4.04	4.49	3.35
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	1.1	1.2	1.58	1.79	0.544	0.472	0.429	0.863	1.09	0.372	0.341
Strontium (Sr)	0.058	0.0606	0.166	0.123	0.152	0.167	0.154	0.15	0.139	0.0919	0.0807
Thallium (Tl)	0.00001	0.0000069	0.0000034	0.0000022	<0.0000020	<0.0000020	<0.0000020	0.0000138	<0.0000020	<0.0000020	<0.0000020
Vanadium (V)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	1.18	1.44	0.00134	0.00158	0.0012	0.00258	<0.00010	0.00068	<0.00010	0.0002	<0.00010

Sample Location	MW06-10S	MW06-10S	MW06-10S	MW06-10M	MW06-10M	MW06-10M	MW06-10D	MW06-10D	MW06-10D	MW06-11S	MW06-12S	MW06-12S	MW08-13	MW08-13
Sampling Date	**15-01-13**	**15-05-12**	**15-08-03**	**15-01-13**	**15-04-20**	**15-08-03**	**15-01-13**	**15-04-20**	**15-08-03**	**15-05-17**	**15-01-27**	**15-05-13**	**15-01-12**	**15-08-02**
Lab Report ID	**B503778**	**B540498**	**B567779**	**B503778**	**B533424**	**B567779**	**B503778**	**B533424**	**B567779**	**B542512**	**B509272**	**B540498**	**B503778**	**B567761**
Field Parameters														
Temperature (°C)	7.99	7.23	2.87	7.66	7.15	2.69	7.83	7.38	3.85	7.42	7.01	7.3	6.56	6.04
pH	1.14	4.1	7.85	2.54	3.27	7.46	1.79	3.91	7.34	2.04	1.36	2.84	1.07	6.25
Specific Conductivity (µS/cm^3)	285	498	303	504	499	625	492	501	521	464	807	796	698	388
Conductivity (µS/cm)	155	299	176	288	293	301	274	294	310	261	442	459	379	247
Physical Parameters														
Temperature (°C)	4	2	2.3	4	4.3	2.3	4	4.3	2.3	2.7	7.7	2	4	5
Conductivity (µS/cm)	291	480	286	449	477	483	460	487	487	436	790	794	698	381
Hardness (mg/L)	142	326	143	256	243	256	261	266	266	222	414	446	328	181
Total Suspended Solids (mg/L)	<4.0	4.3	<4.0	10.8	11	10.7	<4.0	4	<8.0	<4.0	<4.0	7	<4.0	4
Total Dissolved Solids (mg/L)	144	246	210	268	268	340	252	254	330	268	598	542	436	234
pH	8.16	8.34	8.2	8.13	7.87	8.19	8.32	7.95	8.28	8.05	7.99	8.22	8.21	7.87
Turbidity (NTU)	0.61	6.35	1.9	60.5	68.9	73.3	12.6	24.3	19.9	8.27	32.4	35.1	0.14	0.52
DOC (mg/L)														
Major Anions (mg/L)														
Alkalinity-Total	119	230	118	175	189	200	227	231	242	187	135	135	163	146
Acidity-Total	<0.50	<0.50	<0.50	<0.50	<0.50	1.58	<0.50	<0.50	<0.50	<0.50	2.2	<0.50	13.3	9.03
Bromide	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.010	0.011	<0.10	0.048	0.025
Chloride	<0.50	0.83	0.5	<0.50	0.71	0.8	0.84	0.79	0.54	0.71	0.59	<0.50	4	1.7
Fluoride	0.19	0.97	0.17	0.75	0.71	0.75	0.96	0.96	0.97	2.4	0.88	0.9	0.025	0.029
Sulphate	27.8	25.3	28.9	57.5	57.7	49.8	24.7	24.8	24.2	37	267	275	193	47.1
Nutrient Parameters (mg/L)														
Ammonial Nitrogen	0.04	0.0874	0.0109	0.087	0.0914	0.0736	0.095	0.0925	0.0824	0.21	<0.0050	0.143	0.92	0.245
Nitrate Nitrogen	<0.20	<0.20	<0.20	<0.20	0.22	<0.20	<0.20	<0.20	0.22	<0.20	<0.20	0.26	0.3	<0.20
Nitrite Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.21	0.25	<0.20	<0.20	<0.20	<0.20
Dissolved Ortho-Phosphate	0.0079	<0.0010	0.01	<0.0010	0.0031	0.0071	0.0044	0.002	0.0043	0.0013	0.0085	<0.0010	0.0052	0.0023
Dissolved Metals (mg/L)														
Aluminum (Al)	0.00185	0.00155	0.00128	0.00089	0.00337	0.00068	0.00303	0.00107	<0.00050	0.00413	<0.00050	0.00097	0.00933	0.00923
Antimony (Sb)	0.000323	0.000047	0.000361	0.000025	<0.000020	<0.000020	0.000237	0.000042	0.000096	0.000028	0.000078	0.000185	0.000044	0.000034
Arsenic (As)	0.00295	0.000694	0.00397	0.000298	0.000423	0.000091	0.000824	0.000726	0.000344	0.00614	0.000582	0.00108	0.000131	0.000177
Cadmium (Cd)	0.00001	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.00048	0.000109
Calcium (Ca)	49.8	92.2	49.9	83.2	77.5	82.4	70.1	70.7	70.4	62.4	129	138	108	58.9
Chromium (Cr)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00021	0.0001
Cobalt (Co)	0.000116	<0.0000050	0.000134	0.0000162	0.000012	0.0000078	<0.0000050	<0.0000050	<0.0000050	0.000402	0.000311	0.000337	0.000457	0.000117
Copper (Cu)	0.000065	<0.000050	0.000228	0.000074	0.000061	0.000163	0.000224	<0.000050	0.000133	<0.000050	0.000101	0.000059	0.00252	0.00178
Iron (Fe)	0.126	2.45	<0.0010	4.58	5.06	<0.0010	1.1	1.92	0.0026	1.82	2.41	3.08	0.0251	0.0236
Lead (Pb)	0.00003	0.0000467	<0.0000050	0.00003	<0.0000050	<0.0000050	0.000171	<0.0000050	<0.0000050	0.000006	0.00003	0.0000914	0.00012	0.000011
Magnesium (Mg)	4.29	23.3	4.33	11.7	12	12.3	20.8	21.8	21.8	16.2	22.1	24.7	14	8.28
Manganese (Mn)	0.118	0.0169	0.129	0.105	0.106	0.108	0.0205	0.0139	0.016	0.118	0.131	0.152	5.54	1.49
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	0.000949	0.00611	0.00096	0.00306	0.00318	0.00306	0.00342	0.00521	0.00498	0.0151	0.000561	0.000752	0.00031	0.000305

Sample Location	MW06-10S	MW06-10S	MW06-10S	MW06-10M	MW06-10M	MW06-10M	MW06-10D	MW06-10D	MW06-10D	MW06-11S	MW06-12S	MW06-12S	MW08-13	MW08-13
Sampling Date	**15-01-13**	**15-05-12**	**15-08-03**	**15-01-13**	**15-04-20**	**15-08-03**	**15-01-13**	**15-04-20**	**15-08-03**	**15-05-17**	**15-01-27**	**15-05-13**	**15-01-12**	**15-08-02**
Lab Report ID	**B503778**	**B540498**	**B567779**	**B503778**	**B533424**	**B567779**	**B503778**	**B533424**	**B567779**	**B542512**	**B509272**	**B540498**	**B503778**	**B567761**
Nickel (Ni)	0.000489	0.000025	0.000575	0.000263	0.0001	0.000167	0.000083	<0.000020	0.000167	0.000599	0.000848	0.000913	0.0083	0.00498
Phosphorus (P)	0.0092	<0.010	<0.0020	0.0106	0.0114	<0.0020	0.0183	0.0076	<0.0020	0.0371	0.0074	0.012	0.0141	0.0068
Potassium (K)	1.55	2.33	2.1	1.81	1.9	1.91	3.15	2.07	2.3	1.62	3.54	3.69	2.07	1.57
Selenium (Se)	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	<0.000040	0.00286	0.000827
Silicon (Si)	3.59	5.11	3.83	3.99	4.7	4.14	3.87	4.46	4.15	5.82	3.52	4.18	4.13	5.06
Silver (Ag)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)	2.01	1.04	2.45	2.87	2.74	2.75	1.33	0.923	1.09	2.58	4.62	4.84	11	6.81
Strontium (Sr)	0.189	0.196	0.191	0.149	0.159	0.15	0.171	0.17	0.178	0.118	0.449	0.523	0.261	0.148
Thallium (Tl)	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000004	<0.0000020	<0.0000020	0.0000146	0.0000078
Vanadium (V)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.00157	0.0005	0.00039	0.00139	0.00038	<0.00010	0.00162	<0.00010	<0.00010	0.00012	0.00173	0.00111	0.00464	0.00175

Appendix C: Water Quality Lab Reports

Your P.O. #: 108376
Your C.O.C. #: 08402697

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/22
Report #: R1791314
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B503778
Received: 2015/01/16, 14:00

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	4	N/A	2015/01/19	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	4	2015/01/17	2015/01/19	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	3	N/A	2015/01/19	BBY6SOP-00011	SM 22 4500-Cl- G m
Chloride by Automated Colourimetry	1	N/A	2015/01/20	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	4	N/A	2015/01/19	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	4	N/A	2015/01/19	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2015/01/21	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	4	N/A	2015/01/21	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	4	N/A	2015/01/19	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	4	N/A	2015/01/21	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	4	N/A	2015/01/20	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	4	N/A	2015/01/21	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	4	N/A	2015/01/17	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	4	N/A	2015/01/17	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	4	N/A	2015/01/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	1	N/A	2015/01/19	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	3	N/A	2015/01/20	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	4	N/A	2015/01/19	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	4	N/A	2015/01/17	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	3	N/A	2015/01/19	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/01/20	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	4	2015/01/19	2015/01/20	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (Tot, diss.) - unfiltered	4	2015/01/17	2015/01/17	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	4	N/A	2015/01/20	BBY6SOP-00034	SM 22 2540 D
Turbidity	4	N/A	2015/01/16	BBY6SOP-00027	SM 22 2130 B m

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Your P.O. #: 108376
Your C.O.C. #: 08402697

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/22
Report #: R1791314
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B503778
Received: 2015/01/16, 14:00

Encryption Key

Maxxam
22 Jan 2015 11:49:35 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LN2534	LN2535	LN2536			LN2537		
Sampling Date		2015/01/13 17:10	2015/01/13 15:40	2015/01/13 16:15			2015/01/12 14:47		
COC Number		08402697	08402697	08402697			08402697		
	Units	MW06-10D	MW06-10M	MW06-10S	RDL	QC Batch	MW08-13	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 8.3)	mg/L	<0.50	<0.50	<0.50	0.50	7782262	13.3	0.50	7782262
Fluoride (F)	mg/L	0.960	0.750	0.190	0.010	7781647	0.025	0.010	7781647
Calculated Parameters									
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	<0.20	<0.20	0.20	7779894	0.30	0.20	7779894
Misc. Inorganics									
Alkalinity (Total as CaCO3)	mg/L	227	175	119	0.50	7781021	163	0.50	7781021
Anions									
Orthophosphate (P)	mg/L	0.0044 (1)	<0.0010 (1)	0.0079 (1)	0.0010	7781096	0.0052 (1)	0.0010	7781096
Dissolved Sulphate (SO4)	mg/L	24.7	57.5	27.8	0.50	7782076	193	0.50	7783500
Dissolved Chloride (Cl)	mg/L	0.84	<0.50	<0.50	0.50	7782068	4.0	0.50	7783497
Nutrients									
Total Ammonia (N)	mg/L	0.095	0.087	0.040	0.0050	7784839	0.92 (2)	0.050	7784839
Dissolved Phosphorus (P)	mg/L	0.0104 (1)	0.0114 (1)	0.0110 (1)	0.0050	7781101	0.0130 (1)	0.0050	7781101
Nitrate plus Nitrite (N)	mg/L	<0.20 (3)	<0.20 (3)	<0.20 (3)	0.20	7781088	0.30 (4)	0.20	7781088
Nitrite (N)	mg/L	<0.20 (3)	<0.20 (3)	<0.20 (3)	0.20	7781089	<0.20 (4)	0.20	7781089
Physical Properties									
Conductivity	uS/cm	460	449	291	1.0	7781020	698	1.0	7781020
pH	pH	8.32	8.13	8.16	N/A	7781019	8.21	N/A	7781019
Physical Properties									
Total Suspended Solids	mg/L	<4.0	10.8	<4.0	4.0	7782039	<4.0	4.0	7782039
Total Dissolved Solids	mg/L	252	268	144	10	7781563	436	10	7781563
Turbidity	NTU	12.6	60.5	0.61	0.10	7780739	0.14	0.10	7780739

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(2) RDL raised due to sample matrix interference.

(3) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(4) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LN2534	LN2535	LN2536	LN2537		
Sampling Date		2015/01/13 17:10	2015/01/13 15:40	2015/01/13 16:15	2015/01/12 14:47		
COC Number		08402697	08402697	08402697	08402697		
	Units	MW06-10D	MW06-10M	MW06-10S	MW08-13	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7783873
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LN2534	LN2535		LN2536	LN2537		
Sampling Date		2015/01/13 17:10	2015/01/13 15:40		2015/01/13 16:15	2015/01/12 14:47		
COC Number		08402697	08402697		08402697	08402697		
	Units	MW06-10D	MW06-10M	RDL	MW06-10S	MW08-13	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.10	<0.10	0.10	<0.010	0.048	0.010	7781740
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LN2534	LN2535	LN2536	LN2537		
Sampling Date		2015/01/13 17:10	2015/01/13 15:40	2015/01/13 16:15	2015/01/12 14:47		
COC Number		08402697	08402697	08402697	08402697		
	Units	MW06-10D	MW06-10M	MW06-10S	MW08-13	RDL	QC Batch
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	261	256	142	328	0.50	7780026
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00303	0.00089	0.00185	0.00933	0.00050	7782760
Dissolved Antimony (Sb)	mg/L	0.000237	0.000025	0.000323	0.000044	0.000020	7782760
Dissolved Arsenic (As)	mg/L	0.000824	0.000298	0.00295	0.000131	0.000020	7782760
Dissolved Barium (Ba)	mg/L	0.0554	0.0304	0.0301	0.775	0.000020	7782760
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7782760
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7782760
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	7782760
Dissolved Cadmium (Cd)	mg/L	<0.0000050	<0.0000050	0.0000074	0.000478	0.0000050	7782760
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	<0.00010	0.00021	0.00010	7782760
Dissolved Cobalt (Co)	mg/L	<0.0000050	0.0000162	0.000116	0.000457	0.0000050	7782760
Dissolved Copper (Cu)	mg/L	0.000224	0.000074	0.000065	0.00252	0.000050	7782760
Dissolved Iron (Fe)	mg/L	1.10	4.58	0.126	0.0251	0.0010	7782760
Dissolved Lead (Pb)	mg/L	0.000171	0.0000274	0.0000264	0.000116	0.0000050	7782760
Dissolved Lithium (Li)	mg/L	0.00405	0.00225	0.00189	0.00089	0.00050	7782760
Dissolved Manganese (Mn)	mg/L	0.0205	0.105	0.118	5.54	0.000050	7782760
Dissolved Molybdenum (Mo)	mg/L	0.00342	0.00306	0.000949	0.000310	0.000050	7782760
Dissolved Nickel (Ni)	mg/L	0.000083	0.000263	0.000489	0.00830	0.000020	7782760
Dissolved Phosphorus (P)	mg/L	0.0183	0.0106	0.0092	0.0141	0.0020	7782760
Dissolved Selenium (Se)	mg/L	<0.000040	<0.000040	<0.000040	0.00286	0.000040	7782760
Dissolved Silicon (Si)	mg/L	3.87	3.99	3.59	4.13	0.050	7782760
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7782760
Dissolved Strontium (Sr)	mg/L	0.171	0.149	0.189	0.261	0.000050	7782760
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	0.0000146	0.0000020	7782760
Dissolved Tin (Sn)	mg/L	0.00031	<0.00020	<0.00020	<0.00020	0.00020	7782760
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	7782760
Dissolved Uranium (U)	mg/L	0.00810	0.0145	0.00741	0.00165	0.0000020	7782760
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7782760
Dissolved Zinc (Zn)	mg/L	0.00162	0.00139	0.00157	0.00464	0.00010	7782760
Dissolved Zirconium (Zr)	mg/L	0.00010	0.00010	<0.00010	<0.00010	0.00010	7782760
Dissolved Calcium (Ca)	mg/L	70.1	83.2	49.8	108	0.050	7780027
Dissolved Magnesium (Mg)	mg/L	20.8	11.7	4.29	14.0	0.050	7780027
Dissolved Potassium (K)	mg/L	3.15	1.81	1.55	2.07	0.050	7780027
Dissolved Sodium (Na)	mg/L	1.33	2.87	2.01	11.0	0.050	7780027
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LN2534	LN2535	LN2536	LN2537		
Sampling Date		2015/01/13 17:10	2015/01/13 15:40	2015/01/13 16:15	2015/01/12 14:47		
COC Number		08402697	08402697	08402697	08402697		
	Units	**MW06-10D**	**MW06-10M**	**MW06-10S**	**MW08-13**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	8.9	18.9	8.9	61.4	3.0	7780027
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.0°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample LN2534-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.
Sample LN2535-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7780739	Turbidity	2015/01/16			99	80 - 120	<0.10	NTU	3.8	20
7781019	pH	2015/01/19			101	97 - 103			1.2	N/A
7781020	Conductivity	2015/01/19			105	80 - 120	1.5, RDL=1.0	uS/cm	NC	20
7781021	Alkalinity (Total as CaCO3)	2015/01/19	97	80 - 120	103	80 - 120	0.97, RDL=0.50	mg/L	NC	20
7781088	Nitrate plus Nitrite (N)	2015/01/17	106	80 - 120	107	80 - 120	<0.0020	mg/L	NC	25
7781089	Nitrite (N)	2015/01/17	NC	80 - 120	103	80 - 120	<0.0020	mg/L	NC	25
7781096	Orthophosphate (P)	2015/01/17	86	80 - 120	92	80 - 120	<0.0010	mg/L	0.90	20
7781101	Dissolved Phosphorus (P)	2015/01/17	84	80 - 120	103	80 - 120	<0.0050	mg/L	NC	20
7781563	Total Dissolved Solids	2015/01/20	NC	80 - 120	88	80 - 120	<10	mg/L	5.3	20
7781647	Fluoride (F)	2015/01/19	NC	80 - 120	100	80 - 120	<0.010	mg/L	1.3	20
7781740	Bromide (Br)	2015/01/19	103	78 - 120	108	80 - 120	<0.010	mg/L	NC	20
7782039	Total Suspended Solids	2015/01/20	118	80 - 120	95	80 - 120	<4.0	mg/L	NC	20
7782068	Dissolved Chloride (Cl)	2015/01/19	110	80 - 120	101	80 - 120	<0.50	mg/L	NC	20
7782076	Dissolved Sulphate (SO4)	2015/01/19	NC	80 - 120	94	80 - 120	<0.50	mg/L	0.61	20
7782262	Acidity (pH 8.3)	2015/01/19			100	80 - 120	<0.50	mg/L	3.2	20
7782760	Dissolved Aluminum (Al)	2015/01/20	105	80 - 120	110	80 - 120	<0.00050	mg/L	NC	20
7782760	Dissolved Antimony (Sb)	2015/01/20	110	80 - 120	111	80 - 120	<0.000020	mg/L	NC	20
7782760	Dissolved Arsenic (As)	2015/01/20	105	80 - 120	106	80 - 120	<0.000020	mg/L	NC	20
7782760	Dissolved Barium (Ba)	2015/01/20	107	80 - 120	111	80 - 120	<0.000020	mg/L	NC	20
7782760	Dissolved Beryllium (Be)	2015/01/20	108	80 - 120	110	80 - 120	<0.000010	mg/L	NC	20
7782760	Dissolved Bismuth (Bi)	2015/01/20	100	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7782760	Dissolved Boron (B)	2015/01/20					<0.010	mg/L	NC	20
7782760	Dissolved Cadmium (Cd)	2015/01/20	106	80 - 120	107	80 - 120	<0.0000050	mg/L	NC	20
7782760	Dissolved Chromium (Cr)	2015/01/20	107	80 - 120	108	80 - 120	<0.00010	mg/L	NC	20
7782760	Dissolved Cobalt (Co)	2015/01/20	105	80 - 120	105	80 - 120	<0.0000050	mg/L	NC	20
7782760	Dissolved Copper (Cu)	2015/01/20	106	80 - 120	108	80 - 120	<0.000050	mg/L	NC	20
7782760	Dissolved Iron (Fe)	2015/01/20	107	80 - 120	114	80 - 120	<0.0010	mg/L	NC	20
7782760	Dissolved Lead (Pb)	2015/01/20	105	80 - 120	106	80 - 120	<0.0000050	mg/L	NC	20
7782760	Dissolved Lithium (Li)	2015/01/20	94	80 - 120	102	80 - 120	0.00057, RDL=0.00050	mg/L	NC	20
7782760	Dissolved Manganese (Mn)	2015/01/20	103	80 - 120	105	80 - 120	<0.000050	mg/L	NC	20
7782760	Dissolved Molybdenum (Mo)	2015/01/20	103	80 - 120	108	80 - 120	<0.000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7782760	Dissolved Nickel (Ni)	2015/01/20	105	80 - 120	107	80 - 120	<0.000020	mg/L	NC	20
7782760	Dissolved Phosphorus (P)	2015/01/20					<0.0020	mg/L		
7782760	Dissolved Selenium (Se)	2015/01/20	101	80 - 120	103	80 - 120	<0.000040	mg/L	NC	20
7782760	Dissolved Silicon (Si)	2015/01/20					<0.050	mg/L	NC	20
7782760	Dissolved Silver (Ag)	2015/01/20	102	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7782760	Dissolved Strontium (Sr)	2015/01/20	100	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20
7782760	Dissolved Thallium (Tl)	2015/01/20	102	80 - 120	103	80 - 120	<0.0000020	mg/L	NC	20
7782760	Dissolved Tin (Sn)	2015/01/20	106	80 - 120	111	80 - 120	<0.00020	mg/L	NC	20
7782760	Dissolved Titanium (Ti)	2015/01/20	98	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7782760	Dissolved Uranium (U)	2015/01/20	107	80 - 120	109	80 - 120	<0.0000020	mg/L	NC	20
7782760	Dissolved Vanadium (V)	2015/01/20	105	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
7782760	Dissolved Zinc (Zn)	2015/01/20	107	80 - 120	106	80 - 120	0.00012, RDL=0.00010	mg/L	NC	20
7782760	Dissolved Zirconium (Zr)	2015/01/20					<0.00010	mg/L	NC	20
7783497	Dissolved Chloride (Cl)	2015/01/20			106	80 - 120	<0.50	mg/L		
7783500	Dissolved Sulphate (SO4)	2015/01/20			100	80 - 120	<0.50	mg/L		
7783873	Dissolved Mercury (Hg)	2015/01/21	94	80 - 120	114	80 - 120	<0.010	ug/L	NC	20
7784839	Total Ammonia (N)	2015/01/21	102	80 - 120	99	80 - 120	0.0052, RDL=0.0050	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503778
Report Date: 2015/01/22

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B503778

ANALYSIS REQUE

LAB USE ONLY
08402697

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ext. 5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Andrea Kenward	PROJECT MANAGER: Robin McCall
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (DD/MM/YY)	TIME	# CONTAINERS	Package A Including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW06-10D	LN2534	X					13-Jan-15	17:10		X	X	X	X	X	X	X
2	MW06-10M	LN2535	X					13-Jan-15	15:40		X	X	X	X	X	X	X
3	MW06-10S	LN2536	X					13-Jan-15	16:15		X	X	X	X	X	X	X
4	MW08-13	LN2537	X					12-Jan-15	14:47		X	X	X	X	X	X	X
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

B503778

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: 108376

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 5, 4, 3 CS: N/A
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER: Andrea Kenward	DATE: DD/MM/YY 15/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY: Andrea Kenward	DATE: DD/MM/YY 15/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY 16/01/15	TIME: 14:00	RECEIVED BY LABORATORY:

CCCFORM - BC - 20070822

Your P.O. #: 108376
Your C.O.C. #: 08402696

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/23
Report #: R1791948
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B503783
Received: 2015/01/16, 14:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2015/01/19	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	1	2015/01/17	2015/01/19	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	1	N/A	2015/01/19	BBY6SOP-00011	SM 22 4500-Cl- G m
Cyanide SAD (strong acid dissociable)	1	N/A	2015/01/20	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	1	N/A	2015/01/20	BBY6SOP-00005	SM 22 4500-CN O
Carbon (DOC) - field filtered/preserved (1)	1	N/A	2015/01/19	BBY6SOP-00003	SM 22 5310 C m
Conductance - water	1	N/A	2015/01/19	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	1	N/A	2015/01/19	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	1	N/A	2015/01/22	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	1	N/A	2015/01/21	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	1	N/A	2015/01/21	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	1	2015/01/21	2015/01/22	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	1	N/A	2015/01/19	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	1	N/A	2015/01/21	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	1	N/A	2015/01/21	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	1	N/A	2015/01/22	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	1	N/A	2015/01/22	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	1	N/A	2015/01/21	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	1	N/A	2015/01/17	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	1	N/A	2015/01/17	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	1	N/A	2015/01/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	1	N/A	2015/01/22	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (2)	1	N/A	2015/01/19	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	1	N/A	2015/01/17	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	1	N/A	2015/01/19	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	1	2015/01/19	2015/01/20	BBY6SOP-00033	SM 22 2540 C m
Carbon (Total Organic) (3)	1	N/A	2015/01/19	BBY6SOP-00003	SM 22 5310 C m
Phosphorus-P (Total, dissolved) - FF/FP	1	2015/01/17	2015/01/17	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	1	N/A	2015/01/17	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	1	N/A	2015/01/20	BBY6SOP-00034	SM 22 2540 D

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 108376
Your C.O.C. #: 08402696

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/23
Report #: R1791948
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B503783
Received: 2015/01/16, 14:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Turbidity	1	N/A	2015/01/16	BBY6SOP-00027	SM 22 2130 B m

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) DOC present in the sample should be considered as non-purgeable DOC.
(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.
(3) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Maxxam
23 Jan 2015 10:56:53 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	T1	RDL	QC Batch
Misc. Inorganics				
Acidity (pH 8.3)	mg/L	<0.50	0.50	7782262
Fluoride (F)	mg/L	0.290	0.010	7781647
Calculated Parameters				
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	5.36	0.20	7779894
Misc. Inorganics				
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.657	0.0050	7783075
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.342	0.0050	7783084
Dissolved Organic Carbon (C)	mg/L	27.5	0.50	7782111
Alkalinity (Total as CaCO3)	mg/L	39.6	0.50	7781021
Total Organic Carbon (C)	mg/L	33.4	0.50	7782113
Anions				
Orthophosphate (P)	mg/L	<0.0010 (1)	0.0010	7781096
Dissolved Sulphate (SO4)	mg/L	1930	5.0	7782076
Dissolved Chloride (Cl)	mg/L	1100	5.0	7782068
Nutrients				
Total Ammonia (N)	mg/L	2.6	0.0050	7784838
Dissolved Phosphorus (P)	mg/L	<0.0050	0.0050	7781098
Nitrate plus Nitrite (N)	mg/L	7.81 (2)	0.20	7781088
Nitrite (N)	mg/L	2.45 (2)	0.20	7781089
Total Phosphorus (P)	mg/L	<0.0050	0.0050	7781099
Physical Properties				
Conductivity	uS/cm	4850	1.0	7781020
pH	pH	7.52	N/A	7781019
Physical Properties				
Total Suspended Solids	mg/L	8.5	4.0	7781570
Total Dissolved Solids	mg/L	4510	10	7781563
Turbidity	NTU	7.44 (1)	0.10	7780739

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	**T1**	**RDL**	**QC Batch**
Elements				
Dissolved Mercury (Hg)	ug/L	<0.010	0.010	7783873
Total Mercury (Hg)	ug/L	<0.010	0.010	7784270
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	T1	RDL	QC Batch
ANIONS				
Bromide (Br)	mg/L	0.12	0.10	7781740
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	T1	RDL	QC Batch
Misc. Inorganics				
Dissolved Hardness (CaCO3)	mg/L	2410	0.50	7780026
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	mg/L	0.138	0.00050	7782027
Dissolved Antimony (Sb)	mg/L	0.0517	0.000020	7782027
Dissolved Arsenic (As)	mg/L	0.0116	0.000020	7782027
Dissolved Barium (Ba)	mg/L	0.244	0.000020	7782027
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7782027
Dissolved Bismuth (Bi)	mg/L	0.0000676	0.0000050	7782027
Dissolved Boron (B)	mg/L	0.024	0.010	7782027
Dissolved Cadmium (Cd)	mg/L	0.000264	0.0000050	7782027
Dissolved Chromium (Cr)	mg/L	0.00062	0.00010	7782027
Dissolved Cobalt (Co)	mg/L	0.00103	0.0000050	7782027
Dissolved Copper (Cu)	mg/L	0.853	0.000050	7782027
Dissolved Iron (Fe)	mg/L	0.0287	0.0010	7782027
Dissolved Lead (Pb)	mg/L	0.0564	0.0000050	7782027
Dissolved Lithium (Li)	mg/L	0.0157	0.00050	7782027
Dissolved Manganese (Mn)	mg/L	<0.000050	0.000050	7782027
Dissolved Molybdenum (Mo)	mg/L	0.235	0.000050	7782027
Dissolved Nickel (Ni)	mg/L	0.00391	0.000020	7782027
Dissolved Phosphorus (P)	mg/L	0.139 (1)	0.0020	7782027
Dissolved Selenium (Se)	mg/L	3.18	0.000040	7782027
Dissolved Silicon (Si)	mg/L	1.31	0.050	7782027
Dissolved Silver (Ag)	mg/L	0.00279 (1)	0.0000050	7782027
Dissolved Strontium (Sr)	mg/L	3.51	0.000050	7782027
Dissolved Thallium (Tl)	mg/L	0.000677	0.0000020	7782027
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7782027
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7782027
Dissolved Uranium (U)	mg/L	0.0000304	0.0000020	7782027
Dissolved Vanadium (V)	mg/L	0.00021	0.00020	7782027
Dissolved Zinc (Zn)	mg/L	0.0271	0.00010	7782027
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7782027
Dissolved Calcium (Ca)	mg/L	965	0.050	7780027
Dissolved Magnesium (Mg)	mg/L	0.858	0.050	7780027
Dissolved Potassium (K)	mg/L	71.5	0.050	7780027
Dissolved Sodium (Na)	mg/L	271	0.050	7780027

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	**T1**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	1130	3.0	7780027
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	T1	RDL	QC Batch
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	2270	0.50	7779892
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.193	0.0025	7785473
Total Antimony (Sb)	mg/L	0.0503	0.00010	7785473
Total Arsenic (As)	mg/L	0.0103	0.00010	7785473
Total Barium (Ba)	mg/L	0.240	0.00010	7785473
Total Beryllium (Be)	mg/L	<0.000050	0.000050	7785473
Total Bismuth (Bi)	mg/L	0.000345	0.000025	7785473
Total Boron (B)	mg/L	<0.050	0.050	7785473
Total Cadmium (Cd)	mg/L	0.000399	0.000025	7785473
Total Chromium (Cr)	mg/L	0.00100	0.00050	7785473
Total Cobalt (Co)	mg/L	0.00101	0.000025	7785473
Total Copper (Cu)	mg/L	0.832	0.00025	7785473
Total Iron (Fe)	mg/L	0.286	0.0050	7785473
Total Lead (Pb)	mg/L	0.114	0.000025	7785473
Total Lithium (Li)	mg/L	0.0166	0.0025	7785473
Total Manganese (Mn)	mg/L	0.00672	0.00025	7785473
Total Molybdenum (Mo)	mg/L	0.222	0.00025	7785473
Total Nickel (Ni)	mg/L	0.00420	0.00010	7785473
Total Phosphorus (P)	mg/L	0.161	0.010	7785473
Total Selenium (Se)	mg/L	2.86	0.00020	7785473
Total Silicon (Si)	mg/L	1.33	0.25	7785473
Total Silver (Ag)	mg/L	0.00140	0.000025	7785473
Total Strontium (Sr)	mg/L	3.51	0.00025	7785473
Total Thallium (Tl)	mg/L	0.000761	0.000010	7785473
Total Tin (Sn)	mg/L	<0.0010	0.0010	7785473
Total Titanium (Ti)	mg/L	<0.0025	0.0025	7785473
Total Uranium (U)	mg/L	0.000116	0.000010	7785473
Total Vanadium (V)	mg/L	<0.0010	0.0010	7785473
Total Zinc (Zn)	mg/L	0.0491	0.00050	7785473
Total Zirconium (Zr)	mg/L	<0.00050	0.00050	7785473
Total Calcium (Ca)	mg/L	907	0.25	7779893
Total Magnesium (Mg)	mg/L	0.89	0.25	7779893
Total Potassium (K)	mg/L	77.1	0.25	7779893
Total Sodium (Na)	mg/L	272	0.25	7779893
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LN2550		
Sampling Date		2015/01/12 15:30		
COC Number		08402696		
	Units	**T1**	**RDL**	**QC Batch**
Total Sulphur (S)	mg/L	2070	15	7779893
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.0°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample LN2550-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

LOW LEVEL TOTAL METALS IN WATER (WATER) Comments

Sample LN2550-02 Elements by ICPMS Low Level (total): RDL raised due to sample matrix interference.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7780739	Turbidity	2015/01/16			99	80 - 120	<0.10	NTU	3.8	20
7781019	pH	2015/01/19			101	97 - 103			1.2	N/A
7781020	Conductivity	2015/01/19			105	80 - 120	1.5, RDL=1.0	uS/cm	NC	20
7781021	Alkalinity (Total as CaCO3)	2015/01/19	97	80 - 120	103	80 - 120	0.97, RDL=0.50	mg/L	NC	20
7781088	Nitrate plus Nitrite (N)	2015/01/17	106	80 - 120	107	80 - 120	<0.0020	mg/L	NC	25
7781089	Nitrite (N)	2015/01/17	NC	80 - 120	103	80 - 120	<0.0020	mg/L	NC	25
7781096	Orthophosphate (P)	2015/01/17	86	80 - 120	92	80 - 120	<0.0010	mg/L	0.90	20
7781098	Dissolved Phosphorus (P)	2015/01/17	NC	80 - 120	100	80 - 120	<0.0050	mg/L	0.60	20
7781099	Total Phosphorus (P)	2015/01/17	NC	80 - 120	100	80 - 120	<0.0050	mg/L	3.1	20
7781563	Total Dissolved Solids	2015/01/20	NC	80 - 120	88	80 - 120	<10	mg/L	5.3	20
7781570	Total Suspended Solids	2015/01/20	105	80 - 120	96	80 - 120	<4.0	mg/L	NC	20
7781647	Fluoride (F)	2015/01/19	NC	80 - 120	100	80 - 120	<0.010	mg/L	1.3	20
7781740	Bromide (Br)	2015/01/19	103	78 - 120	108	80 - 120	<0.010	mg/L	NC	20
7782027	Dissolved Aluminum (Al)	2015/01/20	100	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7782027	Dissolved Antimony (Sb)	2015/01/20	104	80 - 120	107	80 - 120	<0.000020	mg/L	NC	20
7782027	Dissolved Arsenic (As)	2015/01/20	102	80 - 120	105	80 - 120	<0.000020	mg/L	4.5	20
7782027	Dissolved Barium (Ba)	2015/01/20	NC	80 - 120	110	80 - 120	<0.000020	mg/L	0.73	20
7782027	Dissolved Beryllium (Be)	2015/01/20	110	80 - 120	105	80 - 120	<0.000010	mg/L	NC	20
7782027	Dissolved Bismuth (Bi)	2015/01/20	102	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7782027	Dissolved Boron (B)	2015/01/20					<0.010	mg/L	NC	20
7782027	Dissolved Cadmium (Cd)	2015/01/20	102	80 - 120	107	80 - 120	<0.0000050	mg/L	NC	20
7782027	Dissolved Chromium (Cr)	2015/01/20	106	80 - 120	109	80 - 120	<0.00010	mg/L	NC	20
7782027	Dissolved Cobalt (Co)	2015/01/20	102	80 - 120	107	80 - 120	<0.0000050	mg/L	NC	20
7782027	Dissolved Copper (Cu)	2015/01/20	102	80 - 120	108	80 - 120	<0.000050	mg/L	0.76	20
7782027	Dissolved Iron (Fe)	2015/01/20	110	80 - 120	115	80 - 120	<0.0010	mg/L	NC	20
7782027	Dissolved Lead (Pb)	2015/01/20	105	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7782027	Dissolved Lithium (Li)	2015/01/20	97	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20
7782027	Dissolved Manganese (Mn)	2015/01/20	102	80 - 120	105	80 - 120	<0.000050	mg/L	NC	20
7782027	Dissolved Molybdenum (Mo)	2015/01/20	NC	80 - 120	105	80 - 120	<0.000050	mg/L	4.2	20
7782027	Dissolved Nickel (Ni)	2015/01/20	102	80 - 120	107	80 - 120	<0.000020	mg/L	NC	20
7782027	Dissolved Phosphorus (P)	2015/01/20					<0.0020	mg/L	NC	20
7782027	Dissolved Selenium (Se)	2015/01/20	99	80 - 120	102	80 - 120	<0.000040	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7782027	Dissolved Silicon (Si)	2015/01/20					<0.050	mg/L	4.0	20
7782027	Dissolved Silver (Ag)	2015/01/20	102	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7782027	Dissolved Strontium (Sr)	2015/01/20	NC	80 - 120	102	80 - 120	<0.000050	mg/L	0.70	20
7782027	Dissolved Thallium (Tl)	2015/01/20	99	80 - 120	101	80 - 120	<0.0000020	mg/L	NC	20
7782027	Dissolved Tin (Sn)	2015/01/20	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
7782027	Dissolved Titanium (Ti)	2015/01/20	103	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7782027	Dissolved Uranium (U)	2015/01/20	110	80 - 120	108	80 - 120	<0.0000020	mg/L	1.2	20
7782027	Dissolved Vanadium (V)	2015/01/20	106	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7782027	Dissolved Zinc (Zn)	2015/01/20	101	80 - 120	105	80 - 120	<0.00010	mg/L	1.7	20
7782027	Dissolved Zirconium (Zr)	2015/01/20					<0.00010	mg/L	NC	20
7782068	Dissolved Chloride (Cl)	2015/01/19	110	80 - 120	101	80 - 120	<0.50	mg/L	NC	20
7782076	Dissolved Sulphate (SO4)	2015/01/19	NC	80 - 120	94	80 - 120	<0.50	mg/L	0.61	20
7782111	Dissolved Organic Carbon (C)	2015/01/19	104	80 - 120	107	80 - 120	<0.50	mg/L	NC	20
7782113	Total Organic Carbon (C)	2015/01/19	96	80 - 120	106	80 - 120	<0.50	mg/L	NC	20
7782262	Acidity (pH 8.3)	2015/01/19			100	80 - 120	<0.50	mg/L	3.2	20
7783075	Strong Acid Dissoc. Cyanide (CN)	2015/01/20	96	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
7783084	Weak Acid Dissoc. Cyanide (CN)	2015/01/20	97	80 - 120	103	80 - 120	0.00061, RDL=0.00050	mg/L	NC	20
7783873	Dissolved Mercury (Hg)	2015/01/21	94	80 - 120	114	80 - 120	<0.010	ug/L	NC	20
7784270	Total Mercury (Hg)	2015/01/22	100	80 - 120	100	80 - 120	<0.010	ug/L	NC	20
7784838	Total Ammonia (N)	2015/01/21	99	80 - 120	94	80 - 120	<0.0050	mg/L	NC	20
7785473	Total Aluminum (Al)	2015/01/22	116	80 - 120	117	80 - 120	<0.00050	mg/L		
7785473	Total Antimony (Sb)	2015/01/22	109	80 - 120	104	80 - 120	<0.000020	mg/L		
7785473	Total Arsenic (As)	2015/01/22	106	80 - 120	101	80 - 120	<0.000020	mg/L		
7785473	Total Barium (Ba)	2015/01/22	105	80 - 120	102	80 - 120	<0.000020	mg/L		
7785473	Total Beryllium (Be)	2015/01/22	106	80 - 120	97	80 - 120	<0.000010	mg/L		
7785473	Total Bismuth (Bi)	2015/01/22	108	80 - 120	101	80 - 120	<0.0000050	mg/L		
7785473	Total Boron (B)	2015/01/22					<0.010	mg/L		
7785473	Total Cadmium (Cd)	2015/01/22	105	80 - 120	102	80 - 120	<0.0000050	mg/L		
7785473	Total Chromium (Cr)	2015/01/22	108	80 - 120	100	80 - 120	<0.00010	mg/L		
7785473	Total Cobalt (Co)	2015/01/22	109	80 - 120	101	80 - 120	<0.0000050	mg/L		
7785473	Total Copper (Cu)	2015/01/22	109	80 - 120	98	80 - 120	<0.000050	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7785473	Total Iron (Fe)	2015/01/22	108	80 - 120	106	80 - 120	<0.0010	mg/L		
7785473	Total Lead (Pb)	2015/01/22	102	80 - 120	99	80 - 120	<0.0000050	mg/L		
7785473	Total Lithium (Li)	2015/01/22	101	80 - 120	93	80 - 120	<0.00050	mg/L		
7785473	Total Manganese (Mn)	2015/01/22	109	80 - 120	105	80 - 120	<0.000050	mg/L		
7785473	Total Molybdenum (Mo)	2015/01/22	110	80 - 120	99	80 - 120	<0.000050	mg/L		
7785473	Total Nickel (Ni)	2015/01/22	109	80 - 120	102	80 - 120	<0.000020	mg/L		
7785473	Total Phosphorus (P)	2015/01/22					<0.0020	mg/L		
7785473	Total Selenium (Se)	2015/01/22	102	80 - 120	101	80 - 120	<0.000040	mg/L		
7785473	Total Silicon (Si)	2015/01/22					<0.050	mg/L		
7785473	Total Silver (Ag)	2015/01/22	107	80 - 120	99	80 - 120	<0.0000050	mg/L		
7785473	Total Strontium (Sr)	2015/01/22	104	80 - 120	101	80 - 120	<0.000050	mg/L		
7785473	Total Thallium (Tl)	2015/01/22	98	80 - 120	99	80 - 120	<0.0000020	mg/L		
7785473	Total Tin (Sn)	2015/01/22	108	80 - 120	110	80 - 120	<0.00020	mg/L		
7785473	Total Titanium (Ti)	2015/01/22	120	80 - 120	94	80 - 120	<0.00050	mg/L		
7785473	Total Uranium (U)	2015/01/22	101	80 - 120	98	80 - 120	<0.0000020	mg/L		
7785473	Total Vanadium (V)	2015/01/22	110	80 - 120	97	80 - 120	<0.00020	mg/L		
7785473	Total Zinc (Zn)	2015/01/22	108	80 - 120	101	80 - 120	<0.00010	mg/L		
7785473	Total Zirconium (Zr)	2015/01/22					<0.00010	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B503783
Report Date: 2015/01/23

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B503783

ANALYSIS REC

08402696

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ex.5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Andrea Kenward	PROJECT MANAGER: Robin McCall
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS	TOC
1	T1	UN2550		X				12-Jan-15	15:30	9	X	X	X	X	X	X	X	X	X	X	X
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					

B503783

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS: _____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: 108376

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 5, 4, 3 cwma
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER: Andrea Kenward	DATE: DD/MM/YY 15/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY: Andrea Kenward	DATE: DD/MM/YY 15/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY 16/01/15	TIME: 14:00	RECEIVED BY LABORATORY:

COCFORM - BC - 2807b22

Your P.O. #: 108376
Your C.O.C. #: 08402901

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/30
Report #: R1795607
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B505726
Received: 2015/01/23, 09:35

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	9	N/A	2015/01/23	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	9	2015/01/23	2015/01/23	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	9	N/A	2015/01/26	BBY6SOP-00011	SM 22 4500-Cl- G m
Carbon (DOC) - field filtered/preserved (1)	1	N/A	2015/01/26	BBY6SOP-00003	SM 22 5310 C m
Conductance - water	9	N/A	2015/01/23	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	9	N/A	2015/01/26	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	9	N/A	2015/01/28	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	9	N/A	2015/01/26	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	7	N/A	2015/01/28	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Dissolved) by CVAF	2	N/A	2015/01/29	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	9	2015/01/28	2015/01/28	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	9	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	9	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	9	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	2	N/A	2015/01/29	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	9	N/A	2015/01/28	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	9	N/A	2015/01/27	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	9	N/A	2015/01/26	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	9	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	9	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	9	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	9	N/A	2015/01/27	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (2)	9	N/A	2015/01/23	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	9	N/A	2015/01/23	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	9	N/A	2015/01/26	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	3	2015/01/23	2015/01/26	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	6	2015/01/24	2015/01/26	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (Total, dissolved) - FF/FP	1	2015/01/23	2015/01/23	BBY6SOP-00013	SM 22 4500-P E m
Phosphorus-P (Tot, diss.) - unfiltered	8	2015/01/23	2015/01/23	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	9	N/A	2015/01/23	BBY6SOP-00013	SM 22 4500-P E m

Your P.O. #: 108376
Your C.O.C. #: 08402901

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/30
Report #: R1795607
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B505726
Received: 2015/01/23, 09:35

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Suspended Solids	9	N/A	2015/01/26	BBY6SOP-00034	SM 22 2540 D
Turbidity	9	N/A	2015/01/23	BBY6SOP-00027	SM 22 2130 B m

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) DOC present in the sample should be considered as non-purgeable DOC.
(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Maxxam
30 Jan 2015 11:41:00 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LO2392		LO2393			LO2394		LO2395		
Sampling Date		2015/01/16 11:58		2015/01/16 12:45			2015/01/16 13:19		2015/01/17 11:26		
COC Number		08402901		08402901			08402901		08402901		
	Units	W80	RDL	W14	RDL	QC Batch	W12	QC Batch	W21	RDL	QC Batch
Misc. Inorganics											
Acidity (pH 8.3)	mg/L	<0.50	0.50	<0.50	0.50	7786886	<0.50	7786886	<0.50	0.50	7786886
Fluoride (F)	mg/L	0.079	0.010	0.082 (1)	0.020	7788311	0.050	7788311	0.120	0.010	7788311
Calculated Parameters											
Filter and HNO3 Preservation	N/A	FIELD	N/A	FIELD	N/A	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	0.20	<0.20	0.20	7786526	<0.20	7786526	<0.20	0.20	7786526
Misc. Inorganics											
Dissolved Organic Carbon (C)	mg/L					7788700	2.04	7788700		0.50	7788700
Alkalinity (Total as CaCO3)	mg/L	67.8	0.50	54.7	0.50	7787085	67.6	7787085	101	0.50	7787085
Anions											
Orthophosphate (P)	mg/L	0.0034 (2)	0.0010	0.0024 (2)	0.0010	7786861	0.0023 (2)	7786861	0.011 (2)	0.0010	7786861
Dissolved Sulphate (SO4)	mg/L	20.0	0.50	16.0	0.50	7788520	20.2	7788520	22.2	0.50	7788520
Dissolved Chloride (Cl)	mg/L	<0.50	0.50	<0.50	0.50	7788519	<0.50	7788519	<0.50	0.50	7788519
Nutrients											
Total Ammonia (N)	mg/L	0.011	0.0050	0.019	0.0050	7788899	0.012	7788899	0.027	0.0050	7788899
Dissolved Phosphorus (P)	mg/L	<0.0050 (2)	0.0050	<0.0050 (2)	0.0050	7787280	<0.0050	7787278	0.0156 (2)	0.0050	7787280
Nitrate plus Nitrite (N)	mg/L	<0.20 (3)	0.20	<0.20 (3)	0.20	7787777	<0.20 (3)	7787777	<0.20 (3)	0.20	7787777
Nitrite (N)	mg/L	<0.20 (3)	0.20	<0.20 (3)	0.20	7787781	<0.20 (3)	7787781	<0.20 (3)	0.20	7787781
Total Phosphorus (P)	mg/L	0.0057	0.0050	<0.0050	0.0050	7787277	<0.0050	7787277	0.0225	0.0050	7787277
Physical Properties											
Conductivity	uS/cm	177	1.0	145	1.0	7787087	176	7787087	240	1.0	7787087
pH	pH	7.85	N/A	7.71	N/A	7787088	7.90	7787088	8.02	N/A	7787088
Physical Properties											
Total Suspended Solids	mg/L	<4.0	4.0	<4.0	4.0	7786728	<4.0	7786728	<4.0	4.0	7787602
Total Dissolved Solids	mg/L	100	10	94	10	7787293	110	7787293	148	10	7787293
Turbidity	NTU	0.31 (2)	0.10	0.27 (2)	0.10	7787166	0.27 (2)	7787166	0.34 (2)	0.10	7787166

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) RDL raised due to limited initial sample amount.
(2) Sample arrived to laboratory past recommended hold time.
(3) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LO2396	LO2397	LO2398	LO2399		LO2400		
Sampling Date		2015/01/17 14:21	2015/01/17 15:45	2015/01/17 16:15	2015/01/17 16:50		2015/01/17 16:50		
COC Number		08402901	08402901	08402901	08402901		08402901		
	Units	**W40**	**W71**	**W72**	**W73**	**QC Batch**	**W73-98**	**RDL**	**QC Batch**
Misc. Inorganics									
Acidity (pH 8.3)	mg/L	<0.50	7.00	2.26	<0.50	7786886	<0.50	0.50	7786886
Fluoride (F)	mg/L	0.075	0.690	0.190	0.056	7788311	0.056	0.010	7788311
Calculated Parameters									
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	<0.20	<0.20	<0.20	7786526	<0.20	0.20	7786526
Misc. Inorganics									
Alkalinity (Total as CaCO3)	mg/L	127	309	211	125	7787085	124	0.50	7787085
Anions									
Orthophosphate (P)	mg/L	0.0019 (1)	0.012 (1)	0.012 (1)	0.0033 (1)	7786861	0.0034 (1)	0.0010	7786861
Dissolved Sulphate (SO4)	mg/L	37.4	141	58.8	25.4	7788520	25.3	0.50	7788520
Dissolved Chloride (Cl)	mg/L	0.54	<0.50	0.51	<0.50	7788519	0.52	0.50	7788519
Nutrients									
Total Ammonia (N)	mg/L	0.023	0.0083	0.042	0.0098	7788899	0.013	0.0050	7788899
Dissolved Phosphorus (P)	mg/L	<0.0050 (1)	0.0127 (1)	0.0140 (1)	<0.0050 (1)	7787280	<0.0050 (1)	0.0050	7787280
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	<0.20 (2)	<0.20 (2)	<0.20 (2)	7787777	<0.20 (2)	0.20	7787777
Nitrite (N)	mg/L	<0.20 (2)	<0.20 (2)	<0.20 (2)	<0.20 (2)	7787781	<0.20 (2)	0.20	7787781
Total Phosphorus (P)	mg/L	0.0109	0.0180	0.0384	0.0100	7787277	0.0295	0.0050	7787277
Physical Properties									
Conductivity	uS/cm	315	789	496	287	7787087	285	1.0	7787087
pH	pH	8.07	8.00	8.05	8.05	7787088	8.03	N/A	7787088
Physical Properties									
Total Suspended Solids	mg/L	16.5	<4.0	<4.0	<4.0	7787602	<4.0	4.0	7787602
Total Dissolved Solids	mg/L	184	506	294	164	7787293	168	10	7787293
Turbidity	NTU	0.15 (1)	0.15 (1)	0.33 (1)	0.22 (1)	7787182	0.20 (1)	0.10	7787166

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LO2392	LO2393	LO2394	LO2395	LO2396	LO2397	LO2398		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19	2015/01/17 11:26	2015/01/17 14:21	2015/01/17 15:45	2015/01/17 16:15		
COC Number		08402901	08402901	08402901	08402901	08402901	08402901	08402901		
	Units	**W80**	**W14**	**W12**	**W21**	**W40**	**W71**	**W72**	**RDL**	**QC Batch**
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7790816
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7790821
RDL = Reportable Detection Limit										

Maxxam ID		LO2399	LO2400		
Sampling Date		2015/01/17 16:50	2015/01/17 16:50		
COC Number		08402901	08402901		
	Units	**W73**	**W73-98**	**RDL**	**QC Batch**
Elements					
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	0.010	7792178
Total Mercury (Hg)	ug/L	<0.010	<0.010	0.010	7790821
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LO2392	LO2393	LO2394	LO2395	LO2396	LO2397	LO2398		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19	2015/01/17 11:26	2015/01/17 14:21	2015/01/17 15:45	2015/01/17 16:15		
COC Number		08402901	08402901	08402901	08402901	08402901	08402901	08402901		
	Units	**W80**	**W14**	**W12**	**W21**	**W40**	**W71**	**W72**	**RDL**	**QC Batch**
ANIONS										
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7788353
RDL = Reportable Detection Limit										

Maxxam ID		LO2399	LO2400		
Sampling Date		2015/01/17 16:50	2015/01/17 16:50		
COC Number		08402901	08402901		
	Units	**W73**	**W73-98**	**RDL**	**QC Batch**
ANIONS					
Bromide (Br)	mg/L	<0.010	<0.010	0.010	7788353
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2392	LO2393	LO2394		LO2395		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19		2015/01/17 11:26		
COC Number		08402901	08402901	08402901		08402901		
	Units	W80	W14	W12	QC Batch	W21	RDL	QC Batch
Misc. Inorganics								
Dissolved Hardness (CaCO3)	mg/L	89.4	67.9	83.8	7786523	119	0.50	7786523
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00251	0.00372	0.00171	7788324	0.00197	0.00050	7788324
Dissolved Antimony (Sb)	mg/L	0.000058	0.000046	0.000049	7788324	0.000075	0.000020	7788324
Dissolved Arsenic (As)	mg/L	0.000206	0.000171	0.000142	7788324	0.00118	0.000020	7788324
Dissolved Barium (Ba)	mg/L	0.0740	0.0499	0.0712	7788324	0.0487	0.000020	7788324
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	7788324	<0.000010	0.000010	7788324
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	7788324	<0.0000050	0.0000050	7788324
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	7788324	<0.010	0.010	7788324
Dissolved Cadmium (Cd)	mg/L	0.0000260	0.000103	0.0000143	7788324	0.0000077	0.0000050	7788324
Dissolved Chromium (Cr)	mg/L	0.00060 (1)	0.00037	0.00067 (1)	7788324	0.00018	0.00010	7788324
Dissolved Cobalt (Co)	mg/L	0.0000574	0.0000159	0.0000168	7788324	0.0000115	0.0000050	7788324
Dissolved Copper (Cu)	mg/L	0.000475 (1)	0.000637	0.000522 (1)	7788324	0.000632	0.000050	7788324
Dissolved Iron (Fe)	mg/L	0.0600	0.0310	0.0334	7788324	0.0514	0.0010	7788324
Dissolved Lead (Pb)	mg/L	0.000133 (1)	0.000238	0.000115 (1)	7788324	0.0000767	0.0000050	7793198
Dissolved Lithium (Li)	mg/L	0.00056	0.00151	<0.00050	7788324	0.00116	0.00050	7788324
Dissolved Manganese (Mn)	mg/L	0.0645	0.00638	0.0123	7788324	0.00256	0.000050	7788324
Dissolved Molybdenum (Mo)	mg/L	0.000458	0.000410	0.000425	7788324	0.00135	0.000050	7788324
Dissolved Nickel (Ni)	mg/L	0.000314	0.000569	0.000300	7788324	0.00141	0.000020	7788324
Dissolved Phosphorus (P)	mg/L	0.0067	0.0055	0.0078	7788324	0.0147	0.0020	7788324
Dissolved Selenium (Se)	mg/L	0.00116	0.000418	0.00105	7788324	0.000415	0.000040	7788324
Dissolved Silicon (Si)	mg/L	3.68	4.51	3.46	7788324	3.05	0.050	7788324
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	7788324	<0.0000050	0.0000050	7788324
Dissolved Strontium (Sr)	mg/L	0.0550	0.0520	0.0555	7788324	0.113	0.000050	7788324
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	7788324	<0.0000020	0.0000020	7788324
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	7788324	<0.00020	0.00020	7788324
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	7788324	<0.00050	0.00050	7788324
Dissolved Uranium (U)	mg/L	0.000499	0.000996	0.000477	7788324	0.00171	0.0000020	7788324
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	7788324	0.00021	0.00020	7788324
Dissolved Zinc (Zn)	mg/L	0.00181 (1)	0.00431	0.00166	7788324	0.00106	0.00010	7788324
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	7788324	<0.00010	0.00010	7788324
Dissolved Calcium (Ca)	mg/L	26.6	18.8	24.8	7786524	29.9	0.050	7786524
Dissolved Magnesium (Mg)	mg/L	5.56	5.10	5.30	7786524	10.8	0.050	7786524
Dissolved Potassium (K)	mg/L	0.738	1.06	0.774 (1)	7786524	1.21	0.050	7786524
Dissolved Sodium (Na)	mg/L	1.47	1.68	1.49 (1)	7786524	1.70	0.050	7786524

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2392	LO2393	LO2394		LO2395		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19		2015/01/17 11:26		
COC Number		08402901	08402901	08402901		08402901		
	Units	**W80**	**W14**	**W12**	**QC Batch**	**W21**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	7.0	5.1	6.4	7786524	7.2	3.0	7786524
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2396		LO2397	LO2398	LO2399		
Sampling Date		2015/01/17 14:21		2015/01/17 15:45	2015/01/17 16:15	2015/01/17 16:50		
COC Number		08402901		08402901	08402901	08402901		
	Units	W40	QC Batch	W71	W72	W73	RDL	QC Batch
Misc. Inorganics								
Dissolved Hardness (CaCO3)	mg/L	156	7786523	448	263	145	0.50	7786523
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00170	7788324	0.00125	0.00178	0.00129	0.00050	7788324
Dissolved Antimony (Sb)	mg/L	0.000086	7788324	0.000499	0.000121	0.000109	0.000020	7788324
Dissolved Arsenic (As)	mg/L	0.000187	7788324	0.000282	0.00144	0.000213	0.000020	7788324
Dissolved Barium (Ba)	mg/L	0.0788	7788324	0.0717	0.106	0.0809	0.000020	7788324
Dissolved Beryllium (Be)	mg/L	<0.000010	7788324	<0.000010	<0.000010	<0.000010	0.000010	7788324
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7788324	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788324
Dissolved Boron (B)	mg/L	<0.010	7788324	<0.010	<0.010	<0.010	0.010	7788324
Dissolved Cadmium (Cd)	mg/L	0.0000674	7788324	0.00338	0.000260	0.0000072	0.0000050	7788324
Dissolved Chromium (Cr)	mg/L	0.00029	7788324	<0.00010	0.00021	0.00030	0.00010	7788324
Dissolved Cobalt (Co)	mg/L	0.0000111	7788324	0.0000167	0.000131	0.0000096	0.0000050	7788324
Dissolved Copper (Cu)	mg/L	0.000741	7788324	0.000503	0.000559 (1)	0.000467	0.000050	7788324
Dissolved Iron (Fe)	mg/L	0.0045	7788324	0.0060	0.0307	0.0258	0.0010	7788324
Dissolved Lead (Pb)	mg/L	0.000665	7788324	0.0000206	0.000153 (1)	0.0000256 (1)	0.0000050	7788324
Dissolved Lithium (Li)	mg/L	0.00190	7793198	0.00276	0.00267	0.00157	0.00050	7788324
Dissolved Manganese (Mn)	mg/L	0.000599	7788324	0.00804	0.282	0.00181	0.000050	7788324
Dissolved Molybdenum (Mo)	mg/L	0.000798	7788324	0.00455	0.00366	0.000518	0.000050	7788324
Dissolved Nickel (Ni)	mg/L	0.000777	7788324	0.0306	0.00318	0.000556	0.000020	7788324
Dissolved Phosphorus (P)	mg/L	0.0076	7788324	0.0127	0.0148	0.0051	0.0020	7788324
Dissolved Selenium (Se)	mg/L	0.000906	7788324	0.00529	0.00123	0.00100	0.000040	7788324
Dissolved Silicon (Si)	mg/L	4.47	7788324	4.25	5.40	4.62	0.050	7788324
Dissolved Silver (Ag)	mg/L	<0.0000050	7788324	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788324
Dissolved Strontium (Sr)	mg/L	0.192	7788324	0.342	0.333	0.160	0.000050	7788324
Dissolved Thallium (Tl)	mg/L	<0.0000020	7788324	<0.0000020	<0.0000020	<0.0000020	0.0000020	7788324
Dissolved Tin (Sn)	mg/L	<0.00020	7788324	<0.00020	<0.00020	<0.00020	0.00020	7788324
Dissolved Titanium (Ti)	mg/L	<0.00050	7788324	<0.00050	<0.00050	<0.00050	0.00050	7788324
Dissolved Uranium (U)	mg/L	0.00181	7788324	0.0141	0.00190	0.000805	0.0000020	7788324
Dissolved Vanadium (V)	mg/L	<0.00020	7788324	0.00025	<0.00020	<0.00020	0.00020	7788324
Dissolved Zinc (Zn)	mg/L	0.00401	7788324	0.772	0.0294	0.00047	0.00010	7788324
Dissolved Zirconium (Zr)	mg/L	<0.00010	7788324	<0.00010	<0.00010	<0.00010	0.00010	7788324
Dissolved Calcium (Ca)	mg/L	39.8	7786524	120	65.4	38.5	0.050	7786524
Dissolved Magnesium (Mg)	mg/L	13.8	7786524	35.7	24.3	11.8	0.050	7786524
Dissolved Potassium (K)	mg/L	1.18	7786524	0.908	1.15	0.401	0.050	7786524
Dissolved Sodium (Na)	mg/L	2.32	7786524	1.02	2.49	1.48	0.050	7786524

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2396		LO2397	LO2398	LO2399		
Sampling Date		2015/01/17 14:21		2015/01/17 15:45	2015/01/17 16:15	2015/01/17 16:50		
COC Number		08402901		08402901	08402901	08402901		
	Units	**W40**	**QC Batch**	**W71**	**W72**	**W73**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	11.5	7786524	43.9	17.8	8.2	3.0	7786524
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2400		
Sampling Date		2015/01/17 16:50		
COC Number		08402901		
	Units	W73-98	RDL	QC Batch
Misc. Inorganics				
Dissolved Hardness (CaCO3)	mg/L	147	0.50	7786523
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	mg/L	0.00117	0.00050	7788324
Dissolved Antimony (Sb)	mg/L	0.000112	0.000020	7788324
Dissolved Arsenic (As)	mg/L	0.000208	0.000020	7788324
Dissolved Barium (Ba)	mg/L	0.0855	0.000020	7788324
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7788324
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7788324
Dissolved Boron (B)	mg/L	<0.010	0.010	7788324
Dissolved Cadmium (Cd)	mg/L	0.0000072	0.0000050	7788324
Dissolved Chromium (Cr)	mg/L	0.00030	0.00010	7788324
Dissolved Cobalt (Co)	mg/L	0.0000077	0.0000050	7788324
Dissolved Copper (Cu)	mg/L	0.000459	0.000050	7788324
Dissolved Iron (Fe)	mg/L	0.0219	0.0010	7788324
Dissolved Lead (Pb)	mg/L	0.0000120	0.0000050	7788324
Dissolved Lithium (Li)	mg/L	0.00128	0.00050	7788324
Dissolved Manganese (Mn)	mg/L	0.00172	0.000050	7788324
Dissolved Molybdenum (Mo)	mg/L	0.000511	0.000050	7788324
Dissolved Nickel (Ni)	mg/L	0.000551	0.000020	7788324
Dissolved Phosphorus (P)	mg/L	0.0076	0.0020	7788324
Dissolved Selenium (Se)	mg/L	0.000975	0.000040	7788324
Dissolved Silicon (Si)	mg/L	4.57	0.050	7788324
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7788324
Dissolved Strontium (Sr)	mg/L	0.155	0.000050	7788324
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7788324
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7788324
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7788324
Dissolved Uranium (U)	mg/L	0.000845	0.0000020	7788324
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7788324
Dissolved Zinc (Zn)	mg/L	0.00046	0.00010	7788324
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7788324
Dissolved Calcium (Ca)	mg/L	39.1	0.050	7786524
Dissolved Magnesium (Mg)	mg/L	11.9	0.050	7786524
Dissolved Potassium (K)	mg/L	0.391	0.050	7786524
Dissolved Sodium (Na)	mg/L	1.43	0.050	7786524
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2400		
Sampling Date		2015/01/17 16:50		
COC Number		08402901		
	Units	**W73-98**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	8.0	3.0	7786524
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LO2392	LO2393	LO2394	LO2395	LO2396		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19	2015/01/17 11:26	2015/01/17 14:21		
COC Number		08402901	08402901	08402901	08402901	08402901		
	Units	W80	W14	W12	W21	W40	RDL	QC Batch
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	86.5	67.9	86.7	122	166	0.50	7786522
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.00463	0.00958	0.00417	0.00816	0.0268	0.00050	7788652
Total Antimony (Sb)	mg/L	0.000043	0.000047	0.000043	0.000070	0.000096	0.000020	7788652
Total Arsenic (As)	mg/L	0.000230	0.000166	0.000185	0.00145	0.000271	0.000020	7788652
Total Barium (Ba)	mg/L	0.0745	0.0509	0.0707	0.0498	0.0819	0.000020	7788652
Total Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7788652
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000435	<0.0000050	<0.0000050	0.0000382	0.0000050	7788652
Total Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7788652
Total Cadmium (Cd)	mg/L	0.0000267	0.000101	0.0000144	0.0000113	0.000107	0.0000050	7788652
Total Chromium (Cr)	mg/L	<0.00010	0.00032	<0.00010	0.00012	0.00053	0.00010	7788652
Total Cobalt (Co)	mg/L	0.0000617	0.0000179	0.0000271	0.0000248	0.0000780	0.0000050	7788652
Total Copper (Cu)	mg/L	0.000363	0.000624	0.000344	0.000620	0.00141	0.000050	7788652
Total Iron (Fe)	mg/L	0.151	0.0650	0.0979	0.0989	0.0976	0.0010	7788652
Total Lead (Pb)	mg/L	0.0000560	0.000702	0.0000443	0.0000739	0.000950	0.0000050	7788652
Total Lithium (Li)	mg/L	<0.00050	0.00117	<0.00050	0.00192	0.00219	0.00050	7788652
Total Manganese (Mn)	mg/L	0.0653	0.00856	0.0206	0.00839	0.0150	0.000050	7788652
Total Molybdenum (Mo)	mg/L	0.000463	0.000419	0.000420	0.00137	0.000829	0.000050	7788652
Total Nickel (Ni)	mg/L	0.000277	0.000520	0.000246	0.00153	0.00108	0.000020	7788652
Total Phosphorus (P)	mg/L	0.0092	0.0081	0.0069	0.0198	0.0173	0.0020	7788652
Total Selenium (Se)	mg/L	0.00116	0.000463	0.00120	0.000476	0.000999	0.000040	7788652
Total Silicon (Si)	mg/L	3.84	4.84	3.83	3.34	4.98	0.050	7788652
Total Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788652
Total Strontium (Sr)	mg/L	0.0576	0.0547	0.0564	0.122	0.198	0.000050	7788652
Total Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.0000022	0.0000020	7788652
Total Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7788652
Total Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00093	0.00050	7788652
Total Uranium (U)	mg/L	0.000497	0.00104	0.000484	0.00167	0.00184	0.0000020	7788652
Total Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7788652
Total Zinc (Zn)	mg/L	0.00114	0.00374	0.00159	0.00147	0.00632	0.00010	7788652
Total Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	7788652
Total Calcium (Ca)	mg/L	26.1	19.2	26.4	30.9	43.4	0.050	7786525
Total Magnesium (Mg)	mg/L	5.19	4.89	5.06	10.9	14.0	0.050	7786525
Total Potassium (K)	mg/L	0.628	1.02	0.623	1.21	1.10	0.050	7786525
Total Sodium (Na)	mg/L	1.26	1.61	1.20	1.65	2.23	0.050	7786525

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LO2392	LO2393	LO2394	LO2395	LO2396		
Sampling Date		2015/01/16 11:58	2015/01/16 12:45	2015/01/16 13:19	2015/01/17 11:26	2015/01/17 14:21		
COC Number		08402901	08402901	08402901	08402901	08402901		
	Units	**W80**	**W14**	**W12**	**W21**	**W40**	**RDL**	**QC Batch**
Total Sulphur (S)	mg/L	6.7	5.3	6.7	7.7	12.7	3.0	7786525
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LO2397	LO2398	LO2399	LO2400		
Sampling Date		2015/01/17 15:45	2015/01/17 16:15	2015/01/17 16:50	2015/01/17 16:50		
COC Number		08402901	08402901	08402901	08402901		
	Units	W71	W72	W73	W73-98	RDL	QC Batch
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	453	266	147	150	0.50	7786522
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.00532	0.00430	0.00498	0.00609	0.00050	7788652
Total Antimony (Sb)	mg/L	0.000509	0.000120	0.000104	0.000111	0.000020	7788652
Total Arsenic (As)	mg/L	0.000267	0.00158	0.000223	0.000230	0.000020	7788652
Total Barium (Ba)	mg/L	0.0711	0.107	0.0832	0.0829	0.000020	7788652
Total Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7788652
Total Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788652
Total Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	7788652
Total Cadmium (Cd)	mg/L	0.00329	0.000276	0.0000075	0.0000298	0.0000050	7788652
Total Chromium (Cr)	mg/L	<0.00010	0.00014	0.00030	0.00039	0.00010	7788652
Total Cobalt (Co)	mg/L	0.0000208	0.000124	0.0000133	0.0000169	0.0000050	7788652
Total Copper (Cu)	mg/L	0.000476	0.000378	0.000482	0.000651	0.000050	7788652
Total Iron (Fe)	mg/L	0.0151	0.0677	0.0598	0.0620	0.0010	7788652
Total Lead (Pb)	mg/L	0.0000602	0.000142	0.0000097	0.000114	0.0000050	7788652
Total Lithium (Li)	mg/L	0.00255	0.00231	0.00119	0.00060	0.00050	7788652
Total Manganese (Mn)	mg/L	0.00785	0.281	0.00742	0.00787	0.000050	7788652
Total Molybdenum (Mo)	mg/L	0.00447	0.00372	0.000533	0.000540	0.000050	7788652
Total Nickel (Ni)	mg/L	0.0294	0.00314	0.000602	0.000615	0.000020	7788652
Total Phosphorus (P)	mg/L	0.0164	0.0203	0.0066	0.0218	0.0020	7788652
Total Selenium (Se)	mg/L	0.00572	0.00124	0.00107	0.00108	0.000040	7788652
Total Silicon (Si)	mg/L	4.65	5.80	4.88	4.96	0.050	7788652
Total Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788652
Total Strontium (Sr)	mg/L	0.343	0.347	0.166	0.167	0.000050	7788652
Total Thallium (Tl)	mg/L	0.0000022	<0.0000020	<0.0000020	<0.0000020	0.0000020	7788652
Total Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7788652
Total Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	7788652
Total Uranium (U)	mg/L	0.0140	0.00192	0.000804	0.000809	0.0000020	7788652
Total Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7788652
Total Zinc (Zn)	mg/L	0.752	0.0297	0.00044	0.00123	0.00010	7788652
Total Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	7788652
Total Calcium (Ca)	mg/L	123	67.3	39.0	40.7	0.050	7786525
Total Magnesium (Mg)	mg/L	35.1	23.8	11.9	11.8	0.050	7786525
Total Potassium (K)	mg/L	0.866	1.10	0.393	0.422	0.050	7786525
Total Sodium (Na)	mg/L	0.953	2.47	1.36	1.48	0.050	7786525
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		LO2397	LO2398	LO2399	LO2400		
Sampling Date		2015/01/17 15:45	2015/01/17 16:15	2015/01/17 16:50	2015/01/17 16:50		
COC Number		08402901	08402901	08402901	08402901		
	Units	**W71**	**W72**	**W73**	**W73-98**	**RDL**	**QC Batch**
Total Sulphur (S)	mg/L	47.2	19.5	8.7	9.0	3.0	7786525
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	3.0°C
Package 2	2.3°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample LO2397-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Sample LO2395, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample LO2396, Elements by ICPMS Low Level (dissolved): Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7786728	Total Suspended Solids	2015/01/26	105	80 - 120	100	80 - 120	<4.0	mg/L	NC	20
7786861	Orthophosphate (P)	2015/01/23	103	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
7786886	Acidity (pH 8.3)	2015/01/23			101	80 - 120	<0.50	mg/L	NC	20
7787085	Alkalinity (Total as CaCO3)	2015/01/23	NC	80 - 120	96	80 - 120	<0.50	mg/L	1.5	20
7787087	Conductivity	2015/01/23			100	80 - 120	<1.0	uS/cm	0.46	20
7787088	pH	2015/01/23			102	97 - 103			0	N/A
7787166	Turbidity	2015/01/23			101	80 - 120	<0.10	NTU	1.2	20
7787182	Turbidity	2015/01/23			100	80 - 120	<0.10	NTU	NC	20
7787277	Total Phosphorus (P)	2015/01/23	92	80 - 120	104	80 - 120	<0.0050	mg/L	NC	20
7787278	Dissolved Phosphorus (P)	2015/01/23	95	80 - 120	107	80 - 120	<0.0050	mg/L	NC	20
7787280	Dissolved Phosphorus (P)	2015/01/23	99	80 - 120	104	80 - 120	<0.0050	mg/L	NC	20
7787293	Total Dissolved Solids	2015/01/26	NC	80 - 120	108	80 - 120	<10	mg/L	4.1	20
7787602	Total Suspended Solids	2015/01/26	120	80 - 120	104	80 - 120	<4.0	mg/L	NC	20
7787777	Nitrate plus Nitrite (N)	2015/01/24	106	80 - 120	107	80 - 120	<0.0020	mg/L	0.72	25
7787781	Nitrite (N)	2015/01/24	103	80 - 120	105	80 - 120	<0.0020	mg/L	NC	25
7788311	Fluoride (F)	2015/01/26	102	80 - 120	98	80 - 120	<0.010	mg/L	NC	20
7788324	Dissolved Aluminum (Al)	2015/01/26	109	80 - 120	100	80 - 120	<0.00050	mg/L	9.0	20
7788324	Dissolved Antimony (Sb)	2015/01/26	100	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20
7788324	Dissolved Arsenic (As)	2015/01/26	103	80 - 120	102	80 - 120	<0.000020	mg/L	NC	20
7788324	Dissolved Barium (Ba)	2015/01/26	109	80 - 120	104	80 - 120	<0.000020	mg/L		
7788324	Dissolved Beryllium (Be)	2015/01/26	93	80 - 120	94	80 - 120	<0.000010	mg/L	NC	20
7788324	Dissolved Bismuth (Bi)	2015/01/26	97	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Boron (B)	2015/01/26					<0.010	mg/L	NC	20
7788324	Dissolved Cadmium (Cd)	2015/01/26	101	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Chromium (Cr)	2015/01/26	100	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
7788324	Dissolved Cobalt (Co)	2015/01/26	100	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Copper (Cu)	2015/01/26	102	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7788324	Dissolved Iron (Fe)	2015/01/26	124 (1)	80 - 120	120	80 - 120	<0.0010	mg/L	NC	20
7788324	Dissolved Lead (Pb)	2015/01/26	101	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Lithium (Li)	2015/01/26	91	80 - 120	90	80 - 120	0.00069, RDL=0.00050	mg/L	NC	20
7788324	Dissolved Manganese (Mn)	2015/01/26	104	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7788324	Dissolved Molybdenum (Mo)	2015/01/26	101	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7788324	Dissolved Nickel (Ni)	2015/01/26	104	80 - 120	100	80 - 120	<0.000020	mg/L		
7788324	Dissolved Phosphorus (P)	2015/01/26					<0.0020	mg/L		
7788324	Dissolved Selenium (Se)	2015/01/26	92	80 - 120	98	80 - 120	<0.000040	mg/L	NC	20
7788324	Dissolved Silicon (Si)	2015/01/26					<0.050	mg/L	NC	20
7788324	Dissolved Silver (Ag)	2015/01/26	97	80 - 120	92	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Strontium (Sr)	2015/01/26	100	80 - 120	103	80 - 120	<0.000050	mg/L	7.7	20
7788324	Dissolved Thallium (Tl)	2015/01/26	94	80 - 120	101	80 - 120	<0.0000020	mg/L	NC	20
7788324	Dissolved Tin (Sn)	2015/01/26	98	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
7788324	Dissolved Titanium (Ti)	2015/01/26	105	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7788324	Dissolved Uranium (U)	2015/01/26	103	80 - 120	105	80 - 120	<0.0000020	mg/L	NC	20
7788324	Dissolved Vanadium (V)	2015/01/26	102	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7788324	Dissolved Zinc (Zn)	2015/01/26	160 (1)	80 - 120	101	80 - 120	<0.00010	mg/L		
7788324	Dissolved Zirconium (Zr)	2015/01/26					<0.00010	mg/L	NC	20
7788353	Bromide (Br)	2015/01/26	102	78 - 120	97	80 - 120	<0.010	mg/L	NC	20
7788519	Dissolved Chloride (Cl)	2015/01/26	105	80 - 120	105	80 - 120	<0.50	mg/L	NC	20
7788520	Dissolved Sulphate (SO4)	2015/01/26	NC	80 - 120	98	80 - 120	<0.50	mg/L	4.7	20
7788652	Total Aluminum (Al)	2015/01/27	102	80 - 120	107	80 - 120	<0.00050	mg/L	2.8	20
7788652	Total Antimony (Sb)	2015/01/27	101	80 - 120	111	80 - 120	<0.000020	mg/L	NC	20
7788652	Total Arsenic (As)	2015/01/27	100	80 - 120	106	80 - 120	<0.000020	mg/L	NC	20
7788652	Total Barium (Ba)	2015/01/27	101	80 - 120	109	80 - 120	<0.000020	mg/L	2.1	20
7788652	Total Beryllium (Be)	2015/01/27	101	80 - 120	108	80 - 120	<0.000010	mg/L	NC	20
7788652	Total Bismuth (Bi)	2015/01/27	96	80 - 120	105	80 - 120	<0.0000050	mg/L	NC	20
7788652	Total Boron (B)	2015/01/27					<0.010	mg/L	NC	20
7788652	Total Cadmium (Cd)	2015/01/27	96	80 - 120	106	80 - 120	<0.0000050	mg/L	NC	20
7788652	Total Chromium (Cr)	2015/01/27	97	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
7788652	Total Cobalt (Co)	2015/01/27	97	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7788652	Total Copper (Cu)	2015/01/27	97	80 - 120	103	80 - 120	<0.000050	mg/L	NC	20
7788652	Total Iron (Fe)	2015/01/27	108	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
7788652	Total Lead (Pb)	2015/01/27	101	80 - 120	112	80 - 120	<0.0000050	mg/L	NC	20
7788652	Total Lithium (Li)	2015/01/27	105	80 - 120	108	80 - 120	<0.00050	mg/L	NC	20
7788652	Total Manganese (Mn)	2015/01/27	98	80 - 120	104	80 - 120	<0.000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7788652	Total Molybdenum (Mo)	2015/01/27	96	80 - 120	103	80 - 120	<0.000050	mg/L	NC	20
7788652	Total Nickel (Ni)	2015/01/27	97	80 - 120	104	80 - 120	<0.000020	mg/L	NC	20
7788652	Total Phosphorus (P)	2015/01/27					<0.0020	mg/L		
7788652	Total Selenium (Se)	2015/01/27	99	80 - 120	99	80 - 120	<0.000040	mg/L	NC	20
7788652	Total Silicon (Si)	2015/01/27					<0.050	mg/L	NC	20
7788652	Total Silver (Ag)	2015/01/27	96	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7788652	Total Strontium (Sr)	2015/01/27	98	80 - 120	106	80 - 120	<0.000050	mg/L	7.9	20
7788652	Total Thallium (Tl)	2015/01/27	97	80 - 120	113	80 - 120	<0.0000020	mg/L	NC	20
7788652	Total Tin (Sn)	2015/01/27	100	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7788652	Total Titanium (Ti)	2015/01/27	98	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7788652	Total Uranium (U)	2015/01/27	102	80 - 120	112	80 - 120	<0.0000020	mg/L	NC	20
7788652	Total Vanadium (V)	2015/01/27	98	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
7788652	Total Zinc (Zn)	2015/01/27	97	80 - 120	101	80 - 120	<0.00010	mg/L	0.53	20
7788652	Total Zirconium (Zr)	2015/01/27					<0.00010	mg/L	NC	20
7788700	Dissolved Organic Carbon (C)	2015/01/26	94	80 - 120	100	80 - 120	<0.50	mg/L	2.1	20
7788899	Total Ammonia (N)	2015/01/26	NC	80 - 120	101	80 - 120	<0.0050	mg/L	0.57	20
7790816	Dissolved Mercury (Hg)	2015/01/28	95	80 - 120	98	80 - 120	<0.010	ug/L	NC	20
7790821	Total Mercury (Hg)	2015/01/28	93	80 - 120	94	80 - 120	<0.010	ug/L	NC	20
7792178	Dissolved Mercury (Hg)	2015/01/29	101	80 - 120	104	80 - 120	<0.010	ug/L	NC	20
7793198	Dissolved Lead (Pb)	2015/01/29			105	80 - 120	<0.0000050	mg/L		
7793198	Dissolved Lithium (Li)	2015/01/29			92	80 - 120	<0.00050	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505726
Report Date: 2015/01/30

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

08402901

LAB USE O.
MAXXAM JOB #: B505726

ANALYSIS REQUEST

LAB USE ONLY
COC #

COMPANY NAME:	Yukon Zinc Corporation
CLIENT PROJECT NO.:	
COMPANY ADDRESS:	#410-700 West Pender Vancouver, BC V6C 1G8
TEL.:	604-638-0921 Ex.5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	Thomas Pearson
PROJECT MANAGER:	Robin McCall
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS	TOC
1	W80	L02392		X				16-Jan-15	11:58	7	X	X	X	X			X	X	X	X	
2	W14	L02393		X				16-Jan-15	12:45	7	X	X	X	X			X	X	X	X	
3	W12	L02394		X				16-Jan-15	13:19	8	X	X	X	X	X		X	X	X	X	
4	W21	L02395		X				17-Jan-15	11:26	7	X	X	X	X			X	X	X	X	
5	W40	L02396		X				17-Jan-15	14:21	7	X	X	X	X			X	X	X	X	
6	W71	L02397		X				17-Jan-15	15:45	7	X	X	X	X			X	X	X	X	
7	W72	L02398		X				17-Jan-15	16:15	7	X	X	X	X			X	X	X	X	
8	W73	L02399		X				17-Jan-15	16:50	7	X	X	X	X			X	X	X	X	
9	W73-98	L02400		X				17-Jan-15	16:50	7	X	X	X	X			X	X	X	X	
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					

B505726

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: 108376
SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:
SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER
JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 2,3,4 / 2,3,2 CS:MA
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER:	Thomas Pearson	DATE: DD/MM/YY	22/01/2015	TIME: 7:30
RELINQUISHED BY:	Robin McCall	DATE: DD/MM/YY	22/01/2015	TIME: 7:30
RELINQUISHED BY:		DATE: DD/MM/YY		TIME:

RECEIVED BY:
RECEIVED BY:
RECEIVED BY LABORATORY: Laurel Berthier 2015/01/23 09:35

COCFORM - BC - 20070822

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your P.O. #: 108376
Your C.O.C. #: 08402902

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/29
Report #: R1795101
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B505759
Received: 2015/01/23, 09:35

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	3	N/A	2015/01/26	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	3	2015/01/24	2015/01/24	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	2	N/A	2015/01/26	BBY6SOP-00011	SM 22 4500-Cl- G m
Chloride by Automated Colourimetry	1	N/A	2015/01/27	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	3	N/A	2015/01/24	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	3	N/A	2015/01/26	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2015/01/26	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	3	N/A	2015/01/29	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	3	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	3	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	3	N/A	2015/01/26	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	3	N/A	2015/01/26	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	3	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	3	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	3	N/A	2015/01/24	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	3	N/A	2015/01/26	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	3	N/A	2015/01/24	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	3	N/A	2015/01/24	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	3	N/A	2015/01/26	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	3	2015/01/26	2015/01/27	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (Total, dissolved) - FF/FP	3	2015/01/26	2015/01/26	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	3	N/A	2015/01/27	BBY6SOP-00034	SM 22 2540 D
Turbidity	3	N/A	2015/01/23	BBY6SOP-00027	SM 22 2130 B m

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 108376
Your C.O.C. #: 08402902

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/01/29
Report #: R1795101
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B505759
Received: 2015/01/23, 09:35

Encryption Key

Maxxam
29 Jan 2015 14:09:35 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LO2701			LO2702		LO2703		
Sampling Date		2015/01/20 11:57			2015/01/20 15:07		2015/01/20 15:26		
COC Number		08402902			08402902		08402902		
	Units	MW05-6A	RDL	QC Batch	MW05-5A	QC Batch	MW05-5B	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 8.3)	mg/L	0.81	0.50	7789483	<0.50	7789483	0.54	0.50	7789483
Fluoride (F)	mg/L	2.10	0.010	7788355	0.140	7788355	0.200	0.010	7788355
Calculated Parameters									
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	0.20	7786526	<0.20	7786526	<0.20	0.20	7786526
Misc. Inorganics									
Alkalinity (Total as CaCO3)	mg/L	60.4	0.50	7787609	206	7787609	98.9	0.50	7787609
Anions									
Orthophosphate (P)	mg/L	0.71 (1)	0.010	7787531	0.0095 (1)	7787531	0.0048 (1)	0.0010	7787531
Dissolved Sulphate (SO4)	mg/L	16.0	0.50	7788544	36.2	7788544	40.6	0.50	7788544
Dissolved Chloride (Cl)	mg/L	<0.50	0.50	7788542	<0.50	7790227	0.68	0.50	7788542
Nutrients									
Dissolved Phosphorus (P)	mg/L	0.736	0.050	7788570	0.0121	7788570	0.0154	0.0050	7788570
Total Ammonia (N)	mg/L	0.0166 (1)	0.0050	7787048	0.0803 (1)	7787048	0.0243 (1)	0.0050	7787048
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	0.20	7787774	<0.20 (2)	7787774	<0.20 (2)	0.20	7787774
Nitrite (N)	mg/L	<0.20 (2)	0.20	7787776	<0.20 (2)	7787776	<0.20 (2)	0.20	7787776
Physical Properties									
Conductivity	uS/cm	158	1.0	7787607	462	7787607	273	1.0	7787607
pH	pH	7.93	N/A	7787604	8.15	7787604	8.07	N/A	7787604
Physical Properties									
Total Suspended Solids	mg/L	<4.0	4.0	7788116	<8.0 (3)	7788116	<8.0 (3)	8.0	7788116
Total Dissolved Solids	mg/L	120	10	7788115	278	7788115	160	10	7788115
Turbidity	NTU	6.25	0.10	7787182	12.0	7787182	5.60	0.10	7787182

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(2) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(3) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LO2701	LO2702	LO2703		
Sampling Date		2015/01/20 11:57	2015/01/20 15:07	2015/01/20 15:26		
COC Number		08402902	08402902	08402902		
	Units	MW05-6A	MW05-5A	MW05-5B	RDL	QC Batch
Elements						
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	0.010	0.010	7792178
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LO2701	LO2702	LO2703		
Sampling Date		2015/01/20 11:57	2015/01/20 15:07	2015/01/20 15:26		
COC Number		08402902	08402902	08402902		
	Units	MW05-6A	MW05-5A	MW05-5B	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	0.010	7788536
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2701	LO2702	LO2703		
Sampling Date		2015/01/20 11:57	2015/01/20 15:07	2015/01/20 15:26		
COC Number		08402902	08402902	08402902		
	Units	MW05-6A	MW05-5A	MW05-5B	RDL	QC Batch
Misc. Inorganics						
Dissolved Hardness (CaCO3)	mg/L	77.7	262	145	0.50	7786523
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.00074	0.00260	0.00064	0.00050	7788324
Dissolved Antimony (Sb)	mg/L	0.000593	0.00503	0.000035	0.000020	7788324
Dissolved Arsenic (As)	mg/L	0.00574	0.00512	0.00145	0.000020	7788324
Dissolved Barium (Ba)	mg/L	0.0416	0.0423	0.0339	0.000020	7788324
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000023	<0.000010	0.000010	7788324
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788324
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	0.010	7788324
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000086	0.0000292	0.0000050	7788324
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	7788324
Dissolved Cobalt (Co)	mg/L	0.000348	0.0000917	0.000737	0.0000050	7788324
Dissolved Copper (Cu)	mg/L	0.000056	0.000191	0.000123	0.000050	7788324
Dissolved Iron (Fe)	mg/L	1.46	1.26	0.440	0.0010	7788324
Dissolved Lead (Pb)	mg/L	0.0000109	0.000298	0.0000998	0.0000050	7788324
Dissolved Lithium (Li)	mg/L	0.00059	0.00282	0.00160	0.00050	7788324
Dissolved Manganese (Mn)	mg/L	0.143	0.0444	0.745	0.000050	7788324
Dissolved Molybdenum (Mo)	mg/L	0.00140	0.00753	0.000987	0.000050	7788324
Dissolved Nickel (Ni)	mg/L	0.00109	0.000722	0.00389	0.000020	7788324
Dissolved Phosphorus (P)	mg/L	0.830	0.0134	0.0067	0.0020	7788324
Dissolved Selenium (Se)	mg/L	<0.000040	<0.000040	<0.000040	0.000040	7788324
Dissolved Silicon (Si)	mg/L	6.93	3.85	3.56	0.050	7788324
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7788324
Dissolved Strontium (Sr)	mg/L	0.0266	0.133	0.112	0.000050	7788324
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	0.0000020	7788324
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7788324
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	7788324
Dissolved Uranium (U)	mg/L	0.000107	0.0271	0.00224	0.0000020	7788324
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7788324
Dissolved Zinc (Zn)	mg/L	0.00201	0.00618	0.0703	0.00010	7788324
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00064	<0.00010	0.00010	7788324
Dissolved Calcium (Ca)	mg/L	25.9	68.5	46.6	0.050	7786524
Dissolved Magnesium (Mg)	mg/L	3.18	22.0	6.98	0.050	7786524
Dissolved Potassium (K)	mg/L	1.13	1.51	0.569	0.050	7786524
Dissolved Sodium (Na)	mg/L	1.90	0.301	0.833	0.050	7786524
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LO2701	LO2702	LO2703		
Sampling Date		2015/01/20 11:57	2015/01/20 15:07	2015/01/20 15:26		
COC Number		08402902	08402902	08402902		
	Units	**MW05-6A**	**MW05-5A**	**MW05-5B**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	6.1	12.5	13.6	3.0	7786524
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	3.0°C
Package 2	2.3°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7787048	Total Ammonia (N)	2015/01/26	105	80 - 120	106	80 - 120	0.0100, RDL=0.0050	mg/L	NC	20
7787182	Turbidity	2015/01/23			100	80 - 120	<0.10	NTU	NC	20
7787531	Orthophosphate (P)	2015/01/24	87	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
7787604	pH	2015/01/24			102	97 - 103			0.37	N/A
7787607	Conductivity	2015/01/24			98	80 - 120	<1.0	uS/cm	5.5	20
7787609	Alkalinity (Total as CaCO3)	2015/01/24	NC	80 - 120	91	80 - 120	<0.50	mg/L	6.3	20
7787774	Nitrate plus Nitrite (N)	2015/01/24	104	80 - 120	108	80 - 120	<0.0020	mg/L	NC	25
7787776	Nitrite (N)	2015/01/24	97	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7788115	Total Dissolved Solids	2015/01/27	99	80 - 120	96	80 - 120	<10	mg/L	7.4	20
7788116	Total Suspended Solids	2015/01/27	105	80 - 120	99	80 - 120	<4.0	mg/L	NC	20
7788324	Dissolved Aluminum (Al)	2015/01/26	109	80 - 120	100	80 - 120	<0.00050	mg/L	9.0	20
7788324	Dissolved Antimony (Sb)	2015/01/26	100	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20
7788324	Dissolved Arsenic (As)	2015/01/26	103	80 - 120	102	80 - 120	<0.000020	mg/L	NC	20
7788324	Dissolved Barium (Ba)	2015/01/26	109	80 - 120	104	80 - 120	<0.000020	mg/L		
7788324	Dissolved Beryllium (Be)	2015/01/26	93	80 - 120	94	80 - 120	<0.000010	mg/L	NC	20
7788324	Dissolved Bismuth (Bi)	2015/01/26	97	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Boron (B)	2015/01/26					<0.010	mg/L	NC	20
7788324	Dissolved Cadmium (Cd)	2015/01/26	101	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Chromium (Cr)	2015/01/26	100	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
7788324	Dissolved Cobalt (Co)	2015/01/26	100	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Copper (Cu)	2015/01/26	102	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7788324	Dissolved Iron (Fe)	2015/01/26	124 (1)	80 - 120	120	80 - 120	<0.0010	mg/L	NC	20
7788324	Dissolved Lead (Pb)	2015/01/26	101	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Lithium (Li)	2015/01/26	91	80 - 120	90	80 - 120	0.00069, RDL=0.00050	mg/L	NC	20
7788324	Dissolved Manganese (Mn)	2015/01/26	104	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20
7788324	Dissolved Molybdenum (Mo)	2015/01/26	101	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7788324	Dissolved Nickel (Ni)	2015/01/26	104	80 - 120	100	80 - 120	<0.000020	mg/L		
7788324	Dissolved Phosphorus (P)	2015/01/26					<0.0020	mg/L		
7788324	Dissolved Selenium (Se)	2015/01/26	92	80 - 120	98	80 - 120	<0.000040	mg/L	NC	20
7788324	Dissolved Silicon (Si)	2015/01/26					<0.050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7788324	Dissolved Silver (Ag)	2015/01/26	97	80 - 120	92	80 - 120	<0.0000050	mg/L	NC	20
7788324	Dissolved Strontium (Sr)	2015/01/26	100	80 - 120	103	80 - 120	<0.000050	mg/L	7.7	20
7788324	Dissolved Thallium (Tl)	2015/01/26	94	80 - 120	101	80 - 120	<0.0000020	mg/L	NC	20
7788324	Dissolved Tin (Sn)	2015/01/26	98	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
7788324	Dissolved Titanium (Ti)	2015/01/26	105	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7788324	Dissolved Uranium (U)	2015/01/26	103	80 - 120	105	80 - 120	<0.0000020	mg/L	NC	20
7788324	Dissolved Vanadium (V)	2015/01/26	102	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7788324	Dissolved Zinc (Zn)	2015/01/26	160 (1)	80 - 120	101	80 - 120	<0.00010	mg/L		
7788324	Dissolved Zirconium (Zr)	2015/01/26					<0.00010	mg/L	NC	20
7788355	Fluoride (F)	2015/01/26	103	80 - 120	100	80 - 120	<0.010	mg/L	0	20
7788536	Bromide (Br)	2015/01/26	99	78 - 120	101	80 - 120	<0.010	mg/L	NC	20
7788542	Dissolved Chloride (Cl)	2015/01/26	107	80 - 120	99	80 - 120	<0.50	mg/L	NC	20
7788544	Dissolved Sulphate (SO4)	2015/01/26	102	80 - 120	94	80 - 120	<0.50	mg/L	NC	20
7788570	Dissolved Phosphorus (P)	2015/01/26	NC	80 - 120	99	80 - 120	<0.0050	mg/L	0.94	20
7789483	Acidity (pH 8.3)	2015/01/26			99	80 - 120	<0.50	mg/L	NC	20
7790227	Dissolved Chloride (Cl)	2015/01/27			103	80 - 120	<0.50	mg/L		
7792178	Dissolved Mercury (Hg)	2015/01/29	101	80 - 120	104	80 - 120	<0.010	ug/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B505759
Report Date: 2015/01/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

08402902

LAB USE ONLY
MAXXAM JOB # B505759

ANALYSIS REQUEST

LAB USE ONLY
COC #

COMPANY NAME:	Yukon Zinc Corporation
COMPANY ADDRESS:	#410-700 West Pender Vancouver, BC V6C 1G8
CLIENT PROJECT NO.:	
TEL.:	604-638-0921 Ext. 5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	Thomas Pearson
PROJECT MANAGER:	Robin McCall
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW05-6A	L02701	X					20-Jan-15	11:57		X	X	X	X	X	X	X
2	MW05-5A	L02702	X					20-Jan-15	15:07		X	X	X	X	X	X	X
3	MW05-5B	L02703	X					20-Jan-15	15:26		X	X	X	X	X	X	X
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

B505759

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: 108376

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 2.34 2.32 CG:NA
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER:	Thomas Pearson	DATE: DD/MM/YY 22/01/2015	TIME: 7:30
RELINQUISHED BY:	Robin McCall	DATE: DD/MM/YY 22/01/2015	TIME: 7:30
RELINQUISHED BY:		DATE: DD/MM/YY	TIME:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY LABORATORY: Laurel Berthier 2015/01/23 09:35

COCFORM - BC - 20070822

Your P.O. #: 108376
Your C.O.C. #: 08403208

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/02/11
Report #: R1801473
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B509272
Received: 2015/02/04, 11:00

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	2	N/A	2015/02/06	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	2	2015/02/05	2015/02/06	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	2	N/A	2015/02/05	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	2	N/A	2015/02/06	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	2	N/A	2015/02/05	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2015/02/10	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	2	N/A	2015/02/10	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	2	N/A	2015/02/05	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	2	N/A	2015/02/10	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	2	N/A	2015/02/10	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	2	N/A	2015/02/05	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	2	N/A	2015/02/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	2	N/A	2015/02/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	2	N/A	2015/02/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	2	N/A	2015/02/05	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	2	N/A	2015/02/06	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	2	N/A	2015/02/05	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	1	N/A	2015/02/05	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/02/06	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	2	2015/02/05	2015/02/06	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	2	2015/02/05	2015/02/05	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	2	N/A	2015/02/06	BBY6SOP-00034	SM 22 2540 D
Turbidity	2	N/A	2015/02/05	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Your P.O. #: 108376
Your C.O.C. #: 08403208

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/02/11
Report #: R1801473
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B509272
Received: 2015/02/04, 11:00

Encryption Key

Maxxam
11 Feb 2015 10:45:00 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LQ2148			LQ2149		
Sampling Date		2015/01/27 14:38			2015/01/28 14:45		
COC Number		08403208			08403208		
	Units	MW06-12S	RDL	QC Batch	MW06-8D	RDL	QC Batch
Misc. Inorganics							
Acidity (pH 8.3)	mg/L	2.20	0.50	7801539	3.51	0.50	7801539
Fluoride (F)	mg/L	0.880	0.010	7799884	0.880	0.010	7799884
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	0.20	7798061	<0.20	0.20	7798061
Misc. Inorganics							
Alkalinity (Total as CaCO3)	mg/L	135	0.50	7800267	213	0.50	7800267
Anions							
Orthophosphate (P)	mg/L	0.0085 (1)	0.0010	7799448	0.013 (1)	0.0010	7799448
Dissolved Sulphate (SO4)	mg/L	267	5.0	7800290	31.9	0.50	7803543
Dissolved Chloride (Cl)	mg/L	0.59	0.50	7800289	<0.50	0.50	7800289
Nutrients							
Dissolved Phosphorus (P)	mg/L	0.0108	0.0020	7799477	0.0825	0.0020	7799477
Total Ammonia (N)	mg/L	<0.0050 (1)	0.0050	7800470	0.120 (1)	0.0050	7800470
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	0.20	7800205	<0.20 (3)	0.20	7800205
Nitrite (N)	mg/L	<0.20 (2)	0.20	7800207	<0.20 (3)	0.20	7800207
Physical Properties							
Conductivity	uS/cm	790	1.0	7800269	456	1.0	7800269
pH	pH	7.99	N/A	7800270	8.25	N/A	7800270
Physical Properties							
Total Suspended Solids	mg/L	<4.0 (1)	4.0	7799631	<8.0 (4)	8.0	7799631
Total Dissolved Solids	mg/L	598	10	7799648	286	10	7799648
Turbidity	NTU	32.4 (1)	0.10	7800003	6.61 (1)	0.10	7800003

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample arrived to laboratory past recommended hold time.

(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

(3) RDL raised due to sample matrix interference.

(4) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LQ2148	LQ2149		
Sampling Date		2015/01/27 14:38	2015/01/28 14:45		
COC Number		08403208	08403208		
	Units	MW06-12S	MW06-8D	RDL	QC Batch
Elements					
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	0.010	7803881
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LQ2148	LQ2149		
Sampling Date		2015/01/27 14:38	2015/01/28 14:45		
COC Number		08403208	08403208		
	Units	**MW06-12S**	**MW06-8D**	**RDL**	**QC Batch**
ANIONS					
Bromide (Br)	mg/L	0.011	<0.010	0.010	7799664
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LQ2148	LQ2149		
Sampling Date		2015/01/27 14:38	2015/01/28 14:45		
COC Number		08403208	08403208		
	Units	MW06-12S	MW06-8D	RDL	QC Batch
Misc. Inorganics					
Dissolved Hardness (CaCO3)	mg/L	414	246	0.50	7797807
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	mg/L	<0.00050	0.00380	0.00050	7801161
Dissolved Antimony (Sb)	mg/L	0.000078	0.000179	0.000020	7801161
Dissolved Arsenic (As)	mg/L	0.000582	0.00439	0.000020	7801161
Dissolved Barium (Ba)	mg/L	0.0211	0.0469	0.000020	7801161
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	0.000010	7801161
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	0.0000050	7801161
Dissolved Boron (B)	mg/L	<0.010	<0.010	0.010	7801161
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000059	0.0000050	7801161
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00010	7801161
Dissolved Cobalt (Co)	mg/L	0.000311	0.0000528	0.0000050	7801161
Dissolved Copper (Cu)	mg/L	0.000101	0.000389	0.000050	7801161
Dissolved Iron (Fe)	mg/L	2.41	0.630	0.0010	7801161
Dissolved Lead (Pb)	mg/L	0.0000290	0.000173	0.0000050	7801161
Dissolved Lithium (Li)	mg/L	0.00361	0.00224	0.00050	7801161
Dissolved Manganese (Mn)	mg/L	0.131	0.0102	0.000050	7801161
Dissolved Molybdenum (Mo)	mg/L	0.000561	0.00137	0.000050	7801161
Dissolved Nickel (Ni)	mg/L	0.000848	0.000371	0.000020	7801161
Dissolved Phosphorus (P)	mg/L	0.0074	0.0097	0.0020	7801161
Dissolved Selenium (Se)	mg/L	<0.000040	<0.000040	0.000040	7801161
Dissolved Silicon (Si)	mg/L	3.52	4.37	0.050	7801161
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	0.0000050	7801161
Dissolved Strontium (Sr)	mg/L	0.449	0.152	0.000050	7801161
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	0.0000020	7801161
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	0.00020	7801161
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	0.00050	7801161
Dissolved Uranium (U)	mg/L	0.0218	0.0121	0.0000020	7801161
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	0.00020	7801161
Dissolved Zinc (Zn)	mg/L	0.00173	0.00120	0.00010	7801161
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00057	0.00010	7801161
Dissolved Calcium (Ca)	mg/L	129	56.9	0.050	7798569
Dissolved Magnesium (Mg)	mg/L	22.1	25.3	0.050	7798569
Dissolved Potassium (K)	mg/L	3.54	1.79	0.050	7798569
Dissolved Sodium (Na)	mg/L	4.62	0.544	0.050	7798569
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		LQ2148	LQ2149		
Sampling Date		2015/01/27 14:38	2015/01/28 14:45		
COC Number		08403208	08403208		
	Units	**MW06-12S**	**MW06-8D**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	91.0	8.5	3.0	7798569
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7799448	Orthophosphate (P)	2015/02/05	103	80 - 120	105	80 - 120	<0.0010	mg/L	2.6	20
7799477	Dissolved Phosphorus (P)	2015/02/05	88	80 - 120	102	80 - 120	<0.0020	mg/L	0.30	20
7799631	Total Suspended Solids	2015/02/06	101	80 - 120	98	80 - 120	<4.0	mg/L	NC	20
7799648	Total Dissolved Solids	2015/02/06	NC	80 - 120	104	80 - 120	<10	mg/L	1.3	20
7799664	Bromide (Br)	2015/02/05	97	78 - 120	99	80 - 120	<0.010	mg/L	NC	20
7799884	Fluoride (F)	2015/02/05	NC	80 - 120	98	80 - 120	<0.010	mg/L	NC	20
7800003	Turbidity	2015/02/05			99	80 - 120	<0.10	NTU	0.51	20
7800205	Nitrate plus Nitrite (N)	2015/02/05	NC	80 - 120	106	80 - 120	<0.0020	mg/L	4.0	25
7800207	Nitrite (N)	2015/02/05			103	80 - 120	<0.0020	mg/L	NC	25
7800267	Alkalinity (Total as CaCO3)	2015/02/06	103	80 - 120	92	80 - 120	<0.50	mg/L	0.64	20
7800269	Conductivity	2015/02/06			101	80 - 120	<1.0	uS/cm		
7800270	pH	2015/02/06			102	97 - 103				
7800289	Dissolved Chloride (Cl)	2015/02/05			100	80 - 120	0.80, RDL=0.50	mg/L		
7800290	Dissolved Sulphate (SO4)	2015/02/05			96	80 - 120	<0.50	mg/L		
7800470	Total Ammonia (N)	2015/02/05			94	80 - 120	<0.0050	mg/L	NC	20
7801161	Dissolved Aluminum (Al)	2015/02/10	98	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
7801161	Dissolved Antimony (Sb)	2015/02/10	98	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7801161	Dissolved Arsenic (As)	2015/02/10	96	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7801161	Dissolved Barium (Ba)	2015/02/10	100	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7801161	Dissolved Beryllium (Be)	2015/02/10	91	80 - 120	94	80 - 120	<0.000010	mg/L	NC	20
7801161	Dissolved Bismuth (Bi)	2015/02/10	94	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20
7801161	Dissolved Boron (B)	2015/02/10					<0.010	mg/L	NC	20
7801161	Dissolved Cadmium (Cd)	2015/02/10	101	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7801161	Dissolved Chromium (Cr)	2015/02/10	105	80 - 120	109	80 - 120	<0.00010	mg/L	NC	20
7801161	Dissolved Cobalt (Co)	2015/02/10	104	80 - 120	107	80 - 120	<0.0000050	mg/L	NC	20
7801161	Dissolved Copper (Cu)	2015/02/10	106	80 - 120	109	80 - 120	<0.000050	mg/L	NC	20
7801161	Dissolved Iron (Fe)	2015/02/10	109	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
7801161	Dissolved Lead (Pb)	2015/02/10	99	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7801161	Dissolved Lithium (Li)	2015/02/10	94	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20
7801161	Dissolved Manganese (Mn)	2015/02/10	103	80 - 120	106	80 - 120	<0.000050	mg/L	NC	20
7801161	Dissolved Molybdenum (Mo)	2015/02/10	96	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20
7801161	Dissolved Nickel (Ni)	2015/02/10	107	80 - 120	108	80 - 120	<0.000020	mg/L	1.4	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7801161	Dissolved Phosphorus (P)	2015/02/10					<0.0020	mg/L		
7801161	Dissolved Selenium (Se)	2015/02/10	86	80 - 120	93	80 - 120	<0.000040	mg/L	NC	20
7801161	Dissolved Silicon (Si)	2015/02/10					<0.050	mg/L	NC	20
7801161	Dissolved Silver (Ag)	2015/02/10	100	80 - 120	93	80 - 120	<0.0000050	mg/L	NC	20
7801161	Dissolved Strontium (Sr)	2015/02/10	92	80 - 120	95	80 - 120	<0.000050	mg/L	NC	20
7801161	Dissolved Thallium (Tl)	2015/02/10	96	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7801161	Dissolved Tin (Sn)	2015/02/10	97	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
7801161	Dissolved Titanium (Ti)	2015/02/10	100	80 - 120	110	80 - 120	<0.00050	mg/L	NC	20
7801161	Dissolved Uranium (U)	2015/02/10	106	80 - 120	104	80 - 120	<0.0000020	mg/L	NC	20
7801161	Dissolved Vanadium (V)	2015/02/10	104	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
7801161	Dissolved Zinc (Zn)	2015/02/10	100	80 - 120	109	80 - 120	<0.00010	mg/L	1.3	20
7801161	Dissolved Zirconium (Zr)	2015/02/10					<0.00010	mg/L	NC	20
7801539	Acidity (pH 8.3)	2015/02/06			96	80 - 120	<0.50	mg/L	1.9	20
7803543	Dissolved Sulphate (SO4)	2015/02/06	NC	80 - 120	100	80 - 120	<0.50	mg/L	0.17	20
7803881	Dissolved Mercury (Hg)	2015/02/10	83	80 - 120	112	80 - 120	<0.010	ug/L	NC	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B509272
Report Date: 2015/02/11

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: TP

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

08403208

LAB USE ONLY
MAXXAM JOB # B509272

ANALYSIS REQUEST

LAB USE ONLY
COC #

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ext. 5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Thomas Pearson	PROJECT MANAGER: Robin McCall
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW06-12S	L92148	X					27-Jan-15	14:38	5	X	X	X	X	X	X	X
2	MW06-8D	L92149	X					28-Jan-15	14:45	5	X	X	X	X	X	X	X
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

B509272

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL

* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS _____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: 108376

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 8.9 6 1 1 CS:NA
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER: Thomas Pearson	DATE: DD/MM/YY 29/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY: Robin McCall	DATE: DD/MM/YY 29/01/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurel Berthier 2015/02/04 11:00

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your P.O. #: 108376
Your C.O.C. #: 08405158

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/04/10
Report #: R1843179
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B524799
Received: 2015/03/27, 09:20

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	4	N/A	2015/03/28	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	4	2015/03/27	2015/03/28	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	4	N/A	2015/03/30	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	4	N/A	2015/03/28	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	4	N/A	2015/03/30	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	4	N/A	2015/03/30	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	4	2015/03/31	2015/03/31	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	4	N/A	2015/03/31	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	4	N/A	2015/04/02	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	4	N/A	2015/03/31	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	4	N/A	2015/03/28	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	4	N/A	2015/03/28	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	4	N/A	2015/03/28	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	4	N/A	2015/04/01	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	4	N/A	2015/03/28	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	4	N/A	2015/03/28	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	4	N/A	2015/03/30	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	4	2015/03/31	2015/04/01	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (Tot, diss.) - unfiltered	4	2015/03/28	2015/03/28	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	4	N/A	2015/03/30	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	4	N/A	2015/04/01	BBY6SOP-00034	SM 22 2540 D
Turbidity	4	N/A	2015/03/27	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 108376
Your C.O.C. #: 08405158

Attention:Robin McCall

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/04/10
Report #: R1843179
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B524799

Received: 2015/03/27, 09:20

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin
15 Apr 2015 11:00:39 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		LY5417	LY5418		LY5419	LY5420		
Sampling Date		2015/03/24 13:45	2015/03/24 14:45		2015/03/24 15:00	2015/03/24 16:00		
COC Number		08405158	08405158		08405158	08405158		
	Units	W22	W71	QC Batch	W72	W73	RDL	QC Batch
Misc. Inorganics								
Acidity (pH 8.3)	mg/L	<0.50	3.71	7851244	<0.50	<0.50	0.50	7851244
Fluoride (F)	mg/L	0.072	0.670	7851669	0.180	0.058	0.010	7851669
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	FIELD	ONSITE	FIELD	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	157	487	7848980	249	147	0.50	7848980
Nitrate (N)	mg/L	0.37	<0.20	7849084	0.40	0.24	0.20	7849084
Misc. Inorganics								
Dissolved Hardness (CaCO3)	mg/L	156	441	7848721	266	149	0.50	7848721
Alkalinity (Total as CaCO3)	mg/L	126	325	7850263	213	127	0.50	7850263
Anions								
Orthophosphate (P)	mg/L	0.0028 (1)	0.016 (1)	7850295	0.0089 (1)	0.0029 (1)	0.0010	7850295
Dissolved Sulphate (SO4)	mg/L	35.1	143	7851676	54.2	26.2	0.50	7851676
Dissolved Chloride (Cl)	mg/L	<0.50	0.54	7851671	<0.50	<0.50	0.50	7851671
Nutrients								
Total Ammonia (N)	mg/L	0.0068	0.021	7852966	0.044	0.013	0.0050	7852964
Dissolved Phosphorus (P)	mg/L	<0.0050 (1)	0.0150 (1)	7850303	0.0121 (1)	<0.0050 (1)	0.0050	7850303
Nitrate plus Nitrite (N)	mg/L	0.37 (2)	<0.20 (2)	7850319	0.40 (2)	0.24 (2)	0.20	7850319
Nitrite (N)	mg/L	<0.20 (2)	<0.20 (2)	7850320	<0.20 (2)	<0.20 (2)	0.20	7850320
Total Phosphorus (P)	mg/L	<0.0050	0.0505	7851081	0.0177	<0.0050	0.0050	7851081
Physical Properties								
Conductivity	uS/cm	312	843	7850264	493	296	1.0	7850264
pH	pH	8.07	8.03	7850265	8.11	8.14	N/A	7850265
Physical Properties								
Total Suspended Solids	mg/L	<4.0	101	7852077	11.0	<4.0	4.0	7852077
Total Dissolved Solids	mg/L	166	548	7852111	280	174	10	7852111
Turbidity	NTU	0.60	23.5	7849513	0.67	0.37	0.10	7849513

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(2) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		LY5417	LY5418	LY5419	LY5420		
Sampling Date		2015/03/24 13:45	2015/03/24 14:45	2015/03/24 15:00	2015/03/24 16:00		
COC Number		08405158	08405158	08405158	08405158		
	Units	W22	W71	W72	W73	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7850861
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7852004
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LY5417	LY5418	LY5419	LY5420		
Sampling Date		2015/03/24 13:45	2015/03/24 14:45	2015/03/24 15:00	2015/03/24 16:00		
COC Number		08405158	08405158	08405158	08405158		
	Units	W22	W71	W72	W73	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	7851668
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00198	0.00548	0.00154	0.00156	0.00050	7852260
Dissolved Antimony (Sb)	mg/L	0.000057	0.000450	0.000092	0.000098	0.000020	7852260
Dissolved Arsenic (As)	mg/L	0.000204	0.000319	0.00143	0.000202	0.000020	7852260
Dissolved Barium (Ba)	mg/L	0.0766	0.0753	0.0975	0.0854	0.000020	7852260
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7852260
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7852260
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	7852260
Dissolved Cadmium (Cd)	mg/L	0.0000113	0.00296	0.000173	0.0000069	0.0000050	7852260
Dissolved Chromium (Cr)	mg/L	0.00023	<0.00010	<0.00010	0.00030	0.00010	7852260
Dissolved Cobalt (Co)	mg/L	0.0000088	0.0000304	0.0000757	0.0000068	0.0000050	7852260
Dissolved Copper (Cu)	mg/L	0.000263	0.000393	0.000228	0.000384	0.000050	7852260
Dissolved Iron (Fe)	mg/L	0.0025	0.0141	0.0437	0.0183	0.0010	7852260
Dissolved Lead (Pb)	mg/L	0.0000597	0.0000943	0.0000284	0.0000220	0.0000050	7852260
Dissolved Lithium (Li)	mg/L	0.00235	0.00314	0.00226	0.00093	0.00050	7852260
Dissolved Manganese (Mn)	mg/L	0.000345	0.0149	0.147	0.000483	0.000050	7852260
Dissolved Molybdenum (Mo)	mg/L	0.000813	0.00389	0.00347	0.000542	0.000050	7852260
Dissolved Nickel (Ni)	mg/L	0.000542	0.0306	0.00229	0.000473	0.000020	7852260
Dissolved Phosphorus (P)	mg/L	0.0063	0.0167	0.0130	0.0056	0.0020	7852260
Dissolved Selenium (Se)	mg/L	0.000736	0.00304	0.000881	0.000871	0.000040	7852260
Dissolved Silicon (Si)	mg/L	4.83	4.51	5.44	4.74	0.050	7852260
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7852260
Dissolved Strontium (Sr)	mg/L	0.182	0.339	0.311	0.162	0.000050	7852260
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.0000020	7852260
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7852260
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	7852260
Dissolved Uranium (U)	mg/L	0.00179	0.0157	0.00171	0.000881	0.0000020	7852260
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7852260
Dissolved Zinc (Zn)	mg/L	0.00134	0.697	0.0199	0.00046	0.00010	7852260
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	7852260
Dissolved Calcium (Ca)	mg/L	39.5	117	68.5	39.7	0.050	7849165
Dissolved Magnesium (Mg)	mg/L	13.9	35.9	23.2	12.1	0.050	7849165
Dissolved Potassium (K)	mg/L	1.01	0.935	0.952	0.404	0.050	7849165
Dissolved Sodium (Na)	mg/L	2.26	0.973	2.43	1.38	0.050	7849165
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		LY5417	LY5418	LY5419	LY5420		
Sampling Date		2015/03/24 13:45	2015/03/24 14:45	2015/03/24 15:00	2015/03/24 16:00		
COC Number		08405158	08405158	08405158	08405158		
	Units	W22	W71	W72	W73	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	10.8	45.2	16.9	7.9	3.0	7849165
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.0158	0.890	0.0134	0.00507	0.00050	7852319
Total Antimony (Sb)	mg/L	0.000061	0.000480	0.000093	0.000103	0.000020	7852319
Total Arsenic (As)	mg/L	0.000236	0.000764	0.00170	0.000246	0.000020	7852319
Total Barium (Ba)	mg/L	0.0751	0.103	0.102	0.0800	0.000020	7852319
Total Beryllium (Be)	mg/L	<0.000010	0.000025	<0.000010	<0.000010	0.000010	7852319
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000155	<0.0000050	<0.0000050	0.0000050	7852319
Total Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	7852319
Total Cadmium (Cd)	mg/L	0.0000121	0.00317	0.000216	0.0000074	0.0000050	7852319
Total Chromium (Cr)	mg/L	0.00027	0.00265	<0.00010	0.00043	0.00010	7852319
Total Cobalt (Co)	mg/L	0.0000202	0.000743	0.0000969	0.0000138	0.0000050	7852319
Total Copper (Cu)	mg/L	0.000265	0.00251	0.000332	0.000524	0.000050	7852319
Total Iron (Fe)	mg/L	0.0226	1.70	0.139	0.0503	0.0010	7852319
Total Lead (Pb)	mg/L	0.000104	0.00106	0.0000875	0.0000392	0.0000050	7852319
Total Lithium (Li)	mg/L	0.00230	0.00457	0.00228	0.00119	0.00050	7852319
Total Manganese (Mn)	mg/L	0.00121	0.0525	0.157	0.00378	0.000050	7852319
Total Molybdenum (Mo)	mg/L	0.000839	0.00405	0.00348	0.000521	0.000050	7852319
Total Nickel (Ni)	mg/L	0.000684	0.0355	0.00246	0.000667	0.000020	7852319
Total Phosphorus (P)	mg/L	0.0055	0.0532	0.0221	0.0079	0.0020	7852319
Total Selenium (Se)	mg/L	0.000728	0.00330	0.000884	0.000924	0.000040	7852319
Total Silicon (Si)	mg/L	4.75	5.60	5.29	4.94	0.050	7852319
Total Silver (Ag)	mg/L	<0.0000050	0.0000134	<0.0000050	<0.0000050	0.0000050	7852319
Total Strontium (Sr)	mg/L	0.179	0.348	0.315	0.177	0.000050	7852319
Total Thallium (Tl)	mg/L	<0.0000020	0.0000093	<0.0000020	<0.0000020	0.0000020	7852319
Total Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7852319
Total Titanium (Ti)	mg/L	<0.00050	0.0191	<0.00050	<0.00050	0.00050	7852319
Total Uranium (U)	mg/L	0.00180	0.0155	0.00176	0.000835	0.0000020	7852319
Total Vanadium (V)	mg/L	<0.00020	0.00199	<0.00020	<0.00020	0.00020	7852319
Total Zinc (Zn)	mg/L	0.00146	0.717	0.0219	0.00056	0.00010	7852319
Total Zirconium (Zr)	mg/L	<0.00010	0.00015	<0.00010	<0.00010	0.00010	7852319
Total Calcium (Ca)	mg/L	40.8	135	63.2	36.8	0.050	7849467
Total Magnesium (Mg)	mg/L	13.4	36.5	22.1	13.3	0.050	7849467
Total Potassium (K)	mg/L	0.996	1.00	0.909	0.442	0.050	7849467
Total Sodium (Na)	mg/L	2.22	0.982	2.24	1.55	0.050	7849467
Total Sulphur (S)	mg/L	11.0	43.3	16.9	9.7	3.0	7849467

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.0°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7849513	Turbidity	2015/03/27			99	80 - 120	<0.10	NTU	0.85	20
7850263	Alkalinity (Total as CaCO3)	2015/03/28	NC	80 - 120	100	80 - 120	<0.50	mg/L	NC	20
7850264	Conductivity	2015/03/28			102	80 - 120	1.0, RDL=1.0	uS/cm	NC	20
7850265	pH	2015/03/28			102	97 - 103			7.1	N/A
7850295	Orthophosphate (P)	2015/03/28			96	80 - 120	<0.0010	mg/L	15	20
7850303	Dissolved Phosphorus (P)	2015/03/28	105	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20
7850319	Nitrate plus Nitrite (N)	2015/03/28	101	80 - 120	103	80 - 120	<0.0020	mg/L	0	25
7850320	Nitrite (N)	2015/03/28	101	80 - 120	103	80 - 120	<0.0020	mg/L	NC	25
7850861	Dissolved Mercury (Hg)	2015/03/30	99	80 - 120	110	80 - 120	<0.010	ug/L	NC	20
7851081	Total Phosphorus (P)	2015/03/30	103	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20
7851244	Acidity (pH 8.3)	2015/03/28			100	80 - 120	<0.50	mg/L	NC	20
7851668	Bromide (Br)	2015/03/31	99	78 - 120	94	80 - 120	<0.010	mg/L	NC	20
7851669	Fluoride (F)	2015/03/30	NC	80 - 120	96	80 - 120	<0.010	mg/L	0	20
7851671	Dissolved Chloride (Cl)	2015/03/30	NC	80 - 120	106	80 - 120	<0.50	mg/L	1.4	20
7851676	Dissolved Sulphate (SO4)	2015/03/30	NC	80 - 120	95	80 - 120	<0.50	mg/L	1.5	20
7852004	Total Mercury (Hg)	2015/03/31	91	80 - 120	96	80 - 120	<0.010	ug/L	NC	20
7852077	Total Suspended Solids	2015/04/01	94	80 - 120	97	80 - 120	<4.0	mg/L	NC	20
7852111	Total Dissolved Solids	2015/04/01	NC	80 - 120	96	80 - 120	<10	mg/L	0.62	20
7852260	Dissolved Aluminum (Al)	2015/04/02	104	80 - 120	101	80 - 120	<0.00050	mg/L	2.4	20
7852260	Dissolved Antimony (Sb)	2015/04/02	100	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7852260	Dissolved Arsenic (As)	2015/04/02	102	80 - 120	99	80 - 120	<0.000020	mg/L	NC	20
7852260	Dissolved Barium (Ba)	2015/04/02	103	80 - 120	103	80 - 120	<0.000020	mg/L		
7852260	Dissolved Beryllium (Be)	2015/04/02	95	80 - 120	92	80 - 120	<0.000010	mg/L	NC	20
7852260	Dissolved Bismuth (Bi)	2015/04/02	98	80 - 120	95	80 - 120	<0.0000050	mg/L	NC	20
7852260	Dissolved Boron (B)	2015/04/02					<0.010	mg/L	NC	20
7852260	Dissolved Cadmium (Cd)	2015/04/02	98	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7852260	Dissolved Chromium (Cr)	2015/04/02	97	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
7852260	Dissolved Cobalt (Co)	2015/04/02	97	80 - 120	95	80 - 120	<0.0000050	mg/L	NC	20
7852260	Dissolved Copper (Cu)	2015/04/02	97	80 - 120	95	80 - 120	<0.000050	mg/L	6.3	20
7852260	Dissolved Iron (Fe)	2015/04/02	101	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
7852260	Dissolved Lead (Pb)	2015/04/02	100	80 - 120	97	80 - 120	<0.0000050	mg/L	NC	20
7852260	Dissolved Lithium (Li)	2015/04/02	104	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7852260	Dissolved Manganese (Mn)	2015/04/02	97	80 - 120	96	80 - 120	<0.000050	mg/L	3.9	20
7852260	Dissolved Molybdenum (Mo)	2015/04/02	96	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7852260	Dissolved Nickel (Ni)	2015/04/02	96	80 - 120	95	80 - 120	<0.000020	mg/L	NC	20
7852260	Dissolved Phosphorus (P)	2015/04/02					<0.0020	mg/L		
7852260	Dissolved Selenium (Se)	2015/04/02	99	80 - 120	97	80 - 120	<0.000040	mg/L	NC	20
7852260	Dissolved Silicon (Si)	2015/04/02					<0.050	mg/L	NC	20
7852260	Dissolved Silver (Ag)	2015/04/02	79 (1)	80 - 120	87	80 - 120	0.0000078, RDL=0.0000050	mg/L	NC	20
7852260	Dissolved Strontium (Sr)	2015/04/02	96	80 - 120	94	80 - 120	<0.000050	mg/L		
7852260	Dissolved Thallium (Tl)	2015/04/02	98	80 - 120	78 (2)	80 - 120	<0.0000020	mg/L	NC	20
7852260	Dissolved Tin (Sn)	2015/04/02	95	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7852260	Dissolved Titanium (Ti)	2015/04/02	94	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7852260	Dissolved Uranium (U)	2015/04/02	102	80 - 120	99	80 - 120	<0.0000020	mg/L	NC	20
7852260	Dissolved Vanadium (V)	2015/04/02	100	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
7852260	Dissolved Zinc (Zn)	2015/04/02	99	80 - 120	97	80 - 120	<0.00010	mg/L	3.6	20
7852260	Dissolved Zirconium (Zr)	2015/04/02					<0.00010	mg/L	NC	20
7852319	Total Aluminum (Al)	2015/04/02	95	80 - 120	101	80 - 120	<0.00050	mg/L	2.0	20
7852319	Total Antimony (Sb)	2015/04/02	90	80 - 120	99	80 - 120	<0.000020	mg/L	NC	20
7852319	Total Arsenic (As)	2015/04/02	89	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20
7852319	Total Barium (Ba)	2015/04/02	98	80 - 120	102	80 - 120	<0.000020	mg/L	0.74	20
7852319	Total Beryllium (Be)	2015/04/02	84	80 - 120	95	80 - 120	<0.000010	mg/L	NC	20
7852319	Total Bismuth (Bi)	2015/04/02	91	80 - 120	91	80 - 120	<0.0000050	mg/L	NC	20
7852319	Total Boron (B)	2015/04/02					<0.010	mg/L	NC	20
7852319	Total Cadmium (Cd)	2015/04/02	89	80 - 120	97	80 - 120	<0.0000050	mg/L	NC	20
7852319	Total Chromium (Cr)	2015/04/02	92	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20
7852319	Total Cobalt (Co)	2015/04/02	92	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20
7852319	Total Copper (Cu)	2015/04/02	92	80 - 120	95	80 - 120	<0.000050	mg/L	8.1	20
7852319	Total Iron (Fe)	2015/04/02	99	80 - 120	109	80 - 120	<0.0010	mg/L		
7852319	Total Lead (Pb)	2015/04/02	94	80 - 120	95	80 - 120	<0.0000050	mg/L	1.9	20
7852319	Total Lithium (Li)	2015/04/02	93	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20
7852319	Total Manganese (Mn)	2015/04/02	91	80 - 120	95	80 - 120	<0.000050	mg/L	0.12	20
7852319	Total Molybdenum (Mo)	2015/04/02	90	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7852319	Total Nickel (Ni)	2015/04/02	90	80 - 120	95	80 - 120	<0.000020	mg/L	NC	20
7852319	Total Phosphorus (P)	2015/04/02					<0.0020	mg/L		
7852319	Total Selenium (Se)	2015/04/02	82	80 - 120	100	80 - 120	<0.000040	mg/L	NC	20
7852319	Total Silicon (Si)	2015/04/02					<0.050	mg/L	NC	20
7852319	Total Silver (Ag)	2015/04/02	91	80 - 120	91	80 - 120	0.0000050, RDL=0.0000050	mg/L	NC	20
7852319	Total Strontium (Sr)	2015/04/02	91	80 - 120	99	80 - 120	<0.000050	mg/L		
7852319	Total Thallium (Tl)	2015/04/02	98	80 - 120	97	80 - 120	<0.0000020	mg/L	NC	20
7852319	Total Tin (Sn)	2015/04/02	88	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
7852319	Total Titanium (Ti)	2015/04/02	94	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
7852319	Total Uranium (U)	2015/04/02	96	80 - 120	97	80 - 120	<0.0000020	mg/L	NC	20
7852319	Total Vanadium (V)	2015/04/02	96	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
7852319	Total Zinc (Zn)	2015/04/02	85	80 - 120	97	80 - 120	<0.00010	mg/L	2.3	20
7852319	Total Zirconium (Zr)	2015/04/02					<0.00010	mg/L	NC	20
7852964	Total Ammonia (N)	2015/03/31	102	80 - 120	89	80 - 120	<0.0050	mg/L	NC	20
7852966	Total Ammonia (N)	2015/03/31	NC	80 - 120	93	80 - 120	<0.0050	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Blank Spike outside acceptance criteria (10% of analytes failure allowed).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B524799
Report Date: 2015/04/10

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B524799

ANALYSIS REQUES

08405158

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender Vancouver, BC V6C 1G8	TEL: 604-638-0921 Ex.5022
	E-MAIL: YZC Group
	FAX: 604-682-5404
SAMPLER NAME (PRINT): Robin McCall	PROJECT MANAGER: Robin McCall
	LABORATORY CONTACT: Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk., Acidity, pH, turbidity, temperature	Total/Diss.: Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS	TOC
1	W22	LY5417		X				24-Mar-15	13:45	7	X	X	X	X			X	X	X	X	
2	W71	LY5418		X				24-Mar-15	14:45	7	X	X	X	X			X	X	X	X	
3	W72	LY5419		X				24-Mar-15	15:00	7	X	X	X	X			X	X	X	X	
4	W73	LY5420		X				24-Mar-15	16:00	7	X	X	X	X			X	X	X	X	
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15	B524799																				
16																					
17																					

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL

* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 1,1,1 CS:NA
DUE DATE:
LOG IN CHECK:

RELINQUINSHED BY SAMPLER: Robin McCall	DATE: DD/MM/YY 26/03/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY: Robin McCall	DATE: DD/MM/YY 26/03/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurel Berthier 2015/03/27 09:20

COCFORM - BC - 20070602

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your P.O. #: 108376
Your C.O.C. #: 08406355

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/06
Report #: R1874717
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B533424
Received: 2015/04/24, 09:10

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	2	N/A	2015/04/27	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	2	2015/04/25	2015/04/25	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	2	N/A	2015/04/27	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	2	N/A	2015/04/25	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	2	N/A	2015/04/29	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2015/04/30	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	2	N/A	2015/04/30	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	2	N/A	2015/04/28	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	2	N/A	2015/04/30	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	2	N/A	2015/04/29	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	2	N/A	2015/04/27	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	2	N/A	2015/04/25	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	2	N/A	2015/04/25	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	2	N/A	2015/04/25	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	2	N/A	2015/04/29	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	2	N/A	2015/04/25	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	2	N/A	2015/05/05	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	2	N/A	2015/04/27	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	2	2015/04/25	2015/04/27	BBY6SOP-00033	SM 22 2540 C m
Total Phosphorus	2	N/A	2015/04/27	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	2	N/A	2015/04/30	BBY6SOP-00034	SM 22 2540 D
Turbidity	2	N/A	2015/05/01	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 108376
Your C.O.C. #: 08406355

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/06
Report #: R1874717
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B533424
Received: 2015/04/24, 09:10

Encryption Key

Graham Rudkin
06 May 2015 16:52:55 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MC7632		MC7633		
Sampling Date		2015/04/20 15:00		2015/04/20 16:23		
COC Number		08406355		08406355		
	Units	MW06-10M	QC Batch	MW06-10D	RDL	QC Batch
Misc. Inorganics						
Acidity (pH 4.5)	mg/L	<0.50	7884123	<0.50	0.50	7884123
Acidity (pH 8.3)	mg/L	<0.50	7884123	<0.50	0.50	7884123
Fluoride (F)	mg/L	0.710	7886388	0.960	0.010	7886388
Calculated Parameters						
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.22	7882122	<0.20	0.20	7882122
Misc. Inorganics						
Dissolved Hardness (CaCO3)	mg/L	243	7881854	266	0.50	7881854
Alkalinity (Total as CaCO3)	mg/L	189	7882804	231	0.50	7882804
Alkalinity (PP as CaCO3)	mg/L	<0.50	7882804	<0.50	0.50	7882804
Bicarbonate (HCO3)	mg/L	230	7882804	281	0.50	7882804
Carbonate (CO3)	mg/L	<0.50	7882804	<0.50	0.50	7882804
Hydroxide (OH)	mg/L	<0.50	7882804	<0.50	0.50	7882804
Anions						
Orthophosphate (P)	mg/L	0.0031 (1)	7891866	0.0020 (1)	0.0010	7891866
Dissolved Sulphate (SO4)	mg/L	57.7	7884384	24.8	0.50	7884384
Dissolved Chloride (Cl)	mg/L	0.71	7884382	0.79	0.50	7884382
Nutrients						
Total Ammonia (N)	mg/L	0.0914 (2)	7882941	0.0925 (2)	0.0050	7882941
Nitrate plus Nitrite (N)	mg/L	0.22 (3)	7882928	<0.20 (3)	0.20	7882928
Nitrite (N)	mg/L	<0.20 (3)	7882929	<0.20 (3)	0.20	7882929
Total Phosphorus (P)	mg/L	0.0124	7892309	0.0060	0.0020	7892309
Physical Properties						
Conductivity	uS/cm	477	7882807	487	1.0	7882807
pH	pH	7.87	7882808	7.95	N/A	7882808
Physical Properties						
Total Suspended Solids	mg/L	11.0 (4)	7885107	4.0 (4)	4.0	7885107
Total Dissolved Solids	mg/L	268	7882623	254	10	7882623
Turbidity	NTU	68.9 (2)	7889114	24.3 (2)	0.10	7889298

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample was originally analysed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

(2) Sample arrived to laboratory past recommended hold time.

(3) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

(4) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MC7632	MC7633		
Sampling Date		2015/04/20 15:00	2015/04/20 16:23		
COC Number		08406355	08406355		
	Units	MW06-10M	MW06-10D	RDL	QC Batch
Elements					
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	0.010	7887304
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MC7632		MC7633		
Sampling Date		2015/04/20 15:00		2015/04/20 16:23		
COC Number		08406355		08406355		
	Units	MW06-10M	RDL	MW06-10D	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	0.010	<0.10	0.10	7884582
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.00337	0.00050	0.00107	0.00050	7883888
Dissolved Antimony (Sb)	mg/L	<0.000020	0.000020	0.000042	0.000020	7883888
Dissolved Arsenic (As)	mg/L	0.000423	0.000020	0.000726	0.000020	7883888
Dissolved Barium (Ba)	mg/L	0.0318	0.000020	0.0528	0.000020	7883888
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	<0.000010	0.000010	7883888
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	<0.0000050	0.0000050	7883888
Dissolved Boron (B)	mg/L	<0.010	0.010	<0.010	0.010	7883888
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000050	<0.0000050	0.0000050	7883888
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	7883888
Dissolved Cobalt (Co)	mg/L	0.0000120	0.0000050	<0.0000050	0.0000050	7883888
Dissolved Copper (Cu)	mg/L	0.000061	0.000050	<0.000050	0.000050	7883888
Dissolved Iron (Fe)	mg/L	5.06	0.0010	1.92	0.0010	7883888
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000050	<0.0000050	0.0000050	7883888
Dissolved Lithium (Li)	mg/L	0.00214	0.00050	0.00351	0.00050	7883888
Dissolved Manganese (Mn)	mg/L	0.106	0.000050	0.0139	0.000050	7883888
Dissolved Molybdenum (Mo)	mg/L	0.00318	0.000050	0.00521	0.000050	7883888
Dissolved Nickel (Ni)	mg/L	0.000100	0.000020	<0.000020	0.000020	7883888
Dissolved Phosphorus (P)	mg/L	0.0114	0.0020	0.0076	0.0020	7883888
Dissolved Selenium (Se)	mg/L	<0.000040	0.000040	<0.000040	0.000040	7883888
Dissolved Silicon (Si)	mg/L	4.70	0.050	4.46	0.050	7883888
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	<0.0000050	0.0000050	7883888
Dissolved Strontium (Sr)	mg/L	0.159	0.000050	0.170	0.000050	7883888
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	<0.0000020	0.0000020	7883888
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	<0.00020	0.00020	7883888
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	<0.00050	0.00050	7883888
Dissolved Uranium (U)	mg/L	0.0145	0.0000020	0.00865	0.0000020	7883888
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	<0.00020	0.00020	7883888
Dissolved Zinc (Zn)	mg/L	0.00038	0.00010	<0.00010	0.00010	7883888
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	7883888
Dissolved Calcium (Ca)	mg/L	77.5	0.050	70.7	0.050	7881855
Dissolved Magnesium (Mg)	mg/L	12.0	0.050	21.8	0.050	7881855
Dissolved Potassium (K)	mg/L	1.90	0.050	2.07	0.050	7881855
Dissolved Sodium (Na)	mg/L	2.74	0.050	0.923	0.050	7881855
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MC7632		MC7633		
Sampling Date		2015/04/20 15:00		2015/04/20 16:23		
COC Number		08406355		08406355		
	Units	**MW06-10M**	**RDL**	**MW06-10D**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	21.0	3.0	9.3	3.0	7881855
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.3°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample MC7633-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7882623	Total Dissolved Solids	2015/04/27	NC	80 - 120	96	80 - 120	<10	mg/L	4.5	20
7882804	Alkalinity (PP as CaCO3)	2015/04/25					<0.50	mg/L	NC	20
7882804	Alkalinity (Total as CaCO3)	2015/04/25	NC	80 - 120	89	80 - 120	<0.50	mg/L	0.69	20
7882804	Bicarbonate (HCO3)	2015/04/25					<0.50	mg/L	0.67	20
7882804	Carbonate (CO3)	2015/04/25					<0.50	mg/L	NC	20
7882804	Hydroxide (OH)	2015/04/25					<0.50	mg/L	NC	20
7882807	Conductivity	2015/04/25			101	80 - 120	<1.0	uS/cm		
7882808	pH	2015/04/25			101	97 - 103				
7882928	Nitrate plus Nitrite (N)	2015/04/25	105	80 - 120	108	80 - 120	<0.0020	mg/L	2.1	25
7882929	Nitrite (N)	2015/04/25	100	80 - 120	99	80 - 120	<0.0020	mg/L	NC	25
7882941	Total Ammonia (N)	2015/04/27	92	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20
7883888	Dissolved Aluminum (Al)	2015/04/29	105	80 - 120	102	80 - 120	<0.00050	mg/L		
7883888	Dissolved Antimony (Sb)	2015/04/29	100	80 - 120	97	80 - 120	<0.000020	mg/L	NC	20
7883888	Dissolved Arsenic (As)	2015/04/29	106	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7883888	Dissolved Barium (Ba)	2015/04/29	105	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7883888	Dissolved Beryllium (Be)	2015/04/29	97	80 - 120	97	80 - 120	<0.000010	mg/L	NC	20
7883888	Dissolved Bismuth (Bi)	2015/04/29	98	80 - 120	93	80 - 120	<0.0000050	mg/L	NC	20
7883888	Dissolved Boron (B)	2015/04/29					<0.010	mg/L	NC	20
7883888	Dissolved Cadmium (Cd)	2015/04/29	101	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20
7883888	Dissolved Chromium (Cr)	2015/04/29	99	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20
7883888	Dissolved Cobalt (Co)	2015/04/29	99	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7883888	Dissolved Copper (Cu)	2015/04/29	100	80 - 120	103	80 - 120	<0.000050	mg/L	NC	20
7883888	Dissolved Iron (Fe)	2015/04/29	107	80 - 120	108	80 - 120	<0.0010	mg/L		
7883888	Dissolved Lead (Pb)	2015/04/29	99	80 - 120	97	80 - 120	<0.0000050	mg/L	NC	20
7883888	Dissolved Lithium (Li)	2015/04/29	101	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
7883888	Dissolved Manganese (Mn)	2015/04/29	99	80 - 120	96	80 - 120	<0.000050	mg/L		
7883888	Dissolved Molybdenum (Mo)	2015/04/29	97	80 - 120	95	80 - 120	<0.000050	mg/L	NC	20
7883888	Dissolved Nickel (Ni)	2015/04/29	100	80 - 120	99	80 - 120	<0.000020	mg/L	NC	20
7883888	Dissolved Phosphorus (P)	2015/04/29					<0.0020	mg/L	NC	20
7883888	Dissolved Selenium (Se)	2015/04/29	103	80 - 120	96	80 - 120	<0.000040	mg/L	NC	20
7883888	Dissolved Silicon (Si)	2015/04/29					<0.050	mg/L	NC	20
7883888	Dissolved Silver (Ag)	2015/04/29	90	80 - 120	86	80 - 120	<0.0000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7883888	Dissolved Strontium (Sr)	2015/04/29	101	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7883888	Dissolved Thallium (Tl)	2015/04/29	95	80 - 120	91	80 - 120	<0.0000020	mg/L	NC	20
7883888	Dissolved Tin (Sn)	2015/04/29	95	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7883888	Dissolved Titanium (Ti)	2015/04/29	100	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
7883888	Dissolved Uranium (U)	2015/04/29	99	80 - 120	96	80 - 120	<0.0000020	mg/L	NC	20
7883888	Dissolved Vanadium (V)	2015/04/29	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
7883888	Dissolved Zinc (Zn)	2015/04/29	104	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
7883888	Dissolved Zirconium (Zr)	2015/04/29					<0.00010	mg/L	NC	20
7884123	Acidity (pH 4.5)	2015/04/27					<0.50	mg/L	NC	20
7884123	Acidity (pH 8.3)	2015/04/27			99	80 - 120	0.70, RDL=0.50	mg/L	NC	20
7884382	Dissolved Chloride (Cl)	2015/04/27	NC	80 - 120	95	80 - 120	<0.50	mg/L	2.7	20
7884384	Dissolved Sulphate (SO4)	2015/04/27	NC	80 - 120	95	80 - 120	<0.50	mg/L	3.1	20
7884582	Bromide (Br)	2015/04/28	97	78 - 120	97	80 - 120	<0.010	mg/L	NC	20
7885107	Total Suspended Solids	2015/04/30	101	80 - 120	97	80 - 120	<4.0	mg/L	NC	20
7886388	Fluoride (F)	2015/04/29	NC	80 - 120	98	80 - 120	<0.010	mg/L	NC	20
7887304	Dissolved Mercury (Hg)	2015/04/30	88	80 - 120	82	80 - 120	<0.010	ug/L	NC	20
7889114	Turbidity	2015/05/01			100	80 - 120	<0.10	NTU	6.7	20
7889298	Turbidity	2015/05/01			99	80 - 120	<0.10	NTU	6.5	20
7891866	Orthophosphate (P)	2015/05/05	94	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
7892309	Total Phosphorus (P)	2015/04/27	105	80 - 120	101	80 - 120	<0.0020	mg/L	NC	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B533424
Report Date: 2015/05/06

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: RM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B533424

ANALYSIS REQU

08406355

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ext. 5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Robin McCall	PROJECT MANAGER: Robin McCall
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW06-10M	MC7632	X					20-Apr-15	15:00	5	X	X	X	X	X	X	X
2	MW06-10D	MC7633	X					20-Apr-15	16:23	5	X	X	X	X	X	X	X
3																	
4																	
5																	
6																	
10																	
11																	
12																	
13																	
14																	
15																	

B533424

TAT (Turnaround Time)

LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL

* Some exceptions apply - please contact laboratory

- 5 BUSINESS DAYS [X]
- 3 BUSINESS DAYS [ ]
- 2 BUSINESS DAYS [ ]
- STANDARD 1 BUSINESS DAY [ ]
- RUSH
- RUSH
- URGENT
- OTHER BUSINESS DAYS

PO NUMBER OR QUOTE NUMBER: 108376

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 3,4,6 CS:NA

DUE DATE:

LOG IN CHECK:

RELINQUINSHED BY SAMPLER: Robin McCall	DATE: DD/MM/YY 23/04/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY: Robin McCall	DATE: DD/MM/YY 23/04/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurel Berthier 2015/04/24 09:10

COCFORM - BC - 2007/0822

STUDY

JOAD

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your P.O. #: 108376
Your C.O.C. #: 08406562

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/08
Report #: R1883201
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B535698
Received: 2015/05/01, 15:10

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	2	N/A	2015/05/04	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	2	2015/05/04	2015/05/04	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	2	N/A	2015/05/05	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	2	N/A	2015/05/04	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	2	N/A	2015/05/04	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2015/05/06	BBY7SOP-00002	EPA 6020a R1 m
Bromide as Bromine (Br) by ICPMS	2	N/A	2015/05/04	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	2	N/A	2015/05/06	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	2	N/A	2015/05/05	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	2	N/A	2015/05/05	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	2	N/A	2015/05/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	2	N/A	2015/05/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	2	N/A	2015/05/05	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	2	N/A	2015/05/05	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	2	N/A	2015/05/04	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	2	N/A	2015/05/02	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	2	N/A	2015/05/05	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	2	2015/05/05	2015/05/06	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	2	2015/05/04	2015/05/04	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus - unpreserved	2	N/A	2015/05/04	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	2	N/A	2015/05/07	BBY6SOP-00034	SM 22 2540 D
Turbidity	2	N/A	2015/05/07	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 108376
Your C.O.C. #: 08406562

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/08
Report #: R1883201
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B535698
Received: 2015/05/01, 15:10

Encryption Key

Graham Rudkin
11 May 2015 11:33:52 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MD8676			MD8677		
Sampling Date		2015/04/29 15:30			2015/04/29 15:10		
COC Number		08406562			08406562		
	Units	1180 SUMP	RDL	QC Batch	1240 SUMP	RDL	QC Batch
Misc. Inorganics							
Acidity (pH 4.5)	mg/L	<0.50	0.50	7890988	<0.50	0.50	7890984
Acidity (pH 8.3)	mg/L	3.04	0.50	7890988	3.07	0.50	7890984
Fluoride (F)	mg/L	0.370	0.010	7890947	0.430	0.010	7890947
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.51	0.20	7888787	0.45	0.20	7888787
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	182	0.50	7888655	206	0.50	7888655
Alkalinity (Total as CaCO3)	mg/L	16.3	0.50	7891078	58.5	0.50	7891078
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	7891078	<0.50	0.50	7891078
Bicarbonate (HCO3)	mg/L	19.9	0.50	7891078	71.4	0.50	7891078
Carbonate (CO3)	mg/L	<0.50	0.50	7891078	<0.50	0.50	7891078
Hydroxide (OH)	mg/L	<0.50	0.50	7891078	<0.50	0.50	7891078
Anions							
Orthophosphate (P)	mg/L	<0.0010	0.0010	7889802	0.0019	0.0010	7889802
Dissolved Sulphate (SO4)	mg/L	345	5.0	7892468	652	5.0	7892468
Dissolved Chloride (Cl)	mg/L	17	0.50	7892467	20	0.50	7892467
Nutrients							
Dissolved Phosphorus (P)	mg/L	0.0331 (1)	0.0020	7894816	0.0735 (1)	0.0020	7894816
Total Ammonia (N)	mg/L	2.13 (2)	0.0050	7892181	6.60 (2)	0.050	7892181
Nitrate plus Nitrite (N)	mg/L	0.51 (3)	0.20	7892414	0.72 (3)	0.20	7892414
Nitrite (N)	mg/L	<0.20 (3)	0.20	7892415	0.27 (3)	0.20	7892415
Total Phosphorus (P)	mg/L	0.0441 (1)	0.0020	7894828	0.0945 (1)	0.0020	7894828
Physical Properties							
Conductivity	uS/cm	963	1.0	7891081	1600	1.0	7891081
pH	pH	7.35	N/A	7891080	7.65	N/A	7891080
Physical Properties							
Total Suspended Solids	mg/L	<8.0 (4)	8.0	7892179	<8.0 (4)	8.0	7892179
Total Dissolved Solids	mg/L	604	10	7890959	1070	10	7890959

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past recommended hold time.

(2) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(3) RDL raised due to sample matrix interference. Sample analysed past recommended hold time.

(4) RDL raised due to limited initial sample amount.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MD8676			MD8677		
Sampling Date		2015/04/29 15:30			2015/04/29 15:10		
COC Number		08406562			08406562		
	Units	**1180 SUMP**	**RDL**	**QC Batch**	**1240 SUMP**	**RDL**	**QC Batch**
Turbidity	NTU	0.31 (1)	0.10	7894781	1.01 (1)	0.10	7894781

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MD8676		MD8677		
Sampling Date		2015/04/29 15:30		2015/04/29 15:10		
COC Number		08406562		08406562		
	Units	1180 SUMP	RDL	1240 SUMP	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	0.14 (1)	0.10	0.056	0.010	7890371
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.0101	0.00050	0.0268	0.00050	7890771
Dissolved Antimony (Sb)	mg/L	0.0383	0.000020	0.0579	0.000020	7890771
Dissolved Arsenic (As)	mg/L	0.00435	0.000020	0.00774	0.000020	7890771
Dissolved Barium (Ba)	mg/L	0.0854	0.000020	0.0287	0.000020	7890771
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	<0.000010	0.000010	7890771
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	0.0000182	0.0000050	7890771
Dissolved Boron (B)	mg/L	<0.010	0.010	<0.010	0.010	7890771
Dissolved Cadmium (Cd)	mg/L	0.0000283	0.0000050	0.000533	0.0000050	7890771
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	7890771
Dissolved Cobalt (Co)	mg/L	0.0000815	0.0000050	0.000433	0.0000050	7890771
Dissolved Copper (Cu)	mg/L	<0.000050	0.000050	0.000663	0.000050	7890771
Dissolved Iron (Fe)	mg/L	0.0136	0.0010	0.0412	0.0010	7890771
Dissolved Lead (Pb)	mg/L	0.000296	0.0000050	0.00243	0.0000050	7890771
Dissolved Lithium (Li)	mg/L	0.0229	0.00050	0.0175	0.00050	7890771
Dissolved Manganese (Mn)	mg/L	0.00797	0.000050	0.0429	0.000050	7890771
Dissolved Molybdenum (Mo)	mg/L	0.0301	0.000050	0.0486	0.000050	7890771
Dissolved Nickel (Ni)	mg/L	0.00161	0.000020	0.00805	0.000020	7890771
Dissolved Phosphorus (P)	mg/L	0.0448	0.0020	0.0807	0.0020	7890771
Dissolved Selenium (Se)	mg/L	0.102	0.000040	0.217	0.000040	7890771
Dissolved Silicon (Si)	mg/L	1.67	0.050	4.36	0.050	7890771
Dissolved Silver (Ag)	mg/L	0.0000284	0.0000050	0.0000774	0.0000050	7890771
Dissolved Strontium (Sr)	mg/L	2.19	0.000050	1.37	0.000050	7890771
Dissolved Thallium (Tl)	mg/L	0.00360	0.0000020	0.00658	0.0000020	7890771
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	<0.00020	0.00020	7890771
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	<0.00050	0.00050	7890771
Dissolved Uranium (U)	mg/L	0.00155	0.0000020	0.00818	0.0000020	7890771
Dissolved Vanadium (V)	mg/L	0.00041	0.00020	0.00116	0.00020	7890771
Dissolved Zinc (Zn)	mg/L	0.00265	0.00010	0.0514	0.00010	7890771
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	7890771
Dissolved Calcium (Ca)	mg/L	63.7	0.050	64.2	0.050	7888785
Dissolved Magnesium (Mg)	mg/L	5.55	0.050	11.0	0.050	7888785
Dissolved Potassium (K)	mg/L	50.5	0.050	86.1	0.050	7888785
Dissolved Sodium (Na)	mg/L	83.4	0.050	188	0.050	7888785

RDL = Reportable Detection Limit
(1) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MD8676		MD8677		
Sampling Date		2015/04/29 15:30		2015/04/29 15:10		
COC Number		08406562		08406562		
	Units	**1180 SUMP**	**RDL**	**1240 SUMP**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	134	3.0	239	3.0	7888785
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	16.0°C
Package 2	16.3°C
Package 3	17.0°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7889802	Orthophosphate (P)	2015/05/02	100	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
7890371	Bromide (Br)	2015/05/04	NC	78 - 120	104	80 - 120	<0.010	mg/L	2.3	20
7890771	Dissolved Aluminum (Al)	2015/05/05	104	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
7890771	Dissolved Antimony (Sb)	2015/05/05	102	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20
7890771	Dissolved Arsenic (As)	2015/05/05	105	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20
7890771	Dissolved Barium (Ba)	2015/05/05	104	80 - 120	106	80 - 120	<0.000020	mg/L	NC	20
7890771	Dissolved Beryllium (Be)	2015/05/05	100	80 - 120	96	80 - 120	<0.000010	mg/L	NC	20
7890771	Dissolved Bismuth (Bi)	2015/05/05	100	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7890771	Dissolved Boron (B)	2015/05/05					<0.010	mg/L	NC	20
7890771	Dissolved Cadmium (Cd)	2015/05/05	101	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7890771	Dissolved Chromium (Cr)	2015/05/05	101	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
7890771	Dissolved Cobalt (Co)	2015/05/05	99	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7890771	Dissolved Copper (Cu)	2015/05/05	99	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20
7890771	Dissolved Iron (Fe)	2015/05/05	106	80 - 120	113	80 - 120	<0.0010	mg/L	NC	20
7890771	Dissolved Lead (Pb)	2015/05/05	99	80 - 120	97	80 - 120	<0.0000050	mg/L	NC	20
7890771	Dissolved Lithium (Li)	2015/05/05	103	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
7890771	Dissolved Manganese (Mn)	2015/05/05	100	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20
7890771	Dissolved Molybdenum (Mo)	2015/05/05	99	80 - 120	95	80 - 120	<0.000050	mg/L	NC	20
7890771	Dissolved Nickel (Ni)	2015/05/05	100	80 - 120	99	80 - 120	<0.000020	mg/L	NC	20
7890771	Dissolved Phosphorus (P)	2015/05/05					<0.0020	mg/L	NC	20
7890771	Dissolved Selenium (Se)	2015/05/05	111	80 - 120	100	80 - 120	<0.000040	mg/L	NC	20
7890771	Dissolved Silicon (Si)	2015/05/05					<0.050	mg/L	NC	20
7890771	Dissolved Silver (Ag)	2015/05/05	72 (1)	80 - 120	90	80 - 120	<0.0000050	mg/L	NC	20
7890771	Dissolved Strontium (Sr)	2015/05/05	100	80 - 120	94	80 - 120	<0.000050	mg/L	NC	20
7890771	Dissolved Thallium (Tl)	2015/05/05	99	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7890771	Dissolved Tin (Sn)	2015/05/05	101	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7890771	Dissolved Titanium (Ti)	2015/05/05	98	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
7890771	Dissolved Uranium (U)	2015/05/05	104	80 - 120	103	80 - 120	<0.0000020	mg/L	NC	20
7890771	Dissolved Vanadium (V)	2015/05/05	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
7890771	Dissolved Zinc (Zn)	2015/05/05	107	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
7890771	Dissolved Zirconium (Zr)	2015/05/05					<0.00010	mg/L	NC	20
7890947	Fluoride (F)	2015/05/04	102	80 - 120	100	80 - 120	<0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7890959	Total Dissolved Solids	2015/05/06	102	80 - 120	98	80 - 120	10, RDL=10	mg/L	15	20
7890984	Acidity (pH 4.5)	2015/05/04					<0.50	mg/L	NC	20
7890984	Acidity (pH 8.3)	2015/05/04			101	80 - 120	0.66, RDL=0.50	mg/L	NC	20
7890988	Acidity (pH 4.5)	2015/05/04					<0.50	mg/L	1.6	20
7890988	Acidity (pH 8.3)	2015/05/04			102	80 - 120	0.63, RDL=0.50	mg/L	3.7	20
7891078	Alkalinity (PP as CaCO3)	2015/05/04					<0.50	mg/L	NC	20
7891078	Alkalinity (Total as CaCO3)	2015/05/04	NC	80 - 120	96	80 - 120	0.72, RDL=0.50	mg/L	0.59	20
7891078	Bicarbonate (HCO3)	2015/05/04					0.88, RDL=0.50	mg/L	0.61	20
7891078	Carbonate (CO3)	2015/05/04					<0.50	mg/L	NC	20
7891078	Hydroxide (OH)	2015/05/04					<0.50	mg/L	NC	20
7891080	pH	2015/05/04							0.64	N/A
7891081	Conductivity	2015/05/04			100	80 - 120	<1.0	uS/cm	1.5	20
7892179	Total Suspended Solids	2015/05/07	100	80 - 120	101	80 - 120	<4.0	mg/L	NC	20
7892181	Total Ammonia (N)	2015/05/05	104	80 - 120	112	80 - 120	<0.0050	mg/L	NC	20
7892414	Nitrate plus Nitrite (N)	2015/05/05	101	80 - 120	105	80 - 120	<0.0020	mg/L	0.66	25
7892415	Nitrite (N)	2015/05/05	100	80 - 120	105	80 - 120	<0.0020	mg/L	NC	25
7892467	Dissolved Chloride (Cl)	2015/05/05	NC	80 - 120	98	80 - 120	<0.50	mg/L	0.95	20
7892468	Dissolved Sulphate (SO4)	2015/05/05			91	80 - 120	<0.50	mg/L		
7894781	Turbidity	2015/05/07			99	80 - 120	0.12, RDL=0.10	NTU	NC	20
7894816	Dissolved Phosphorus (P)	2015/05/04	NC	80 - 120	98	80 - 120	<0.0020	mg/L	4.7	20
7894828	Total Phosphorus (P)	2015/05/04	104	80 - 120	103	80 - 120	<0.0020	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B535698
Report Date: 2015/05/08

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: AK

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B535698

ANALYSIS REQUE

08406562

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ex.5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Andrea Kenward	PROJECT MANAGER: Robin McCall
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk., Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (not inc. Hg)	LL Dissolved Metals (not inc.Hg)	Hardness	TDS, TSS	TOC
1	1180 Sump	MD8676	X					29-Apr-15	15:30	5	X	X	X	X				X	X	X	
2	1240 Sump	MD8677	X					29-Apr-15	15:10	5	X	X	X	X				X	X	X	
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					

B535698

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER:
Email quote for payment: andrea.kenward@yukonzinc.com

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:
No mercury analysis required

RELINQUISHED BY SAMPLER: Andrea Kenward	DATE: DD/MM/YY 30/04/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY: Andrea Kenward	DATE: DD/MM/YY 30/04/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: JOHN CURRIE 2015/05/01 15:10

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C:	DUE DATE:	LOG IN CHECK:
18,15,15 17,16,16 17,17,17		

COCFORM - BC - 20070822

Your P.O. #: 108376
Your C.O.C. #: 08407236

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/29
Report #: R1967179
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B540498
Received: 2015/05/15, 12:35

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	7	N/A	2015/05/20	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	7	2015/05/19	2015/05/20	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	7	N/A	2015/05/19	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	7	N/A	2015/05/20	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	7	N/A	2015/05/19	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2015/05/21	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	3	N/A	2015/05/25	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	7	N/A	2015/05/22	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	1	N/A	2015/05/20	BBY7SOP-00002	EPA 6020A R1 m
Bromide as Bromine (Br) by ICPMS	6	N/A	2015/05/21	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	4	N/A	2015/05/21	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	3	N/A	2015/05/25	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	4	N/A	2015/05/21	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	3	N/A	2015/05/23	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	7	N/A	2015/05/20	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	7	N/A	2015/05/16	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	7	N/A	2015/05/16	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	7	N/A	2015/05/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	4	N/A	2015/05/21	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	3	N/A	2015/05/23	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	7	N/A	2015/05/20	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	7	N/A	2015/05/19	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	6	N/A	2015/05/19	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/05/20	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	2	2015/05/19	2015/05/20	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	5	2015/05/20	2015/05/21	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	7	2015/05/19	2015/05/19	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	3	N/A	2015/05/20	BBY6SOP-00034	SM 22 2540 D
Total Suspended Solids	4	N/A	2015/05/21	BBY6SOP-00034	SM 22 2540 D
Turbidity	7	N/A	2015/05/16	BBY6SOP-00027	SM 22 2130 B m

Your P.O. #: 108376
Your C.O.C. #: 08407236

Attention:Andrea Kenward

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/05/29
Report #: R1967179
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B540498

Received: 2015/05/15, 12:35

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin

29 May 2015 15:42:23 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MG3461		MG3462		MG3463		MG3464		
Sampling Date		2015/05/13 16:40		2015/05/12 16:25		2015/05/12 15:45		2015/05/13 13:15		
COC Number		08407236		08407236		08407236		08407236		
	Units	MW05-3B	QC Batch	MW05-4A	QC Batch	MW05-4B	QC Batch	MW06-9S	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7906927	<0.50	7906927	<0.50	7906927	<0.50	0.50	7906927
Acidity (pH 8.3)	mg/L	7.51	7906927	<0.50	7906927	2.32	7906927	<0.50	0.50	7906927
Fluoride (F)	mg/L	0.130	7905691	1.10	7905691	0.230	7905691	0.880	0.010	7905691
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	7903020	0.24	7903020	0.33	7903020	<0.20	0.20	7903020
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	169	7904155	164	7904155	66.3	7904155	119	0.50	7904155
Alkalinity (Total as CaCO3)	mg/L	94.1	7906132	112	7906132	50.5	7906132	93.9	0.50	7906132
Alkalinity (PP as CaCO3)	mg/L	<0.50	7906132	<0.50	7906132	<0.50	7906132	<0.50	0.50	7906132
Bicarbonate (HCO3)	mg/L	115	7906132	136	7906132	61.6	7906132	115	0.50	7906132
Carbonate (CO3)	mg/L	<0.50	7906132	<0.50	7906132	<0.50	7906132	<0.50	0.50	7906132
Hydroxide (OH)	mg/L	<0.50	7906132	<0.50	7906132	<0.50	7906132	<0.50	0.50	7906132
Anions										
Orthophosphate (P)	mg/L	0.0013 (1)	7906148	0.0010 (2)	7906148	0.0013 (2)	7906148	0.077 (1)	0.0010	7906148
Dissolved Sulphate (SO4)	mg/L	87.8	7905978	48.2	7905978	24.4	7905978	27.3	0.50	7905978
Dissolved Chloride (Cl)	mg/L	2.6	7905976	<0.50	7905976	<0.50	7905976	<0.50	0.50	7905976
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.0023	7906159	0.0074	7906159	0.0069	7906159	0.186	0.0020	7906159
Total Ammonia (N)	mg/L	0.0055 (3)	7904732	0.0304 (2)	7904732	0.0222 (2)	7904732	0.0494 (3)	0.0050	7904732
Nitrate plus Nitrite (N)	mg/L	0.26 (4)	7904745	0.24 (5)	7904745	0.33 (5)	7904745	<0.20 (4)	0.20	7904745
Nitrite (N)	mg/L	0.22 (4)	7904746	<0.20 (5)	7904746	<0.20 (5)	7904746	<0.20 (4)	0.20	7904746
Physical Properties										
Conductivity	uS/cm	394	7906135	334	7906135	165	7906135	256	1.0	7906135
pH	pH	7.81	7906134	8.20	7906134	7.63	7906134	8.13	N/A	7906134
Physical Properties										
Total Suspended Solids	mg/L	<4.0	7906082	<4.0	7905307	<4.0	7905307	<4.0	4.0	7906082
Total Dissolved Solids	mg/L	242	7906089	196	7905293	106	7906089	138	10	7906089

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample analysed past recommended hold time.
(2) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.
(3) Sample preserved to extend hold time.
(4) RDL raised due to sample matrix interference.
(5) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MG3461		MG3462		MG3463		MG3464		
Sampling Date		2015/05/13 16:40		2015/05/12 16:25		2015/05/12 15:45		2015/05/13 13:15		
COC Number		08407236		08407236		08407236		08407236		
	Units	**MW05-3B**	**QC Batch**	**MW05-4A**	**QC Batch**	**MW05-4B**	**QC Batch**	**MW06-9S**	**RDL**	**QC Batch**
Turbidity	NTU	<0.10	7904468	5.04 (1)	7904468	1.11 (1)	7904468	1.24	0.10	7904468

RDL = Reportable Detection Limit

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MG3465		MG3466			MG3467		
Sampling Date		2015/05/13 14:00		2015/05/12 14:05			2015/05/13 15:10		
COC Number		08407236		08407236			08407236		
	Units	MW06-9M	QC Batch	MW06-10S	RDL	QC Batch	MW06-12S	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	7906927	<0.50	0.50	7906927	<0.50	0.50	7906927
Acidity (pH 8.3)	mg/L	<0.50	7906927	<0.50	0.50	7906927	<0.50	0.50	7906927
Fluoride (F)	mg/L	1.00	7905691	0.970	0.010	7905691	0.900	0.010	7905691
Calculated Parameters									
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.25	7903020	<0.20	0.20	7903020	0.26	0.20	7903020
Misc. Inorganics									
Dissolved Hardness (CaCO3)	mg/L	222	7904155	326	0.50	7904155	446	0.50	7904155
Alkalinity (Total as CaCO3)	mg/L	164	7906132	230	0.50	7906132	135	0.50	7906132
Alkalinity (PP as CaCO3)	mg/L	<0.50	7906132	2.40	0.50	7906132	<0.50	0.50	7906132
Bicarbonate (HCO3)	mg/L	200	7906132	275	0.50	7906132	165	0.50	7906132
Carbonate (CO3)	mg/L	<0.50	7906132	2.88	0.50	7906132	<0.50	0.50	7906132
Hydroxide (OH)	mg/L	<0.50	7906132	<0.50	0.50	7906132	<0.50	0.50	7906132
Anions									
Orthophosphate (P)	mg/L	0.0013 (1)	7906148	<0.0010 (2)	0.0010	7906148	<0.0010 (1)	0.0010	7906148
Dissolved Sulphate (SO4)	mg/L	34.1	7907298	25.3	0.50	7905978	275	5.0	7905978
Dissolved Chloride (Cl)	mg/L	<0.50	7905976	0.83	0.50	7905976	<0.50	0.50	7905976
Nutrients									
Dissolved Phosphorus (P)	mg/L	0.0182	7906159	0.0064	0.0020	7906159	0.0193	0.0020	7906159
Total Ammonia (N)	mg/L	0.0800 (3)	7904732	0.0874 (2)	0.0050	7904732	0.143 (3)	0.0050	7904732
Nitrate plus Nitrite (N)	mg/L	0.25 (4)	7904745	<0.20 (5)	0.20	7904745	0.26 (4)	0.20	7904745
Nitrite (N)	mg/L	<0.20 (4)	7904746	<0.20 (5)	0.20	7904746	<0.20 (4)	0.20	7904746
Physical Properties									
Conductivity	uS/cm	387	7906135	480	1.0	7906135	794	1.0	7906135
pH	pH	8.28	7906134	8.34	N/A	7906134	8.22	N/A	7906134
Physical Properties									
Total Suspended Solids	mg/L	<4.0	7906082	4.3	4.0	7905307	7.0	4.0	7906083
Total Dissolved Solids	mg/L	224	7906089	246	10	7905293	542	10	7906089

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past recommended hold time.

(2) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(3) Sample preserved to extend hold time.

(4) RDL raised due to sample matrix interference.

(5) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MG3465		MG3466			MG3467		
Sampling Date		2015/05/13 14:00		2015/05/12 14:05			2015/05/13 15:10		
COC Number		08407236		08407236			08407236		
	Units	**MW06-9M**	**QC Batch**	**MW06-10S**	**RDL**	**QC Batch**	**MW06-12S**	**RDL**	**QC Batch**
Turbidity	NTU	4.83	7904468	6.35 (1)	0.10	7904468	35.1	0.10	7904468

RDL = Reportable Detection Limit

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MG3461	MG3462	MG3463	MG3464	MG3465	MG3466	MG3467		
Sampling Date		2015/05/13 16:40	2015/05/12 16:25	2015/05/12 15:45	2015/05/13 13:15	2015/05/13 14:00	2015/05/12 14:05	2015/05/13 15:10		
COC Number		08407236	08407236	08407236	08407236	08407236	08407236	08407236		
	Units	**MW05-3B**	**MW05-4A**	**MW05-4B**	**MW06-9S**	**MW06-9M**	**MW06-10S**	**MW06-12S**	**RDL**	**QC Batch**
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7908282
RDL = Reportable Detection Limit										

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MG3461		MG3462	MG3463	MG3464		
Sampling Date		2015/05/13 16:40		2015/05/12 16:25	2015/05/12 15:45	2015/05/13 13:15		
COC Number		08407236		08407236	08407236	08407236		
	Units	MW05-3B	QC Batch	MW05-4A	MW05-4B	MW06-9S	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	0.014	7906820	<0.010	<0.010	<0.010	0.010	7906737
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	<0.00050	7906912	0.00051	0.00359	0.00176	0.00050	7906912
Dissolved Antimony (Sb)	mg/L	0.000115	7906912	0.000069	0.000102	<0.000020	0.000020	7906912
Dissolved Arsenic (As)	mg/L	0.000069	7906912	0.00252	0.00484	0.00443	0.000020	7906912
Dissolved Barium (Ba)	mg/L	0.0835	7906912	0.0517	0.0600	0.0582	0.000020	7906912
Dissolved Beryllium (Be)	mg/L	<0.000010	7906912	<0.000010	<0.000010	<0.000010	0.000010	7906912
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7906912	<0.0000050	<0.0000050	<0.0000050	0.0000050	7906912
Dissolved Boron (B)	mg/L	<0.010	7906912	<0.010	<0.010	<0.010	0.010	7906912
Dissolved Cadmium (Cd)	mg/L	0.0250	7906912	<0.0000050	0.00232	0.0000081	0.0000050	7906912
Dissolved Chromium (Cr)	mg/L	<0.00010	7906912	<0.00010	<0.00010	<0.00010	0.00010	7906912
Dissolved Cobalt (Co)	mg/L	0.0000256	7906912	0.0000057	0.00703	0.0000458	0.0000050	7906912
Dissolved Copper (Cu)	mg/L	0.00285	7906912	<0.000050	0.000116	<0.000050	0.000050	7906912
Dissolved Iron (Fe)	mg/L	0.0025	7906912	1.02	2.56	0.602	0.0010	7906912
Dissolved Lead (Pb)	mg/L	0.000124	7906912	0.0000117	0.000144	<0.0000050	0.0000050	7906912
Dissolved Lithium (Li)	mg/L	0.00162	7906912	0.00065	0.00098	0.00084	0.00050	7906912
Dissolved Manganese (Mn)	mg/L	0.00390	7906912	0.137	2.20	0.0910	0.000050	7906912
Dissolved Molybdenum (Mo)	mg/L	0.000523	7906912	0.00421	0.000316	0.00378	0.000050	7906912
Dissolved Nickel (Ni)	mg/L	0.00562	7906912	0.000051	0.00582	0.000129	0.000020	7906912
Dissolved Phosphorus (P)	mg/L	0.0030	7906912	0.0091	0.0086	0.189	0.0020	7906912
Dissolved Selenium (Se)	mg/L	0.00600	7906912	<0.000040	<0.000040	<0.000040	0.000040	7906912
Dissolved Silicon (Si)	mg/L	5.43	7906912	3.72	7.10	4.69	0.050	7906912
Dissolved Silver (Ag)	mg/L	<0.0000050	7906912	<0.0000050	<0.0000050	<0.0000050	0.0000050	7906912
Dissolved Strontium (Sr)	mg/L	0.196	7906912	0.195	0.0909	0.150	0.000050	7906912
Dissolved Thallium (Tl)	mg/L	0.0000095	7906912	0.0000038	0.0000585	0.0000138	0.0000020	7906912
Dissolved Tin (Sn)	mg/L	<0.00020	7906912	<0.00020	<0.00020	<0.00020	0.00020	7906912
Dissolved Titanium (Ti)	mg/L	<0.00050	7906912	<0.00050	<0.00050	<0.00050	0.00050	7906912
Dissolved Uranium (U)	mg/L	0.00206	7906912	0.000929	0.0000448	0.000450	0.0000020	7906912
Dissolved Vanadium (V)	mg/L	<0.00020	7906912	<0.00020	<0.00020	<0.00020	0.00020	7906912
Dissolved Zinc (Zn)	mg/L	2.08	7906912	0.00040	0.262	0.00068	0.00010	7906912
Dissolved Zirconium (Zr)	mg/L	<0.00010	7906912	<0.00010	<0.00010	<0.00010	0.00010	7906912
Dissolved Calcium (Ca)	mg/L	56.4	7903097	59.0	22.8	39.2	0.050	7903097
Dissolved Magnesium (Mg)	mg/L	6.87	7903097	4.08	2.26	5.12	0.050	7903097
Dissolved Potassium (K)	mg/L	1.47	7903097	2.11	1.32	1.09	0.050	7903097
Dissolved Sodium (Na)	mg/L	9.00	7903097	1.17	1.06	0.863	0.050	7903097

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MG3461		MG3462	MG3463	MG3464		
Sampling Date		2015/05/13 16:40		2015/05/12 16:25	2015/05/12 15:45	2015/05/13 13:15		
COC Number		08407236		08407236	08407236	08407236		
	Units	**MW05-3B**	**QC Batch**	**MW05-4A**	**MW05-4B**	**MW06-9S**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	32.5	7903097	16.8	9.0	10.0	3.0	7903097
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MG3465	MG3466		MG3467		
Sampling Date		2015/05/13 14:00	2015/05/12 14:05		2015/05/13 15:10		
COC Number		08407236	08407236		08407236		
	Units	MW06-9M	MW06-10S	RDL	MW06-12S	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	<0.010	0.010	<0.10 (1)	0.10	7906737
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00120	0.00155	0.00050	0.00097	0.00050	7907167
Dissolved Antimony (Sb)	mg/L	0.000261	0.000047	0.000020	0.000185	0.000020	7907167
Dissolved Arsenic (As)	mg/L	0.00193	0.000694	0.000020	0.00108	0.000020	7907167
Dissolved Barium (Ba)	mg/L	0.0589	0.0558	0.000020	0.0219	0.000020	7907167
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	0.000010	<0.000010	0.000010	7907167
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	0.0000050	<0.0000050	0.0000050	7907167
Dissolved Boron (B)	mg/L	<0.010	<0.010	0.010	<0.010	0.010	7907167
Dissolved Cadmium (Cd)	mg/L	<0.0000050	<0.0000050	0.0000050	<0.0000050	0.0000050	7907167
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00010	<0.00010	0.00010	7907167
Dissolved Cobalt (Co)	mg/L	0.0000111	<0.0000050	0.0000050	0.000337	0.0000050	7907167
Dissolved Copper (Cu)	mg/L	<0.000050	<0.000050	0.000050	0.000059	0.000050	7907167
Dissolved Iron (Fe)	mg/L	0.950	2.45	0.0010	3.08	0.0010	7907167
Dissolved Lead (Pb)	mg/L	0.0000787	0.0000467	0.0000050	0.0000914	0.0000050	7907167
Dissolved Lithium (Li)	mg/L	0.00254	0.00314	0.00050	0.00356	0.00050	7907167
Dissolved Manganese (Mn)	mg/L	0.0214	0.0169	0.000050	0.152	0.000050	7907167
Dissolved Molybdenum (Mo)	mg/L	0.00427	0.00611	0.000050	0.000752	0.000050	7907167
Dissolved Nickel (Ni)	mg/L	0.000042	0.000025	0.000020	0.000913	0.000020	7907167
Dissolved Phosphorus (P)	mg/L	0.017	<0.010	0.010	0.012	0.010	7907167
Dissolved Selenium (Se)	mg/L	<0.000040	<0.000040	0.000040	<0.000040	0.000040	7907167
Dissolved Silicon (Si)	mg/L	4.49	5.11	0.050	4.18	0.050	7907167
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	0.0000050	<0.0000050	0.0000050	7907167
Dissolved Strontium (Sr)	mg/L	0.0919	0.196	0.000050	0.523	0.000050	7907167
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	0.0000020	<0.0000020	0.0000020	7907167
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	0.00020	<0.00020	0.00020	7907167
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	0.00050	<0.00050	0.00050	7907167
Dissolved Uranium (U)	mg/L	0.00372	0.00950	0.0000020	0.0225	0.0000020	7907167
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	0.00020	<0.00020	0.00020	7907167
Dissolved Zinc (Zn)	mg/L	0.00020	0.00050	0.00010	0.00111	0.00010	7907167
Dissolved Zirconium (Zr)	mg/L	0.00015	<0.00010	0.00010	<0.00010	0.00010	7907167
Dissolved Calcium (Ca)	mg/L	66.8	92.2	0.050	138	0.050	7903097
Dissolved Magnesium (Mg)	mg/L	13.4	23.3	0.050	24.7	0.050	7903097
Dissolved Potassium (K)	mg/L	2.07	2.33	0.10	3.69	0.10	7903097
Dissolved Sodium (Na)	mg/L	0.372	1.04	0.050	4.84	0.050	7903097

RDL = Reportable Detection Limit
(1) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MG3465	MG3466		MG3467		
Sampling Date		2015/05/13 14:00	2015/05/12 14:05		2015/05/13 15:10		
COC Number		08407236	08407236		08407236		
	Units	**MW06-9M**	**MW06-10S**	**RDL**	**MW06-12S**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	13.0	10.3	3.0	106	3.0	7903097
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.0°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7904468	Turbidity	2015/05/16			101	80 - 120	<0.10	NTU	NC	20
7904732	Total Ammonia (N)	2015/05/20	95	80 - 120	106	80 - 120	<0.0050	mg/L	NC	20
7904745	Nitrate plus Nitrite (N)	2015/05/16	NC	80 - 120	104	80 - 120	0.0026, RDL=0.0020	mg/L	NC	25
7904746	Nitrite (N)	2015/05/16	NC	80 - 120	101	80 - 120	<0.0020	mg/L	NC	25
7905293	Total Dissolved Solids	2015/05/20	99	80 - 120	90	80 - 120	<10	mg/L	NC	20
7905307	Total Suspended Solids	2015/05/20	117	80 - 120	102	80 - 120	<4.0	mg/L	20	20
7905691	Fluoride (F)	2015/05/19	NC	80 - 120	100	80 - 120	<0.010	mg/L	NC	20
7905976	Dissolved Chloride (Cl)	2015/05/19	111	80 - 120	97	80 - 120	<0.50	mg/L	NC	20
7905978	Dissolved Sulphate (SO4)	2015/05/19	NC	80 - 120	91	80 - 120	<0.50	mg/L	2.6	20
7906082	Total Suspended Solids	2015/05/21	100	80 - 120	107	80 - 120	<4.0	mg/L	NC	20
7906083	Total Suspended Solids	2015/05/21	99	80 - 120	105	80 - 120	<4.0	mg/L	NC	20
7906089	Total Dissolved Solids	2015/05/21	98	80 - 120	114	80 - 120	<10	mg/L	18	20
7906132	Alkalinity (PP as CaCO3)	2015/05/20					<0.50	mg/L	NC	20
7906132	Alkalinity (Total as CaCO3)	2015/05/20	NC	80 - 120	97	80 - 120	<0.50	mg/L	0.62	20
7906132	Bicarbonate (HCO3)	2015/05/20					<0.50	mg/L	0.62	20
7906132	Carbonate (CO3)	2015/05/20					<0.50	mg/L	NC	20
7906132	Hydroxide (OH)	2015/05/20					<0.50	mg/L	NC	20
7906134	pH	2015/05/20			101	97 - 103			0.50	N/A
7906135	Conductivity	2015/05/20			102	80 - 120	1.0, RDL=1.0	uS/cm	0.71	20
7906148	Orthophosphate (P)	2015/05/19	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
7906159	Dissolved Phosphorus (P)	2015/05/19	104	80 - 120	93	80 - 120	<0.0020	mg/L	NC	20
7906737	Bromide (Br)	2015/05/21	102	78 - 120	102	80 - 120	<0.010	mg/L	NC	20
7906820	Bromide (Br)	2015/05/20	116	78 - 120	99	80 - 120	<0.010	mg/L	NC	20
7906912	Dissolved Aluminum (Al)	2015/05/20	102	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20
7906912	Dissolved Antimony (Sb)	2015/05/20	102	80 - 120	104	80 - 120	<0.000020	mg/L	NC	20
7906912	Dissolved Arsenic (As)	2015/05/20	106	80 - 120	102	80 - 120	<0.000020	mg/L	1.6	20
7906912	Dissolved Barium (Ba)	2015/05/20	NC	80 - 120	107	80 - 120	<0.000020	mg/L	7.1	20
7906912	Dissolved Beryllium (Be)	2015/05/20	101	80 - 120	99	80 - 120	<0.000010	mg/L	NC	20
7906912	Dissolved Bismuth (Bi)	2015/05/20	95	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7906912	Dissolved Boron (B)	2015/05/20					<0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7906912	Dissolved Cadmium (Cd)	2015/05/20	93	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7906912	Dissolved Chromium (Cr)	2015/05/20	98	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
7906912	Dissolved Cobalt (Co)	2015/05/20	94	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7906912	Dissolved Copper (Cu)	2015/05/20	92	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7906912	Dissolved Iron (Fe)	2015/05/20	102	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
7906912	Dissolved Lead (Pb)	2015/05/20	102	80 - 120	106	80 - 120	<0.0000050	mg/L	NC	20
7906912	Dissolved Lithium (Li)	2015/05/20	102	80 - 120	108	80 - 120	<0.00050	mg/L	NC	20
7906912	Dissolved Manganese (Mn)	2015/05/20	96	80 - 120	98	80 - 120	<0.000050	mg/L	3.2	20
7906912	Dissolved Molybdenum (Mo)	2015/05/20	NC	80 - 120	98	80 - 120	<0.000050	mg/L	1.1	20
7906912	Dissolved Nickel (Ni)	2015/05/20	95	80 - 120	99	80 - 120	<0.000020	mg/L	2.0	20
7906912	Dissolved Phosphorus (P)	2015/05/20					<0.0020	mg/L	NC	20
7906912	Dissolved Selenium (Se)	2015/05/20	96	80 - 120	96	80 - 120	<0.000040	mg/L	0.034	20
7906912	Dissolved Silicon (Si)	2015/05/20					<0.050	mg/L	2.5	20
7906912	Dissolved Silver (Ag)	2015/05/20	98	80 - 120	88	80 - 120	<0.0000050	mg/L	NC	20
7906912	Dissolved Strontium (Sr)	2015/05/20	NC	80 - 120	96	80 - 120	<0.000050	mg/L	3.0	20
7906912	Dissolved Thallium (Tl)	2015/05/20	87	80 - 120	100	80 - 120	<0.0000020	mg/L	NC	20
7906912	Dissolved Tin (Sn)	2015/05/20	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
7906912	Dissolved Titanium (Ti)	2015/05/20	95	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20
7906912	Dissolved Uranium (U)	2015/05/20	100	80 - 120	104	80 - 120	<0.0000020	mg/L	0.33	20
7906912	Dissolved Vanadium (V)	2015/05/20	101	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
7906912	Dissolved Zinc (Zn)	2015/05/20	91	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
7906912	Dissolved Zirconium (Zr)	2015/05/20					<0.00010	mg/L	NC	20
7906927	Acidity (pH 4.5)	2015/05/20					<0.50	mg/L	NC	20
7906927	Acidity (pH 8.3)	2015/05/20			95	80 - 120	<0.50	mg/L	3.0	20
7907167	Dissolved Aluminum (Al)	2015/05/23	109	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
7907167	Dissolved Antimony (Sb)	2015/05/23	101	80 - 120	109	80 - 120	<0.000020	mg/L	NC	20
7907167	Dissolved Arsenic (As)	2015/05/23	103	80 - 120	106	80 - 120	<0.000020	mg/L	NC	20
7907167	Dissolved Barium (Ba)	2015/05/23	103	80 - 120	108	80 - 120	<0.000020	mg/L	NC	20
7907167	Dissolved Beryllium (Be)	2015/05/23	96	80 - 120	99	80 - 120	<0.000010	mg/L	NC	20
7907167	Dissolved Bismuth (Bi)	2015/05/23	103	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7907167	Dissolved Boron (B)	2015/05/23					<0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7907167	Dissolved Cadmium (Cd)	2015/05/23	101	80 - 120	105	80 - 120	<0.0000050	mg/L	NC	20
7907167	Dissolved Chromium (Cr)	2015/05/23	99	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
7907167	Dissolved Cobalt (Co)	2015/05/23	99	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7907167	Dissolved Copper (Cu)	2015/05/23	101	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20
7907167	Dissolved Iron (Fe)	2015/05/23	110	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
7907167	Dissolved Lead (Pb)	2015/05/23	104	80 - 120	106	80 - 120	<0.0000050	mg/L	NC	20
7907167	Dissolved Lithium (Li)	2015/05/23	101	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7907167	Dissolved Manganese (Mn)	2015/05/23	101	80 - 120	104	80 - 120	<0.000050	mg/L	NC	20
7907167	Dissolved Molybdenum (Mo)	2015/05/23	105	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7907167	Dissolved Nickel (Ni)	2015/05/23	99	80 - 120	102	80 - 120	<0.000020	mg/L	NC	20
7907167	Dissolved Phosphorus (P)	2015/05/23					0.012, RDL=0.010 (1)	mg/L		
7907167	Dissolved Selenium (Se)	2015/05/23	103	80 - 120	101	80 - 120	<0.000040	mg/L	NC	20
7907167	Dissolved Silicon (Si)	2015/05/23					<0.050	mg/L	NC	20
7907167	Dissolved Silver (Ag)	2015/05/23	98	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7907167	Dissolved Strontium (Sr)	2015/05/23	100	80 - 120	104	80 - 120	<0.000050	mg/L	NC	20
7907167	Dissolved Thallium (Tl)	2015/05/23	100	80 - 120	102	80 - 120	<0.0000020	mg/L	NC	20
7907167	Dissolved Tin (Sn)	2015/05/23	103	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7907167	Dissolved Titanium (Ti)	2015/05/23	96	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7907167	Dissolved Uranium (U)	2015/05/23	102	80 - 120	102	80 - 120	<0.0000020	mg/L	NC	20
7907167	Dissolved Vanadium (V)	2015/05/23	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
7907167	Dissolved Zinc (Zn)	2015/05/23	105	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
7907167	Dissolved Zirconium (Zr)	2015/05/23					<0.00010	mg/L	NC	20
7907298	Dissolved Sulphate (SO4)	2015/05/20			96	80 - 120	<0.50	mg/L	2.1	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7908282	Dissolved Mercury (Hg)	2015/05/22	92	80 - 120	91	80 - 120	<0.010	ug/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) BLANK outside acceptance criteria, detection limit adjusted accordingly

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B540498
Report Date: 2015/05/29

YUKON ZINC CORPORATION
Your P.O. #: 108376
Sampler Initials: MA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B540498

ANALYSIS REQU

08407236

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #410-700 West Pender, Vancouver, BC, V6C 1G8	TEL.: 604-638-0921 Ext. 5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Margaret Ayles	PROJECT MANAGER: Malcom Swallow/Alex Wu
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW05-3B	MG3461	X					13-May-15	16:40	5	X	X	X	X	X	X	X
2	MW05-4A	MG3462	X					12-May-15	16:25	5	X	X	X	X	X	X	X
3	MW05-4B	MG3463	X					12-May-15	15:45	5	X	X	X	X	X	X	X
4	MW06-9S	MG3464	X					13-May-15	13:15	5	X	X	X	X	X	X	X
5	MW06-9M	MG3465	X					13-May-15	14:00	5	X	X	X	X	X	X	X
9	MW06-10S	MG3466	X					12-May-15	14:05	5	X	X	X	X	X	X	X
10	MW06-12S	MG3467	X					13-May-15	15:10	5	X	X	X	X	X	X	X
11																	
12																	
13																	
14																	
15																	

B540498

TAT (Turnaround Time)

LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL

* Some exceptions apply - please contact laboratory

- 5 BUSINESS DAYS [X]
- 3 BUSINESS DAYS [ ]
- 2 BUSINESS DAYS [ ]
- STANDARD 1 BUSINESS DAY [ ]
- RUSH
- RUSH
- URGENT
- OTHER BUSINESS DAYS

PO NUMBER OR QUOTE NUMBER: 108376

ACCOUNTING CONTACT:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

- CCME [ ]
- CSR [ ]
- AB TIER 1 [ ]
- OTHER [ ]

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 2,1,3 (S:NA)

DUE DATE:

LOG IN CHECK:

RELINQUINSHED BY SAMPLER: Margaret Ayles	DATE: DD/MM/YY 14/05/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY: Margaret Ayles	DATE: DD/MM/YY 14/05/2015	TIME: 7:30	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurel Berthier 2015/05/15 12:35

COCFORM - BC - 20070828

STUDY

JORD

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your C.O.C. #: 08407392

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/08
Report #: R1972564
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B542512
Received: 2015/05/22, 10:10

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	3	N/A	2015/05/25	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	3	2015/05/23	2015/05/23	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	3	N/A	2015/05/25	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	3	N/A	2015/05/23	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	3	N/A	2015/05/25	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2015/06/02	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	3	N/A	2015/05/27	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	3	N/A	2015/05/27	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	3	N/A	2015/06/02	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	3	N/A	2015/06/01	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	3	N/A	2015/05/28	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	3	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	3	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	3	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	3	N/A	2015/05/26	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	3	N/A	2015/05/23	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	3	N/A	2015/05/25	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	3	N/A	2015/05/25	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	3	2015/05/24	2015/05/26	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - UF/UP	3	2015/05/26	2015/05/26	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	3	N/A	2015/05/26	BBY6SOP-00034	SM 22 2540 D
Turbidity	3	N/A	2015/05/23	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08407392

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/08
Report #: R1972564
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B542512
Received: 2015/05/22, 10:10

Encryption Key

Graham Rudkin
16 Jun 2015 14:44:56 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MH3547		MH3548	MH3549		
Sampling Date		2015/05/17 14:25		2015/05/17 14:25	2015/05/17 15:55		
COC Number		08407392		08407392	08407392		
	Units	MW05-5A	QC Batch	MW05-5A-96	MW06-11S	RDL	QC Batch
Misc. Inorganics							
Acidity (pH 4.5)	mg/L	<0.50	7912662	<0.50	<0.50	0.50	7912662
Acidity (pH 8.3)	mg/L	<0.50	7912662	<0.50	<0.50	0.50	7912662
Fluoride (F)	mg/L	1.40	7912168	1.40	2.40	0.010	7912168
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	7909101	<0.20	<0.20	0.20	7909101
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	208	7909082	210	222	0.50	7909082
Alkalinity (Total as CaCO3)	mg/L	162	7910847	164	187	0.50	7910844
Alkalinity (PP as CaCO3)	mg/L	<0.50	7910847	<0.50	<0.50	0.50	7910844
Bicarbonate (HCO3)	mg/L	197	7910847	201	228	0.50	7910844
Carbonate (CO3)	mg/L	<0.50	7910847	<0.50	<0.50	0.50	7910844
Hydroxide (OH)	mg/L	<0.50	7910847	<0.50	<0.50	0.50	7910844
Anions							
Orthophosphate (P)	mg/L	0.0050 (1)	7912289	0.0056 (1)	0.0013 (1)	0.0010	7912289
Dissolved Sulphate (SO4)	mg/L	30.0	7912534	29.2	37.0	0.50	7912534
Dissolved Chloride (Cl)	mg/L	<0.50	7912532	<0.50	0.71	0.50	7912532
Nutrients							
Total Ammonia (N)	mg/L	0.066	7916107	0.070	0.21	0.0050	7916107
Dissolved Phosphorus (P)	mg/L	0.0117 (1)	7914774	0.0117 (1)	0.0524 (1)	0.0020	7914774
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7910902	<0.20 (2)	<0.20 (2)	0.20	7910902
Nitrite (N)	mg/L	<0.20 (2)	7910903	<0.20 (2)	0.25 (2)	0.20	7910903
Physical Properties							
Conductivity	uS/cm	375	7910846	378	436	1.0	7910842
pH	pH	7.96	7910845	8.04	8.05	N/A	7910840
Physical Properties							
Total Suspended Solids	mg/L	<4.0 (3)	7910240	<4.0 (3)	<4.0 (3)	4.0	7910240
Total Dissolved Solids	mg/L	186	7911062	224	268	10	7911062
Turbidity	NTU	0.14 (1)	7910841	0.22 (1)	8.27 (1)	0.10	7910841

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(3) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MH3547	MH3548	MH3549		
Sampling Date		2015/05/17 14:25	2015/05/17 14:25	2015/05/17 15:55		
COC Number		08407392	08407392	08407392		
	Units	MW05-5A	MW05-5A-96	MW06-11S	RDL	QC Batch
Elements						
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	0.010	7914490
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3547	MH3548	MH3549		
Sampling Date		2015/05/17 14:25	2015/05/17 14:25	2015/05/17 15:55		
COC Number		08407392	08407392	08407392		
	Units	MW05-5A	MW05-5A-96	MW06-11S	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	0.010	7912791
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.00586	0.00544	0.00413	0.00050	7912029
Dissolved Antimony (Sb)	mg/L	0.00778	0.00781	0.000028	0.000020	7912029
Dissolved Arsenic (As)	mg/L	0.00319	0.00326	0.00614	0.000020	7912029
Dissolved Barium (Ba)	mg/L	0.0692	0.0715	0.0499	0.000020	7912029
Dissolved Beryllium (Be)	mg/L	0.000010	0.000011	<0.000010	0.000010	7912029
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7912029
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	0.010	7912029
Dissolved Cadmium (Cd)	mg/L	0.00285	0.00282	<0.0000050	0.0000050	7912029
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	7912029
Dissolved Cobalt (Co)	mg/L	0.00169	0.00167	0.000402	0.0000050	7912029
Dissolved Copper (Cu)	mg/L	0.00145	0.00145	<0.000050	0.000050	7912029
Dissolved Iron (Fe)	mg/L	0.0351	0.0324	1.82	0.0010	7912029
Dissolved Lead (Pb)	mg/L	0.000586	0.000206	0.0000060	0.0000050	7912029
Dissolved Lithium (Li)	mg/L	0.00195	0.00196	0.00164	0.00050	7912029
Dissolved Manganese (Mn)	mg/L	0.251	0.251	0.118	0.000050	7912029
Dissolved Molybdenum (Mo)	mg/L	0.00672	0.00660	0.0151	0.000050	7912029
Dissolved Nickel (Ni)	mg/L	0.0112	0.0109	0.000599	0.000020	7912029
Dissolved Phosphorus (P)	mg/L	0.0104	0.0087	0.0371	0.0020	7912029
Dissolved Selenium (Se)	mg/L	0.000579	0.000572	<0.000040	0.000040	7912029
Dissolved Silicon (Si)	mg/L	3.40	3.44	5.82	0.050	7912029
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000070	<0.0000050	0.0000050	7912029
Dissolved Strontium (Sr)	mg/L	0.121	0.122	0.118	0.000050	7912029
Dissolved Thallium (Tl)	mg/L	0.0000340	0.0000360	0.0000040	0.0000020	7912029
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7912029
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	7912029
Dissolved Uranium (U)	mg/L	0.0254	0.0251	0.00561	0.0000020	7912029
Dissolved Vanadium (V)	mg/L	0.00028	0.00026	<0.00020	0.00020	7912029
Dissolved Zinc (Zn)	mg/L	0.235	0.234	0.00012	0.00010	7912029
Dissolved Zirconium (Zr)	mg/L	0.00046	0.00053	0.00019	0.00010	7912029
Dissolved Calcium (Ca)	mg/L	57.7	58.3	62.4	0.050	7909445
Dissolved Magnesium (Mg)	mg/L	15.4	15.7	16.2	0.050	7909445
Dissolved Potassium (K)	mg/L	2.54	2.51	1.62	0.050	7909445
Dissolved Sodium (Na)	mg/L	0.349	0.339	2.58	0.050	7909445
Dissolved Sulphur (S)	mg/L	9.5	12.1	13.5	3.0	7909445
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.7°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7910240	Total Suspended Solids	2015/05/26	99	80 - 120	101	80 - 120	<4.0	mg/L	NC	20
7910840	pH	2015/05/23			102	97 - 103			0.25	N/A
7910841	Turbidity	2015/05/23			102	80 - 120	<0.10	NTU	NC	20
7910842	Conductivity	2015/05/23			97	80 - 120	<1.0	uS/cm	0.93	20
7910844	Alkalinity (PP as CaCO3)	2015/05/23					<0.50	mg/L	NC	20
7910844	Alkalinity (Total as CaCO3)	2015/05/23	NC	80 - 120	91	80 - 120	<0.50	mg/L	0.17	20
7910844	Bicarbonate (HCO3)	2015/05/23					<0.50	mg/L	0.17	20
7910844	Carbonate (CO3)	2015/05/23					<0.50	mg/L	NC	20
7910844	Hydroxide (OH)	2015/05/23					<0.50	mg/L	NC	20
7910845	pH	2015/05/23			101	97 - 103				
7910846	Conductivity	2015/05/23			99	80 - 120	<1.0	uS/cm		
7910847	Alkalinity (PP as CaCO3)	2015/05/23					<0.50	mg/L	NC	20
7910847	Alkalinity (Total as CaCO3)	2015/05/23	107	80 - 120	90	80 - 120	0.53, RDL=0.50	mg/L	0.59	20
7910847	Bicarbonate (HCO3)	2015/05/23					0.65, RDL=0.50	mg/L	0.59	20
7910847	Carbonate (CO3)	2015/05/23					<0.50	mg/L	NC	20
7910847	Hydroxide (OH)	2015/05/23					<0.50	mg/L	NC	20
7910902	Nitrate plus Nitrite (N)	2015/05/23			101	80 - 120	<0.0020	mg/L		
7910903	Nitrite (N)	2015/05/23			102	80 - 120	<0.0020	mg/L		
7911062	Total Dissolved Solids	2015/05/26	101	80 - 120	106	80 - 120	12, RDL=10	mg/L	3.3	20
7912029	Dissolved Aluminum (Al)	2015/06/01	98	80 - 120	97	80 - 120	<0.00050	mg/L		
7912029	Dissolved Antimony (Sb)	2015/06/01	105	80 - 120	106	80 - 120	<0.000020	mg/L		
7912029	Dissolved Arsenic (As)	2015/06/01	99	80 - 120	96	80 - 120	<0.000020	mg/L		
7912029	Dissolved Barium (Ba)	2015/06/01	103	80 - 120	100	80 - 120	<0.000020	mg/L		
7912029	Dissolved Beryllium (Be)	2015/06/01	96	80 - 120	100	80 - 120	<0.000010	mg/L		
7912029	Dissolved Bismuth (Bi)	2015/06/01	100	80 - 120	94	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Boron (B)	2015/06/01					<0.010	mg/L		
7912029	Dissolved Cadmium (Cd)	2015/06/01	99	80 - 120	101	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Chromium (Cr)	2015/06/01	97	80 - 120	97	80 - 120	<0.00010	mg/L		
7912029	Dissolved Cobalt (Co)	2015/06/01	95	80 - 120	94	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Copper (Cu)	2015/06/01	88	80 - 120	91	80 - 120	<0.000050	mg/L		
7912029	Dissolved Iron (Fe)	2015/06/01	NC	80 - 120	109	80 - 120	<0.0010	mg/L	0.21	20
7912029	Dissolved Lead (Pb)	2015/06/01	98	80 - 120	94	80 - 120	<0.0000050	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7912029	Dissolved Lithium (Li)	2015/06/01	98	80 - 120	105	80 - 120	<0.00050	mg/L		
7912029	Dissolved Manganese (Mn)	2015/06/01	102	80 - 120	102	80 - 120	<0.000050	mg/L	0.40	20
7912029	Dissolved Molybdenum (Mo)	2015/06/01	NC	80 - 120	98	80 - 120	<0.000050	mg/L		
7912029	Dissolved Nickel (Ni)	2015/06/01	90	80 - 120	92	80 - 120	<0.000020	mg/L		
7912029	Dissolved Phosphorus (P)	2015/06/01					<0.0020	mg/L		
7912029	Dissolved Selenium (Se)	2015/06/01	97	80 - 120	96	80 - 120	<0.000040	mg/L		
7912029	Dissolved Silicon (Si)	2015/06/01					<0.050	mg/L		
7912029	Dissolved Silver (Ag)	2015/06/01	101	80 - 120	88	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Strontium (Sr)	2015/06/01	NC	80 - 120	101	80 - 120	<0.000050	mg/L		
7912029	Dissolved Thallium (Tl)	2015/06/01	102	80 - 120	90	80 - 120	<0.0000020	mg/L		
7912029	Dissolved Tin (Sn)	2015/06/01	103	80 - 120	98	80 - 120	<0.00020	mg/L		
7912029	Dissolved Titanium (Ti)	2015/06/01	92	80 - 120	97	80 - 120	<0.00050	mg/L		
7912029	Dissolved Uranium (U)	2015/06/01	99	80 - 120	92	80 - 120	<0.0000020	mg/L		
7912029	Dissolved Vanadium (V)	2015/06/01	97	80 - 120	99	80 - 120	<0.00020	mg/L		
7912029	Dissolved Zinc (Zn)	2015/06/01	98	80 - 120	104	80 - 120	<0.00010	mg/L		
7912029	Dissolved Zirconium (Zr)	2015/06/01					<0.00010	mg/L		
7912168	Fluoride (F)	2015/05/25	NC	80 - 120	98	80 - 120	<0.010	mg/L	0	20
7912289	Orthophosphate (P)	2015/05/25	85	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
7912532	Dissolved Chloride (Cl)	2015/05/25	NC	80 - 120	100	80 - 120	<0.50	mg/L	1.9	20
7912534	Dissolved Sulphate (SO4)	2015/05/25	NC	80 - 120	93	80 - 120	<0.50	mg/L	2.3	20
7912662	Acidity (pH 4.5)	2015/05/25					<0.50	mg/L	NC	20
7912662	Acidity (pH 8.3)	2015/05/25			99	80 - 120	<0.50	mg/L	NC	20
7912791	Bromide (Br)	2015/05/27	117	78 - 120	107	80 - 120	<0.010	mg/L	NC	20
7914490	Dissolved Mercury (Hg)	2015/05/27	101	80 - 120	106	80 - 120	<0.010	ug/L	NC	20
7914774	Dissolved Phosphorus (P)	2015/05/26	111	80 - 120	100	80 - 120	<0.0020	mg/L	4.0	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7916107	Total Ammonia (N)	2015/05/28	NC	80 - 120	111	80 - 120	0.0093, RDL=0.0050	mg/L	0.064	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542512
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B542512

ANALYSIS REQUE

08407392

COMPANY NAME:	CLIENT PROJECT NO.:
Yukon Zinc Corporation	
COMPANY ADDRESS: #701-475 Howe Street, Vancouver, BC, V6C 2B3	TEL.: 604-638-0921 Ext. 5022
	E-MAIL: YZC Group
	FAX: 604-682-5404
SAMPLER NAME (PRINT): Margaret Ayles	PROJECT MANAGER: Malcom Swallow/ Alex Wu
	LABORATORY CONTACT: Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc, P, Hg)	Hardness	TDS, TSS
1	MW05-5A	MH3547	X					17-May-15	14:25	5	X	X	X	X	X	X	X
2	MW05-5A-96	MH3548	X					17-May-15	14:25	5	X	X	X	X	X	X	X
3	MW06-11S	MH3549	X					17-May-15	15:55	5	X	X	X	X	X	X	X
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

B542512

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 2,3,3 CS:LA
DUE DATE:
LOG IN CHECK:

	DATE: DD/MM/YY	TIME:	
RELINQUISHED BY SAMPLER: Margaret Ayles	21/05/2015	7:30	RECEIVED BY:
RELINQUISHED BY: Margaret Ayles	21/05/2015	7:30	RECEIVED BY:
RELINQUISHED BY:			RECEIVED BY LABORATORY: Laurel Berthier 2015/05/22 10:10

CCCFORM - BC - 20070822

Your C.O.C. #: 08407391

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/08
Report #: R1972566
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B542529
Received: 2015/05/22, 10:10

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	7	N/A	2015/05/25	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	7	2015/05/23	2015/05/23	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	7	N/A	2015/05/25	BBY6SOP-00011	SM 22 4500-Cl- G m
Cyanide SAD (strong acid dissociable)	2	N/A	2015/05/28	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	2	N/A	2015/05/28	BBY6SOP-00004	SM 22 4500-CN O
Carbon (DOC) - field filtered/preserved (1)	3	N/A	2015/05/27	BBY6SOP-00003	SM 22 5310 C m
Conductance - water	7	N/A	2015/05/23	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	7	N/A	2015/05/25	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	3	N/A	2015/05/27	BBY7SOP-00002	EPA 6020a R1 m
Hardness Total (calculated as CaCO3)	4	N/A	2015/06/02	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	6	N/A	2015/06/02	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	1	N/A	2015/06/04	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	7	N/A	2015/05/27	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	7	2015/05/27	2015/05/27	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	7	N/A	2015/05/27	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	6	N/A	2015/06/02	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	1	N/A	2015/06/04	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	7	N/A	2015/06/01	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Digested LL (total)	1	2015/05/25	2015/06/01	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Digested LL (total)	3	2015/05/25	2015/06/02	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	3	N/A	2015/05/27	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	4	N/A	2015/06/02	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	3	N/A	2015/05/27	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	7	N/A	2015/05/28	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	7	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	7	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	7	N/A	2015/05/23	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	1	N/A	2015/05/23	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	6	N/A	2015/05/26	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (2)	7	N/A	2015/05/23	BBY6SOP-00026	SM 22 4500-H+ B m

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08407391

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/08
Report #: R1972566
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B542529
Received: 2015/05/22, 10:10

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Orthophosphate by Konelab (low level)	7	N/A	2015/05/25	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	6	N/A	2015/05/25	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/05/26	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	3	2015/05/24	2015/05/26	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	4	2015/05/26	2015/05/27	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - UF/UP	7	2015/05/26	2015/05/26	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	7	N/A	2015/05/26	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	3	N/A	2015/05/26	BBY6SOP-00034	SM 22 2540 D
Total Suspended Solids	4	N/A	2015/05/27	BBY6SOP-00034	SM 22 2540 D
Turbidity	7	N/A	2015/05/23	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) DOC present in the sample should be considered as non-purgeable DOC.
(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin
16 Jun 2015 14:45:23 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MH3600			MH3601		MH3602		
Sampling Date		2015/05/15 16:53			2015/05/20 09:15		2015/05/16 14:40		
COC Number		08407391			08407391		08407391		
	Units	T1	RDL	QC Batch	W22	QC Batch	W31	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	0.50	7912662	<0.50	7912662	<0.50	0.50	7912662
Acidity (pH 8.3)	mg/L	0.64	0.50	7912662	<0.50	7912662	<0.50	0.50	7912662
Fluoride (F)	mg/L	0.062	0.010	7912168	0.046	7912168	0.020	0.010	7912168
Calculated Parameters									
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	329	0.50	7908956	43.3	7908956	28.8	0.50	7908956
Nitrate (N)	mg/L	0.45	0.20	7909101	<0.20	7909101	<0.20	0.20	7909101
Misc. Inorganics									
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.0248	0.00050	7915961		7915961	0.00098	0.00050	7915961
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.00153	0.00050	7915966		7915966	0.00059	0.00050	7915966
Dissolved Hardness (CaCO3)	mg/L	345	0.50	7909082	41.5	7909082	30.7	0.50	7920229
Dissolved Organic Carbon (C)	mg/L	3.57	0.50	7914604		7914604	4.78	0.50	7914604
Alkalinity (Total as CaCO3)	mg/L	16.3	0.50	7910844	34.8	7910844	28.3	0.50	7910844
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Bicarbonate (HCO3)	mg/L	19.9	0.50	7910844	42.4	7910844	34.6	0.50	7910844
Carbonate (CO3)	mg/L	<0.50	0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Hydroxide (OH)	mg/L	<0.50	0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Anions									
Orthophosphate (P)	mg/L	<0.0010 (1)	0.0010	7912289	<0.0010 (2)	7912289	0.0016 (1)	0.0010	7912289
Dissolved Sulphate (SO4)	mg/L	283	5.0	7912534	8.31	7912534	0.97	0.50	7912534
Dissolved Chloride (Cl)	mg/L	58	0.50	7912532	0.57	7912532	<0.50	0.50	7912532
Nutrients									
Total Ammonia (N)	mg/L	0.22	0.0050	7916104	0.016	7916111	0.0096	0.0050	7916104
Dissolved Phosphorus (P)	mg/L	0.0456 (1)	0.0020	7914774	0.0199 (2)	7914774	0.0121 (1)	0.0020	7914774
Nitrate plus Nitrite (N)	mg/L	0.45 (3)	0.20	7910899	<0.20 (4)	7910899	<0.20 (3)	0.20	7910899
Nitrite (N)	mg/L	<0.20 (3)	0.20	7910901	<0.20 (4)	7910901	<0.20 (3)	0.20	7910901
Total Phosphorus (P)	mg/L	0.0497	0.0020	7914803	0.0214	7914803	0.0133	0.0020	7914803
Physical Properties									
Conductivity	uS/cm	762	1.0	7910842	88.9	7910842	60.7	1.0	7910842
pH	pH	7.21	N/A	7910840	7.58	7910840	7.54	N/A	7910840

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) Sample analysed past recommended hold time.
(3) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(4) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MH3600			MH3601		MH3602		
Sampling Date		2015/05/15 16:53			2015/05/20 09:15		2015/05/16 14:40		
COC Number		08407391			08407391		08407391		
	Units	T1	RDL	QC Batch	W22	QC Batch	W31	RDL	QC Batch
Physical Properties									
Total Suspended Solids	mg/L	12.3 (1)	4.0	7910240	6.3	7912192	<4.0 (2)	4.0	7910240
Total Dissolved Solids	mg/L	582 (2)	10	7911062	86	7912187	60 (2)	10	7911062
Turbidity	NTU	10.4 (3)	0.10	7910841	1.11	7910841	0.25 (3)	0.10	7910857

RDL = Reportable Detection Limit

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(2) Sample analysed past recommended hold time.

(3) Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MH3603		MH3604		MH3605		MH3606		
Sampling Date		2015/05/20 11:26		2015/05/20 11:54		2015/05/20 12:38		2015/05/16 11:58		
COC Number		08407391		08407391		08407391		08407391		
	Units	W71	QC Batch	W72	QC Batch	W73	QC Batch	W82	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7912662	<0.50	7912662	<0.50	7912662	<0.50	0.50	7912662
Acidity (pH 8.3)	mg/L	<0.50	7912662	<0.50	7912662	<0.50	7912662	<0.50	0.50	7912662
Fluoride (F)	mg/L	0.560	7912168	0.140	7912168	0.035	7912168	0.100	0.010	7912168
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	256	7908956	118	7908956	59.2	7908956	48.1	0.50	7908956
Nitrate (N)	mg/L	<0.20	7909101	<0.20	7909101	<0.20	7909101	<0.20	0.20	7909101
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	272	7910375	132	7910375	61.1	7910375	47.8	0.50	7910375
Dissolved Organic Carbon (C)	mg/L						7914604	4.89	0.50	7914604
Alkalinity (Total as CaCO3)	mg/L	199	7910844	85.7	7910844	52.0	7910844	30.1	0.50	7910844
Alkalinity (PP as CaCO3)	mg/L	<0.50	7910844	<0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Bicarbonate (HCO3)	mg/L	243	7910844	105	7910844	63.4	7910844	36.7	0.50	7910844
Carbonate (CO3)	mg/L	<0.50	7910844	<0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Hydroxide (OH)	mg/L	<0.50	7910844	<0.50	7910844	<0.50	7910844	<0.50	0.50	7910844
Anions										
Orthophosphate (P)	mg/L	0.034 (1)	7912289	0.0065 (1)	7912289	0.0016 (1)	7912289	0.014 (2)	0.0010	7912289
Dissolved Sulphate (SO4)	mg/L	78.5	7912534	41.1	7913973	9.49	7912534	16.9	0.50	7912534
Dissolved Chloride (Cl)	mg/L	0.76	7912532	0.89	7912532	<0.50	7912532	0.71	0.50	7912532
Nutrients										
Total Ammonia (N)	mg/L	0.012	7916104	0.019	7916104	0.016	7916104	0.031	0.0050	7916104
Dissolved Phosphorus (P)	mg/L	0.113 (1)	7914774	0.0351 (1)	7914774	0.0117 (1)	7914774	0.0439 (2)	0.0020	7914774
Nitrate plus Nitrite (N)	mg/L	<0.20 (3)	7910899	<0.20 (3)	7910902	<0.20 (3)	7910899	<0.20 (4)	0.20	7910899
Nitrite (N)	mg/L	<0.20 (3)	7910901	0.23 (3)	7910903	<0.20 (3)	7910901	<0.20 (4)	0.20	7910901
Total Phosphorus (P)	mg/L	0.171	7914803	0.0374	7914803	0.0124	7914803	0.0506	0.0020	7914803
Physical Properties										
Conductivity	uS/cm	522	7910842	252	7910842	125	7910842	106	1.0	7910842
pH	pH	8.00	7910840	7.89	7910840	7.80	7910840	7.38	N/A	7910840
Physical Properties										
Total Suspended Solids	mg/L	24.8	7912192	7.0	7912192	<4.0	7912192	<4.0 (1)	4.0	7910240
Total Dissolved Solids	mg/L	362	7912187	196	7912187	92	7912187	82 (1)	10	7911062
Turbidity	NTU	0.65	7910857	1.07	7910857	0.40	7910857	1.12 (2)	0.10	7910857

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample analysed past recommended hold time.
(2) Sample arrived to laboratory past recommended hold time.
(3) RDL raised due to sample matrix interference.
(4) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MH3600	MH3601	MH3602	MH3603	MH3604	MH3605	MH3606		
Sampling Date		2015/05/15 16:53	2015/05/20 09:15	2015/05/16 14:40	2015/05/20 11:26	2015/05/20 11:54	2015/05/20 12:38	2015/05/16 11:58		
COC Number		08407391	08407391	08407391	08407391	08407391	08407391	08407391		
	Units	T1	W22	W31	W71	W72	W73	W82	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7914490
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7914542

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3600			MH3601		MH3602		
Sampling Date		2015/05/15 16:53			2015/05/20 09:15		2015/05/16 14:40		
COC Number		08407391			08407391		08407391		
	Units	T1	RDL	QC Batch	W22	QC Batch	W31	RDL	QC Batch
ANIONS									
Bromide (Br)	mg/L	<0.10	0.10	7912791	<0.010	7912791	<0.010	0.010	7912816
Dissolved Metals by ICPMS									
Dissolved Aluminum (Al)	mg/L	0.00917	0.00050	7912029	0.0237	7912029	0.0510	0.00050	7912029
Dissolved Antimony (Sb)	mg/L	0.00367	0.000020	7912029	0.000038	7912029	0.000034	0.000020	7912029
Dissolved Arsenic (As)	mg/L	0.00145	0.000020	7912029	0.000162	7912029	0.000133	0.000020	7912029
Dissolved Barium (Ba)	mg/L	0.0638	0.000020	7912029	0.0271	7912029	0.00675	0.000020	7912029
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7912029	<0.000010	7912029	0.000015	0.000010	7912029
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7912029	<0.0000050	7912029	<0.0000050	0.0000050	7912029
Dissolved Boron (B)	mg/L	<0.010	0.010	7912029	<0.010	7912029	<0.010	0.010	7912029
Dissolved Cadmium (Cd)	mg/L	0.000354	0.0000050	7912029	0.0000100	7921268	0.0000060	0.0000050	7921268
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7912029	0.00016	7921268	0.00304 (1)	0.00010	7912029
Dissolved Cobalt (Co)	mg/L	0.000249	0.0000050	7912029	0.0000250	7921268	0.0000720 (1)	0.0000050	7912029
Dissolved Copper (Cu)	mg/L	0.0820	0.000050	7912029	0.000950	7912029	0.00311	0.000050	7912029
Dissolved Iron (Fe)	mg/L	0.0105	0.0010	7912029	0.0657	7921268	0.114 (1)	0.0010	7912029
Dissolved Lead (Pb)	mg/L	0.000846	0.0000050	7912029	0.0000280	7912029	0.0000430	0.0000050	7912029
Dissolved Lithium (Li)	mg/L	0.00085	0.00050	7912029	0.00091	7912029	<0.00050	0.00050	7912029
Dissolved Manganese (Mn)	mg/L	0.109	0.000050	7912029	0.00193	7921268	0.00128 (1)	0.000050	7912029
Dissolved Molybdenum (Mo)	mg/L	0.0161	0.000050	7912029	0.000341	7912029	0.000231	0.000050	7912029
Dissolved Nickel (Ni)	mg/L	0.000809	0.000020	7912029	0.00110	7921268	0.00187 (1)	0.000020	7912029
Dissolved Phosphorus (P)	mg/L	0.0184	0.0020	7912029	0.0036	7912029	0.0077	0.0020	7912029
Dissolved Selenium (Se)	mg/L	0.765	0.000040	7912029	0.000208	7912029	0.000132	0.000040	7912029
Dissolved Silicon (Si)	mg/L	0.925	0.050	7912029	2.88	7912029	1.96	0.050	7912029
Dissolved Silver (Ag)	mg/L	0.00130	0.0000050	7912029	<0.0000050	7912029	<0.0000050	0.0000050	7912029
Dissolved Strontium (Sr)	mg/L	0.399	0.000050	7912029	0.0447	7912029	0.00776	0.000050	7912029
Dissolved Thallium (Tl)	mg/L	0.0000720	0.0000020	7912029	0.0000030	7912029	0.0000030	0.0000020	7912029
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7912029	<0.00020	7912029	<0.00020	0.00020	7912029
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7912029	<0.00050	7912029	0.00127	0.00050	7912029
Dissolved Uranium (U)	mg/L	0.0000460	0.0000020	7912029	0.000535	7921268	0.0000180	0.0000020	7912029
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7912029	<0.00020	7912029	0.00035	0.00020	7912029
Dissolved Zinc (Zn)	mg/L	0.0138	0.00010	7912029	0.00080	7912029	0.00044	0.00010	7912029
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7912029	<0.00010	7912029	<0.00010	0.00010	7912029
Dissolved Calcium (Ca)	mg/L	137	0.050	7909445	11.7	7909445	11.2	0.050	7920273
Dissolved Magnesium (Mg)	mg/L	0.841	0.050	7909445	2.96	7909445	0.678	0.050	7920273
Dissolved Potassium (K)	mg/L	5.07	0.050	7909445	0.842	7909445	0.450	0.050	7920273
Dissolved Sodium (Na)	mg/L	15.7	0.050	7909445	0.703	7909445	0.650	0.050	7920273

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3600			MH3601		MH3602		
Sampling Date		2015/05/15 16:53			2015/05/20 09:15		2015/05/16 14:40		
COC Number		08407391			08407391		08407391		
	Units	T1	RDL	QC Batch	W22	QC Batch	W31	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	148	3.0	7909445	3.2	7909445	<3.0	3.0	7920273
Total Metals by ICPMS									
Total Aluminum (Al)	mg/L	0.602	0.0030	7911656	0.150	7911554	0.0764	0.00050	7911554
Total Antimony (Sb)	mg/L	0.00347	0.000050	7911656	0.000035	7911554	0.000022	0.000020	7911554
Total Arsenic (As)	mg/L	0.00197	0.000020	7911656	0.000297	7911554	0.000138	0.000020	7911554
Total Barium (Ba)	mg/L	0.0674	0.00010	7911656	0.0332	7911554	0.00625	0.000020	7911554
Total Beryllium (Be)	mg/L	0.000016	0.000010	7911656	0.000016	7911554	<0.000010	0.000010	7911554
Total Bismuth (Bi)	mg/L	<0.000020	0.000020	7911656	0.0000060	7911554	<0.0000050	0.0000050	7911554
Total Boron (B)	mg/L	<0.050	0.050	7911656	<0.010	7911554	<0.010	0.010	7911554
Total Cadmium (Cd)	mg/L	0.000403	0.0000050	7911656	0.0000250	7911554	0.0000070	0.0000050	7911554
Total Chromium (Cr)	mg/L	0.00229	0.00050	7911656	0.00052	7911554	0.00016	0.00010	7911554
Total Cobalt (Co)	mg/L	0.000863	0.000010	7911656	0.000140	7911554	0.0000370	0.0000050	7911554
Total Copper (Cu)	mg/L	0.0860	0.00020	7911656	0.00129	7911554	0.00282	0.000050	7911554
Total Iron (Fe)	mg/L	1.12	0.0050	7911656	0.334	7911554	0.0247	0.0010	7911554
Total Lead (Pb)	mg/L	0.00571	0.000050	7911656	0.000159	7911554	0.0000510	0.0000050	7911554
Total Lithium (Li)	mg/L	0.00147	0.00050	7911656	0.00109	7911554	<0.00050	0.00050	7911554
Total Manganese (Mn)	mg/L	0.132	0.00010	7911656	0.0267	7911554	0.000679	0.000050	7911554
Total Molybdenum (Mo)	mg/L	0.0155	0.000050	7911656	0.000319	7911554	0.000166	0.000050	7911554
Total Nickel (Ni)	mg/L	0.00241	0.00010	7911656	0.00162	7911554	0.000258	0.000020	7911554
Total Phosphorus (P)	mg/L				0.0204	7911554	0.0151	0.0020	7911554
Total Selenium (Se)	mg/L	0.757	0.000040	7911656	0.000189	7911554	0.000137	0.000040	7911554
Total Silicon (Si)	mg/L	1.82	0.10	7911656	2.92	7911554	1.89	0.050	7911554
Total Silver (Ag)	mg/L	0.00253	0.0000050	7911656	0.0000060	7911554	<0.0000050	0.0000050	7911554
Total Strontium (Sr)	mg/L	0.378	0.000050	7911656	0.0386	7911554	0.00748	0.000050	7911554
Total Thallium (Tl)	mg/L	0.0000830	0.0000020	7911656	0.0000050	7911554	0.0000020	0.0000020	7911554
Total Tin (Sn)	mg/L	<0.00020	0.00020	7911656	<0.00020	7911554	<0.00020	0.00020	7911554
Total Titanium (Ti)	mg/L	0.0477	0.0050	7911656	0.00509	7911554	0.00204	0.00050	7911554
Total Uranium (U)	mg/L	0.0000620	0.0000050	7911656	0.000511	7911554	0.0000090	0.0000020	7911554
Total Vanadium (V)	mg/L	0.00226	0.00050	7911656	0.00048	7911554	0.00043	0.00020	7911554
Total Zinc (Zn)	mg/L	0.0264	0.0010	7911656	0.00207	7911554	0.00046	0.00010	7911554
Total Zirconium (Zr)	mg/L	0.00035	0.00010	7911656	0.00015	7911554	<0.00010	0.00010	7911554
Total Calcium (Ca)	mg/L	130	0.25	7909956	11.9	7909956	10.5	0.050	7909956
Total Magnesium (Mg)	mg/L	1.07	0.25	7909956	3.29	7909956	0.610	0.050	7909956
Total Potassium (K)	mg/L	4.67	0.25	7909956	0.793	7909956	0.442	0.050	7909956
Total Sodium (Na)	mg/L	14.3	0.25	7909956	0.744	7909956	0.587	0.050	7909956
Total Sulphur (S)	mg/L	137	15	7909956	<3.0	7909956	<3.0	3.0	7909956
RDL = Reportable Detection Limit									

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3603	MH3604	MH3605		
Sampling Date		2015/05/20 11:26	2015/05/20 11:54	2015/05/20 12:38		
COC Number		08407391	08407391	08407391		
	Units	W71	W72	W73	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	0.010	7912791
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.00332	0.00961	0.00939	0.00050	7912029
Dissolved Antimony (Sb)	mg/L	0.000424	0.000210	0.000090	0.000020	7912029
Dissolved Arsenic (As)	mg/L	0.000335	0.00117	0.000216	0.000020	7912029
Dissolved Barium (Ba)	mg/L	0.0468	0.0625	0.0382	0.000020	7912029
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	0.000010	7912029
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7912029
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	0.010	7912029
Dissolved Cadmium (Cd)	mg/L	0.00231	0.000138	0.0000070	0.0000050	7912029
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00038	0.00010	7912029
Dissolved Cobalt (Co)	mg/L	0.000199	0.0000480	0.0000230	0.0000050	7912029
Dissolved Copper (Cu)	mg/L	0.00114	0.00140	0.00259	0.000050	7912029
Dissolved Iron (Fe)	mg/L	0.0356	0.0979	0.0566	0.0010	7912029
Dissolved Lead (Pb)	mg/L	0.0000190	0.000131	0.0000240	0.0000050	7912029
Dissolved Lithium (Li)	mg/L	0.00227	0.00140	<0.00050	0.00050	7912029
Dissolved Manganese (Mn)	mg/L	0.0328	0.0281	0.00281	0.000050	7912029
Dissolved Molybdenum (Mo)	mg/L	0.00437	0.00213	0.000377	0.000050	7912029
Dissolved Nickel (Ni)	mg/L	0.0258	0.00458	0.00132	0.000020	7912029
Dissolved Phosphorus (P)	mg/L	0.0161	0.0155	0.0060	0.0020	7912029
Dissolved Selenium (Se)	mg/L	0.00411	0.00124	0.000409	0.000040	7912029
Dissolved Silicon (Si)	mg/L	3.39	2.98	3.30	0.050	7912029
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7912029
Dissolved Strontium (Sr)	mg/L	0.201	0.159	0.0584	0.000050	7912029
Dissolved Thallium (Tl)	mg/L	0.0000040	0.0000020	0.0000020	0.0000020	7912029
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7912029
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	7912029
Dissolved Uranium (U)	mg/L	0.00796	0.000791	0.000132	0.0000020	7912029
Dissolved Vanadium (V)	mg/L	0.00022	0.00024	<0.00020	0.00020	7912029
Dissolved Zinc (Zn)	mg/L	0.461	0.0317	0.00053	0.00010	7912029
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	7912029
Dissolved Calcium (Ca)	mg/L	74.2	35.2	17.4	0.050	7909445
Dissolved Magnesium (Mg)	mg/L	21.2	10.7	4.31	0.050	7909445
Dissolved Potassium (K)	mg/L	0.786	0.805	0.359	0.050	7909445
Dissolved Sodium (Na)	mg/L	0.686	1.03	0.667	0.050	7909445
Dissolved Sulphur (S)	mg/L	27.6	15.8	3.6	3.0	7909445

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3603	MH3604	MH3605		
Sampling Date		2015/05/20 11:26	2015/05/20 11:54	2015/05/20 12:38		
COC Number		08407391	08407391	08407391		
	Units	W71	W72	W73	RDL	QC Batch
Total Metals by ICPMS						
Total Aluminum (Al)	mg/L	0.649	0.109	0.0609	0.0030	7912244
Total Antimony (Sb)	mg/L	0.000586	0.000187	0.000085	0.000050	7912244
Total Arsenic (As)	mg/L	0.00145	0.00151	0.000263	0.000020	7912244
Total Barium (Ba)	mg/L	0.0833	0.0617	0.0363	0.00010	7912244
Total Beryllium (Be)	mg/L	0.000039	<0.000010	<0.000010	0.000010	7912244
Total Bismuth (Bi)	mg/L	<0.000020	<0.000020	<0.000020	0.000020	7912244
Total Boron (B)	mg/L	<0.050	<0.050	<0.050	0.050	7912244
Total Cadmium (Cd)	mg/L	0.00437	0.000243	0.0000130	0.0000050	7912244
Total Chromium (Cr)	mg/L	0.00137	<0.00050	0.00059	0.00050	7912244
Total Cobalt (Co)	mg/L	0.00181	0.000137	0.000054	0.000010	7912244
Total Copper (Cu)	mg/L	0.00543	0.00206	0.00312	0.00020	7912244
Total Iron (Fe)	mg/L	1.79	0.315	0.138	0.0050	7912244
Total Lead (Pb)	mg/L	0.00148	0.000194	0.000121	0.000050	7912244
Total Lithium (Li)	mg/L	0.00288	0.00153	<0.00050	0.00050	7912244
Total Manganese (Mn)	mg/L	0.142	0.0668	0.0220	0.00010	7912244
Total Molybdenum (Mo)	mg/L	0.00424	0.00198	0.000341	0.000050	7912244
Total Nickel (Ni)	mg/L	0.0498	0.00537	0.00155	0.00010	7912244
Total Selenium (Se)	mg/L	0.00405	0.00114	0.000368	0.000040	7912244
Total Silicon (Si)	mg/L	3.34	2.40	2.70	0.10	7912244
Total Silver (Ag)	mg/L	0.0000400	0.0000100	0.0000060	0.0000050	7912244
Total Strontium (Sr)	mg/L	0.203	0.147	0.0549	0.000050	7912244
Total Thallium (Tl)	mg/L	0.0000330	0.0000040	0.0000020	0.0000020	7912244
Total Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7912244
Total Titanium (Ti)	mg/L	0.0121	<0.0050	<0.0050	0.0050	7912244
Total Uranium (U)	mg/L	0.00889	0.000829	0.000148	0.0000050	7912244
Total Vanadium (V)	mg/L	0.00338	0.00052	<0.00050	0.00050	7912244
Total Zinc (Zn)	mg/L	0.632	0.0318	0.0014	0.0010	7912244
Total Zirconium (Zr)	mg/L	0.00062	0.00018	<0.00010	0.00010	7912244
Total Calcium (Ca)	mg/L	65.9	29.7	15.9	0.25	7909956
Total Magnesium (Mg)	mg/L	22.3	10.8	4.73	0.25	7909956
Total Potassium (K)	mg/L	0.82	0.76	0.33	0.25	7909956
Total Sodium (Na)	mg/L	0.74	1.07	0.70	0.25	7909956
Total Sulphur (S)	mg/L	21	<15	<15	15	7909956
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3606		
Sampling Date		2015/05/16 11:58		
COC Number		08407391		
	Units	W82	RDL	QC Batch
ANIONS				
Bromide (Br)	mg/L	<0.010	0.010	7912791
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	mg/L	0.0289	0.00050	7912029
Dissolved Antimony (Sb)	mg/L	0.000440	0.000020	7912029
Dissolved Arsenic (As)	mg/L	0.000683	0.000020	7912029
Dissolved Barium (Ba)	mg/L	0.0671	0.000020	7912029
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7912029
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7912029
Dissolved Boron (B)	mg/L	<0.010	0.010	7912029
Dissolved Cadmium (Cd)	mg/L	0.00111	0.0000050	7912029
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7912029
Dissolved Cobalt (Co)	mg/L	0.000213	0.0000050	7912029
Dissolved Copper (Cu)	mg/L	0.00281	0.000050	7912029
Dissolved Iron (Fe)	mg/L	0.258	0.0010	7912029
Dissolved Lead (Pb)	mg/L	0.000876	0.0000050	7912029
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7912029
Dissolved Manganese (Mn)	mg/L	0.0938	0.000050	7912029
Dissolved Molybdenum (Mo)	mg/L	0.000344	0.000050	7912029
Dissolved Nickel (Ni)	mg/L	0.00775	0.000020	7912029
Dissolved Phosphorus (P)	mg/L	0.0306	0.0020	7912029
Dissolved Selenium (Se)	mg/L	0.00171	0.000040	7912029
Dissolved Silicon (Si)	mg/L	2.37	0.050	7912029
Dissolved Silver (Ag)	mg/L	0.0000080	0.0000050	7912029
Dissolved Strontium (Sr)	mg/L	0.0462	0.000050	7912029
Dissolved Thallium (Tl)	mg/L	0.0000060	0.0000020	7912029
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7912029
Dissolved Titanium (Ti)	mg/L	0.00066	0.00050	7912029
Dissolved Uranium (U)	mg/L	0.0000560	0.0000020	7912029
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7912029
Dissolved Zinc (Zn)	mg/L	0.130	0.00010	7912029
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7912029
Dissolved Calcium (Ca)	mg/L	15.1	0.050	7909445
Dissolved Magnesium (Mg)	mg/L	2.44	0.050	7909445
Dissolved Potassium (K)	mg/L	1.05	0.050	7909445
Dissolved Sodium (Na)	mg/L	0.711	0.050	7909445
Dissolved Sulphur (S)	mg/L	6.3	3.0	7909445
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MH3606		
Sampling Date		2015/05/16 11:58		
COC Number		08407391		
	Units	W82	RDL	QC Batch
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.0705	0.00050	7911554
Total Antimony (Sb)	mg/L	0.000386	0.000020	7911554
Total Arsenic (As)	mg/L	0.000754	0.000020	7911554
Total Barium (Ba)	mg/L	0.0666	0.000020	7911554
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7911554
Total Bismuth (Bi)	mg/L	0.0000060	0.0000050	7911554
Total Boron (B)	mg/L	<0.010	0.010	7911554
Total Cadmium (Cd)	mg/L	0.00118	0.0000050	7911554
Total Chromium (Cr)	mg/L	0.00014	0.00010	7911554
Total Cobalt (Co)	mg/L	0.000266	0.0000050	7911554
Total Copper (Cu)	mg/L	0.00338	0.000050	7911554
Total Iron (Fe)	mg/L	0.411	0.0010	7911554
Total Lead (Pb)	mg/L	0.00161	0.0000050	7911554
Total Lithium (Li)	mg/L	<0.00050	0.00050	7911554
Total Manganese (Mn)	mg/L	0.112	0.000050	7911554
Total Molybdenum (Mo)	mg/L	0.000296	0.000050	7911554
Total Nickel (Ni)	mg/L	0.00785	0.000020	7911554
Total Phosphorus (P)	mg/L	0.0531	0.0020	7911554
Total Selenium (Se)	mg/L	0.00165	0.000040	7911554
Total Silicon (Si)	mg/L	2.22	0.050	7911554
Total Silver (Ag)	mg/L	0.0000230	0.0000050	7911554
Total Strontium (Sr)	mg/L	0.0428	0.000050	7911554
Total Thallium (Tl)	mg/L	0.0000090	0.0000020	7911554
Total Tin (Sn)	mg/L	<0.00020	0.00020	7911554
Total Titanium (Ti)	mg/L	0.00101	0.00050	7911554
Total Uranium (U)	mg/L	0.0000610	0.0000020	7911554
Total Vanadium (V)	mg/L	<0.00020	0.00020	7911554
Total Zinc (Zn)	mg/L	0.119	0.00010	7911554
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7911554
Total Calcium (Ca)	mg/L	15.1	0.050	7909956
Total Magnesium (Mg)	mg/L	2.49	0.050	7909956
Total Potassium (K)	mg/L	0.981	0.050	7909956
Total Sodium (Na)	mg/L	0.731	0.050	7909956
Total Sulphur (S)	mg/L	4.6	3.0	7909956
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.7°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample MH3600-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Sample MH3601, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MH3602, Elements by ICPMS Low Level (dissolved): Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7910240	Total Suspended Solids	2015/05/26	99	80 - 120	101	80 - 120	<4.0	mg/L	NC	20
7910840	pH	2015/05/23			102	97 - 103			0.25	N/A
7910841	Turbidity	2015/05/23			102	80 - 120	<0.10	NTU	NC	20
7910842	Conductivity	2015/05/23			97	80 - 120	<1.0	uS/cm	0.93	20
7910844	Alkalinity (PP as CaCO3)	2015/05/23					<0.50	mg/L	NC	20
7910844	Alkalinity (Total as CaCO3)	2015/05/23	NC	80 - 120	91	80 - 120	<0.50	mg/L	0.17	20
7910844	Bicarbonate (HCO3)	2015/05/23					<0.50	mg/L	0.17	20
7910844	Carbonate (CO3)	2015/05/23					<0.50	mg/L	NC	20
7910844	Hydroxide (OH)	2015/05/23					<0.50	mg/L	NC	20
7910857	Turbidity	2015/05/23			101	80 - 120	<0.10	NTU	NC	20
7910899	Nitrate plus Nitrite (N)	2015/05/23	NC	80 - 120	102	80 - 120	<0.0020	mg/L	4.8	25
7910901	Nitrite (N)	2015/05/23	102	80 - 120	101	80 - 120	<0.0020	mg/L	NC	25
7910902	Nitrate plus Nitrite (N)	2015/05/23			101	80 - 120	<0.0020	mg/L		
7910903	Nitrite (N)	2015/05/23			102	80 - 120	<0.0020	mg/L		
7911062	Total Dissolved Solids	2015/05/26	101	80 - 120	106	80 - 120	12, RDL=10	mg/L	3.3	20
7911554	Total Aluminum (Al)	2015/05/27	103	80 - 120	102	80 - 120	<0.00050	mg/L	0.13	20
7911554	Total Antimony (Sb)	2015/05/27	99	80 - 120	99	80 - 120	<0.000020	mg/L	NC	20
7911554	Total Arsenic (As)	2015/05/27	101	80 - 120	105	80 - 120	<0.000020	mg/L	NC	20
7911554	Total Barium (Ba)	2015/05/27	100	80 - 120	97	80 - 120	<0.000020	mg/L	NC	20
7911554	Total Beryllium (Be)	2015/05/27	100	80 - 120	104	80 - 120	<0.000010	mg/L	NC	20
7911554	Total Bismuth (Bi)	2015/05/27	108	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7911554	Total Boron (B)	2015/05/27					<0.010	mg/L	NC	20
7911554	Total Cadmium (Cd)	2015/05/27	98	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7911554	Total Chromium (Cr)	2015/05/27	97	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
7911554	Total Cobalt (Co)	2015/05/27	96	80 - 120	94	80 - 120	<0.0000050	mg/L	NC	20
7911554	Total Copper (Cu)	2015/05/27	97	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20
7911554	Total Iron (Fe)	2015/05/27	105	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
7911554	Total Lead (Pb)	2015/05/27	102	80 - 120	95	80 - 120	<0.0000050	mg/L	NC	20
7911554	Total Lithium (Li)	2015/05/27	96	80 - 120	94	80 - 120	<0.00050	mg/L	NC	20
7911554	Total Manganese (Mn)	2015/05/27	97	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20
7911554	Total Molybdenum (Mo)	2015/05/27	101	80 - 120	87	80 - 120	<0.000050	mg/L	NC	20
7911554	Total Nickel (Ni)	2015/05/27	98	80 - 120	96	80 - 120	<0.000020	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7911554	Total Phosphorus (P)	2015/05/27					<0.0020	mg/L		
7911554	Total Selenium (Se)	2015/05/27	102	80 - 120	109	80 - 120	<0.000040	mg/L	NC	20
7911554	Total Silicon (Si)	2015/05/27					<0.050	mg/L	NC	20
7911554	Total Silver (Ag)	2015/05/27	98	80 - 120	94	80 - 120	<0.0000050	mg/L	NC	20
7911554	Total Strontium (Sr)	2015/05/27	96	80 - 120	94	80 - 120	<0.000050	mg/L	NC	20
7911554	Total Thallium (Tl)	2015/05/27	103	80 - 120	89	80 - 120	<0.0000020	mg/L	NC	20
7911554	Total Tin (Sn)	2015/05/27	95	80 - 120	91	80 - 120	<0.00020	mg/L	NC	20
7911554	Total Titanium (Ti)	2015/05/27	100	80 - 120	92	80 - 120	<0.00050	mg/L	NC	20
7911554	Total Uranium (U)	2015/05/27	100	80 - 120	93	80 - 120	<0.0000020	mg/L	NC	20
7911554	Total Vanadium (V)	2015/05/27	94	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
7911554	Total Zinc (Zn)	2015/05/27	99	80 - 120	117	80 - 120	<0.00010	mg/L	NC	20
7911554	Total Zirconium (Zr)	2015/05/27					<0.00010	mg/L		
7911656	Total Aluminum (Al)	2015/06/01	NC	80 - 120	101	80 - 120	<0.0030	mg/L	5.2	20
7911656	Total Antimony (Sb)	2015/06/01	108	80 - 120	110	80 - 120	<0.000050	mg/L	NC	20
7911656	Total Arsenic (As)	2015/06/01	100	80 - 120	98	80 - 120	<0.000020	mg/L	5.0	20
7911656	Total Barium (Ba)	2015/06/01	NC	80 - 120	105	80 - 120	<0.00010	mg/L	1.3	20
7911656	Total Beryllium (Be)	2015/06/01	102	80 - 120	98	80 - 120	<0.000010	mg/L	NC	20
7911656	Total Bismuth (Bi)	2015/06/01	103	80 - 120	102	80 - 120	<0.000020	mg/L	NC	20
7911656	Total Boron (B)	2015/06/01					<0.050	mg/L	NC	20
7911656	Total Cadmium (Cd)	2015/06/01	102	80 - 120	102	80 - 120	<0.0000050	mg/L	1.6	20
7911656	Total Chromium (Cr)	2015/06/01	99	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7911656	Total Cobalt (Co)	2015/06/01	100	80 - 120	101	80 - 120	<0.000010	mg/L	1.1	20
7911656	Total Copper (Cu)	2015/06/01	95	80 - 120	104	80 - 120	0.00032, RDL=0.00020	mg/L	4.7	20
7911656	Total Iron (Fe)	2015/06/01	NC	80 - 120	116	80 - 120	<0.0050	mg/L	4.4	20
7911656	Total Lead (Pb)	2015/06/01	102	80 - 120	102	80 - 120	<0.000050	mg/L	NC	20
7911656	Total Lithium (Li)	2015/06/01	107	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
7911656	Total Manganese (Mn)	2015/06/01	NC	80 - 120	108	80 - 120	<0.00010	mg/L	0.43	20
7911656	Total Molybdenum (Mo)	2015/06/01	NC	80 - 120	102	80 - 120	<0.000050	mg/L	9.9	20
7911656	Total Nickel (Ni)	2015/06/01	96	80 - 120	99	80 - 120	<0.00010	mg/L	2.8	20
7911656	Total Selenium (Se)	2015/06/01	102	80 - 120	96	80 - 120	<0.000040	mg/L	8.7	20
7911656	Total Silicon (Si)	2015/06/01					<0.10	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7911656	Total Silver (Ag)	2015/06/01	104	80 - 120	106	80 - 120	<0.0000050	mg/L	NC	20
7911656	Total Strontium (Sr)	2015/06/01	NC	80 - 120	101	80 - 120	<0.000050	mg/L	6.4	20
7911656	Total Thallium (Tl)	2015/06/01	103	80 - 120	99	80 - 120	0.0000020, RDL=0.0000020	mg/L	0	20
7911656	Total Tin (Sn)	2015/06/01	104	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
7911656	Total Titanium (Ti)	2015/06/01	NC	80 - 120	99	80 - 120	<0.0050	mg/L		
7911656	Total Uranium (U)	2015/06/01	100	80 - 120	97	80 - 120	<0.0000050	mg/L	3.4	20
7911656	Total Vanadium (V)	2015/06/01	102	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
7911656	Total Zinc (Zn)	2015/06/01	NC	80 - 120	107	80 - 120	<0.0010	mg/L	2.7	20
7911656	Total Zirconium (Zr)	2015/06/01					<0.00010	mg/L		
7912029	Dissolved Aluminum (Al)	2015/06/01	98	80 - 120	97	80 - 120	<0.00050	mg/L		
7912029	Dissolved Antimony (Sb)	2015/06/01	105	80 - 120	106	80 - 120	<0.000020	mg/L		
7912029	Dissolved Arsenic (As)	2015/06/01	99	80 - 120	96	80 - 120	<0.000020	mg/L		
7912029	Dissolved Barium (Ba)	2015/06/01	103	80 - 120	100	80 - 120	<0.000020	mg/L		
7912029	Dissolved Beryllium (Be)	2015/06/01	96	80 - 120	100	80 - 120	<0.000010	mg/L		
7912029	Dissolved Bismuth (Bi)	2015/06/01	100	80 - 120	94	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Boron (B)	2015/06/01					<0.010	mg/L		
7912029	Dissolved Cadmium (Cd)	2015/06/01	99	80 - 120	101	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Chromium (Cr)	2015/06/01	97	80 - 120	97	80 - 120	<0.00010	mg/L		
7912029	Dissolved Cobalt (Co)	2015/06/01	95	80 - 120	94	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Copper (Cu)	2015/06/01	88	80 - 120	91	80 - 120	<0.000050	mg/L		
7912029	Dissolved Iron (Fe)	2015/06/01	NC	80 - 120	109	80 - 120	<0.0010	mg/L	0.21	20
7912029	Dissolved Lead (Pb)	2015/06/01	98	80 - 120	94	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Lithium (Li)	2015/06/01	98	80 - 120	105	80 - 120	<0.00050	mg/L		
7912029	Dissolved Manganese (Mn)	2015/06/01	102	80 - 120	102	80 - 120	<0.000050	mg/L	0.40	20
7912029	Dissolved Molybdenum (Mo)	2015/06/01	NC	80 - 120	98	80 - 120	<0.000050	mg/L		
7912029	Dissolved Nickel (Ni)	2015/06/01	90	80 - 120	92	80 - 120	<0.000020	mg/L		
7912029	Dissolved Phosphorus (P)	2015/06/01					<0.0020	mg/L		
7912029	Dissolved Selenium (Se)	2015/06/01	97	80 - 120	96	80 - 120	<0.000040	mg/L		
7912029	Dissolved Silicon (Si)	2015/06/01					<0.050	mg/L		
7912029	Dissolved Silver (Ag)	2015/06/01	101	80 - 120	88	80 - 120	<0.0000050	mg/L		
7912029	Dissolved Strontium (Sr)	2015/06/01	NC	80 - 120	101	80 - 120	<0.000050	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7912029	Dissolved Thallium (Tl)	2015/06/01	102	80 - 120	90	80 - 120	<0.0000020	mg/L		
7912029	Dissolved Tin (Sn)	2015/06/01	103	80 - 120	98	80 - 120	<0.00020	mg/L		
7912029	Dissolved Titanium (Ti)	2015/06/01	92	80 - 120	97	80 - 120	<0.00050	mg/L		
7912029	Dissolved Uranium (U)	2015/06/01	99	80 - 120	92	80 - 120	<0.0000020	mg/L		
7912029	Dissolved Vanadium (V)	2015/06/01	97	80 - 120	99	80 - 120	<0.00020	mg/L		
7912029	Dissolved Zinc (Zn)	2015/06/01	98	80 - 120	104	80 - 120	<0.00010	mg/L		
7912029	Dissolved Zirconium (Zr)	2015/06/01					<0.00010	mg/L		
7912168	Fluoride (F)	2015/05/25	NC	80 - 120	98	80 - 120	<0.010	mg/L	0	20
7912187	Total Dissolved Solids	2015/05/27	NC	80 - 120	98	80 - 120	<10	mg/L	4.5	20
7912192	Total Suspended Solids	2015/05/27	104	80 - 120	100	80 - 120	<4.0	mg/L	NC	20
7912244	Total Aluminum (Al)	2015/06/02	NC	80 - 120	112	80 - 120	<0.0030	mg/L	1.3	20
7912244	Total Antimony (Sb)	2015/06/02	103	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7912244	Total Arsenic (As)	2015/06/02	110	80 - 120	97	80 - 120	<0.000020	mg/L	1.0	20
7912244	Total Barium (Ba)	2015/06/02	NC	80 - 120	99	80 - 120	<0.00010	mg/L	3.2	20
7912244	Total Beryllium (Be)	2015/06/02	95	80 - 120	92	80 - 120	<0.000010	mg/L	NC	20
7912244	Total Bismuth (Bi)	2015/06/02	96	80 - 120	98	80 - 120	<0.000020	mg/L	NC	20
7912244	Total Boron (B)	2015/06/02					<0.050	mg/L	4.6	20
7912244	Total Cadmium (Cd)	2015/06/02	96	80 - 120	91	80 - 120	<0.0000050	mg/L	NC	20
7912244	Total Chromium (Cr)	2015/06/02	99	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7912244	Total Cobalt (Co)	2015/06/02	92	80 - 120	104	80 - 120	<0.000010	mg/L	11	20
7912244	Total Copper (Cu)	2015/06/02	91	80 - 120	107	80 - 120	0.00039, RDL=0.00020	mg/L	NC	20
7912244	Total Iron (Fe)	2015/06/02	NC	80 - 120	105	80 - 120	0.0053, RDL=0.0050	mg/L	15	20
7912244	Total Lead (Pb)	2015/06/02	94	80 - 120	98	80 - 120	<0.000050	mg/L	13	20
7912244	Total Lithium (Li)	2015/06/02	NC	80 - 120	102	80 - 120	<0.00050	mg/L	1.9	20
7912244	Total Manganese (Mn)	2015/06/02	NC	80 - 120	102	80 - 120	<0.00010	mg/L	7.9	20
7912244	Total Molybdenum (Mo)	2015/06/02	NC	80 - 120	95	80 - 120	<0.000050	mg/L	1.8	20
7912244	Total Nickel (Ni)	2015/06/02	NC	80 - 120	106	80 - 120	<0.00010	mg/L	8.0	20
7912244	Total Selenium (Se)	2015/06/02	106	80 - 120	92	80 - 120	<0.000040	mg/L	NC	20
7912244	Total Silicon (Si)	2015/06/02					<0.10	mg/L	9.1	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7912244	Total Silver (Ag)	2015/06/02	112	80 - 120	95	80 - 120	0.0000070, RDL=0.0000050	mg/L	NC	20
7912244	Total Strontium (Sr)	2015/06/02	NC	80 - 120	98	80 - 120	<0.000050	mg/L	3.6	20
7912244	Total Thallium (Tl)	2015/06/02	100	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7912244	Total Tin (Sn)	2015/06/02	105	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
7912244	Total Titanium (Ti)	2015/06/02	NC	80 - 120	112	80 - 120	<0.0050	mg/L	NC	20
7912244	Total Uranium (U)	2015/06/02	101	80 - 120	98	80 - 120	<0.0000050	mg/L	4.2	20
7912244	Total Vanadium (V)	2015/06/02	NC	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
7912244	Total Zinc (Zn)	2015/06/02	87	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
7912244	Total Zirconium (Zr)	2015/06/02					<0.00010	mg/L	14	20
7912289	Orthophosphate (P)	2015/05/25	85	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
7912532	Dissolved Chloride (Cl)	2015/05/25	NC	80 - 120	100	80 - 120	<0.50	mg/L	1.9	20
7912534	Dissolved Sulphate (SO4)	2015/05/25	NC	80 - 120	93	80 - 120	<0.50	mg/L	2.3	20
7912662	Acidity (pH 4.5)	2015/05/25					<0.50	mg/L	NC	20
7912662	Acidity (pH 8.3)	2015/05/25			99	80 - 120	<0.50	mg/L	NC	20
7912791	Bromide (Br)	2015/05/27	117	78 - 120	107	80 - 120	<0.010	mg/L	NC	20
7912816	Bromide (Br)	2015/05/27	108	78 - 120	97	80 - 120	<0.010	mg/L	NC	20
7913973	Dissolved Sulphate (SO4)	2015/05/26	114	80 - 120	90	80 - 120	<0.50	mg/L	NC	20
7914490	Dissolved Mercury (Hg)	2015/05/27	101	80 - 120	106	80 - 120	<0.010	ug/L	NC	20
7914542	Total Mercury (Hg)	2015/05/27	84	80 - 120	86	80 - 120	<0.010	ug/L	NC	20
7914604	Dissolved Organic Carbon (C)	2015/05/27	96	80 - 120	102	80 - 120	<0.50	mg/L	1.9	20
7914774	Dissolved Phosphorus (P)	2015/05/26	111	80 - 120	100	80 - 120	<0.0020	mg/L	4.0	20
7914803	Total Phosphorus (P)	2015/05/26	105	80 - 120	97	80 - 120	<0.0020	mg/L	0.71	20
7915961	Strong Acid Dissoc. Cyanide (CN)	2015/05/28	100	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20
7915966	Weak Acid Dissoc. Cyanide (CN)	2015/05/28	103	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7916104	Total Ammonia (N)	2015/05/28	93	80 - 120	94	80 - 120	0.0093, RDL=0.0050	mg/L	NC	20
7916111	Total Ammonia (N)	2015/05/28	170 (1)	80 - 120	108	80 - 120	0.0093, RDL=0.0050	mg/L	9.0	20
7921268	Dissolved Cadmium (Cd)	2015/06/03			103	80 - 120	<0.0000050	mg/L		
7921268	Dissolved Chromium (Cr)	2015/06/03			106	80 - 120	<0.00010	mg/L		
7921268	Dissolved Cobalt (Co)	2015/06/03			103	80 - 120	<0.0000050	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7921268	Dissolved Iron (Fe)	2015/06/03			115	80 - 120	<0.0010	mg/L		
7921268	Dissolved Manganese (Mn)	2015/06/03			105	80 - 120	<0.000050	mg/L		
7921268	Dissolved Nickel (Ni)	2015/06/03			105	80 - 120	<0.000020	mg/L		
7921268	Dissolved Uranium (U)	2015/06/03			101	80 - 120	<0.0000020	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

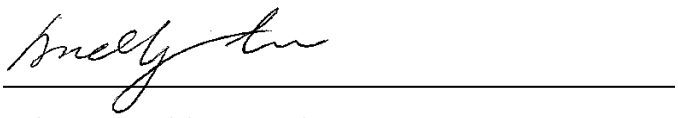
Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B542529
Report Date: 2015/06/08

YUKON ZINC CORPORATION
Sampler Initials: MA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B542529

08407391

ANALYSIS REQUEST

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #701-475 Howe Street, Vancouver, BC, V6C 2B3	TEL.: 604-638-0921 Ex.5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Margaret Ayles	PROJECT MANAGER: Malcom Swallow/Alex Wu
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	T1	MH3600		X				15-May-15	16:53	9	X	X	X	X	X	X	X	X	X	X
2	W22	MH3601		X				20-May-15	9:15	7	X	X	X	X			X	X	X	X
3	W31	MH3602		X				16-May-15	14:40	9	X	X	X	X	X	X	X	X	X	X
4	W71	MH3603		X				20-May-15	11:26	7	X	X	X	X			X	X	X	X
5	W72	MH3604		X				20-May-15	11:54	7	X	X	X	X			X	X	X	X
6	W73	MH3605		X				20-May-15	12:38	7	X	X	X	X			X	X	X	X
7	W82	MH3606		X				16-May-15	11:58	8	X	X	X	X	X		X	X	X	X
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				

B542529

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS: ____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

ACCOUNTING CONTACT:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 2,3,3 CS:MA
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER: Margaret Ayles	DATE: DD/MM/YY 21/05/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY: Margaret Ayles	DATE: DD/MM/YY 21/05/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: YBU Laurel Berthier 2015/05/22 10:10

COCFORM - BC - 2007/0822

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your C.O.C. #: 08409416

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/07/06
Report #: R1992104
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B552114
Received: 2015/06/19, 14:10

Sample Matrix: Water
Samples Received: 11

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	11	N/A	2015/06/23	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	11	2015/06/20	2015/06/20	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	11	N/A	2015/06/22	BBY6SOP-00011	SM 22 4500-Cl- G m
Cyanide SAD (strong acid dissociable)	3	N/A	2015/06/22	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	3	N/A	2015/06/22	BBY6SOP-00004	SM 22 4500-CN O
Carbon (DOC) - field filtered/preserved (1)	6	N/A	2015/06/24	BBY6SOP-00003	SM 22 5310 C m
Conductance - water	11	N/A	2015/06/20	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	11	N/A	2015/06/22	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	11	N/A	2015/06/24	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	11	N/A	2015/06/23	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	11	N/A	2015/07/03	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	11	2015/06/25	2015/06/25	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	11	N/A	2015/06/25	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	10	N/A	2015/06/23	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	1	N/A	2015/07/06	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	2	N/A	2015/06/22	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	9	N/A	2015/06/23	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	11	N/A	2015/06/24	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	11	N/A	2015/06/24	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	11	N/A	2015/06/23	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	11	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	11	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	11	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	2	N/A	2015/06/22	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	9	N/A	2015/06/23	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (2)	11	N/A	2015/06/20	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	10	N/A	2015/06/20	BBY6SOP-00013	SM 22 4500-P E m
Orthophosphate by Konelab (low level)	1	N/A	2015/07/03	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	11	N/A	2015/06/22	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	5	2015/06/20	2015/06/22	BBY6SOP-00033	SM 22 2540 C m

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08409416

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/07/06
Report #: R1992104
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B552114
Received: 2015/06/19, 14:10

Sample Matrix: Water
Samples Received: 11

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids (Filt. Residue)	2	2015/06/22	2015/06/23	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	1	2015/06/23	2015/06/24	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	3	2015/06/24	2015/06/25	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - UF/UP	10	2015/06/20	2015/06/22	BBY6SOP-00013	SM 22 4500-P E m
Phosphorus-P (LL Tot, dissolved) - UF/UP	1	2015/06/30	2015/06/30	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	10	N/A	2015/06/22	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	1	N/A	2015/06/30	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	11	N/A	2015/06/22	BBY6SOP-00034	SM 22 2540 D
Turbidity	11	N/A	2015/06/20	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) DOC present in the sample should be considered as non-purgeable DOC.
(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin
14 Jul 2015 13:24:24 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4782			MM4783			MM4784		
Sampling Date		2015/06/16 09:20			2015/06/15 13:15			2015/06/16 08:35		
COC Number		08409416			08409416			08409416		
	Units	L1	RDL	QC Batch	T1	RDL	QC Batch	W9	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	0.50	7943633	<0.50	0.50	7943633	<0.50	0.50	7943633
Acidity (pH 8.3)	mg/L	<0.50	0.50	7943633	3.25	0.50	7943633	<0.50	0.50	7943633
Fluoride (F)	mg/L	0.068	0.010	7942558	0.200	0.010	7942558	0.120	0.010	7942558
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	51.8	0.50	7939589	1590	0.50	7939589	146	0.50	7939589
Nitrate (N)	mg/L	<0.0020	0.0020	7940151	2.23	0.20	7940151	0.0863	0.0020	7940151
Misc. Inorganics										
Strong Acid Dissoc. Cyanide (CN)	mg/L			7942199	0.206	0.0050	7942199			7942199
Weak Acid Dissoc. Cyanide (CN)	mg/L			7942210	0.0524	0.00050	7942210			7942210
Dissolved Hardness (CaCO3)	mg/L	51.4	0.50	7939917	1660	0.50	7939917	149	0.50	7939917
Dissolved Organic Carbon (C)	mg/L	3.42	0.50	7946011	21.1	0.50	7946007	1.45	0.50	7946011
Alkalinity (Total as CaCO3)	mg/L	43.9	0.50	7941094	29.3	0.50	7941094	107	0.50	7941094
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	7941094	<0.50	0.50	7941094	<0.50	0.50	7941094
Bicarbonate (HCO3)	mg/L	53.6	0.50	7941094	35.8	0.50	7941094	130	0.50	7941094
Carbonate (CO3)	mg/L	<0.50	0.50	7941094	<0.50	0.50	7941094	<0.50	0.50	7941094
Hydroxide (OH)	mg/L	<0.50	0.50	7941094	<0.50	0.50	7941094	<0.50	0.50	7941094
Anions										
Orthophosphate (P)	mg/L	0.0034 (1)	0.0010	7941321	<0.0010 (2)	0.0010	7955268	0.0024 (1)	0.0010	7941321
Dissolved Sulphate (SO4)	mg/L	9.35	0.50	7943019	1360	5.0	7943011	42.9	0.50	7943019
Dissolved Chloride (Cl)	mg/L	<0.50	0.50	7943014	620	5.0	7943009	0.81	0.50	7943014
Nutrients										
Total Ammonia (N)	mg/L	<0.0050	0.0050	7943106	2.0	0.050	7943106	0.0095	0.0050	7943106
Dissolved Phosphorus (P)	mg/L	0.0212 (1)	0.0020	7941319	0.174 (3)	0.0020	7941319	0.0042 (1)	0.0020	7941319
Nitrate plus Nitrite (N)	mg/L	<0.0020 (1)	0.0020	7941228	2.44 (4)	0.20	7941228	0.0985 (1)	0.0020	7941228
Nitrite (N)	mg/L	<0.0020 (1)	0.0020	7941229	0.205 (1)	0.0020	7941229	0.0122 (1)	0.0020	7941229
Total Phosphorus (P)	mg/L	0.0199	0.0020	7942395	0.178	0.0020	7942395	0.0045	0.0020	7942395
Physical Properties										
Conductivity	uS/cm	109	1.0	7941095	3230	1.0	7941095	295	1.0	7941095
pH	pH	7.82	N/A	7941096	7.34	N/A	7941096	8.07	N/A	7941096

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

(2) Sample received past method-specified hold time.

(3) Sample arrived to laboratory past recommended hold time.

(4) RDL raised due to sample matrix interference. Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4782			MM4783			MM4784		
Sampling Date		2015/06/16 09:20			2015/06/15 13:15			2015/06/16 08:35		
COC Number		08409416			08409416			08409416		
	Units	L1	RDL	QC Batch	T1	RDL	QC Batch	W9	RDL	QC Batch
Physical Properties										
Total Suspended Solids	mg/L	<4.0	4.0	7941015	4.0	4.0	7941015	<4.0	4.0	7941015
Total Dissolved Solids	mg/L	72	10	7942054	3020 (1)	10	7942023	166	10	7942054
Turbidity	NTU	0.83 (2)	0.10	7940891	1.38 (2)	0.10	7940891	0.10 (2)	0.10	7940891

RDL = Reportable Detection Limit

(1) Sample analysed past recommended hold time.

(2) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4785		MM4786		MM4787		MM4788		
Sampling Date		2015/06/13 10:32		2015/06/17 15:24		2015/06/17 15:24		2015/06/13 13:32		
COC Number		08409416		08409416		08409416		08409416		
	Units	W22	QC Batch	W31	QC Batch	W31-96	QC Batch	W71	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7943633	<0.50	7943633	<0.50	7943633	<0.50	0.50	7943633
Acidity (pH 8.3)	mg/L	<0.50	7943633	<0.50	7943633	<0.50	7943633	<0.50	0.50	7943633
Fluoride (F)	mg/L	0.068	7942558	0.023	7942558	0.021	7942558	0.650	0.010	7942558
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	79.4	7939589	57.3	7939589	57.6	7939589	341	0.50	7939589
Nitrate (N)	mg/L	0.0044	7940151	0.0052	7940151	0.0041	7940151	0.0192	0.0020	7940151
Misc. Inorganics										
Strong Acid Dissoc. Cyanide (CN)	mg/L		7942199	0.00068	7942199	0.00065	7942199		0.00050	7942199
Weak Acid Dissoc. Cyanide (CN)	mg/L		7942210	<0.00050	7942210	0.00059	7942210		0.00050	7942210
Dissolved Hardness (CaCO3)	mg/L	79.4	7939917	58.1	7939917	58.7	7939917	346	0.50	7939917
Dissolved Organic Carbon (C)	mg/L		7946011	3.07	7946007	1.62	7946011		0.50	7946011
Alkalinity (Total as CaCO3)	mg/L	62.0	7941094	53.2	7941094	52.8	7941094	240	0.50	7941094
Alkalinity (PP as CaCO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Bicarbonate (HCO3)	mg/L	75.6	7941094	65.0	7941094	64.4	7941094	293	0.50	7941094
Carbonate (CO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Hydroxide (OH)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Anions										
Orthophosphate (P)	mg/L	<0.0010 (1)	7941321	<0.0010	7941321	<0.0010	7941322	0.0093 (1)	0.0010	7941321
Dissolved Sulphate (SO4)	mg/L	17.7	7943019	6.84	7943011	6.87	7943019	97.8	0.50	7943011
Dissolved Chloride (Cl)	mg/L	<0.50	7943014	<0.50	7943009	<0.50	7943014	0.51	0.50	7943009
Nutrients										
Total Ammonia (N)	mg/L	0.012	7943106	0.0081	7943106	0.0078	7943106	0.019	0.0050	7943106
Dissolved Phosphorus (P)	mg/L	0.0020 (1)	7941319	<0.0020 (2)	7941319	<0.0020 (2)	7941319	0.0161	0.0020	7952220
Nitrate plus Nitrite (N)	mg/L	0.0044 (1)	7941228	0.0052	7941226	0.0041	7941228	0.0192 (1)	0.0020	7941228
Nitrite (N)	mg/L	<0.0020 (1)	7941229	<0.0020	7941227	<0.0020	7941229	<0.0020 (3)	0.0020	7941229
Total Phosphorus (P)	mg/L	0.0024	7942395	<0.0020	7942395	<0.0020	7942395	0.0211	0.0020	7952204
Physical Properties										
Conductivity	uS/cm	164	7941095	116	7941095	117	7941095	612	1.0	7941095
pH	pH	7.95	7941096	7.90	7941096	7.91	7941096	8.16	N/A	7941096
Physical Properties										
Total Suspended Solids	mg/L	<4.0	7941015	<4.0	7941015	<4.0	7941015	<4.0	4.0	7941015

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) Sample preserved to extend hold time.
(3) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4785		MM4786		MM4787		MM4788		
Sampling Date		2015/06/13 10:32		2015/06/17 15:24		2015/06/17 15:24		2015/06/13 13:32		
COC Number		08409416		08409416		08409416		08409416		
	Units	W22	QC Batch	W31	QC Batch	W31-96	QC Batch	W71	RDL	QC Batch
Total Dissolved Solids	mg/L	94	7941003	84	7944099	68	7944099	380	10	7941003
Turbidity	NTU	0.19 (1)	7940891	0.18	7940891	0.12	7940891	0.27 (1)	0.10	7940891

RDL = Reportable Detection Limit
(1) Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4789		MM4790		MM4791		MM4792		
Sampling Date		2015/06/13 13:50		2015/06/13 14:17		2015/06/14 14:18		2015/06/17 16:54		
COC Number		08409416		08409416		08409416		08409416		
	Units	W72	QC Batch	W73	QC Batch	W80	QC Batch	W82	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7943633	<0.50	7943633	<0.50	7943633	<0.50	0.50	7943633
Acidity (pH 8.3)	mg/L	<0.50	7943633	<0.50	7943633	<0.50	7943633	<0.50	0.50	7943633
Fluoride (F)	mg/L	0.180	7942558	0.044	7942558	0.043	7942558	0.150	0.010	7942558
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	158	7939589	83.4	7939589	71.7	7939589	130	0.50	7939589
Nitrate (N)	mg/L	0.0282	7940151	0.0071	7940151	0.0020	7940151	0.182	0.0020	7940151
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	165	7939917	87.1	7939917	75.7	7939917	126	0.50	7939917
Dissolved Organic Carbon (C)	mg/L		7946011		7946011		7946011	1.43	0.50	7946011
Alkalinity (Total as CaCO3)	mg/L	111	7941094	71.9	7941094	58.3	7941094	81.8	0.50	7941094
Alkalinity (PP as CaCO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Bicarbonate (HCO3)	mg/L	136	7941094	87.7	7941094	71.1	7941094	99.7	0.50	7941094
Carbonate (CO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Hydroxide (OH)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Anions										
Orthophosphate (P)	mg/L	0.014 (1)	7941321	<0.0010 (1)	7941321	0.0031 (1)	7941321	0.0075	0.0010	7941321
Dissolved Sulphate (SO4)	mg/L	47.4	7943019	13.5	7943011	16.2	7943019	49.4	0.50	7943011
Dissolved Chloride (Cl)	mg/L	0.53	7943014	<0.50	7943009	<0.50	7943014	0.74	0.50	7943009
Nutrients										
Total Ammonia (N)	mg/L	0.016	7943106	0.0071	7943106	0.025	7943106	0.011	0.0050	7943106
Dissolved Phosphorus (P)	mg/L	0.0234 (1)	7941319	0.0032 (1)	7941319	0.0048 (1)	7941319	0.0228 (2)	0.0020	7941319
Nitrate plus Nitrite (N)	mg/L	0.0282 (1)	7941228	0.0071 (1)	7941226	0.0020 (1)	7941228	0.182	0.0020	7941228
Nitrite (N)	mg/L	<0.0020 (1)	7941229	<0.0020 (1)	7941227	<0.0020 (1)	7941229	<0.0020	0.0020	7941229
Total Phosphorus (P)	mg/L	0.0202	7942395	0.0047	7942395	0.0059	7942395	0.0214	0.0020	7942395
Physical Properties										
Conductivity	uS/cm	310	7941095	169	7941095	150	7941095	270	1.0	7941095
pH	pH	8.08	7941096	7.98	7941096	7.91	7941096	7.92	N/A	7941096
Physical Properties										
Total Suspended Solids	mg/L	<4.0	7941015	<4.0	7941015	<4.0	7941015	<4.0	4.0	7941015
Total Dissolved Solids	mg/L	178	7941003	106	7941003	92	7941003	166	10	7944099
Turbidity	NTU	0.84 (1)	7940891	0.69 (1)	7940891	0.42 (1)	7940891	1.04	0.10	7940891

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) Sample preserved to extend hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MM4782	MM4783	MM4784		MM4785		MM4786		
Sampling Date		2015/06/16 09:20	2015/06/15 13:15	2015/06/16 08:35		2015/06/13 10:32		2015/06/17 15:24		
COC Number		08409416	08409416	08409416		08409416		08409416		
	Units	L1	T1	W9	QC Batch	W22	QC Batch	W31	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	7953804	<0.010	7953804	<0.010	0.010	7953804
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	7946158	<0.010	7946245	<0.010	0.010	7946158
RDL = Reportable Detection Limit										

Maxxam ID		MM4787	MM4788	MM4789	MM4790	MM4791	MM4792		
Sampling Date		2015/06/17 15:24	2015/06/13 13:32	2015/06/13 13:50	2015/06/13 14:17	2015/06/14 14:18	2015/06/17 16:54		
COC Number		08409416	08409416	08409416	08409416	08409416	08409416		
	Units	W31-96	W71	W72	W73	W80	W82	RDL	QC Batch
Elements									
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7953804
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7946158
RDL = Reportable Detection Limit									

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4782			MM4783		
Sampling Date		2015/06/16 09:20			2015/06/15 13:15		
COC Number		08409416			08409416		
	Units	L1	RDL	QC Batch	T1	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	0.010	7945941	<0.10	0.10	7945908
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.0149	0.00050	7941997	0.0670	0.00050	7941997
Dissolved Antimony (Sb)	mg/L	0.000045	0.000020	7941997	0.0409	0.000020	7941997
Dissolved Arsenic (As)	mg/L	0.00126	0.000020	7941997	0.00942	0.000020	7941997
Dissolved Barium (Ba)	mg/L	0.0426	0.000020	7941997	0.136	0.000020	7941997
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7941997	<0.000010	0.000010	7941997
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7941997	<0.0000050	0.0000050	7941997
Dissolved Boron (B)	mg/L	<0.010	0.010	7941997	0.020	0.010	7941997
Dissolved Cadmium (Cd)	mg/L	0.0000163	0.0000050	7949887	0.0110	0.0000050	7941997
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7941997	<0.00010	0.00010	7941997
Dissolved Cobalt (Co)	mg/L	0.0000139	0.0000050	7941997	0.00164	0.0000050	7941997
Dissolved Copper (Cu)	mg/L	0.000530	0.000050	7941997	0.707	0.000050	7941997
Dissolved Iron (Fe)	mg/L	0.0391	0.0010	7941997	0.0233	0.0010	7941997
Dissolved Lead (Pb)	mg/L	0.0000240	0.0000050	7941997	0.138	0.0000050	7941997
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7941997	0.00856	0.00050	7941997
Dissolved Manganese (Mn)	mg/L	0.00391	0.000050	7941997	0.164	0.000050	7941997
Dissolved Molybdenum (Mo)	mg/L	0.00107	0.000050	7941997	0.0843	0.000050	7941997
Dissolved Nickel (Ni)	mg/L	0.00116 (1)	0.000020	7949887	0.00550	0.000020	7941997
Dissolved Phosphorus (P)	mg/L	0.0096	0.0020	7941997	0.140	0.0020	7941997
Dissolved Selenium (Se)	mg/L	0.000342	0.000040	7949887	2.71	0.000040	7941997
Dissolved Silicon (Si)	mg/L	2.72	0.050	7941997	1.31	0.050	7941997
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7941997	0.00235	0.0000050	7941997
Dissolved Strontium (Sr)	mg/L	0.0468	0.000050	7941997	2.67	0.000050	7941997
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7941997	0.00109	0.0000020	7941997
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7941997	<0.00020	0.00020	7941997
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7941997	<0.00050	0.00050	7941997
Dissolved Uranium (U)	mg/L	0.000542	0.0000020	7949887	0.000603	0.0000020	7941997
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7941997	<0.00020	0.00020	7941997
Dissolved Zinc (Zn)	mg/L	0.00192	0.00010	7949887	0.629	0.00010	7941997
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7941997	<0.00010	0.00010	7941997
Dissolved Calcium (Ca)	mg/L	15.0	0.050	7945959	662	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	3.40	0.050	7945959	1.95	0.050	7939918
Dissolved Potassium (K)	mg/L	0.723	0.050	7945959	50.7	0.050	7939918
Dissolved Sodium (Na)	mg/L	0.997	0.050	7945959	185	0.050	7939918

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4782			MM4783		
Sampling Date		2015/06/16 09:20			2015/06/15 13:15		
COC Number		08409416			08409416		
	Units	L1	RDL	QC Batch	T1	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	3.3	3.0	7945959	868	3.0	7939918
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.0245	0.00050	7943514	0.324	0.00050	7943514
Total Antimony (Sb)	mg/L	0.000038	0.000020	7943514	0.0458	0.000020	7943514
Total Arsenic (As)	mg/L	0.00130	0.000020	7943514	0.0104	0.000020	7943514
Total Barium (Ba)	mg/L	0.0405	0.000020	7943514	0.153	0.000020	7943514
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7943514	<0.000010	0.000010	7943514
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7943514	0.0000124	0.0000050	7943514
Total Boron (B)	mg/L	<0.010	0.010	7943514	0.018	0.010	7943514
Total Cadmium (Cd)	mg/L	0.0000190	0.0000050	7943514	0.00973	0.0000050	7943514
Total Chromium (Cr)	mg/L	<0.00010	0.00010	7943514	<0.00010	0.00010	7943514
Total Cobalt (Co)	mg/L	0.0000180	0.0000050	7943514	0.00167	0.0000050	7943514
Total Copper (Cu)	mg/L	0.000519	0.000050	7943514	0.721	0.000050	7943514
Total Iron (Fe)	mg/L	0.0732	0.0010	7943514	0.0481	0.0010	7943514
Total Lead (Pb)	mg/L	0.0000201	0.0000050	7943514	0.157	0.0000050	7943514
Total Lithium (Li)	mg/L	0.00056	0.00050	7943514	0.0125	0.00050	7943514
Total Manganese (Mn)	mg/L	0.0132	0.000050	7943514	0.152	0.000050	7943514
Total Molybdenum (Mo)	mg/L	0.000963	0.000050	7943514	0.0915	0.000050	7943514
Total Nickel (Ni)	mg/L	0.000501	0.000020	7943514	0.00543	0.000020	7943514
Total Phosphorus (P)	mg/L	0.0350	0.0020	7943514	0.146	0.0020	7943514
Total Selenium (Se)	mg/L	0.000336	0.000040	7943514	2.94	0.000040	7943514
Total Silicon (Si)	mg/L	2.41	0.050	7943514	1.24	0.050	7943514
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	7943514	0.00496	0.0000050	7943514
Total Strontium (Sr)	mg/L	0.0394	0.000050	7943514	2.42	0.000050	7943514
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	7943514	0.00107	0.0000020	7943514
Total Tin (Sn)	mg/L	<0.00020	0.00020	7943514	<0.00020	0.00020	7943514
Total Titanium (Ti)	mg/L	<0.00050	0.00050	7943514	<0.00050	0.00050	7943514
Total Uranium (U)	mg/L	0.000548	0.0000020	7943514	0.000722	0.0000020	7943514
Total Vanadium (V)	mg/L	<0.00020	0.00020	7943514	<0.00020	0.00020	7943514
Total Zinc (Zn)	mg/L	0.00227	0.00010	7943514	0.639	0.00010	7943514
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7943514	<0.00010	0.00010	7943514
Total Calcium (Ca)	mg/L	15.4	0.050	7940311	633	0.050	7940311
Total Magnesium (Mg)	mg/L	3.20	0.050	7940311	2.06	0.050	7940311
Total Potassium (K)	mg/L	0.743	0.050	7940311	47.5	0.050	7940311
Total Sodium (Na)	mg/L	0.875	0.050	7940311	176	0.050	7940311
Total Sulphur (S)	mg/L	<3.0	3.0	7940311	931	3.0	7940311
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4784		MM4785		MM4786		
Sampling Date		2015/06/16 08:35		2015/06/13 10:32		2015/06/17 15:24		
COC Number		08409416		08409416		08409416		
	Units	W9	QC Batch	W22	QC Batch	W31	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	7945908	<0.010	7945941	<0.010	0.010	7945908
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.0178 (1)	7941997	0.0179	7941997	0.0415	0.00050	7949887
Dissolved Antimony (Sb)	mg/L	0.000168	7949887	0.000083	7941997	<0.000020	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.000265	7941997	0.000183	7941997	0.000167	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.117	7941997	0.0460	7941997	0.0112	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	7941997	<0.000010	7941997	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7941997	<0.0000050	7941997	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	7941997	<0.010	7941997	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	0.00130	7941997	0.0000086	7941997	<0.0000050	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	<0.00010	7941997	0.00014	7941997	0.00013	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	0.0000099	7941997	0.0000132	7941997	0.0000222	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	0.00109	7941997	0.000528	7941997	0.00124	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.0052	7941997	0.0140	7941997	0.0050	0.0010	7942004
Dissolved Lead (Pb)	mg/L	0.0000737	7941997	0.0000176	7941997	0.0000198	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	0.00055	7941997	0.00116	7941997	<0.00050	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.000121	7941997	0.000913	7941997	0.000063	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.000826	7941997	0.000549	7941997	0.000336	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.00360	7941997	0.000712	7941997	0.000096	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.0067	7941997	0.0029	7941997	0.0038	0.0020	7942004
Dissolved Selenium (Se)	mg/L	0.00382	7941997	0.000356	7949887	0.000214	0.000040	7942004
Dissolved Silicon (Si)	mg/L	3.23	7941997	3.24	7941997	2.54	0.050	7942004
Dissolved Silver (Ag)	mg/L	0.0000218	7941997	0.0000083	7941997	0.0000066	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.134	7941997	0.0824	7941997	0.0145	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	0.0000022	7949887	0.0000047	7941997	<0.0000020	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	7941997	<0.00020	7941997	<0.00020	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	7941997	<0.00050	7941997	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.00180	7941997	0.000726	7941997	0.0000133	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	<0.00020	7941997	<0.00020	7941997	0.00047	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.116	7941997	0.00236 (1)	7941997	0.00140 (1)	0.00010	7949887
Dissolved Zirconium (Zr)	mg/L	<0.00010	7941997	<0.00010	7941997	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	43.8	7939918	21.2	7939918	21.3	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	9.66	7939918	6.41	7939918	1.17	0.050	7939918
Dissolved Potassium (K)	mg/L	1.01	7939918	0.767	7939918	0.388	0.050	7939918
Dissolved Sodium (Na)	mg/L	1.56	7939918	1.36	7939918	1.01	0.050	7939918

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4784		MM4785		MM4786		
Sampling Date		2015/06/16 08:35		2015/06/13 10:32		2015/06/17 15:24		
COC Number		08409416		08409416		08409416		
	Units	W9	QC Batch	W22	QC Batch	W31	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	14.3	7939918	6.3	7939918	<3.0	3.0	7939918
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.00742	7943514	0.0168	7943514	0.0164	0.00050	7943514
Total Antimony (Sb)	mg/L	0.000179	7943514	0.000049	7943514	<0.000020	0.000020	7943514
Total Arsenic (As)	mg/L	0.000252	7943514	0.000194	7943514	0.000168	0.000020	7943514
Total Barium (Ba)	mg/L	0.122	7943514	0.0487	7943514	0.0112	0.000020	7943514
Total Beryllium (Be)	mg/L	<0.000010	7943514	<0.000010	7943514	<0.000010	0.000010	7943514
Total Bismuth (Bi)	mg/L	<0.0000050	7943514	<0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Boron (B)	mg/L	<0.010	7943514	<0.010	7943514	<0.010	0.010	7943514
Total Cadmium (Cd)	mg/L	0.00129	7943514	0.0000093	7943514	<0.0000050	0.0000050	7943514
Total Chromium (Cr)	mg/L	<0.00010	7943514	0.00017	7943514	<0.00010	0.00010	7943514
Total Cobalt (Co)	mg/L	0.0000133	7943514	0.0000260	7943514	0.0000239	0.0000050	7943514
Total Copper (Cu)	mg/L	0.00104	7943514	0.000548	7943514	0.00136	0.000050	7943514
Total Iron (Fe)	mg/L	0.0104	7943514	0.0379	7943514	0.0043	0.0010	7943514
Total Lead (Pb)	mg/L	0.000183	7943514	0.0000194	7943514	0.0000487	0.0000050	7943514
Total Lithium (Li)	mg/L	0.00105	7943514	0.00179	7943514	<0.00050	0.00050	7943514
Total Manganese (Mn)	mg/L	0.000465	7943514	0.00345	7943514	0.000188	0.000050	7943514
Total Molybdenum (Mo)	mg/L	0.000822	7943514	0.000555	7943514	0.000360	0.000050	7943514
Total Nickel (Ni)	mg/L	0.00352	7943514	0.000748	7943514	0.000109	0.000020	7943514
Total Phosphorus (P)	mg/L	0.0096	7943514	0.0044	7943514	0.0043	0.0020	7943514
Total Selenium (Se)	mg/L	0.00314	7943514	0.000362	7943514	0.000195	0.000040	7943514
Total Silicon (Si)	mg/L	3.41	7943514	3.39	7943514	2.67	0.050	7943514
Total Silver (Ag)	mg/L	<0.0000050	7943514	<0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Strontium (Sr)	mg/L	0.129	7943514	0.0869	7943514	0.0145	0.000050	7943514
Total Thallium (Tl)	mg/L	0.0000024	7943514	<0.0000020	7943514	<0.0000020	0.0000020	7943514
Total Tin (Sn)	mg/L	<0.00020	7943514	<0.00020	7943514	<0.00020	0.00020	7943514
Total Titanium (Ti)	mg/L	<0.00050	7943514	0.00057	7943514	<0.00050	0.00050	7943514
Total Uranium (U)	mg/L	0.00179	7943514	0.000759	7943514	0.0000125	0.0000020	7943514
Total Vanadium (V)	mg/L	<0.00020	7943514	<0.00020	7943514	0.00050	0.00020	7943514
Total Zinc (Zn)	mg/L	0.113	7943514	0.00061	7943514	0.00034	0.00010	7943514
Total Zirconium (Zr)	mg/L	<0.00010	7943514	<0.00010	7943514	<0.00010	0.00010	7943514
Total Calcium (Ca)	mg/L	43.2	7940311	21.4	7940311	21.0	0.050	7940311
Total Magnesium (Mg)	mg/L	9.20	7940311	6.26	7940311	1.17	0.050	7940311
Total Potassium (K)	mg/L	1.02	7940311	0.764	7940311	0.398	0.050	7940311
Total Sodium (Na)	mg/L	1.43	7940311	1.24	7940311	0.990	0.050	7940311
Total Sulphur (S)	mg/L	13.0	7940311	5.6	7940311	<3.0	3.0	7940311

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4787			MM4788		
Sampling Date		2015/06/17 15:24			2015/06/13 13:32		
COC Number		08409416			08409416		
	Units	W31-96	RDL	QC Batch	W71	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	0.010	7945941	<0.10	0.10	7945908
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.0341 (1)	0.00050	7949887	0.0282	0.00050	7942004
Dissolved Antimony (Sb)	mg/L	<0.000020	0.000020	7942004	0.000431	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.000165	0.000020	7942004	0.000337	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.0114	0.000020	7942004	0.0495	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7942004	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7942004	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	0.010	7942004	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000050	7942004	0.00225	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	0.00011	0.00010	7942004	<0.00010	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	0.0000238	0.0000050	7942004	0.0000667	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	0.00126	0.000050	7942004	0.000551	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.0043	0.0010	7949887	0.0186	0.0010	7942004
Dissolved Lead (Pb)	mg/L	0.0000182	0.0000050	7942004	0.0000189	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7942004	0.00211	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.000087	0.000050	7942004	0.00904	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.000341	0.000050	7942004	0.00511	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.000099	0.000020	7942004	0.0267	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.0046	0.0020	7942004	0.0157	0.0020	7942004
Dissolved Selenium (Se)	mg/L	0.000217	0.000040	7942004	0.00509	0.000040	7942004
Dissolved Silicon (Si)	mg/L	2.59	0.050	7942004	3.80	0.050	7942004
Dissolved Silver (Ag)	mg/L	0.0000053	0.0000050	7942004	<0.0000050	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.0140	0.000050	7942004	0.256	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7942004	0.0000024	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7942004	<0.00020	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7942004	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.0000127	0.0000020	7942004	0.0110	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	0.00048	0.00020	7942004	0.00028	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.00173 (1)	0.00010	7942004	0.483	0.00010	7942004
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7942004	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	21.5	0.050	7939918	93.3	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	1.18	0.050	7939918	27.5	0.050	7939918
Dissolved Potassium (K)	mg/L	0.389	0.050	7939918	0.797	0.050	7939918
Dissolved Sodium (Na)	mg/L	1.03	0.050	7939918	0.836	0.050	7939918

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4787			MM4788		
Sampling Date		2015/06/17 15:24			2015/06/13 13:32		
COC Number		08409416			08409416		
	Units	W31-96	RDL	QC Batch	W71	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	<3.0	3.0	7939918	30.4	3.0	7939918
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.0145	0.00050	7943514	0.0411	0.00050	7943514
Total Antimony (Sb)	mg/L	<0.000020	0.000020	7943514	0.000464	0.000020	7943514
Total Arsenic (As)	mg/L	0.000164	0.000020	7943514	0.000473	0.000020	7943514
Total Barium (Ba)	mg/L	0.0109	0.000020	7943514	0.0528	0.000020	7943514
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7943514	<0.000010	0.000010	7943514
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Boron (B)	mg/L	<0.010	0.010	7943514	<0.010	0.010	7943514
Total Cadmium (Cd)	mg/L	<0.0000050	0.0000050	7943514	0.00255	0.0000050	7943514
Total Chromium (Cr)	mg/L	<0.00010	0.00010	7943514	<0.00010	0.00010	7943514
Total Cobalt (Co)	mg/L	0.0000217	0.0000050	7943514	0.000138	0.0000050	7943514
Total Copper (Cu)	mg/L	0.00138	0.000050	7943514	0.000718	0.000050	7943514
Total Iron (Fe)	mg/L	0.0033	0.0010	7943514	0.172	0.0010	7943514
Total Lead (Pb)	mg/L	0.0000148	0.0000050	7943514	0.000168	0.0000050	7943514
Total Lithium (Li)	mg/L	<0.00050	0.00050	7943514	0.00293	0.00050	7943514
Total Manganese (Mn)	mg/L	0.000069	0.000050	7943514	0.0160	0.000050	7943514
Total Molybdenum (Mo)	mg/L	0.000369	0.000050	7943514	0.00544	0.000050	7943514
Total Nickel (Ni)	mg/L	0.000140	0.000020	7943514	0.0292	0.000020	7943514
Total Phosphorus (P)	mg/L	0.0060	0.0020	7943514	0.0277	0.0020	7943514
Total Selenium (Se)	mg/L	0.000179	0.000040	7943514	0.00515	0.000040	7943514
Total Silicon (Si)	mg/L	2.76	0.050	7943514	4.01	0.050	7943514
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Strontium (Sr)	mg/L	0.0141	0.000050	7943514	0.247	0.000050	7943514
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	7943514	0.0000026	0.0000020	7943514
Total Tin (Sn)	mg/L	<0.00020	0.00020	7943514	<0.00020	0.00020	7943514
Total Titanium (Ti)	mg/L	<0.00050	0.00050	7943514	<0.00050	0.00050	7943514
Total Uranium (U)	mg/L	0.0000127	0.0000020	7943514	0.0116	0.0000020	7943514
Total Vanadium (V)	mg/L	0.00050	0.00020	7943514	0.00040	0.00020	7943514
Total Zinc (Zn)	mg/L	0.00019	0.00010	7943514	0.510	0.00010	7943514
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7943514	<0.00010	0.00010	7943514
Total Calcium (Ca)	mg/L	21.1	0.050	7940311	90.4	0.050	7940311
Total Magnesium (Mg)	mg/L	1.18	0.050	7940311	28.0	0.050	7940311
Total Potassium (K)	mg/L	0.386	0.050	7940311	0.824	0.050	7940311
Total Sodium (Na)	mg/L	0.992	0.050	7940311	0.818	0.050	7940311
Total Sulphur (S)	mg/L	<3.0	3.0	7940311	30.1	3.0	7940311
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4789		MM4790		MM4791		
Sampling Date		2015/06/13 13:50		2015/06/13 14:17		2015/06/14 14:18		
COC Number		08409416		08409416		08409416		
	Units	W72	QC Batch	W73	QC Batch	W80	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	7945941	<0.010	7945908	<0.010	0.010	7945941
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.0223	7942004	0.0168	7942004	0.0146	0.00050	7942004
Dissolved Antimony (Sb)	mg/L	0.000244	7942004	0.000090	7942004	0.000052	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.00113	7942004	0.000206	7942004	0.000216	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.0685	7942004	0.0479	7942004	0.0575	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	7942004	<0.000010	7942004	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7942004	<0.0000050	7942004	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	7942004	<0.010	7942004	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	0.000255	7942004	0.0000051	7942004	0.0000558 (1)	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	<0.00010	7942004	0.00024	7942004	<0.00010	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	0.0000322	7942004	0.0000128	7942004	0.0000331	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	0.000846	7942004	0.000968	7942004	0.000693	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.0628	7942004	0.0297	7942004	0.0612	0.0010	7942004
Dissolved Lead (Pb)	mg/L	0.0000274	7942004	0.0000053	7942004	0.0000993 (1)	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	0.00151	7942004	<0.00050	7942004	<0.00050	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.0354	7942004	0.00269	7942004	0.0135	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.00274	7942004	0.000416	7942004	0.000398	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.00493	7942004	0.000688	7942004	0.000301	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.0162	7942004	0.0036	7942004	0.0082	0.0020	7942004
Dissolved Selenium (Se)	mg/L	0.00177	7942004	0.000455	7942004	0.000986	0.000040	7942004
Dissolved Silicon (Si)	mg/L	3.06	7942004	3.52	7942004	2.82	0.050	7942004
Dissolved Silver (Ag)	mg/L	<0.0000050	7942004	<0.0000050	7942004	<0.0000050	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.201	7942004	0.0793	7942004	0.0450	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	<0.0000020	7942004	<0.0000020	7942004	<0.0000020	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	7942004	<0.00020	7942004	<0.00020	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	7942004	<0.00050	7942004	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.00138	7942004	0.000227	7942004	0.000292	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	0.00024	7942004	<0.00020	7942004	<0.00020	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.0421	7942004	0.00078 (1)	7942004	0.00157 (1)	0.00010	7942004
Dissolved Zirconium (Zr)	mg/L	<0.00010	7942004	<0.00010	7942004	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	42.0	7939918	24.4	7939918	24.0	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	14.5	7939918	6.38	7939918	3.80	0.050	7939918
Dissolved Potassium (K)	mg/L	0.663	7939918	0.245	7939918	0.548	0.050	7939918
Dissolved Sodium (Na)	mg/L	1.34	7939918	0.934	7939918	1.03	0.050	7939918

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4789		MM4790		MM4791		
Sampling Date		2015/06/13 13:50		2015/06/13 14:17		2015/06/14 14:18		
COC Number		08409416		08409416		08409416		
	Units	W72	QC Batch	W73	QC Batch	W80	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	15.0	7939918	4.4	7939918	5.2	3.0	7939918
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.0425	7943514	0.0335	7943514	0.0460	0.00050	7943514
Total Antimony (Sb)	mg/L	0.000268	7943514	0.000097	7943514	0.000051	0.000020	7943514
Total Arsenic (As)	mg/L	0.00126	7943514	0.000237	7943514	0.000239	0.000020	7943514
Total Barium (Ba)	mg/L	0.0717	7943514	0.0474	7943514	0.0577	0.000020	7943514
Total Beryllium (Be)	mg/L	<0.000010	7943514	<0.000010	7943514	<0.000010	0.000010	7943514
Total Bismuth (Bi)	mg/L	<0.0000050	7943514	<0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Boron (B)	mg/L	<0.010	7943514	<0.010	7943514	<0.010	0.010	7943514
Total Cadmium (Cd)	mg/L	0.000348	7943514	0.0000151	7943514	0.0000212	0.0000050	7943514
Total Chromium (Cr)	mg/L	0.00019	7943514	0.00030	7943514	0.00016	0.00010	7943514
Total Cobalt (Co)	mg/L	0.0000840	7943514	0.0000312	7943514	0.0000728	0.0000050	7943514
Total Copper (Cu)	mg/L	0.00102	7943514	0.00116	7943514	0.000890	0.000050	7943514
Total Iron (Fe)	mg/L	0.161	7943514	0.0664	7943514	0.138	0.0010	7943514
Total Lead (Pb)	mg/L	0.0000491	7943514	0.0000176	7943514	0.0000442	0.0000050	7943514
Total Lithium (Li)	mg/L	0.00198	7943514	0.00080	7943514	0.00058	0.00050	7943514
Total Manganese (Mn)	mg/L	0.0548	7943514	0.00911	7943514	0.0169	0.000050	7943514
Total Molybdenum (Mo)	mg/L	0.00284	7943514	0.000426	7943514	0.000395	0.000050	7943514
Total Nickel (Ni)	mg/L	0.00534	7943514	0.000804	7943514	0.000424	0.000020	7943514
Total Phosphorus (P)	mg/L	0.0220	7943514	0.0048	7943514	0.0083	0.0020	7943514
Total Selenium (Se)	mg/L	0.00179	7943514	0.000466	7943514	0.000951	0.000040	7943514
Total Silicon (Si)	mg/L	3.31	7943514	3.61	7943514	2.96	0.050	7943514
Total Silver (Ag)	mg/L	<0.0000050	7943514	<0.0000050	7943514	<0.0000050	0.0000050	7943514
Total Strontium (Sr)	mg/L	0.189	7943514	0.0785	7943514	0.0434	0.000050	7943514
Total Thallium (Tl)	mg/L	<0.0000020	7943514	<0.0000020	7943514	<0.0000020	0.0000020	7943514
Total Tin (Sn)	mg/L	<0.00020	7943514	<0.00020	7943514	<0.00020	0.00020	7943514
Total Titanium (Ti)	mg/L	0.00052	7943514	<0.00050	7943514	0.00142	0.00050	7943514
Total Uranium (U)	mg/L	0.00144	7943514	0.000245	7943514	0.000313	0.0000020	7943514
Total Vanadium (V)	mg/L	0.00034	7943514	0.00025	7943514	0.00025	0.00020	7943514
Total Zinc (Zn)	mg/L	0.0473	7943514	0.00041	7943514	0.00097	0.00010	7943514
Total Zirconium (Zr)	mg/L	<0.00010	7943514	0.00016	7943514	<0.00010	0.00010	7943514
Total Calcium (Ca)	mg/L	40.4	7940311	23.0	7940311	22.7	0.050	7940311
Total Magnesium (Mg)	mg/L	13.9	7940311	6.30	7940311	3.62	0.050	7940311
Total Potassium (K)	mg/L	0.657	7940311	0.247	7940311	0.517	0.050	7940311
Total Sodium (Na)	mg/L	1.27	7940311	0.919	7940311	0.947	0.050	7940311
Total Sulphur (S)	mg/L	14.6	7940311	4.4	7940311	5.1	3.0	7940311
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4792		
Sampling Date		2015/06/17 16:54		
COC Number		08409416		
	Units	W82	RDL	QC Batch
ANIONS				
Bromide (Br)	mg/L	<0.010	0.010	7945908
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	mg/L	0.0190	0.00050	7942004
Dissolved Antimony (Sb)	mg/L	0.000308	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.000202	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.139	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	0.00147	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	0.000225	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	0.00189	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.0787	0.0010	7942004
Dissolved Lead (Pb)	mg/L	0.000177	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.0532	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.000377	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.0109	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.0108	0.0020	7942004
Dissolved Selenium (Se)	mg/L	0.00242	0.000040	7942004
Dissolved Silicon (Si)	mg/L	3.17	0.050	7942004
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.117	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	0.0000057	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.000327	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.154	0.00010	7942004
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	43.5	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	4.13	0.050	7939918
Dissolved Potassium (K)	mg/L	1.07	0.050	7939918
Dissolved Sodium (Na)	mg/L	1.34	0.050	7939918
Dissolved Sulphur (S)	mg/L	14.5	3.0	7939918
RDL = Reportable Detection Limit				

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4792		
Sampling Date		2015/06/17 16:54		
COC Number		08409416		
	Units	W82	RDL	QC Batch
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.0422	0.00050	7943514
Total Antimony (Sb)	mg/L	0.000326	0.000020	7943514
Total Arsenic (As)	mg/L	0.000315	0.000020	7943514
Total Barium (Ba)	mg/L	0.151	0.000020	7943514
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7943514
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7943514
Total Boron (B)	mg/L	<0.010	0.010	7943514
Total Cadmium (Cd)	mg/L	0.00178	0.0000050	7943514
Total Chromium (Cr)	mg/L	<0.00010	0.00010	7943514
Total Cobalt (Co)	mg/L	0.000349	0.0000050	7943514
Total Copper (Cu)	mg/L	0.00277	0.000050	7943514
Total Iron (Fe)	mg/L	0.220	0.0010	7943514
Total Lead (Pb)	mg/L	0.000811	0.0000050	7943514
Total Lithium (Li)	mg/L	0.00060	0.00050	7943514
Total Manganese (Mn)	mg/L	0.0817	0.000050	7943514
Total Molybdenum (Mo)	mg/L	0.000436	0.000050	7943514
Total Nickel (Ni)	mg/L	0.0114	0.000020	7943514
Total Phosphorus (P)	mg/L	0.0209	0.0020	7943514
Total Selenium (Se)	mg/L	0.00250	0.000040	7943514
Total Silicon (Si)	mg/L	3.30	0.050	7943514
Total Silver (Ag)	mg/L	0.0000055	0.0000050	7943514
Total Strontium (Sr)	mg/L	0.118	0.000050	7943514
Total Thallium (Tl)	mg/L	0.0000067	0.0000020	7943514
Total Tin (Sn)	mg/L	<0.00020	0.00020	7943514
Total Titanium (Ti)	mg/L	0.00081	0.00050	7943514
Total Uranium (U)	mg/L	0.000354	0.0000020	7943514
Total Vanadium (V)	mg/L	<0.00020	0.00020	7943514
Total Zinc (Zn)	mg/L	0.166	0.00010	7943514
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7943514
Total Calcium (Ca)	mg/L	44.9	0.050	7940311
Total Magnesium (Mg)	mg/L	4.39	0.050	7940311
Total Potassium (K)	mg/L	1.15	0.050	7940311
Total Sodium (Na)	mg/L	1.40	0.050	7940311
Total Sulphur (S)	mg/L	14.7	3.0	7940311
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.0°C
Package 2	8.0°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample MM4783-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.
Sample MM4788-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Sample MM4782, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MM4784, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MM4785, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MM4786, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MM4787, Elements by ICPMS Low Level (dissolved): Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7940891	Turbidity	2015/06/20			98	80 - 120	<0.10	NTU	1.6	20
7941003	Total Dissolved Solids	2015/06/22	101	80 - 120	96	80 - 120	<10	mg/L	2.1	20
7941015	Total Suspended Solids	2015/06/22	114	80 - 120	102	80 - 120	<4.0	mg/L	NC	20
7941094	Alkalinity (PP as CaCO3)	2015/06/20					<0.50	mg/L	NC	20
7941094	Alkalinity (Total as CaCO3)	2015/06/20	NC	80 - 120	99	80 - 120	0.67, RDL=0.50	mg/L	2.9	20
7941094	Bicarbonate (HCO3)	2015/06/20					0.82, RDL=0.50	mg/L	2.9	20
7941094	Carbonate (CO3)	2015/06/20					<0.50	mg/L	NC	20
7941094	Hydroxide (OH)	2015/06/20					<0.50	mg/L	NC	20
7941095	Conductivity	2015/06/20			100	80 - 120	1.0, RDL=1.0	uS/cm	0.63	20
7941096	pH	2015/06/20			101	97 - 103			0.54	N/A
7941226	Nitrate plus Nitrite (N)	2015/06/20	105	80 - 120	109	80 - 120	<0.0020	mg/L	NC	25
7941227	Nitrite (N)	2015/06/20	100	80 - 120	105	80 - 120	<0.0020	mg/L	NC	25
7941228	Nitrate plus Nitrite (N)	2015/06/20	87	80 - 120	109	80 - 120	<0.0020	mg/L	NC	25
7941229	Nitrite (N)	2015/06/20	95	80 - 120	106	80 - 120	<0.0020	mg/L	NC	25
7941319	Dissolved Phosphorus (P)	2015/06/22	88	80 - 120	92	80 - 120	<0.0020	mg/L	NC	20
7941321	Orthophosphate (P)	2015/06/20	97	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
7941322	Orthophosphate (P)	2015/06/20	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
7941997	Dissolved Aluminum (Al)	2015/06/22	94	80 - 120	113	80 - 120	<0.00050	mg/L	NC	20
7941997	Dissolved Antimony (Sb)	2015/06/22	92	80 - 120	109	80 - 120	<0.000020	mg/L	NC	20
7941997	Dissolved Arsenic (As)	2015/06/22	95	80 - 120	111	80 - 120	<0.000020	mg/L	NC	20
7941997	Dissolved Barium (Ba)	2015/06/22	96	80 - 120	113	80 - 120	<0.000020	mg/L	NC	20
7941997	Dissolved Beryllium (Be)	2015/06/22	90	80 - 120	106	80 - 120	<0.000010	mg/L	NC	20
7941997	Dissolved Bismuth (Bi)	2015/06/22	89	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7941997	Dissolved Boron (B)	2015/06/22					<0.010	mg/L	NC	20
7941997	Dissolved Cadmium (Cd)	2015/06/22	99	80 - 120	108	80 - 120	<0.0000050	mg/L	NC	20
7941997	Dissolved Chromium (Cr)	2015/06/22	94	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
7941997	Dissolved Cobalt (Co)	2015/06/22	95	80 - 120	108	80 - 120	<0.0000050	mg/L	NC	20
7941997	Dissolved Copper (Cu)	2015/06/22	94	80 - 120	107	80 - 120	<0.000050	mg/L	NC	20
7941997	Dissolved Iron (Fe)	2015/06/22	106	80 - 120	115	80 - 120	<0.0010	mg/L	NC	20
7941997	Dissolved Lead (Pb)	2015/06/22	93	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7941997	Dissolved Lithium (Li)	2015/06/22	93	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20
7941997	Dissolved Manganese (Mn)	2015/06/22	97	80 - 120	109	80 - 120	<0.000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7941997	Dissolved Molybdenum (Mo)	2015/06/22	93	80 - 120	108	80 - 120	<0.000050	mg/L	NC	20
7941997	Dissolved Nickel (Ni)	2015/06/22	96	80 - 120	109	80 - 120	<0.000020	mg/L	2.4	20
7941997	Dissolved Phosphorus (P)	2015/06/22					<0.0020	mg/L	NC	20
7941997	Dissolved Selenium (Se)	2015/06/22	87	80 - 120	104	80 - 120	<0.000040	mg/L	NC	20
7941997	Dissolved Silicon (Si)	2015/06/22					<0.050	mg/L	NC	20
7941997	Dissolved Silver (Ag)	2015/06/22	94	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7941997	Dissolved Strontium (Sr)	2015/06/22	94	80 - 120	107	80 - 120	<0.000050	mg/L	NC	20
7941997	Dissolved Thallium (Tl)	2015/06/22	90	80 - 120	100	80 - 120	<0.0000020	mg/L	NC	20
7941997	Dissolved Tin (Sn)	2015/06/22	93	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
7941997	Dissolved Titanium (Ti)	2015/06/22	93	80 - 120	112	80 - 120	<0.00050	mg/L	NC	20
7941997	Dissolved Uranium (U)	2015/06/22	95	80 - 120	109	80 - 120	<0.0000020	mg/L	NC	20
7941997	Dissolved Vanadium (V)	2015/06/22	94	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
7941997	Dissolved Zinc (Zn)	2015/06/22	93	80 - 120	110	80 - 120	<0.00010	mg/L	NC	20
7941997	Dissolved Zirconium (Zr)	2015/06/22					<0.00010	mg/L	NC	20
7942004	Dissolved Aluminum (Al)	2015/06/23	96	80 - 120	111	80 - 120	<0.00050	mg/L	1.8	20
7942004	Dissolved Antimony (Sb)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000020	mg/L	0.59	20
7942004	Dissolved Arsenic (As)	2015/06/23	98	80 - 120	111	80 - 120	<0.000020	mg/L	3.5	20
7942004	Dissolved Barium (Ba)	2015/06/23	NC	80 - 120	109	80 - 120	<0.000020	mg/L	2.5	20
7942004	Dissolved Beryllium (Be)	2015/06/23	89	80 - 120	105	80 - 120	<0.000010	mg/L	NC	20
7942004	Dissolved Bismuth (Bi)	2015/06/23	88	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7942004	Dissolved Boron (B)	2015/06/23					<0.010	mg/L	NC	20
7942004	Dissolved Cadmium (Cd)	2015/06/23	93	80 - 120	111	80 - 120	<0.0000050	mg/L	1.3	20
7942004	Dissolved Chromium (Cr)	2015/06/23	91	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
7942004	Dissolved Cobalt (Co)	2015/06/23	90	80 - 120	106	80 - 120	<0.0000050	mg/L	3.1	20
7942004	Dissolved Copper (Cu)	2015/06/23	87	80 - 120	106	80 - 120	<0.000050	mg/L	NC	20
7942004	Dissolved Iron (Fe)	2015/06/23	NC	80 - 120	120	80 - 120	<0.0010	mg/L	2.0	20
7942004	Dissolved Lead (Pb)	2015/06/23	92	80 - 120	108	80 - 120	<0.0000050	mg/L	1.7	20
7942004	Dissolved Lithium (Li)	2015/06/23	94	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
7942004	Dissolved Manganese (Mn)	2015/06/23	NC	80 - 120	110	80 - 120	<0.000050	mg/L	2.5	20
7942004	Dissolved Molybdenum (Mo)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000050	mg/L	0.85	20
7942004	Dissolved Nickel (Ni)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000020	mg/L	3.0	20
7942004	Dissolved Phosphorus (P)	2015/06/23					<0.0020	mg/L	1.8	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7942004	Dissolved Selenium (Se)	2015/06/23	87	80 - 120	103	80 - 120	<0.000040	mg/L	NC	20
7942004	Dissolved Silicon (Si)	2015/06/23					<0.050	mg/L	4.1	20
7942004	Dissolved Silver (Ag)	2015/06/23	87	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7942004	Dissolved Strontium (Sr)	2015/06/23	NC	80 - 120	109	80 - 120	<0.000050	mg/L	3.5	20
7942004	Dissolved Thallium (Tl)	2015/06/23	89	80 - 120	102	80 - 120	<0.0000020	mg/L	NC	20
7942004	Dissolved Tin (Sn)	2015/06/23	92	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7942004	Dissolved Titanium (Ti)	2015/06/23	100	80 - 120	110	80 - 120	<0.00050	mg/L	NC	20
7942004	Dissolved Uranium (U)	2015/06/23	95	80 - 120	112	80 - 120	<0.0000020	mg/L	1.8	20
7942004	Dissolved Vanadium (V)	2015/06/23	93	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7942004	Dissolved Zinc (Zn)	2015/06/23	NC	80 - 120	108	80 - 120	<0.00010	mg/L	3.2	20
7942004	Dissolved Zirconium (Zr)	2015/06/23					<0.00010	mg/L	NC	20
7942023	Total Dissolved Solids	2015/06/24	NC	80 - 120	98	80 - 120	<10	mg/L	5.8	20
7942054	Total Dissolved Solids	2015/06/23	102	80 - 120	98	80 - 120	<10	mg/L	3.6	20
7942199	Strong Acid Dissoc. Cyanide (CN)	2015/06/22	104	80 - 120	101	80 - 120	0.00079, RDL=0.00050	mg/L	NC	20
7942210	Weak Acid Dissoc. Cyanide (CN)	2015/06/22	107	80 - 120	102	80 - 120	0.00069, RDL=0.00050	mg/L	NC	20
7942395	Total Phosphorus (P)	2015/06/22	NC	80 - 120	100	80 - 120	<0.0020	mg/L	1.8	20
7942558	Fluoride (F)	2015/06/22	100	80 - 120	98	80 - 120	<0.010	mg/L	0	20
7943009	Dissolved Chloride (Cl)	2015/06/22	NC	80 - 120	96	80 - 120	<0.50	mg/L	0.57	20
7943011	Dissolved Sulphate (SO4)	2015/06/22	NC	80 - 120	92	80 - 120	<0.50	mg/L	2.8	20
7943014	Dissolved Chloride (Cl)	2015/06/22	97	80 - 120	96	80 - 120	<0.50	mg/L		
7943019	Dissolved Sulphate (SO4)	2015/06/22	105	80 - 120	93	80 - 120	<0.50	mg/L	7.1	20
7943106	Total Ammonia (N)	2015/06/23	99	80 - 120	103	80 - 120	0.0090, RDL=0.0050	mg/L	NC	20
7943514	Total Aluminum (Al)	2015/06/24	93	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
7943514	Total Antimony (Sb)	2015/06/24	92	80 - 120	105	80 - 120	<0.000020	mg/L	NC	20
7943514	Total Arsenic (As)	2015/06/24	93	80 - 120	102	80 - 120	<0.000020	mg/L	NC	20
7943514	Total Barium (Ba)	2015/06/24	94	80 - 120	105	80 - 120	<0.000020	mg/L	NC	20
7943514	Total Beryllium (Be)	2015/06/24	89	80 - 120	101	80 - 120	<0.000010	mg/L	NC	20
7943514	Total Bismuth (Bi)	2015/06/24	87	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7943514	Total Boron (B)	2015/06/24					<0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7943514	Total Cadmium (Cd)	2015/06/24	86	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7943514	Total Chromium (Cr)	2015/06/24	95	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
7943514	Total Cobalt (Co)	2015/06/24	95	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7943514	Total Copper (Cu)	2015/06/24	95	80 - 120	102	80 - 120	<0.000050	mg/L	NC	20
7943514	Total Iron (Fe)	2015/06/24	96	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
7943514	Total Lead (Pb)	2015/06/24	90	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7943514	Total Lithium (Li)	2015/06/24	88	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
7943514	Total Manganese (Mn)	2015/06/24	91	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7943514	Total Molybdenum (Mo)	2015/06/24	90	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20
7943514	Total Nickel (Ni)	2015/06/24	94	80 - 120	103	80 - 120	<0.000020	mg/L	NC	20
7943514	Total Phosphorus (P)	2015/06/24					<0.0020	mg/L		
7943514	Total Selenium (Se)	2015/06/24	85	80 - 120	97	80 - 120	<0.000040	mg/L	NC	20
7943514	Total Silicon (Si)	2015/06/24					<0.050	mg/L	NC	20
7943514	Total Silver (Ag)	2015/06/24	92	80 - 120	86	80 - 120	<0.0000050	mg/L	NC	20
7943514	Total Strontium (Sr)	2015/06/24	91	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7943514	Total Thallium (Tl)	2015/06/24	88	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7943514	Total Tin (Sn)	2015/06/24	93	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
7943514	Total Titanium (Ti)	2015/06/24	96	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7943514	Total Uranium (U)	2015/06/24	92	80 - 120	104	80 - 120	<0.0000020	mg/L	NC	20
7943514	Total Vanadium (V)	2015/06/24	94	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7943514	Total Zinc (Zn)	2015/06/24	92	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
7943514	Total Zirconium (Zr)	2015/06/24					<0.00010	mg/L	NC	20
7943633	Acidity (pH 4.5)	2015/06/23					<0.50	mg/L	NC	20
7943633	Acidity (pH 8.3)	2015/06/23			96	80 - 120	<0.50	mg/L	NC	20
7944099	Total Dissolved Solids	2015/06/25	104	80 - 120	86	80 - 120	<10	mg/L	3.8	20
7945908	Bromide (Br)	2015/06/25	98	78 - 120	101	80 - 120	<0.010	mg/L	NC	20
7945941	Bromide (Br)	2015/06/25	99	78 - 120	101	80 - 120	<0.010	mg/L	NC	20
7946007	Dissolved Organic Carbon (C)	2015/06/24	95	80 - 120	101	80 - 120	<0.50	mg/L	NC	20
7946011	Dissolved Organic Carbon (C)	2015/06/24	113	80 - 120	97	80 - 120	<0.50	mg/L	9.8	20
7946158	Total Mercury (Hg)	2015/06/25	99	80 - 120	92	80 - 120	<0.010	ug/L	NC	20
7946245	Total Mercury (Hg)	2015/06/25	91	80 - 120	101	80 - 120	<0.010	ug/L	NC	20
7949887	Dissolved Aluminum (Al)	2015/06/29			114	80 - 120	<0.00050	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7949887	Dissolved Antimony (Sb)	2015/06/29			106	80 - 120	<0.000020	mg/L		
7949887	Dissolved Cadmium (Cd)	2015/06/29			103	80 - 120	<0.0000050	mg/L		
7949887	Dissolved Iron (Fe)	2015/06/29			107	80 - 120	<0.0010	mg/L		
7949887	Dissolved Nickel (Ni)	2015/06/29			105	80 - 120	<0.000020	mg/L		
7949887	Dissolved Selenium (Se)	2015/06/29			100	80 - 120	<0.000040	mg/L		
7949887	Dissolved Thallium (Tl)	2015/06/29			110	80 - 120	<0.0000020	mg/L		
7949887	Dissolved Uranium (U)	2015/06/29			111	80 - 120	<0.0000020	mg/L		
7949887	Dissolved Zinc (Zn)	2015/06/29			104	80 - 120	<0.00010	mg/L		
7952204	Total Phosphorus (P)	2015/06/30	94	80 - 120	92	80 - 120	<0.0020	mg/L	NC	20
7952220	Dissolved Phosphorus (P)	2015/06/30			97	80 - 120	<0.0020	mg/L		
7953804	Dissolved Mercury (Hg)	2015/07/03	102	80 - 120	99	80 - 120	<0.010	ug/L	NC	20
7955268	Orthophosphate (P)	2015/07/03			105	80 - 120	<0.0010	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552114
Report Date: 2015/07/06

YUKON ZINC CORPORATION
Sampler Initials: MA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc
4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca
Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

08409416

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY — MAXXAM JOB #: B552114

ANALYSIS REQUEST

LAB USE ONLY — COC #:

COMPANY NAME:	Yukon Zinc Corporation
CLIENT PROJECT NO.:	
COMPANY ADDRESS:	#701-475 Howe Street Vancouver, BC V6C 2B3
TEL.:	604-638-0921 Ex.5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	Margaret Ayles
PROJECT MANAGER:	Malcom Swallow/Alex Wu
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	L1	MM4782	X					16-Jun-15	9:20	8	X	X	X	X	X		X	X	X	X
2	T1	MM4783	X					15-Jun-15	13:15	9	X	X	X	X	X	X	X	X	X	X
3	W9	MM4784	X					16-Jun-15	8:35	8	X	X	X	X	X		X	X	X	X
4	W22	MM4785	X					13-Jun-15	10:32	7	X	X	X	X			X	X	X	X
5	W31	MM4786	X					17-Jun-15	15:24	9	X	X	X	X	X	X	X	X	X	X
6	W31-96	MM4787	X					17-Jun-15	15:24	9	X	X	X	X	X	X	X	X	X	X
7	W71	MM4788	X					13-Jun-15	13:32	7	X	X	X	X			X	X	X	X
8	W72	MM4789	X					13-Jun-15	13:50	7	X	X	X	X			X	X	X	X
9	W73	MM4790	X					13-Jun-15	14:17	7	X	X	X	X			X	X	X	X
10	W80	MM4791	X					14-Jun-15	14:18	7	X	X	X	X			X	X	X	X
11	W82	MM4792	X					17-Jun-15	16:54	8	X	X	X	X	X		X	X	X	X
12																				
13																				
14																				
15																				
16																				
17																				

B552114

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS: ____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER
JARS USED:

LAB USE ONLY — ARRIVAL TEMPERATURE °C: 8,8,8 / 8,8,8 | DUE DATE: | LOG IN CHECK:

RELINQUISHED BY SAMPLER:	DATE: DD/MM/YY 18/06/2015	TIME: 7:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: JESSICA LHOK 2015/06/19 14:10

COCFORM - BC - 20070822

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your C.O.C. #: 08409417

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/29
Report #: R1985356
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B552115
Received: 2015/06/19, 14:10

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	8	N/A	2015/06/23	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	8	2015/06/20	2015/06/20	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	8	N/A	2015/06/22	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	8	N/A	2015/06/20	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	8	N/A	2015/06/22	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	8	N/A	2015/06/23	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	8	N/A	2015/06/26	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	8	N/A	2015/06/25	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	8	N/A	2015/06/23	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	8	N/A	2015/06/23	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	8	N/A	2015/06/23	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	8	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	8	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	8	N/A	2015/06/20	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	8	N/A	2015/06/23	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	8	N/A	2015/06/20	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	8	N/A	2015/06/20	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	7	N/A	2015/06/22	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/06/23	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	6	2015/06/23	2015/06/24	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	2	2015/06/24	2015/06/25	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	8	2015/06/22	2015/06/22	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	8	N/A	2015/06/22	BBY6SOP-00034	SM 22 2540 D
Turbidity	8	N/A	2015/06/20	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08409417

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/06/29
Report #: R1985356
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B552115
Received: 2015/06/19, 14:10

Encryption Key

Graham Rudkin
29 Jun 2015 16:16:48 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4793		MM4794		MM4795		MM4796		
Sampling Date		2015/06/17 10:15		2015/06/17 10:15		2015/06/17 14:18		2015/06/15 15:00		
COC Number		08409417		08409417		08409417		08409417		
	Units	MW05-1A	QC Batch	MW05-1A-98	QC Batch	MW05-1B	QC Batch	MW05-2A	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7943628	<0.50	7943633	<0.50	7943628	<0.50	0.50	7943628
Acidity (pH 8.3)	mg/L	<0.50	7943628	<0.50	7943633	<0.50	7943628	<0.50	0.50	7943628
Fluoride (F)	mg/L	0.490	7942558	0.490	7942558	0.120	7942558	0.260	0.010	7942558
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.0020	7940151	<0.0020	7940151	0.0500	7940151	<0.0020	0.0020	7940151
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	121	7939917	122	7939917	102	7939917	201	0.50	7939917
Alkalinity (Total as CaCO3)	mg/L	102	7941094	103	7941094	97.3	7941094	171	0.50	7941094
Alkalinity (PP as CaCO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Bicarbonate (HCO3)	mg/L	124	7941094	125	7941094	119	7941094	209	0.50	7941094
Carbonate (CO3)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Hydroxide (OH)	mg/L	<0.50	7941094	<0.50	7941094	<0.50	7941094	<0.50	0.50	7941094
Anions										
Orthophosphate (P)	mg/L	0.020	7941321	0.021	7941321	0.074	7941321	<0.0010 (1)	0.0010	7941321
Dissolved Sulphate (SO4)	mg/L	18.3	7943011	18.6	7943011	3.59	7943011	30.6	0.50	7943011
Dissolved Chloride (Cl)	mg/L	<0.50	7943009	<0.50	7943009	<0.50	7943009	<0.50	0.50	7943009
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.138	7942397	0.128	7942397	0.366	7942397	0.0054	0.0020	7942397
Total Ammonia (N)	mg/L	0.133 (2)	7943257	0.134 (2)	7943257	0.514 (2)	7943257	0.102 (1)	0.0050	7943257
Nitrate plus Nitrite (N)	mg/L	<0.0020	7941226	<0.0020	7941226	0.0500	7941226	<0.0020 (1)	0.0020	7941226
Nitrite (N)	mg/L	<0.0020	7941227	<0.0020	7941227	<0.0020	7941227	<0.0020 (1)	0.0020	7941227
Physical Properties										
Conductivity	uS/cm	238	7941095	238	7941095	199	7941095	382	1.0	7941095
pH	pH	8.10	7941096	8.08	7941096	7.80	7941096	7.96	N/A	7941096
Physical Properties										
Total Suspended Solids	mg/L	<4.0	7941015	<4.0	7941015	<4.0	7941015	<4.0	4.0	7941015
Total Dissolved Solids	mg/L	134	7944099	136	7944099	144	7942744	254 (3)	10	7942023
Turbidity	NTU	1.56	7940891	1.53	7940891	3.48	7940891	11.0 (1)	0.10	7940891

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) Sample preserved to extend hold time.
(3) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MM4797		MM4798			MM4799	MM4800		
Sampling Date		2015/06/15 15:40		2015/06/16 13:10			2015/06/16 16:20	2015/06/16 14:17		
COC Number		08409417		08409417			08409417	08409417		
	Units	MW05-2B	QC Batch	MW06-8D	RDL	QC Batch	MW06-8M	MW06-8S	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7943628	<0.50	0.50	7943628	<0.50	<0.50	0.50	7943628
Acidity (pH 8.3)	mg/L	3.21	7943628	<0.50	0.50	7943628	<0.50	3.23	0.50	7943628
Fluoride (F)	mg/L	0.065	7942558	0.880	0.010	7942558	1.30	0.270	0.010	7942558
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	N/A	ONSITE	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.0020	7940151	<0.0020	0.0020	7940151	0.0111	<0.0020	0.0020	7940151
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	133	7939917	246	0.50	7939917	225	96.7	0.50	7939917
Alkalinity (Total as CaCO3)	mg/L	142	7941094	214	0.50	7941094	158	67.3	0.50	7941094
Alkalinity (PP as CaCO3)	mg/L	<0.50	7941094	<0.50	0.50	7941094	<0.50	<0.50	0.50	7941094
Bicarbonate (HCO3)	mg/L	173	7941094	261	0.50	7941094	193	82.1	0.50	7941094
Carbonate (CO3)	mg/L	<0.50	7941094	<0.50	0.50	7941094	<0.50	<0.50	0.50	7941094
Hydroxide (OH)	mg/L	<0.50	7941094	<0.50	0.50	7941094	<0.50	<0.50	0.50	7941094
Anions										
Orthophosphate (P)	mg/L	<0.0010 (1)	7941321	<0.0010 (2)	0.0010	7941321	0.0035 (2)	0.17 (2)	0.0010	7941321
Dissolved Sulphate (SO4)	mg/L	6.30	7943011	28.7	0.50	7944814	38.5	30.6	0.50	7943011
Dissolved Chloride (Cl)	mg/L	<0.50	7943009	<0.50	0.50	7943009	<0.50	0.68	0.50	7943009
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.285	7942397	0.0035	0.0020	7942397	0.0099	0.256	0.0020	7942397
Total Ammonia (N)	mg/L	0.0220 (1)	7943257	0.0723 (2)	0.0050	7943257	0.0755 (2)	0.0343 (2)	0.0050	7943257
Nitrate plus Nitrite (N)	mg/L	0.0026 (1)	7941226	<0.0020 (2)	0.0020	7941226	0.0131 (2)	0.0045 (2)	0.0020	7941226
Nitrite (N)	mg/L	0.0024 (1)	7941227	<0.0020 (2)	0.0020	7941227	0.0020 (2)	0.0028 (2)	0.0020	7941227
Physical Properties										
Conductivity	uS/cm	280	7941095	451	1.0	7941095	375	203	1.0	7941095
pH	pH	7.44	7941096	7.95	N/A	7941096	8.12	7.10	N/A	7941096
Physical Properties										
Total Suspended Solids	mg/L	11.5	7941015	<4.0	4.0	7941015	<8.0 (3)	<8.0 (3)	8.0	7941015
Total Dissolved Solids	mg/L	166 (4)	7942023	262	10	7942744	224	128	10	7942744
Turbidity	NTU	182 (1)	7940891	5.81 (2)	0.10	7940891	1.56 (2)	3.09 (2)	0.10	7940891

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.
(3) RDL raised due to limited initial sample amount.
(4) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MM4793	MM4794	MM4795	MM4796	MM4797	MM4798	MM4799		
Sampling Date		2015/06/17 10:15	2015/06/17 10:15	2015/06/17 14:18	2015/06/15 15:00	2015/06/15 15:40	2015/06/16 13:10	2015/06/16 16:20		
COC Number		08409417	08409417	08409417	08409417	08409417	08409417	08409417		
	Units	MW05-1A	MW05-1A-98	MW05-1B	MW05-2A	MW05-2B	MW06-8D	MW06-8M	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7947486
RDL = Reportable Detection Limit										

Maxxam ID		MM4800		
Sampling Date		2015/06/16 14:17		
COC Number		08409417		
	Units	MW06-8S	RDL	QC Batch
Elements				
Dissolved Mercury (Hg)	ug/L	<0.010	0.010	7947486
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4793	MM4794	MM4795	MM4796	MM4797		
Sampling Date		2015/06/17 10:15	2015/06/17 10:15	2015/06/17 14:18	2015/06/15 15:00	2015/06/15 15:40		
COC Number		08409417	08409417	08409417	08409417	08409417		
	Units	MW05-1A	MW05-1A-98	MW05-1B	MW05-2A	MW05-2B	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7945908
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00342	0.0174	0.0125	0.00392	0.00373	0.00050	7942004
Dissolved Antimony (Sb)	mg/L	<0.000020	<0.000020	0.000066	0.000029	<0.000020	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.0101	0.00993	0.00465	0.00117	0.0506	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.0254	0.0245	0.242	0.0435	0.178	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000214	0.0000055	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00016	<0.00010	0.00011	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	<0.0000050	0.0000128	0.0000468	0.0000089	0.000141	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	<0.000050	<0.000050	0.000099	0.000087	0.000069	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.525	0.557	2.10	0.835	15.9	0.0010	7942004
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000453	0.0000966	0.00217	0.000148	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	<0.00050	<0.00050	<0.00050	0.00190	<0.00050	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.193	0.197	0.301	0.207	1.13	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.00674	0.00625	0.00179	0.00327	0.00257	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.000038	0.000092	0.000690	0.000058	0.000241	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.106	0.109	0.302	0.0113	0.262	0.0020	7942004
Dissolved Selenium (Se)	mg/L	0.000056	0.000048	0.000127	0.000069	0.000104	0.000040	7942004
Dissolved Silicon (Si)	mg/L	3.26	3.49	4.75	3.92	5.06	0.050	7942004
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.144	0.145	0.119	0.171	0.0962	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00023	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	0.00066	<0.00050	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.0000443	0.0000438	0.0000518	0.00692	0.000169	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	0.00110	<0.00020	0.00035	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.00044	0.00108	0.00069	0.00182	0.00081	0.00010	7942004
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	0.00020	0.00019	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	40.0	40.2	35.5	52.3	41.7	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	5.10	5.15	3.22	17.0	7.06	0.050	7939918
Dissolved Potassium (K)	mg/L	1.21	1.24	1.35	1.86	0.365	0.050	7939918
Dissolved Sodium (Na)	mg/L	1.61	1.65	1.17	0.691	1.33	0.050	7939918
Dissolved Sulphur (S)	mg/L	7.5	7.4	<3.0	10.0	<3.0	3.0	7939918

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MM4798		MM4799	MM4800		
Sampling Date		2015/06/16 13:10		2015/06/16 16:20	2015/06/16 14:17		
COC Number		08409417		08409417	08409417		
	Units	MW06-8D	QC Batch	MW06-8M	MW06-8S	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	7945941	<0.010	<0.010	0.010	7945908
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00928	7942004	0.00168	0.00401	0.00050	7942004
Dissolved Antimony (Sb)	mg/L	0.000163	7942004	0.000749	0.00341	0.000020	7942004
Dissolved Arsenic (As)	mg/L	0.00452	7942004	0.0128	0.00120	0.000020	7942004
Dissolved Barium (Ba)	mg/L	0.0450	7942004	0.0525	0.0233	0.000020	7942004
Dissolved Beryllium (Be)	mg/L	<0.000010	7942004	<0.000010	<0.000010	0.000010	7942004
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7942004	<0.0000050	<0.0000050	0.0000050	7942004
Dissolved Boron (B)	mg/L	<0.010	7942004	<0.010	<0.010	0.010	7942004
Dissolved Cadmium (Cd)	mg/L	0.0000299	7942004	<0.0000050	0.0000914	0.0000050	7942004
Dissolved Chromium (Cr)	mg/L	<0.00010	7942004	<0.00010	<0.00010	0.00010	7942004
Dissolved Cobalt (Co)	mg/L	0.0000652	7942004	0.000222	0.00325	0.0000050	7942004
Dissolved Copper (Cu)	mg/L	0.000828	7942004	<0.000050	<0.000050	0.000050	7942004
Dissolved Iron (Fe)	mg/L	0.606	7942004	0.433	2.03	0.0010	7942004
Dissolved Lead (Pb)	mg/L	0.00189	7942004	0.0000352	0.0000573	0.0000050	7942004
Dissolved Lithium (Li)	mg/L	0.00223	7942004	0.00382	<0.00050	0.00050	7942004
Dissolved Manganese (Mn)	mg/L	0.0116	7942004	0.0393	0.317	0.000050	7942004
Dissolved Molybdenum (Mo)	mg/L	0.00135	7942004	0.00499	0.00254	0.000050	7942004
Dissolved Nickel (Ni)	mg/L	0.000276	7942004	0.00282	0.0372	0.000020	7942004
Dissolved Phosphorus (P)	mg/L	0.0064	7942004	0.0114	0.252	0.0020	7942004
Dissolved Selenium (Se)	mg/L	<0.000040	7942004	<0.000040	0.000043	0.000040	7942004
Dissolved Silicon (Si)	mg/L	4.77	7942004	3.70	5.49	0.050	7942004
Dissolved Silver (Ag)	mg/L	<0.0000050	7942004	<0.0000050	<0.0000050	0.0000050	7942004
Dissolved Strontium (Sr)	mg/L	0.167	7942004	0.166	0.0580	0.000050	7942004
Dissolved Thallium (Tl)	mg/L	<0.0000020	7942004	0.0000034	0.0000100	0.0000020	7942004
Dissolved Tin (Sn)	mg/L	<0.00020	7942004	<0.00020	<0.00020	0.00020	7942004
Dissolved Titanium (Ti)	mg/L	<0.00050	7942004	<0.00050	<0.00050	0.00050	7942004
Dissolved Uranium (U)	mg/L	0.0112	7942004	0.0185	0.0000224	0.0000020	7942004
Dissolved Vanadium (V)	mg/L	<0.00020	7942004	<0.00020	<0.00020	0.00020	7942004
Dissolved Zinc (Zn)	mg/L	0.00258	7942004	0.00134	1.18	0.00010	7942004
Dissolved Zirconium (Zr)	mg/L	0.00054	7942004	<0.00010	<0.00010	0.00010	7942004
Dissolved Calcium (Ca)	mg/L	57.2	7939918	51.5	32.7	0.050	7939918
Dissolved Magnesium (Mg)	mg/L	25.0	7939918	23.3	3.66	0.050	7939918
Dissolved Potassium (K)	mg/L	1.77	7939918	2.18	0.944	0.050	7939918
Dissolved Sodium (Na)	mg/L	0.472	7939918	1.58	1.10	0.050	7939918
Dissolved Sulphur (S)	mg/L	8.8	7939918	13.6	9.7	3.0	7939918

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.0°C
Package 2	8.0°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7940891	Turbidity	2015/06/20			98	80 - 120	<0.10	NTU	1.6	20
7941015	Total Suspended Solids	2015/06/22	114	80 - 120	102	80 - 120	<4.0	mg/L	NC	20
7941094	Alkalinity (PP as CaCO3)	2015/06/20					<0.50	mg/L	NC	20
7941094	Alkalinity (Total as CaCO3)	2015/06/20	NC	80 - 120	99	80 - 120	0.67, RDL=0.50	mg/L	2.9	20
7941094	Bicarbonate (HCO3)	2015/06/20					0.82, RDL=0.50	mg/L	2.9	20
7941094	Carbonate (CO3)	2015/06/20					<0.50	mg/L	NC	20
7941094	Hydroxide (OH)	2015/06/20					<0.50	mg/L	NC	20
7941095	Conductivity	2015/06/20			100	80 - 120	1.0, RDL=1.0	uS/cm	0.63	20
7941096	pH	2015/06/20			101	97 - 103			0.54	N/A
7941226	Nitrate plus Nitrite (N)	2015/06/20	105	80 - 120	109	80 - 120	<0.0020	mg/L	NC	25
7941227	Nitrite (N)	2015/06/20	100	80 - 120	105	80 - 120	<0.0020	mg/L	NC	25
7941321	Orthophosphate (P)	2015/06/20	97	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
7942004	Dissolved Aluminum (Al)	2015/06/23	96	80 - 120	111	80 - 120	<0.00050	mg/L	1.8	20
7942004	Dissolved Antimony (Sb)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000020	mg/L	0.59	20
7942004	Dissolved Arsenic (As)	2015/06/23	98	80 - 120	111	80 - 120	<0.000020	mg/L	3.5	20
7942004	Dissolved Barium (Ba)	2015/06/23	NC	80 - 120	109	80 - 120	<0.000020	mg/L	2.5	20
7942004	Dissolved Beryllium (Be)	2015/06/23	89	80 - 120	105	80 - 120	<0.000010	mg/L	NC	20
7942004	Dissolved Bismuth (Bi)	2015/06/23	88	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7942004	Dissolved Boron (B)	2015/06/23					<0.010	mg/L	NC	20
7942004	Dissolved Cadmium (Cd)	2015/06/23	93	80 - 120	111	80 - 120	<0.0000050	mg/L	1.3	20
7942004	Dissolved Chromium (Cr)	2015/06/23	91	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
7942004	Dissolved Cobalt (Co)	2015/06/23	90	80 - 120	106	80 - 120	<0.0000050	mg/L	3.1	20
7942004	Dissolved Copper (Cu)	2015/06/23	87	80 - 120	106	80 - 120	<0.000050	mg/L	NC	20
7942004	Dissolved Iron (Fe)	2015/06/23	NC	80 - 120	120	80 - 120	<0.0010	mg/L	2.0	20
7942004	Dissolved Lead (Pb)	2015/06/23	92	80 - 120	108	80 - 120	<0.0000050	mg/L	1.7	20
7942004	Dissolved Lithium (Li)	2015/06/23	94	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
7942004	Dissolved Manganese (Mn)	2015/06/23	NC	80 - 120	110	80 - 120	<0.000050	mg/L	2.5	20
7942004	Dissolved Molybdenum (Mo)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000050	mg/L	0.85	20
7942004	Dissolved Nickel (Ni)	2015/06/23	NC	80 - 120	108	80 - 120	<0.000020	mg/L	3.0	20
7942004	Dissolved Phosphorus (P)	2015/06/23					<0.0020	mg/L	1.8	20
7942004	Dissolved Selenium (Se)	2015/06/23	87	80 - 120	103	80 - 120	<0.000040	mg/L	NC	20
7942004	Dissolved Silicon (Si)	2015/06/23					<0.050	mg/L	4.1	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7942004	Dissolved Silver (Ag)	2015/06/23	87	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7942004	Dissolved Strontium (Sr)	2015/06/23	NC	80 - 120	109	80 - 120	<0.000050	mg/L	3.5	20
7942004	Dissolved Thallium (Tl)	2015/06/23	89	80 - 120	102	80 - 120	<0.0000020	mg/L	NC	20
7942004	Dissolved Tin (Sn)	2015/06/23	92	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7942004	Dissolved Titanium (Ti)	2015/06/23	100	80 - 120	110	80 - 120	<0.00050	mg/L	NC	20
7942004	Dissolved Uranium (U)	2015/06/23	95	80 - 120	112	80 - 120	<0.0000020	mg/L	1.8	20
7942004	Dissolved Vanadium (V)	2015/06/23	93	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
7942004	Dissolved Zinc (Zn)	2015/06/23	NC	80 - 120	108	80 - 120	<0.00010	mg/L	3.2	20
7942004	Dissolved Zirconium (Zr)	2015/06/23					<0.00010	mg/L	NC	20
7942023	Total Dissolved Solids	2015/06/24	NC	80 - 120	98	80 - 120	<10	mg/L	5.8	20
7942397	Dissolved Phosphorus (P)	2015/06/22	93	80 - 120	96	80 - 120	<0.0020	mg/L	NC	20
7942558	Fluoride (F)	2015/06/22	100	80 - 120	98	80 - 120	<0.010	mg/L	0	20
7942744	Total Dissolved Solids	2015/06/24	102	80 - 120	108	80 - 120	12, RDL=10	mg/L	2.7	20
7943009	Dissolved Chloride (Cl)	2015/06/22	NC	80 - 120	96	80 - 120	<0.50	mg/L	0.57	20
7943011	Dissolved Sulphate (SO4)	2015/06/22	NC	80 - 120	92	80 - 120	<0.50	mg/L	2.8	20
7943257	Total Ammonia (N)	2015/06/23	NC	80 - 120	101	80 - 120	<0.0050	mg/L	1.4	20
7943628	Acidity (pH 4.5)	2015/06/23					<0.50	mg/L	NC	20
7943628	Acidity (pH 8.3)	2015/06/23			96	80 - 120	<0.50	mg/L	9.1	20
7943633	Acidity (pH 4.5)	2015/06/23					<0.50	mg/L	NC	20
7943633	Acidity (pH 8.3)	2015/06/23			96	80 - 120	<0.50	mg/L	NC	20
7944099	Total Dissolved Solids	2015/06/25	104	80 - 120	86	80 - 120	<10	mg/L	3.8	20
7944814	Dissolved Sulphate (SO4)	2015/06/23	NC	80 - 120	95	80 - 120	<0.50	mg/L	1.2	20
7945908	Bromide (Br)	2015/06/25	98	78 - 120	101	80 - 120	<0.010	mg/L	NC	20
7945941	Bromide (Br)	2015/06/25	99	78 - 120	101	80 - 120	<0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: MA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
7947486	Dissolved Mercury (Hg)	2015/06/26	109	80 - 120	114	80 - 120	<0.010	ug/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B552115
Report Date: 2015/06/29

YUKON ZINC CORPORATION
Sampler Initials: MA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

08409417

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

LAB USE ONLY
MAXXAM JOB #: B552115

ANALYSIS REQUEST

LAB USE ONLY
COC #:

COMPANY NAME:	Yukon Zinc Corporation
COMPANY ADDRESS:	#701-475 Howe Street Vancouver, BC V6C 2B3
CLIENT PROJECT NO.:	
TEL.:	604-638-0921 Ext. 5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	Margaret Ayles
PROJECT MANAGER:	Malcom Swallow/ Alex Wu
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE DD/MM/YY	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW05-1A	MM4793	X					17-Jun-15	10:15	5	X	X	X	X	X	X	X
2	MW05-1A-98	MM4794	X					17-Jun-15	10:15	5	X	X	X	X	X	X	X
3	MW05-1B	MM4795	X					17:jun-15	14:18	5	X	X	X	X	X	X	X
4	MW05-2A	MM4796	X					15-Jun-15	15:00	5	X	X	X	X	X	X	X
5	MW05-2B	MM4797	X					15-Jun-15	15:40	5	X	X	X	X	X	X	X
6	MW06-8D	MM4798	X					16-Jun-15	13:10	5	X	X	X	X	X	X	X
7	MW06-8M	MM4799	X					16-Jun-15	16:20	5	X	X	X	X	X	X	X
8	MW06-8S	MM4800	X					16-Jun-15	14:17	5	X	X	X	X	X	X	X
9																	
10																	
11																	
12																	
13																	
14																	
15																	

B552115

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS: _____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER
JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 8,8,8 8,8,8
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER:	Margaret Ayles	DATE: DD/MM/YY 18/06/2015	TIME: 7:30
RECEIVED BY:			
RELINQUISHED BY:		DATE: DD/MM/YY	TIME:
RECEIVED BY:			
RELINQUISHED BY:		DATE: DD/MM/YY	TIME:
RECEIVED BY LABORATORY:	JESSICA		2015/06/19 14:10

COCFORM - BC - 20070622

Your C.O.C. #: 08412607

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026311
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567563
Received: 2015/08/07, 09:10

Sample Matrix: Water
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	8	N/A	2015/08/07	BBY6SOP-00037	SM 22 2310 B m
Acidity pH 4.5 & pH 8.3 (as CaCO3)	8	N/A	2015/08/08	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	9	2015/08/08	2015/08/08	BBY6SOP-00026	SM 22 2320 B m
Alkalinity - Water	7	2015/08/08	2015/08/09	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	15	N/A	2015/08/10	BBY6SOP-00011	SM 22 4500-Cl- G m
Cyanide SAD (strong acid dissociable)	4	N/A	2015/08/11	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	2	N/A	2015/08/11	BBY6SOP-00004	SM 22 4500-CN O
Cyanide WAD (weak acid dissociable)	2	N/A	2015/08/18	BBY6SOP-00004	SM 22 4500-CN O
Carbon (DOC) (1, 2)	3	N/A	2015/08/11	EENVSOP-00060	MMCW 119 1996 m
Carbon (DOC) (1, 2)	4	N/A	2015/08/12	EENVSOP-00060	MMCW 119 1996 m
Conductance - water	9	N/A	2015/08/08	BBY6SOP-00026	SM 22 2510 B m
Conductance - water	7	N/A	2015/08/09	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	15	N/A	2015/08/11	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	9	N/A	2015/08/11	BBY7SOP-00002	EPA 6020a R1 m
Hardness Total (calculated as CaCO3)	7	N/A	2015/08/13	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	15	N/A	2015/08/12	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	1	N/A	2015/08/13	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	16	N/A	2015/08/12	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	16	2015/08/13	2015/08/13	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	15	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	15	N/A	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	1	N/A	2015/08/13	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	16	N/A	2015/08/11	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Digested LL (total)	7	2015/08/12	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	9	N/A	2015/08/11	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	7	N/A	2015/08/13	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	9	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	15	N/A	2015/08/10	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	15	N/A	2015/08/08	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	15	N/A	2015/08/08	BBY6SOP-00010	SM 22 4500-NO3- I m

Your C.O.C. #: 08412607

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026311
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567563
Received: 2015/08/07, 09:10

Sample Matrix: Water
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Nitrogen - Nitrate (as N)	15	N/A	2015/08/08	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	16	N/A	2015/08/10	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (3)	9	N/A	2015/08/08	BBY6SOP-00026	SM 22 4500-H+ B m
pH Water (3)	7	N/A	2015/08/09	BBY6SOP-00026	SM 22 4500-H+ B m
Total Dissolved Solids (Filt. Residue)	16	2015/08/08	2015/08/10	BBY6SOP-00033	SM 22 2540 C m
Carbon (Total Organic) (1, 4)	4	N/A	2015/08/12	EENVSOP-00060	MMCW 119 1996 m
Total Suspended Solids	16	N/A	2015/08/10	BBY6SOP-00034	SM 22 2540 D
Turbidity	16	N/A	2015/08/07	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Edmonton Environmental
(2) DOC present in the sample should be considered as non-purgeable DOC.
(3) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.
(4) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Graham Rudkin
19 Aug 2015 13:44:17 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV5161		MV5162		MV5163		MV5164		
Sampling Date		2015/07/30 15:30		2015/07/30 15:30		2015/07/30 16:45		2015/07/30 18:25		
COC Number		08412607		08412607		08412607		08412607		
	UNITS	W8	QC Batch	W8-99	QC Batch	W9	QC Batch	L1	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7995013	<0.50	7995014	<0.50	7995013	<0.50	0.50	7995014
Acidity (pH 8.3)	mg/L	<0.50	7995013	<0.50	7995014	<0.50	7995013	<0.50	0.50	7995014
Fluoride (F)	mg/L	0.040	7998149	0.013	7998149	0.110	7998149	0.066	0.010	7998149
Calculated Parameters										
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	7996359	LAB	7996359	LAB	N/A	7996359
Total Hardness (CaCO3)	mg/L	86.9	7994034	<0.50	7994034	161	7994034	59.5	0.50	7994034
Nitrate (N)	mg/L	<0.20	7994069	<0.20	7994069	<0.20	7994069	<0.20	0.20	7994069
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	90.5	7994239	<0.50	7994239	163	7994239	59.4	0.50	7994239
Dissolved Organic Carbon (C)	mg/L					6.6	7998375	1.9	0.50	7998375
Alkalinity (Total as CaCO3)	mg/L	73.2	7995512	1.41	7995516	113	7995512	50.2	0.50	7995516
Alkalinity (PP as CaCO3)	mg/L	<0.50	7995512	<0.50	7995516	<0.50	7995512	<0.50	0.50	7995516
Bicarbonate (HCO3)	mg/L	89.2	7995512	1.72	7995516	138	7995512	61.2	0.50	7995516
Carbonate (CO3)	mg/L	<0.50	7995512	<0.50	7995516	<0.50	7995512	<0.50	0.50	7995516
Hydroxide (OH)	mg/L	<0.50	7995512	<0.50	7995516	<0.50	7995512	<0.50	0.50	7995516
Anions										
Dissolved Chloride (Cl)	mg/L	<0.50	7997115	<0.50	7997115	<0.50	7997115	<0.50	0.50	7997115
Nutrients										
Total Ammonia (N)	mg/L	<0.0050 (1)	7997195	0.0059 (1)	7997195	<0.0050 (1)	7997195	0.0156 (1)	0.0050	7997195
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7995622	<0.20 (2)	7995622	<0.20 (2)	7995622	<0.20 (2)	0.20	7995622
Nitrite (N)	mg/L	<0.20 (2)	7995623	<0.20 (2)	7995623	<0.20 (2)	7995623	<0.20 (2)	0.20	7995623
Physical Properties										
Conductivity	uS/cm	179	7995511	1.3	7995521	309	7995511	122	1.0	7995521
pH	pH	7.99	7995509	6.36	7995522	8.13	7995509	7.83	N/A	7995522
Physical Properties										
Total Suspended Solids	mg/L	6.5 (1)	7995327	<4.0 (1)	7995327	<4.0 (1)	7995327	<4.0 (1)	4.0	7995327
Total Dissolved Solids	mg/L	114 (1)	7995330	<10 (1)	7995330	188 (1)	7995330	74 (1)	10	7995330
Turbidity	NTU	1.40 (1)	7994571	<0.10 (1)	7994571	0.19 (1)	7994571	0.63 (1)	0.10	7994571

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV5165		MV5166		MV5167	MV5168		
Sampling Date		2015/07/30 14:15		2015/07/30 10:12		2015/07/30 21:11	2015/07/30 17:35		
COC Number		08412607		08412607		08412607	08412607		
	UNITS	W15	QC Batch	W16	QC Batch	W31	W81	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	7995014	<0.50	7995013	<0.50	<0.50	0.50	7995014
Acidity (pH 8.3)	mg/L	<0.50	7995014	<0.50	7995013	<0.50	<0.50	0.50	7995014
Fluoride (F)	mg/L	0.028	7998149	0.039	7998149	0.027	0.029	0.010	7998149
Calculated Parameters									
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	7996359	LAB	LAB	N/A	7996359
Total Hardness (CaCO3)	mg/L	55.5	7994034	84.0	7994034	64.4	63.2	0.50	7994034
Nitrate (N)	mg/L	<0.20	7994069	0.37	7994069	<0.20	<0.20	0.20	7994069
Misc. Inorganics									
Strong Acid Dissoc. Cyanide (CN)	mg/L			0.00095	7997783	<0.00050		0.00050	7997783
Weak Acid Dissoc. Cyanide (CN)	mg/L			0.00112	7997815	<0.00050		0.00050	8006359
Dissolved Hardness (CaCO3)	mg/L	56.1	7994239	81.4	7994239	68.1	64.0	0.50	7994239
Dissolved Organic Carbon (C)	mg/L		7998375	1.8	7999169	1.5		0.50	7999169
Alkalinity (Total as CaCO3)	mg/L	49.5	7995512	70.1	7995512	58.5	54.4	0.50	7995516
Total Organic Carbon (C)	mg/L			2.7	7999314	1.9		0.50	7999314
Alkalinity (PP as CaCO3)	mg/L	<0.50	7995512	<0.50	7995512	<0.50	<0.50	0.50	7995516
Bicarbonate (HCO3)	mg/L	60.4	7995512	85.5	7995512	71.4	66.4	0.50	7995516
Carbonate (CO3)	mg/L	<0.50	7995512	<0.50	7995512	<0.50	<0.50	0.50	7995516
Hydroxide (OH)	mg/L	<0.50	7995512	<0.50	7995512	<0.50	<0.50	0.50	7995516
Anions									
Dissolved Chloride (Cl)	mg/L	<0.50	7997115	<0.50	7997115	<0.50	<0.50	0.50	7997115
Nutrients									
Total Ammonia (N)	mg/L	<0.0050 (1)	7997195	<0.0050 (1)	7997195	0.0056 (1)	<0.0050 (1)	0.0050	7997195
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7995622	0.37 (2)	7995622	<0.20 (2)	<0.20 (2)	0.20	7995622
Nitrite (N)	mg/L	<0.20 (2)	7995623	<0.20 (2)	7995623	<0.20 (2)	<0.20 (2)	0.20	7995623
Physical Properties									
Conductivity	uS/cm	117	7995511	164	7995511	134	128	1.0	7995521
pH	pH	7.84	7995509	7.96	7995509	7.90	7.85	N/A	7995522
Physical Properties									
Total Suspended Solids	mg/L	<4.0 (1)	7995327	<4.0 (1)	7995327	<4.0 (1)	<4.0 (1)	4.0	7995327
Total Dissolved Solids	mg/L	66 (1)	7995330	92 (1)	7995330	64 (1)	66 (1)	10	7995330
Turbidity	NTU	0.12 (1)	7994571	0.42 (1)	7994571	0.17 (1)	0.22 (1)	0.10	7994571

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV5169		MV5170			MV5171		
Sampling Date		2015/07/30 19:30		2015/07/30 17:35			2015/07/30 17:20		
COC Number		08412607		08412607			08412607		
	UNITS	W82	QC Batch	W85	RDL	QC Batch	T1	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	7995014	<0.50	0.50	7995014	<0.50	0.50	7995014
Acidity (pH 8.3)	mg/L	0.58	7995014	<0.50	0.50	7995014	1.06	0.50	7995014
Fluoride (F)	mg/L	0.150	7998149	0.037	0.010	7998149		0.010	7998149
Calculated Parameters									
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	N/A	7996359	LAB	N/A	7996359
Total Hardness (CaCO3)	mg/L	132	7994034	81.2	0.50	7994034	1670	0.50	7994034
Nitrate (N)	mg/L	<0.20	7994069	<0.20	0.20	7994069		0.20	7994069
Misc. Inorganics									
Strong Acid Dissoc. Cyanide (CN)	mg/L		7997783	<0.00050	0.00050	7997783	0.225	0.0025	7997783
Weak Acid Dissoc. Cyanide (CN)	mg/L		8006359	<0.00050	0.00050	8006359	0.0817	0.0025	7997815
Dissolved Hardness (CaCO3)	mg/L	145	7994239	79.4	0.50	7994239	1840	0.50	7994239
Dissolved Organic Carbon (C)	mg/L	3.0	7998375	1.8	0.50	7999169	25 (1)	1.0	7999169
Alkalinity (Total as CaCO3)	mg/L	88.8	7995512	68.8	0.50	7995516	40.1	0.50	7995512
Total Organic Carbon (C)	mg/L			2.1	0.50	7999314	26 (1)	1.0	7999314
Alkalinity (PP as CaCO3)	mg/L	<0.50	7995512	<0.50	0.50	7995516	<0.50	0.50	7995512
Bicarbonate (HCO3)	mg/L	108	7995512	84.0	0.50	7995516	49.0	0.50	7995512
Carbonate (CO3)	mg/L	<0.50	7995512	<0.50	0.50	7995516	<0.50	0.50	7995512
Hydroxide (OH)	mg/L	<0.50	7995512	<0.50	0.50	7995516	<0.50	0.50	7995512
Anions									
Dissolved Chloride (Cl)	mg/L	<0.50	7997115	<0.50	0.50	7997115		0.50	
Nutrients									
Total Ammonia (N)	mg/L	<0.0050 (2)	7997195	<0.0050 (2)	0.0050	7997195		0.0050	
Nitrate plus Nitrite (N)	mg/L	<0.20 (3)	7995622	<0.20 (3)	0.20	7995622		0.20	
Nitrite (N)	mg/L	<0.20 (3)	7995623	<0.20 (3)	0.20	7995623		0.20	
Physical Properties									
Conductivity	uS/cm	281	7995511	157	1.0	7995521	3390	1.0	7995511
pH	pH	8.01	7995509	7.76	N/A	7995522	7.67	N/A	7995509
Physical Properties									
Total Suspended Solids	mg/L	<4.0 (2)	7995327	<4.0 (2)	4.0	7995327	5.5 (2)	4.0	7995327
Total Dissolved Solids	mg/L	172 (2)	7995330	76 (2)	10	7995330	3180 (2)	10	7995330
Turbidity	NTU	2.13 (2)	7994571	0.46 (2)	0.10	7994571	4.28 (2)	0.10	7995053

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.
(2) Sample arrived to laboratory past recommended hold time.
(3) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV5172		MV5173		MV5174	MV5175	MV5176		
Sampling Date		2015/07/30 10:54		2015/07/30 12:40		2015/07/30 12:50	2015/07/30 13:32	2015/07/30 10:06		
COC Number		08412607		08412607		08412607	08412607	08412607		
	UNITS	W22	QC Batch	W71	QC Batch	W72	W73	W80	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7995013	<0.50	7995014	<0.50	<0.50	<0.50	0.50	7995014
Acidity (pH 8.3)	mg/L	<0.50	7995013	<0.50	7995014	<0.50	<0.50	<0.50	0.50	7995014
Fluoride (F)	mg/L	0.063	7998149	0.680	7998149	0.150	0.044	0.042	0.010	7998149
Calculated Parameters										
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	7996359	LAB	LAB	LAB	N/A	7996359
Total Hardness (CaCO3)	mg/L	104	7994034	308	7994034	155	101	78.4	0.50	7994034
Nitrate (N)	mg/L	<0.20	7994069	<0.20	7994069	<0.20	<0.20	<0.20	0.20	7994069
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	106	7994239	362	8000563	161	101	82.8	0.50	7994239
Alkalinity (Total as CaCO3)	mg/L	84.3	7995512	228	7995516	118	84.7	67.9	0.50	7995512
Alkalinity (PP as CaCO3)	mg/L	<0.50	7995512	1.76	7995516	<0.50	<0.50	<0.50	0.50	7995512
Bicarbonate (HCO3)	mg/L	103	7995512	273	7995516	144	103	82.8	0.50	7995512
Carbonate (CO3)	mg/L	<0.50	7995512	2.11	7995516	<0.50	<0.50	<0.50	0.50	7995512
Hydroxide (OH)	mg/L	<0.50	7995512	<0.50	7995516	<0.50	<0.50	<0.50	0.50	7995512
Anions										
Dissolved Chloride (Cl)	mg/L	<0.50	7997115	<0.50	7997115	<0.50	<0.50	<0.50	0.50	7997115
Nutrients										
Total Ammonia (N)	mg/L	0.0081 (1)	7997194	<0.0050 (1)	7997195	0.0300 (1)	<0.0050 (1)	<0.0050 (1)	0.0050	7997195
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7995622	<0.20 (2)	7995622	<0.20 (2)	<0.20 (2)	<0.20 (2)	0.20	7995622
Nitrite (N)	mg/L	<0.20 (2)	7995623	<0.20 (2)	7995623	<0.20 (2)	<0.20 (2)	<0.20 (2)	0.20	7995623
Physical Properties										
Conductivity	uS/cm	211	7995511	579	7995521	306	200	169	1.0	7995511
pH	pH	8.15	7995509	8.31	7995522	8.12	8.05	7.97	N/A	7995509
Physical Properties										
Total Suspended Solids	mg/L	<4.0 (1)	7995327	<4.0 (1)	7995327	<4.0 (1)	<4.0 (1)	<4.0 (1)	4.0	7995327
Total Dissolved Solids	mg/L	110 (1)	7995330	372 (1)	7995330	184 (1)	102 (1)	82 (1)	10	7995330
Turbidity	NTU	0.26 (1)	7995053	0.18 (1)	7995053	0.47 (1)	0.33 (1)	0.23 (1)	0.10	7995053

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MV5161	MV5162	MV5163	MV5164	MV5165	MV5166		
Sampling Date		2015/07/30 15:30	2015/07/30 15:30	2015/07/30 16:45	2015/07/30 18:25	2015/07/30 14:15	2015/07/30 10:12		
COC Number		08412607	08412607	08412607	08412607	08412607	08412607		
	UNITS	W8	W8-99	W9	L1	W15	W16	RDL	QC Batch
Elements									
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7999569
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8000585
RDL = Reportable Detection Limit									

Maxxam ID		MV5167	MV5168	MV5169	MV5170	MV5171	MV5172	MV5173		
Sampling Date		2015/07/30 21:11	2015/07/30 17:35	2015/07/30 19:30	2015/07/30 17:35	2015/07/30 17:20	2015/07/30 10:54	2015/07/30 12:40		
COC Number		08412607	08412607	08412607	08412607	08412607	08412607	08412607		
	UNITS	W31	W81	W82	W85	T1	W22	W71	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7999592
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8000585
RDL = Reportable Detection Limit										

Maxxam ID		MV5174	MV5175	MV5176		
Sampling Date		2015/07/30 12:50	2015/07/30 13:32	2015/07/30 10:06		
COC Number		08412607	08412607	08412607		
	UNITS	W72	W73	W80	RDL	QC Batch
Elements						
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	0.010	7999592
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	0.010	8000585
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5161			MV5162	MV5163		
Sampling Date		2015/07/30 15:30			2015/07/30 15:30	2015/07/30 16:45		
COC Number		08412607			08412607	08412607		
	UNITS	W8	RDL	QC Batch	W8-99	W9	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	0.010	7996475	<0.010	<0.010	0.010	7996475
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00873	0.00050	7998267	<0.00050	0.00326	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	0.000053	0.000020	7998267	<0.000020	0.000189	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000195	0.000020	7998267	<0.000020	0.000234	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0433	0.000020	7998267	<0.000020	0.137	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7998267	<0.000010	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	0.010	7998267	<0.010	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	0.0000294	0.0000050	7998267	<0.0000050	0.00150	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7998267	<0.00010	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000307	0.0000050	7998267	<0.0000050	0.0000101	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.000909	0.000050	7998267	<0.000050	0.000892	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0163	0.0010	7998267	<0.0010	0.0038	0.0010	7998267
Dissolved Lead (Pb)	mg/L	0.0000221	0.0000050	7998267	<0.0000050	0.0000142	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7998267	<0.00050	0.00098	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.00180	0.000050	7998267	<0.000050	0.000228	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.000497	0.000050	7998267	<0.000050	0.000790	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000587	0.000020	7998267	0.000080	0.00413	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	7998267	<0.0020	<0.0020	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.000555	0.000040	7998267	<0.000040	0.00336	0.000040	7998267
Dissolved Silicon (Si)	mg/L	2.70	0.050	7998267	<0.050	3.41	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.0640	0.000050	7998267	<0.000050	0.143	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7998267	<0.0000020	0.0000026	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7998267	0.00024	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7998267	<0.00050	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000495	0.0000020	7998267	<0.0000020	0.00191	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7998267	<0.00020	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00201	0.00010	7998267	<0.00010	0.135	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7998267	<0.00010	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	30.3	0.050	7994506	<0.050	48.7	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	3.59	0.050	7994506	<0.050	10.1	0.050	7994506
Dissolved Potassium (K)	mg/L	0.336	0.050	7994506	<0.050	1.16	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.32	0.050	7994506	<0.050	1.61	0.050	7994506
Dissolved Sulphur (S)	mg/L	5.7	3.0	7994506	<3.0	15.3	3.0	7994506

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5161			MV5162	MV5163		
Sampling Date		2015/07/30 15:30			2015/07/30 15:30	2015/07/30 16:45		
COC Number		08412607			08412607	08412607		
	UNITS	W8	RDL	QC Batch	W8-99	W9	RDL	QC Batch
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.0887	0.0030	7999599	<0.00050	0.0105	0.00050	7996920
Total Antimony (Sb)	mg/L	0.000061	0.000050	7999599	<0.000020	0.000205	0.000020	7996920
Total Arsenic (As)	mg/L	0.000218	0.000020	7999599	<0.000020	0.000278	0.000020	7996920
Total Barium (Ba)	mg/L	0.0459	0.00010	7999599	<0.000020	0.148	0.000020	7996920
Total Beryllium (Be)	mg/L	0.000012	0.000010	7999599	<0.000010	<0.000010	0.000010	7996920
Total Bismuth (Bi)	mg/L	<0.000020	0.000020	7999599	<0.0000050	<0.0000050	0.0000050	7996920
Total Boron (B)	mg/L	<0.050	0.050	7999599	<0.010	<0.010	0.010	7996920
Total Cadmium (Cd)	mg/L	0.0000436	0.0000050	7999599	<0.0000050	0.00165	0.0000050	7996920
Total Chromium (Cr)	mg/L	<0.00050	0.00050	7999599	<0.00010	<0.00010	0.00010	7996920
Total Cobalt (Co)	mg/L	0.000127	0.000010	7999599	<0.0000050	0.0000270	0.0000050	7996920
Total Copper (Cu)	mg/L	0.00199	0.00020	7999599	<0.000050	0.00133	0.000050	7996920
Total Iron (Fe)	mg/L	0.192	0.0050	7999599	<0.0010	0.0458	0.0010	7996920
Total Lead (Pb)	mg/L	0.000295	0.000050	7999599	0.0000094	0.000274	0.0000050	7996920
Total Lithium (Li)	mg/L	<0.00050	0.00050	7999599	<0.00050	0.00078	0.00050	7996920
Total Manganese (Mn)	mg/L	0.00475	0.00010	7999599	<0.000050	0.00498	0.000050	7996920
Total Molybdenum (Mo)	mg/L	0.000511	0.000050	7999599	<0.000050	0.000810	0.000050	7996920
Total Nickel (Ni)	mg/L	0.00087	0.00010	7999599	0.000022	0.00454	0.000020	7996920
Total Phosphorus (P)	mg/L				<0.0020	0.0055	0.0020	7996920
Total Selenium (Se)	mg/L	0.000453	0.000040	7999599	<0.000040	0.00332	0.000040	7996920
Total Silicon (Si)	mg/L	2.67	0.10	7999599	<0.050	3.44	0.050	7996920
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	8004672	<0.0000050	<0.0000050	0.0000050	7996920
Total Strontium (Sr)	mg/L	0.0582	0.000050	7999599	<0.000050	0.144	0.000050	7996920
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	7999599	0.0000044	0.0000084	0.0000020	7996920
Total Tin (Sn)	mg/L	<0.00020	0.00020	7999599	<0.00020	<0.00020	0.00020	7996920
Total Titanium (Ti)	mg/L	<0.0050	0.0050	7999599	<0.00050	<0.00050	0.00050	7996920
Total Uranium (U)	mg/L	0.000521	0.0000050	7999599	<0.0000020	0.00203	0.0000020	7996920
Total Vanadium (V)	mg/L	0.00050	0.00050	7999599	<0.00020	<0.00020	0.00020	7996920
Total Zinc (Zn)	mg/L	0.0051	0.0010	7999599	0.00023	0.148	0.00010	7996920
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7999599	<0.00010	<0.00010	0.00010	7996920
Total Calcium (Ca)	mg/L	29.3	0.25	7994507	<0.050	47.6	0.050	7994507
Total Magnesium (Mg)	mg/L	3.36	0.25	7994507	<0.050	10.2	0.050	7994507
Total Potassium (K)	mg/L	0.29	0.25	7994507	<0.050	1.11	0.050	7994507
Total Sodium (Na)	mg/L	1.12	0.25	7994507	<0.050	1.58	0.050	7994507
Total Sulphur (S)	mg/L	<15	15	7994507	<3.0	15.3	3.0	7994507
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5164		MV5165		MV5166		
Sampling Date		2015/07/30 18:25		2015/07/30 14:15		2015/07/30 10:12		
COC Number		08412607		08412607		08412607		
	UNITS	L1	QC Batch	W15	QC Batch	W16	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	7996475	<0.010	7996475	<0.010	0.010	7996475
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00722	7998267	0.00454	7998267	0.00431	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	0.000051	7998267	0.000038	7998267	0.000052	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.00152	7998267	0.000138	7998267	0.000142	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0476	7998267	0.0181	7998267	0.0672	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	7998267	<0.000010	7998267	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7998267	<0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	7998267	<0.010	7998267	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	0.0000064	7998267	0.0000232	7998267	0.0000712	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	7998267	0.00017	7998267	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000080	7998267	0.0000149	7998267	0.0000145	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.000454	7998267	0.00114 (1)	8000887	0.000626	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0054	7998267	0.0021	7998267	0.0086	0.0010	7998267
Dissolved Lead (Pb)	mg/L	<0.0000050	7998267	0.000115	7998267	<0.0000050	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	<0.00050	7998267	<0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.000125	7998267	0.000106	7998267	0.00478	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.00106	7998267	0.000236	7998267	0.000407	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000426	7998267	0.000180 (1)	7998267	0.000314	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	0.0065	7998267	<0.0020	7998267	<0.0020	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.000421	7998267	0.000236	7998267	0.00117	0.000040	7998267
Dissolved Silicon (Si)	mg/L	2.32	7998267	2.35	7998267	3.17	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	7998267	<0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.0471	7998267	0.0314	7998267	0.0537	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	7998267	<0.0000020	7998267	<0.0000020	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	7998267	<0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	7998267	<0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000645	7998267	0.0000561	7998267	0.000216	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	7998267	0.00023	7998267	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00051	7998267	0.00132	8000887	0.00312	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	7998267	<0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	17.6	7994506	20.3	7994506	26.8	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	3.78	7994506	1.35	7994506	3.50	0.050	7994506
Dissolved Potassium (K)	mg/L	0.751	7994506	0.425	7994506	0.528	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.13	7994506	1.07	7994506	1.31	0.050	7994506

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5164		MV5165		MV5166		
Sampling Date		2015/07/30 18:25		2015/07/30 14:15		2015/07/30 10:12		
COC Number		08412607		08412607		08412607		
	UNITS	L1	QC Batch	W15	QC Batch	W16	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	3.7	7994506	3.3	7994506	4.1	3.0	7994506
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.0141	7996920	0.00679	7996920	0.0136	0.00050	7996920
Total Antimony (Sb)	mg/L	0.000052	7996920	0.000024	7996920	0.000049	0.000020	7996920
Total Arsenic (As)	mg/L	0.00161	7996920	0.000134	7996920	0.000157	0.000020	7996920
Total Barium (Ba)	mg/L	0.0479	7996920	0.0182	7996920	0.0683	0.000020	7996920
Total Beryllium (Be)	mg/L	<0.000010	7996920	<0.000010	7996920	<0.000010	0.000010	7996920
Total Bismuth (Bi)	mg/L	<0.0000050	7996920	<0.0000050	7996920	<0.0000050	0.0000050	7996920
Total Boron (B)	mg/L	<0.010	7996920	<0.010	7996920	<0.010	0.010	7996920
Total Cadmium (Cd)	mg/L	0.0000246	7996920	0.0000138	7996920	0.0000912	0.0000050	7996920
Total Chromium (Cr)	mg/L	<0.00010	7996920	0.00022	7996920	<0.00010	0.00010	7996920
Total Cobalt (Co)	mg/L	0.0000217	7996920	0.0000246	7996920	0.0000562	0.0000050	7996920
Total Copper (Cu)	mg/L	0.000731	7996920	0.000925	7996920	0.000794	0.000050	7996920
Total Iron (Fe)	mg/L	0.0810	7996920	0.0078	7996920	0.0582	0.0010	7996920
Total Lead (Pb)	mg/L	0.0000530	7996920	0.000198	7996920	0.0000582	0.0000050	7996920
Total Lithium (Li)	mg/L	<0.00050	7996920	<0.00050	7996920	<0.00050	0.00050	7996920
Total Manganese (Mn)	mg/L	0.0202	7996920	0.000698	7996920	0.0199	0.000050	7996920
Total Molybdenum (Mo)	mg/L	0.00111	7996920	0.000236	7996920	0.000403	0.000050	7996920
Total Nickel (Ni)	mg/L	0.000544	7996920	0.000143	7996920	0.000294	0.000020	7996920
Total Phosphorus (P)	mg/L	0.0114	7996920	0.0026	7996920	0.0045	0.0020	7996920
Total Selenium (Se)	mg/L	0.000407	7996920	0.000230	7996920	0.00107	0.000040	7996920
Total Silicon (Si)	mg/L	2.21	7996920	2.50	7996920	3.10	0.050	7996920
Total Silver (Ag)	mg/L	<0.0000050	7996920	<0.0000050	7996920	<0.0000050	0.0000050	7996920
Total Strontium (Sr)	mg/L	0.0471	7996920	0.0305	7996920	0.0538	0.000050	7996920
Total Thallium (Tl)	mg/L	0.0000048	7996920	0.0000033	7996920	0.0000022	0.0000020	7996920
Total Tin (Sn)	mg/L	<0.00020	7996920	<0.00020	7996920	<0.00020	0.00020	7996920
Total Titanium (Ti)	mg/L	<0.00050	7996920	<0.00050	7996920	<0.00050	0.00050	7996920
Total Uranium (U)	mg/L	0.000676	7996920	0.0000609	7996920	0.000231	0.0000020	7996920
Total Vanadium (V)	mg/L	<0.00020	7996920	0.00028	7996920	<0.00020	0.00020	7996920
Total Zinc (Zn)	mg/L	0.00243	7996920	0.00217	7996920	0.00429	0.00010	7996920
Total Zirconium (Zr)	mg/L	<0.00010	7996920	<0.00010	7996920	<0.00010	0.00010	7996920
Total Calcium (Ca)	mg/L	17.7	7994507	20.0	7994507	27.8	0.050	7994507
Total Magnesium (Mg)	mg/L	3.75	7994507	1.37	7994507	3.51	0.050	7994507
Total Potassium (K)	mg/L	0.724	7994507	0.381	7994507	0.520	0.050	7994507
Total Sodium (Na)	mg/L	1.05	7994507	0.998	7994507	1.25	0.050	7994507
Total Sulphur (S)	mg/L	3.6	7994507	3.3	7994507	4.1	3.0	7994507
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5167		MV5168			MV5169		
Sampling Date		2015/07/30 21:11		2015/07/30 17:35			2015/07/30 19:30		
COC Number		08412607		08412607			08412607		
	UNITS	W31	QC Batch	W81	RDL	QC Batch	W82	RDL	QC Batch
ANIONS									
Bromide (Br)	mg/L	<0.010	7996475	<0.010	0.010	7996475	<0.010	0.010	7996475
Dissolved Metals by ICPMS									
Dissolved Aluminum (Al)	mg/L	0.00928	7998267	0.00440	0.00050	7998267	0.0161	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	<0.000020	7998267	0.000028	0.000020	7998267	0.000323	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000151	7998267	0.000119	0.000020	7998267	0.000163	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0130	7998267	0.0326	0.000020	7998267	0.156	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	7998267	<0.000010	0.000010	7998267	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7998267	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	7998267	<0.010	0.010	7998267	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	<0.0000050	7998267	0.0000204	0.0000050	7998267	0.00242	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	7998267	<0.00010	0.00010	7998267	0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000209	7998267	0.0000145	0.0000050	7998267	0.000116	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.00115	7998267	0.000563	0.000050	7998267	0.00258	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0016	7998267	0.0045	0.0010	7998267	0.0236	0.0010	7998267
Dissolved Lead (Pb)	mg/L	0.0000154	7998267	<0.0000050	0.0000050	7998267	0.0000565	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	<0.00050	7998267	<0.00050	0.00050	7998267	0.00062	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	<0.000050	7998267	0.00153	0.000050	7998267	0.0603	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.000335	7998267	0.000272	0.000050	7998267	0.000383	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000192	7998267	0.000202	0.000020	8000887	0.0149	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	7998267	<0.0020	0.0020	7998267	0.0054	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.000205	7998267	0.000470	0.000040	7998267	0.00292	0.000040	8001117
Dissolved Silicon (Si)	mg/L	2.89	7998267	2.67	0.050	7998267	3.61	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	7998267	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.0165	7998267	0.0367	0.000050	7998267	0.127	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	7998267	<0.0000020	0.0000020	7998267	0.0000065	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	7998267	<0.00020	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	7998267	<0.00050	0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.0000139	7998267	0.000102	0.0000020	7998267	0.000326	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	0.00048	7998267	0.00021	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00019	7998267	0.00075	0.00010	7998267	0.210	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	7998267	<0.00010	0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	24.9	7994506	22.5	0.050	7994506	49.8	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	1.46	7994506	1.92	0.050	7994506	4.95	0.050	7994506
Dissolved Potassium (K)	mg/L	0.407	7994506	0.400	0.050	7994506	1.19	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.25	7994506	1.02	0.050	7994506	1.54	0.050	7994506
Dissolved Sulphur (S)	mg/L	<3.0	7994506	3.3	3.0	7994506	17.0	3.0	7994506

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5167		MV5168			MV5169		
Sampling Date		2015/07/30 21:11		2015/07/30 17:35			2015/07/30 19:30		
COC Number		08412607		08412607			08412607		
	UNITS	W31	QC Batch	W81	RDL	QC Batch	W82	RDL	QC Batch
Total Metals by ICPMS									
Total Aluminum (Al)	mg/L	0.0109	7996920	0.0122	0.00050	7996920	0.0814	0.0030	7999599
Total Antimony (Sb)	mg/L	<0.000020	7996920	0.000042	0.000020	7996920	0.000331	0.000050	7999599
Total Arsenic (As)	mg/L	0.000151	7996920	0.000149	0.000020	7996920	0.000382	0.000020	7999599
Total Barium (Ba)	mg/L	0.0133	7996920	0.0351	0.000020	7996920	0.147	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	7996920	<0.000010	0.000010	7996920	<0.000010	0.000010	7999599
Total Bismuth (Bi)	mg/L	<0.0000050	7996920	<0.0000050	0.0000050	7996920	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	<0.010	7996920	<0.010	0.010	7996920	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0000084	7996920	0.0000398	0.0000050	7996920	0.00255	0.0000050	7999599
Total Chromium (Cr)	mg/L	<0.00010	7996920	0.00016	0.00010	7996920	<0.00050	0.00050	7999599
Total Cobalt (Co)	mg/L	0.0000235	7996920	0.0000309	0.0000050	7996920	0.000773	0.000010	7999599
Total Copper (Cu)	mg/L	0.00130	7996920	0.00267	0.000050	7996920	0.00554	0.00020	7999599
Total Iron (Fe)	mg/L	0.0042	7996920	0.0261	0.0010	7996920	0.440	0.0050	7999599
Total Lead (Pb)	mg/L	0.0000525	7996920	0.000202	0.0000050	7996920	0.00240	0.000050	7999599
Total Lithium (Li)	mg/L	<0.00050	7996920	<0.00050	0.00050	7996920	0.00056	0.00050	7999599
Total Manganese (Mn)	mg/L	0.000148	7996920	0.00737	0.000050	7996920	0.157	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.000353	7996920	0.000348	0.000050	7996920	0.000375	0.000050	7999599
Total Nickel (Ni)	mg/L	0.000164	7996920	0.000228	0.000020	7996920	0.0162	0.00010	7999599
Total Phosphorus (P)	mg/L	<0.0020	7996920	0.0054	0.0020	7996920			
Total Selenium (Se)	mg/L	0.000207	7996920	0.000472	0.000040	7996920	0.00224	0.000040	7999599
Total Silicon (Si)	mg/L	2.77	7996920	2.71	0.050	7996920	3.06	0.10	7999599
Total Silver (Ag)	mg/L	<0.0000050	7996920	<0.0000050	0.0000050	7996920	0.0000074	0.0000050	8004672
Total Strontium (Sr)	mg/L	0.0166	7996920	0.0381	0.000050	7996920	0.112	0.000050	7999599
Total Thallium (Tl)	mg/L	<0.0000020	7996920	<0.0000020	0.0000020	7996920	0.0000117	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	7996920	0.00020	0.00020	7996920	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	<0.00050	7996920	0.00052	0.00050	7996920	<0.0050	0.0050	7999599
Total Uranium (U)	mg/L	0.0000139	7996920	0.000108	0.0000020	7996920	0.000320	0.0000050	7999599
Total Vanadium (V)	mg/L	0.00051	7996920	0.00027	0.00020	7996920	<0.00050	0.00050	7999599
Total Zinc (Zn)	mg/L	0.00045	7996920	0.00327	0.00010	7996920	0.237	0.0010	7999599
Total Zirconium (Zr)	mg/L	<0.00010	7996920	<0.00010	0.00010	7996920	<0.00010	0.00010	7999599
Total Calcium (Ca)	mg/L	23.4	7994507	22.0	0.050	7994507	45.4	0.25	7994507
Total Magnesium (Mg)	mg/L	1.44	7994507	2.02	0.050	7994507	4.48	0.25	7994507
Total Potassium (K)	mg/L	0.386	7994507	0.453	0.050	7994507	1.03	0.25	7994507
Total Sodium (Na)	mg/L	1.17	7994507	1.58	0.050	7994507	1.46	0.25	7994507
Total Sulphur (S)	mg/L	<3.0	7994507	3.5	3.0	7994507	15	15	7994507

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5170			MV5171		
Sampling Date		2015/07/30 17:35			2015/07/30 17:20		
COC Number		08412607			08412607		
	UNITS	W85	RDL	QC Batch	T1	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	0.010	7996475		0.010	7996475
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00516	0.00050	7998267	0.0622	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	0.000056	0.000020	7998267	0.0546	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000137	0.000020	7998267	0.0127	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0676	0.000020	7998267	0.160	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7998267	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	0.010	7998267	0.022	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	0.0000389	0.0000050	7998267	0.0100	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000108	0.0000050	7998267	0.00168	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.000716	0.000050	7998267	0.616	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0092	0.0010	7998267	0.0143	0.0010	7998267
Dissolved Lead (Pb)	mg/L	0.0000124	0.0000050	7998267	0.173	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7998267	0.0121	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.000734	0.000050	7998267	0.202	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.000416	0.000050	7998267	0.144	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000320	0.000020	7998267	0.00550	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	7998267	0.129	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.000609	0.000040	8001117	6.78 (1)	0.000080	8001117
Dissolved Silicon (Si)	mg/L	3.16	0.050	7998267	1.49	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7998267	0.0251	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.0527	0.000050	7998267	2.65	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7998267	0.00169	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000246	0.0000020	7998267	0.000813	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00131	0.00010	7998267	0.604	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	26.2	0.050	7994506	733	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	3.37	0.050	7994506	1.96	0.050	7994506
Dissolved Potassium (K)	mg/L	0.554	0.050	7994506	53.1	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.07	0.050	7994506	193	0.050	7994506

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5170			MV5171		
Sampling Date		2015/07/30 17:35			2015/07/30 17:20		
COC Number		08412607			08412607		
	UNITS	W85	RDL	QC Batch	T1	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	3.3	3.0	7994506	801	3.0	7994506
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.0593	0.0030	7999599	0.0825	0.0030	7999599
Total Antimony (Sb)	mg/L	0.000061	0.000050	7999599	0.0539	0.000050	7999599
Total Arsenic (As)	mg/L	0.000176	0.000020	7999599	0.0117	0.000020	7999599
Total Barium (Ba)	mg/L	0.0681	0.00010	7999599	0.152	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7999599	<0.000010	0.000010	7999599
Total Bismuth (Bi)	mg/L	<0.000020	0.000020	7999599	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	<0.050	0.050	7999599	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0000557	0.0000050	7999599	0.0108	0.0000050	7999599
Total Chromium (Cr)	mg/L	<0.00050	0.00050	7999599	<0.00050	0.00050	7999599
Total Cobalt (Co)	mg/L	0.000100	0.000010	7999599	0.00175	0.000010	7999599
Total Copper (Cu)	mg/L	0.00159	0.00020	7999599	0.764	0.00020	7999599
Total Iron (Fe)	mg/L	0.120	0.0050	7999599	0.0817	0.0050	7999599
Total Lead (Pb)	mg/L	0.000092	0.000050	7999599	0.211	0.000050	7999599
Total Lithium (Li)	mg/L	<0.00050	0.00050	7999599	0.0124	0.00050	7999599
Total Manganese (Mn)	mg/L	0.00752	0.00010	7999599	0.200	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.000449	0.000050	7999599	0.152	0.000050	7999599
Total Nickel (Ni)	mg/L	0.00055	0.00010	7999599	0.00575	0.00010	7999599
Total Selenium (Se)	mg/L	0.000535	0.000040	7999599	5.05	0.000040	7999599
Total Silicon (Si)	mg/L	3.01	0.10	7999599	1.64	0.10	7999599
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	8004672	0.0235	0.0000050	7999599
Total Strontium (Sr)	mg/L	0.0499	0.000050	7999599	2.36	0.000050	7999599
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	7999599	0.00171	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	0.00020	7999599	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	<0.0050	0.0050	7999599	<0.0050	0.0050	7999599
Total Uranium (U)	mg/L	0.000267	0.0000050	7999599	0.000786	0.0000050	7999599
Total Vanadium (V)	mg/L	<0.00050	0.00050	7999599	<0.00050	0.00050	7999599
Total Zinc (Zn)	mg/L	0.0034	0.0010	7999599	0.669	0.0010	7999599
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7999599	<0.00010	0.00010	7999599
Total Calcium (Ca)	mg/L	27.1	0.25	7994507	665	0.25	7994507
Total Magnesium (Mg)	mg/L	3.32	0.25	7994507	1.92	0.25	7994507
Total Potassium (K)	mg/L	0.51	0.25	7994507	49.1	0.25	7994507
Total Sodium (Na)	mg/L	1.04	0.25	7994507	185	0.25	7994507
Total Sulphur (S)	mg/L	<15	15	7994507	858	15	7994507
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5172			MV5173		MV5174		
Sampling Date		2015/07/30 10:54			2015/07/30 12:40		2015/07/30 12:50		
COC Number		08412607			08412607		08412607		
	UNITS	W22	RDL	QC Batch	W71	QC Batch	W72	RDL	QC Batch
ANIONS									
Bromide (Br)	mg/L	<0.010	0.010	7996475	<0.010	7996475	<0.010	0.010	7996475
Dissolved Metals by ICPMS									
Dissolved Aluminum (Al)	mg/L	0.00395	0.00050	7998267	0.00277	7998267	0.00601	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	0.000103 (1)	0.000020	8000887	0.000555	7998267	0.000258	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000232	0.000020	7998267	0.000345	7998267	0.00140	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0602	0.000020	7998267	0.0493	7998267	0.0700	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7998267	<0.000010	7998267	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	0.010	7998267	<0.010	7998267	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	0.0000122	0.0000050	7998267	0.00273	7998267	0.000234	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	0.00016	0.00010	7998267	<0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000114	0.0000050	7998267	0.0000405	7998267	0.0000139	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.00235 (1)	0.000050	8000887	0.000840	8001117	0.00165	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0076	0.0010	7998267	0.0142	7998267	0.0298	0.0010	7998267
Dissolved Lead (Pb)	mg/L	0.0000322	0.0000050	7998267	0.0000055	7998267	<0.0000050	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	0.00193	0.00050	7998267	0.00264	7998267	0.00178	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.000127	0.000050	7998267	0.00303	7998267	0.00905	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.000725	0.000050	8000887	0.00495	7998267	0.00221	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000996	0.000020	7998267	0.0333	7998267	0.00437	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	7998267	0.0103	7998267	0.0088	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.00125	0.000040	8000887	0.00617	7998267	0.00144	0.000040	8001117
Dissolved Silicon (Si)	mg/L	3.72	0.050	7998267	3.79	7998267	3.32	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	8000887	<0.0000050	8001117	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.115	0.000050	7998267	0.256	7998267	0.185	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	0.0000034	0.0000020	8000887	0.0000070	7998267	0.0000035	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7998267	<0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7998267	<0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000932	0.0000020	7998267	0.00958	7998267	0.00102	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7998267	0.00025	7998267	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00101	0.00010	7998267	0.598	7998267	0.0351	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7998267	<0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	28.1	0.050	7994506	97.8	8000603	40.4	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	8.67	0.050	7994506	28.5	8000603	14.7	0.050	7994506
Dissolved Potassium (K)	mg/L	0.900	0.050	7994506	0.746	8000603	0.556	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.73	0.050	7994506	0.946 (1)	8000603	1.44	0.050	7994506

RDL = Reportable Detection Limit

(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5172			MV5173		MV5174		
Sampling Date		2015/07/30 10:54			2015/07/30 12:40		2015/07/30 12:50		
COC Number		08412607			08412607		08412607		
	UNITS	W22	RDL	QC Batch	W71	QC Batch	W72	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	8.1	3.0	7994506	31.8	8000603	14.3	3.0	7994506
Total Metals by ICPMS									
Total Aluminum (Al)	mg/L	0.00762	0.00050	7996920	0.0186	7999599	0.0228	0.0030	7999599
Total Antimony (Sb)	mg/L	0.000063	0.000020	7996920	0.000463	7999599	0.000217	0.000050	7999599
Total Arsenic (As)	mg/L	0.000236	0.000020	7996920	0.000311	7999599	0.00144	0.000020	7999599
Total Barium (Ba)	mg/L	0.0626	0.000020	7996920	0.0461	7999599	0.0683	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7996920	<0.000010	7999599	<0.000010	0.000010	7999599
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7996920	<0.000020	7999599	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	<0.010	0.010	7996920	<0.050	7999599	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0000160	0.0000050	7996920	0.00271	7999599	0.000304	0.0000050	7999599
Total Chromium (Cr)	mg/L	0.00019	0.00010	7996920	<0.00050	7999599	<0.00050	0.00050	7999599
Total Cobalt (Co)	mg/L	0.0000242	0.0000050	7996920	0.000072	7999599	0.000057	0.000010	7999599
Total Copper (Cu)	mg/L	0.000742	0.000050	7996920	0.00126	7999599	0.00136	0.00020	7999599
Total Iron (Fe)	mg/L	0.0360	0.0010	7996920	0.0601	7999599	0.113	0.0050	7999599
Total Lead (Pb)	mg/L	0.0000605	0.0000050	7996920	<0.000050	7999599	<0.000050	0.000050	7999599
Total Lithium (Li)	mg/L	0.00167	0.00050	7996920	0.00241	7999599	0.00172	0.00050	7999599
Total Manganese (Mn)	mg/L	0.00414	0.000050	7996920	0.00524	7999599	0.0488	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.000626	0.000050	7996920	0.00467	7999599	0.00219	0.000050	7999599
Total Nickel (Ni)	mg/L	0.000912	0.000020	7996920	0.0304	7999599	0.00456	0.00010	7999599
Total Phosphorus (P)	mg/L	0.0023	0.0020	7996920					
Total Selenium (Se)	mg/L	0.000489	0.000040	7996920	0.00510	7999599	0.00120	0.000040	7999599
Total Silicon (Si)	mg/L	3.73	0.050	7996920	3.63	7999599	3.21	0.10	7999599
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	7996920	<0.0000050	7999599	<0.0000050	0.0000050	7999599
Total Strontium (Sr)	mg/L	0.115	0.000050	7996920	0.219	7999599	0.179	0.000050	7999599
Total Thallium (Tl)	mg/L	0.0000021	0.0000020	7996920	0.0000046	7999599	<0.0000020	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	0.00020	7996920	<0.00020	7999599	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	<0.00050	0.00050	7996920	<0.0050	7999599	<0.0050	0.0050	7999599
Total Uranium (U)	mg/L	0.000995	0.0000020	7996920	0.00950	7999599	0.00104	0.0000050	7999599
Total Vanadium (V)	mg/L	<0.00020	0.00020	7996920	<0.00050	7999599	<0.00050	0.00050	7999599
Total Zinc (Zn)	mg/L	0.00116	0.00010	7996920	0.507	7999599	0.0402	0.0010	7999599
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7996920	<0.00010	7999599	<0.00010	0.00010	7999599
Total Calcium (Ca)	mg/L	26.8	0.050	7994507	83.2	7994507	39.7	0.25	7994507
Total Magnesium (Mg)	mg/L	8.87	0.050	7994507	24.3	7994507	13.6	0.25	7994507
Total Potassium (K)	mg/L	0.819	0.050	7994507	0.66	7994507	0.48	0.25	7994507
Total Sodium (Na)	mg/L	1.60	0.050	7994507	0.76	7994507	1.26	0.25	7994507
Total Sulphur (S)	mg/L	7.8	3.0	7994507	28	7994507	<15	15	7994507

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5175			MV5176		
Sampling Date		2015/07/30 13:32			2015/07/30 10:06		
COC Number		08412607			08412607		
	UNITS	W73	RDL	QC Batch	W80	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	0.010	7996475	<0.010	0.010	7996475
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00282	0.00050	7998267	0.00331	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	0.000118	0.000020	7998267	0.000064	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000213	0.000020	7998267	0.000223	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0579	0.000020	7998267	0.0641	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7998267	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	0.010	7998267	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	0.0000064	0.0000050	7998267	0.0000146	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	0.00022	0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000116	0.0000050	7998267	0.0000278	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.00140	0.000050	7998267	0.00114	0.000050	7998267
Dissolved Iron (Fe)	mg/L	0.0133	0.0010	7998267	0.0430	0.0010	7998267
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	0.00051	0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.000463	0.000050	7998267	0.0162	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.000498	0.000050	7998267	0.000411	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000718	0.000020	7998267	0.000384	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	7998267	0.0024	0.0020	7998267
Dissolved Selenium (Se)	mg/L	0.000653	0.000040	7998267	0.000781	0.000040	7998267
Dissolved Silicon (Si)	mg/L	3.85	0.050	7998267	3.06	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7998267	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.0926	0.000050	7998267	0.0511	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7998267	<0.0000020	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7998267	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000287	0.0000020	7998267	0.000314	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7998267	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	0.00015	0.00010	7998267	0.00031	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7998267	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	28.6	0.050	7994506	26.0	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	7.21	0.050	7994506	4.36	0.050	7994506
Dissolved Potassium (K)	mg/L	0.248	0.050	7994506	0.573	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.08	0.050	7994506	1.09	0.050	7994506
Dissolved Sulphur (S)	mg/L	5.3	3.0	7994506	5.4	3.0	7994506
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV5175			MV5176		
Sampling Date		2015/07/30 13:32			2015/07/30 10:06		
COC Number		08412607			08412607		
	UNITS	W73	RDL	QC Batch	W80	RDL	QC Batch
Total Metals by ICPMS							
Total Aluminum (Al)	mg/L	0.0122	0.00050	7996920	0.0152	0.0030	7999599
Total Antimony (Sb)	mg/L	0.000098	0.000020	7996920	<0.000050	0.000050	7999599
Total Arsenic (As)	mg/L	0.000263	0.000020	7996920	0.000253	0.000020	7999599
Total Barium (Ba)	mg/L	0.0609	0.000020	7996920	0.0607	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7996920	<0.000010	0.000010	7999599
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7996920	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	<0.010	0.010	7996920	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0000135	0.0000050	7996920	0.0000166	0.0000050	7999599
Total Chromium (Cr)	mg/L	0.00029	0.00010	7996920	<0.00050	0.00050	7999599
Total Cobalt (Co)	mg/L	0.0000361	0.0000050	7996920	0.000050	0.000010	7999599
Total Copper (Cu)	mg/L	0.00133	0.000050	7996920	0.00120	0.00020	7999599
Total Iron (Fe)	mg/L	0.0923	0.0010	7996920	0.102	0.0050	7999599
Total Lead (Pb)	mg/L	0.0000214	0.0000050	7996920	<0.000050	0.000050	7999599
Total Lithium (Li)	mg/L	<0.00050	0.00050	7996920	<0.00050	0.00050	7999599
Total Manganese (Mn)	mg/L	0.0275	0.000050	7996920	0.0230	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.000456	0.000050	7996920	0.000399	0.000050	7999599
Total Nickel (Ni)	mg/L	0.000880	0.000020	7996920	0.00035	0.00010	7999599
Total Phosphorus (P)	mg/L	0.0043	0.0020	7996920			
Total Selenium (Se)	mg/L	0.000605	0.000040	7996920	0.000656	0.000040	7999599
Total Silicon (Si)	mg/L	3.86	0.050	7996920	2.87	0.10	7999599
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	7996920	<0.0000050	0.0000050	7999599
Total Strontium (Sr)	mg/L	0.0956	0.000050	7996920	0.0484	0.000050	7999599
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	7996920	<0.0000020	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	0.00020	7996920	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	<0.00050	0.00050	7996920	<0.0050	0.0050	7999599
Total Uranium (U)	mg/L	0.000310	0.0000020	7996920	0.000319	0.0000050	7999599
Total Vanadium (V)	mg/L	0.00022	0.00020	7996920	<0.00050	0.00050	7999599
Total Zinc (Zn)	mg/L	0.00044	0.00010	7996920	0.0010	0.0010	7999599
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7996920	<0.00010	0.00010	7999599
Total Calcium (Ca)	mg/L	28.5	0.050	7994507	24.4	0.25	7994507
Total Magnesium (Mg)	mg/L	7.37	0.050	7994507	4.23	0.25	7994507
Total Potassium (K)	mg/L	0.242	0.050	7994507	0.50	0.25	7994507
Total Sodium (Na)	mg/L	1.08	0.050	7994507	1.03	0.25	7994507
Total Sulphur (S)	mg/L	5.2	3.0	7994507	<15	15	7994507
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.0°C

Sample MV5167-01 : Sample analyzed past recommended hold time for weak acide dissolved Cyanide due to required rework.

Sample MV5170-01 : Sample analyzed past recommended hold time for weak acide dissolved Cyanide due to required rework.

Sample MV5161, Elements by ICPMS Digested LL (total): Test repeated.
Sample MV5165, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5168, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5169, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5169, Elements by ICPMS Digested LL (total): Test repeated.
Sample MV5170, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5170, Elements by ICPMS Digested LL (total): Test repeated.
Sample MV5171, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5172, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5173, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV5174, Elements by ICPMS Low Level (dissolved): Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7994571	Turbidity	2015/08/07			101	80 - 120	<0.10	NTU	NC	20
7995013	Acidity (pH 4.5)	2015/08/07					<0.50	mg/L		
7995013	Acidity (pH 8.3)	2015/08/07			99	80 - 120	<0.50	mg/L		
7995014	Acidity (pH 4.5)	2015/08/07					<0.50	mg/L	NC	20
7995014	Acidity (pH 8.3)	2015/08/07			101	80 - 120	<0.50	mg/L	NC	20
7995053	Turbidity	2015/08/07			99	80 - 120	<0.10	NTU	NC (1)	20
7995327	Total Suspended Solids	2015/08/10	106	80 - 120	103	80 - 120	<4.0	mg/L	NC	20
7995330	Total Dissolved Solids	2015/08/10	102	80 - 120	86	80 - 120	<10	mg/L	3.2	20
7995509	pH	2015/08/08			101	97 - 103			0.99	N/A
7995511	Conductivity	2015/08/08			100	80 - 120	1.2, RDL=1.0	uS/cm	0.48	20
7995512	Alkalinity (PP as CaCO3)	2015/08/08					<0.50	mg/L	NC	20
7995512	Alkalinity (Total as CaCO3)	2015/08/08	104	80 - 120	95	80 - 120	<0.50	mg/L	2.3	20
7995512	Bicarbonate (HCO3)	2015/08/08					<0.50	mg/L	2.3	20
7995512	Carbonate (CO3)	2015/08/08					<0.50	mg/L	NC	20
7995512	Hydroxide (OH)	2015/08/08					<0.50	mg/L	NC	20
7995516	Alkalinity (PP as CaCO3)	2015/08/09					<0.50	mg/L		
7995516	Alkalinity (Total as CaCO3)	2015/08/09	NC	80 - 120	93	80 - 120	<0.50	mg/L	NC	20
7995516	Bicarbonate (HCO3)	2015/08/09					<0.50	mg/L		
7995516	Carbonate (CO3)	2015/08/09					<0.50	mg/L		
7995516	Hydroxide (OH)	2015/08/09					<0.50	mg/L		
7995521	Conductivity	2015/08/09			100	80 - 120	1.2, RDL=1.0	uS/cm	2.0	20
7995522	pH	2015/08/09			101	97 - 103			0.31	N/A
7995622	Nitrate plus Nitrite (N)	2015/08/08	104	80 - 120	106	80 - 120	<0.0020	mg/L	0.19	25
7995623	Nitrite (N)	2015/08/08	97	80 - 120	98	80 - 120	<0.0020	mg/L	NC	25
7996475	Bromide (Br)	2015/08/10	103	78 - 120	108	80 - 120	<0.010	mg/L	NC	20
7996920	Total Aluminum (Al)	2015/08/10	104	80 - 120	104	80 - 120	0.00071, RDL=0.00050	mg/L	3.9	20
7996920	Total Antimony (Sb)	2015/08/10	NC	80 - 120	104	80 - 120	<0.000020	mg/L	0.93	20
7996920	Total Arsenic (As)	2015/08/10	100	80 - 120	100	80 - 120	<0.000020	mg/L	5.6	20
7996920	Total Barium (Ba)	2015/08/10	NC	80 - 120	105	80 - 120	<0.000020	mg/L	0.36	20
7996920	Total Beryllium (Be)	2015/08/10	104	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20
7996920	Total Bismuth (Bi)	2015/08/10	106	80 - 120	105	80 - 120	<0.0000050	mg/L	3.9	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7996920	Total Boron (B)	2015/08/10					<0.010	mg/L	NC	20
7996920	Total Cadmium (Cd)	2015/08/10	NC	80 - 120	105	80 - 120	<0.0000050	mg/L	3.0	20
7996920	Total Chromium (Cr)	2015/08/10	105	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
7996920	Total Cobalt (Co)	2015/08/10	106	80 - 120	107	80 - 120	<0.0000050	mg/L	1.5	20
7996920	Total Copper (Cu)	2015/08/10	NC	80 - 120	109	80 - 120	<0.000050	mg/L	0.76	20
7996920	Total Iron (Fe)	2015/08/10	NC	80 - 120	111	80 - 120	<0.0010	mg/L	1.1	20
7996920	Total Lead (Pb)	2015/08/10	NC	80 - 120	108	80 - 120	<0.0000050	mg/L	0.71	20
7996920	Total Lithium (Li)	2015/08/10	100	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
7996920	Total Manganese (Mn)	2015/08/10	NC	80 - 120	105	80 - 120	<0.000050	mg/L	0.18	20
7996920	Total Molybdenum (Mo)	2015/08/10	102	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7996920	Total Nickel (Ni)	2015/08/10	107	80 - 120	107	80 - 120	<0.000020	mg/L	2.0	20
7996920	Total Phosphorus (P)	2015/08/10					<0.0020	mg/L	NC	20
7996920	Total Selenium (Se)	2015/08/10	NC	80 - 120	97	80 - 120	<0.000040	mg/L	1.8	20
7996920	Total Silicon (Si)	2015/08/10					<0.050	mg/L	NC	20
7996920	Total Silver (Ag)	2015/08/10	111	80 - 120	98	80 - 120	<0.0000050	mg/L	0.23	20
7996920	Total Strontium (Sr)	2015/08/10	NC	80 - 120	101	80 - 120	<0.000050	mg/L	4.8	20
7996920	Total Thallium (Tl)	2015/08/10	NC	80 - 120	106	80 - 120	<0.0000020	mg/L	3.6	20
7996920	Total Tin (Sn)	2015/08/10	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
7996920	Total Titanium (Ti)	2015/08/10	107	80 - 120	108	80 - 120	<0.00050	mg/L	NC	20
7996920	Total Uranium (U)	2015/08/10	109	80 - 120	111	80 - 120	<0.0000020	mg/L	6.5	20
7996920	Total Vanadium (V)	2015/08/10	105	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
7996920	Total Zinc (Zn)	2015/08/10	NC	80 - 120	111	80 - 120	<0.00010	mg/L	0.34	20
7996920	Total Zirconium (Zr)	2015/08/10					<0.00010	mg/L	NC	20
7997115	Dissolved Chloride (Cl)	2015/08/10	119	80 - 120	96	80 - 120	<0.50	mg/L	NC	20
7997194	Total Ammonia (N)	2015/08/10			101	80 - 120	<0.0050	mg/L		
7997195	Total Ammonia (N)	2015/08/10	102	80 - 120	103	80 - 120	<0.0050	mg/L	NC	20
7997783	Strong Acid Dissoc. Cyanide (CN)	2015/08/11	80	80 - 120	104	80 - 120	0.00074, RDL=0.00050	mg/L	0.99	20
7997815	Weak Acid Dissoc. Cyanide (CN)	2015/08/11	95	80 - 120	105	80 - 120	0.00058, RDL=0.00050	mg/L	1.8	20
7998149	Fluoride (F)	2015/08/11	NC	80 - 120	100	80 - 120	0.011, RDL=0.010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7998267	Dissolved Aluminum (Al)	2015/08/11	100	80 - 120	105	80 - 120	0.00055, RDL=0.00050	mg/L	4.3	20
7998267	Dissolved Antimony (Sb)	2015/08/11	101	80 - 120	105	80 - 120	<0.000020	mg/L	NC	20
7998267	Dissolved Arsenic (As)	2015/08/11	99	80 - 120	103	80 - 120	<0.000020	mg/L	9.7	20
7998267	Dissolved Barium (Ba)	2015/08/11	NC	80 - 120	103	80 - 120	<0.000020	mg/L	2.2	20
7998267	Dissolved Beryllium (Be)	2015/08/11	99	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20
7998267	Dissolved Bismuth (Bi)	2015/08/11	95	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Boron (B)	2015/08/11					<0.010	mg/L	NC	20
7998267	Dissolved Cadmium (Cd)	2015/08/11	97	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Chromium (Cr)	2015/08/11	98	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
7998267	Dissolved Cobalt (Co)	2015/08/11	99	80 - 120	106	80 - 120	<0.0000050	mg/L	5.9	20
7998267	Dissolved Copper (Cu)	2015/08/11	91	80 - 120	106	80 - 120	<0.000050	mg/L	19	20
7998267	Dissolved Iron (Fe)	2015/08/11	96	80 - 120	113	80 - 120	<0.0010	mg/L	3.7	20
7998267	Dissolved Lead (Pb)	2015/08/11	97	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Lithium (Li)	2015/08/11	93	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7998267	Dissolved Manganese (Mn)	2015/08/11	NC	80 - 120	105	80 - 120	<0.000050	mg/L	7.0	20
7998267	Dissolved Molybdenum (Mo)	2015/08/11	93	80 - 120	100	80 - 120	<0.000050	mg/L	4.2	20
7998267	Dissolved Nickel (Ni)	2015/08/11	97	80 - 120	105	80 - 120	<0.000020	mg/L	6.4	20
7998267	Dissolved Phosphorus (P)	2015/08/11					<0.0020	mg/L	NC	20
7998267	Dissolved Selenium (Se)	2015/08/11	96	80 - 120	97	80 - 120	<0.000040	mg/L	2.1	20
7998267	Dissolved Silicon (Si)	2015/08/11					<0.050	mg/L	4.7	20
7998267	Dissolved Silver (Ag)	2015/08/11	102	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Strontium (Sr)	2015/08/11	NC	80 - 120	99	80 - 120	<0.000050	mg/L	8.8	20
7998267	Dissolved Thallium (Tl)	2015/08/11	90	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7998267	Dissolved Tin (Sn)	2015/08/11	99	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7998267	Dissolved Titanium (Ti)	2015/08/11	96	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7998267	Dissolved Uranium (U)	2015/08/11	102	80 - 120	105	80 - 120	<0.0000020	mg/L	4.3	20
7998267	Dissolved Vanadium (V)	2015/08/11	99	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
7998267	Dissolved Zinc (Zn)	2015/08/11	100	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
7998267	Dissolved Zirconium (Zr)	2015/08/11					<0.00010	mg/L	NC	20
7998375	Dissolved Organic Carbon (C)	2015/08/11	NC	80 - 120	113	80 - 120	<0.50	mg/L	3.9	20
7999169	Dissolved Organic Carbon (C)	2015/08/12	100	80 - 120	105	80 - 120	<0.50	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7999314	Total Organic Carbon (C)	2015/08/12	111	80 - 120	106	80 - 120	<0.50	mg/L	NC	20
7999569	Dissolved Mercury (Hg)	2015/08/12	94	80 - 120	94	80 - 120	<0.010	ug/L	NC	20
7999592	Dissolved Mercury (Hg)	2015/08/12	87	80 - 120	96	80 - 120	<0.010	ug/L	NC	20
7999599	Total Aluminum (Al)	2015/08/12	NC	80 - 120	105	80 - 120	<0.0030	mg/L	0.33	20
7999599	Total Antimony (Sb)	2015/08/12	126 (2)	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7999599	Total Arsenic (As)	2015/08/12	102	80 - 120	96	80 - 120	<0.000020	mg/L	2.1	20
7999599	Total Barium (Ba)	2015/08/12	NC	80 - 120	103	80 - 120	<0.00010	mg/L	0.93	20
7999599	Total Beryllium (Be)	2015/08/12	108	80 - 120	99	80 - 120	<0.000010	mg/L	NC	20
7999599	Total Bismuth (Bi)	2015/08/12	108	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20
7999599	Total Boron (B)	2015/08/12					<0.050	mg/L	NC	20
7999599	Total Cadmium (Cd)	2015/08/12	99	80 - 120	99	80 - 120	<0.0000050	mg/L	11	20
7999599	Total Chromium (Cr)	2015/08/12	100	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20
7999599	Total Cobalt (Co)	2015/08/12	101	80 - 120	106	80 - 120	<0.000010	mg/L	4.5	20
7999599	Total Copper (Cu)	2015/08/12	99	80 - 120	110	80 - 120	0.00034, RDL=0.00020	mg/L	3.7	20
7999599	Total Iron (Fe)	2015/08/12	NC	80 - 120	113	80 - 120	<0.0050	mg/L	4.7	20
7999599	Total Lead (Pb)	2015/08/12	113	80 - 120	106	80 - 120	<0.000050	mg/L	3.0	20
7999599	Total Lithium (Li)	2015/08/12	NC	80 - 120	101	80 - 120	<0.00050	mg/L	4.0	20
7999599	Total Manganese (Mn)	2015/08/12	NC	80 - 120	101	80 - 120	<0.00010	mg/L	0.12	20
7999599	Total Molybdenum (Mo)	2015/08/12	NC	80 - 120	98	80 - 120	<0.000050	mg/L	0.92	20
7999599	Total Nickel (Ni)	2015/08/12	97	80 - 120	104	80 - 120	<0.00010	mg/L	0.40	20
7999599	Total Selenium (Se)	2015/08/12	95	80 - 120	90	80 - 120	<0.000040	mg/L	1.8	20
7999599	Total Silicon (Si)	2015/08/12					<0.10	mg/L	1.2	20
7999599	Total Silver (Ag)	2015/08/12	109	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7999599	Total Strontium (Sr)	2015/08/12	NC	80 - 120	97	80 - 120	<0.000050	mg/L	1.9	20
7999599	Total Thallium (Tl)	2015/08/12	107	80 - 120	100	80 - 120	<0.0000020	mg/L	10	20
7999599	Total Tin (Sn)	2015/08/12	109	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
7999599	Total Titanium (Ti)	2015/08/12	NC	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
7999599	Total Uranium (U)	2015/08/12	NC	80 - 120	108	80 - 120	<0.0000050	mg/L	0.76	20
7999599	Total Vanadium (V)	2015/08/12	105	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7999599	Total Zinc (Zn)	2015/08/12	NC	80 - 120	104	80 - 120	<0.0010	mg/L	18	20
7999599	Total Zirconium (Zr)	2015/08/12					<0.00010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8000585	Total Mercury (Hg)	2015/08/13	92	80 - 120	94	80 - 120	<0.010	ug/L	NC	20
8000887	Dissolved Antimony (Sb)	2015/08/13			107	80 - 120	<0.000020	mg/L		
8000887	Dissolved Copper (Cu)	2015/08/13			109	80 - 120	<0.000050	mg/L		
8000887	Dissolved Molybdenum (Mo)	2015/08/13			101	80 - 120	<0.000050	mg/L		
8000887	Dissolved Nickel (Ni)	2015/08/13			109	80 - 120	<0.000020	mg/L		
8000887	Dissolved Selenium (Se)	2015/08/13			100	80 - 120	<0.000040	mg/L		
8000887	Dissolved Silver (Ag)	2015/08/13			106	80 - 120	<0.0000050	mg/L		
8000887	Dissolved Thallium (Tl)	2015/08/13			105	80 - 120	<0.0000020	mg/L		
8000887	Dissolved Zinc (Zn)	2015/08/13			110	80 - 120	<0.00010	mg/L		
8001117	Dissolved Copper (Cu)	2015/08/13			106	80 - 120	<0.000050	mg/L		
8001117	Dissolved Selenium (Se)	2015/08/13			98	80 - 120	<0.000040	mg/L		
8001117	Dissolved Silver (Ag)	2015/08/13			102	80 - 120	<0.0000050	mg/L		
8004672	Total Silver (Ag)	2015/08/17	119	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
8006359	Weak Acid Dissoc. Cyanide (CN)	2015/08/18			100	80 - 120	<0.00050	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Sample arrived to laboratory past recommended hold time.

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

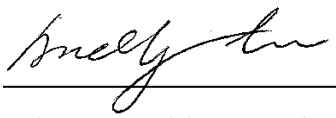
Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567563
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Andy Lu, Data Validation Coordinator

Suwan Fock, Senior Analyst

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

B567563

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHA

08412607

ANALYSIS REQUES

LAB USE ONLY
MAXXAM JOB #: B567563

ANALYSIS REQUES

LAB USE ONLY
COC #

COMPANY NAME:	Yukon Zinc Corporation
CLIENT PROJECT NO.:	
COMPANY ADDRESS:	#701-475 Howe Street Vancouver, BC V6C 2B3
TEL:	604-638-0921 Ex.5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	James Spencer
PROJECT MANAGER:	Malcom Swallow/Alex Wu
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	TOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	W8	MV5161		X				30-Jul-15	1530	3	X	X		X				X	X	X	X
2	W8-99	MV5162		X				30-Jul-15	1530	3	X	X		X				X	X	X	X
3	W9	MV5163		X				30-Jul-15	1645	4	X	X		X	X			X	X	X	X
4	L1	MV5164		X				30-Jul-15	1825	4	X	X		X	X			X	X	X	X
5	W15	MV5165		X				30-Jul-15	1415	3	X	X		X				X	X	X	X
6	W16	MV5166		X				30-Jul-15	1012	5	X	X		X	X	X	X	X	X	X	X
7	W31	MV5167		X				30-Jul-15	2111	5	X	X		X	X	X	X	X	X	X	X
8	W81	MV5168		X				30-Jul-15	1735	3	X	X		X				X	X	X	X
9	W82	MV5169		X				30-Jul-15	1930	4	X	X		X	X			X	X	X	X
10	W85	MV5170		X				30-Jul-15	1735	5	X	X		X	X	X	X	X	X	X	X
11	T1	MV5171		X				30-Jul-15	1720	5	X	X			X	X	X	X	X	X	X
13	W22	MV5172		X				1-Aug-15	1054	3	X	X		X				X	X	X	X
14	W71	MV5173		X				1-Aug-15	1240	3	X	X		X				X	X	X	X
15	W72	MV5174		X				1-Aug-15	1250	3	X	X		X				X	X	X	X
16	W73	MV5175		X				1-Aug-15	1332	3	X	X		X				X	X	X	X
17	W80	MV5176		X				4-Aug-15	1006	3	X	X		X				X	X	X	X

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

CCME
CSR
AB TIER 1
OTHER

LAB USE ONLY
ARRIVAL TEMPERATURE °C:
DUE DATI LOG IN CHECK:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED: 3, 5, 4

RELINQUINSHED BY SAMPLER:	James Spencer	DATE: DD/MM/YY	06-08-2015	TIME: 10:30
RELINQUINSHED BY:		DATE: DD/MM/YY		TIME:
RELINQUINSHED BY:		DATE: DD/MM/YY		TIME:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY LABORATORY: JESSICA KHOR 2015/08/07 09:10

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your C.O.C. #: 08412606

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026239
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567761
Received: 2015/08/07, 09:10

Sample Matrix: Water
Samples Received: 13

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	13	N/A	2015/08/11	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	1	2015/08/11	2015/08/11	BBY6SOP-00026	SM 22 2320 B m
Alkalinity - Water	12	2015/08/11	2015/08/12	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	13	N/A	2015/08/10	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	1	N/A	2015/08/11	BBY6SOP-00026	SM 22 2510 B m
Conductance - water	12	N/A	2015/08/12	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	13	N/A	2015/08/11	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	13	N/A	2015/08/12	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	13	N/A	2015/08/12	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	13	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	13	N/A	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	13	N/A	2015/08/11	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	7	N/A	2015/08/10	BBY6SOP-00009	SM 22 4500-NH3- G m
Ammonia-N (Unpreserved)	6	N/A	2015/08/11	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	13	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	13	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	13	N/A	2015/08/12	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	6	N/A	2015/08/10	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	7	N/A	2015/08/11	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	1	N/A	2015/08/11	BBY6SOP-00026	SM 22 4500-H+ B m
pH Water (1)	12	N/A	2015/08/12	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	11	N/A	2015/08/10	BBY6SOP-00013	SM 22 4500-P E m
Orthophosphate by Konelab (low level)	2	N/A	2015/08/13	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	13	N/A	2015/08/10	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	5	2015/08/10	2015/08/11	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	8	2015/08/13	2015/08/14	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	12	2015/08/10	2015/08/10	BBY6SOP-00013	SM 22 4500-P E m
Phosphorus-P (LL Tot, dissolved) - UF/UP	1	2015/08/10	2015/08/10	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	13	N/A	2015/08/10	BBY6SOP-00034	SM 22 2540 D
Turbidity	13	N/A	2015/08/08	BBY6SOP-00027	SM 22 2130 B m

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08412606

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026239
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567761

Received: 2015/08/07, 09:10

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin

18 Aug 2015 17:37:21 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6272		MV6273		MV6274		MV6275		
Sampling Date		2015/08/02 11:11		2015/08/02 10:55		2015/08/02 11:53		2015/08/02 12:01		
COC Number		08412606		08412606		08412606		08412606		
	UNITS	MW05-01A	QC Batch	MW05-01B	QC Batch	MW05-02A	QC Batch	MW05-02B	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7998213	<0.50	7998219	<0.50	7998213	<0.50	0.50	7998219
Acidity (pH 8.3)	mg/L	<0.50	7998213	<0.50	7998219	<0.50	7998213	3.13	0.50	7998219
Fluoride (F)	mg/L	0.470	7998137	0.160	7998152	0.260	7998137	0.062	0.010	7998152
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	7995424	<0.20	7995424	<0.20	7995424	<0.20	0.20	7995424
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	123	7995422	108	7995422	200	7995422	149	0.50	7995422
Alkalinity (Total as CaCO3)	mg/L	103	7997781	108	7997791	181	7997781	140	0.50	7997791
Alkalinity (PP as CaCO3)	mg/L	<0.50	7997781	<0.50	7997791	<0.50	7997781	<0.50	0.50	7997791
Bicarbonate (HCO3)	mg/L	126	7997781	131	7997791	221	7997781	170	0.50	7997791
Carbonate (CO3)	mg/L	<0.50	7997781	<0.50	7997791	<0.50	7997781	<0.50	0.50	7997791
Hydroxide (OH)	mg/L	<0.50	7997781	<0.50	7997791	<0.50	7997781	<0.50	0.50	7997791
Anions										
Orthophosphate (P)	mg/L	0.023 (1)	8000853	0.030 (1)	7996865	0.0031 (1)	7996863	0.075 (1)	0.0010	8000853
Dissolved Sulphate (SO4)	mg/L	25.8	7997218	8.13	7997220	32.5	7997218	7.01	0.50	7997220
Dissolved Chloride (Cl)	mg/L	<0.50	7997217	<0.50	7997219	<0.50	7997217	<0.50	0.50	7997219
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.0559	7996871	0.254	7996871	0.0040	7996871	0.300	0.0020	7996871
Total Ammonia (N)	mg/L	0.153 (1)	7997195	0.538 (1)	7998708	0.117 (1)	7997195	0.0139 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7998691	<0.20 (2)	7998695	<0.20 (2)	7998691	<0.20 (2)	0.20	7998695
Nitrite (N)	mg/L	<0.20 (2)	7998692	<0.20 (2)	7998696	<0.20 (2)	7998692	<0.20 (2)	0.20	7998696
Physical Properties										
Conductivity	uS/cm	257	7997780	228	7997793	398	7997780	278	1.0	7997793
pH	pH	8.11	7997777	8.09	7997796	8.21	7997777	8.02	N/A	7997796
Physical Properties										
Total Suspended Solids	mg/L	<4.0	7995327	5.8	7995327	<4.0	7995594	38.5	4.0	7995594
Total Dissolved Solids	mg/L	146	8000636	124	8000636	236	8000636	154	10	8000636
Turbidity	NTU	0.45 (1)	7995474	6.20 (1)	7995474	11.2 (1)	7995474	186 (1)	0.10	7995474

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6276		MV6277	MV6278		MV6279	MV6280		
Sampling Date		2015/08/02 16:22		2015/08/02 16:49	2015/08/02 17:30		2015/08/02 17:14	2015/08/02 18:11		
COC Number		08412606		08412606	08412606		08412606	08412606		
	UNITS	MW05-03A	QC Batch	MW05-03B	MW05-04A	QC Batch	MW05-04B	MW05-05A	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	7998219	<0.50	<0.50	7998213	<0.50	<0.50	0.50	7998213
Acidity (pH 8.3)	mg/L	0.72	7998219	9.30	4.83	7998213	<0.50	1.48	0.50	7998213
Fluoride (F)	mg/L	0.950	7998152	0.130	0.390	7998137	1.10	1.60	0.010	7998137
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	FIELD	ONSITE	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	7995424	0.35	<0.20	7995424	0.73	<0.20	0.20	7995424
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	228	7995422	168	109	7995422	148	235	0.50	7995422
Alkalinity (Total as CaCO3)	mg/L	192	7997791	94.0	80.6	7997781	118	185	0.50	7997781
Alkalinity (PP as CaCO3)	mg/L	<0.50	7997791	<0.50	<0.50	7997781	<0.50	<0.50	0.50	7997781
Bicarbonate (HCO3)	mg/L	234	7997791	115	98.3	7997781	144	226	0.50	7997781
Carbonate (CO3)	mg/L	<0.50	7997791	<0.50	<0.50	7997781	<0.50	<0.50	0.50	7997781
Hydroxide (OH)	mg/L	<0.50	7997791	<0.50	<0.50	7997781	<0.50	<0.50	0.50	7997781
Anions										
Orthophosphate (P)	mg/L	<0.0010 (1)	7996865	<0.0010 (1)	0.0013 (1)	7996863	0.0025 (1)	0.012 (1)	0.0010	7996863
Dissolved Sulphate (SO4)	mg/L	40.3	7997220	84.1	35.1	7997218	35.6	31.2	0.50	7997218
Dissolved Chloride (Cl)	mg/L	0.53	7997219	2.8	<0.50	7997217	<0.50	<0.50	0.50	7997217
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.0192	7996871	0.0025	0.0061	7996871	0.0076	0.0158	0.0020	7996871
Total Ammonia (N)	mg/L	0.0927 (1)	7997210	0.0120 (1)	0.0306 (1)	7997195	0.0750 (1)	0.0952 (1)	0.0050	7997195
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7998695	0.35 (2)	<0.20 (2)	7998691	0.73 (2)	<0.20 (2)	0.20	7998691
Nitrite (N)	mg/L	<0.20 (2)	7998696	<0.20 (2)	<0.20 (2)	7998692	<0.20 (2)	<0.20 (2)	0.20	7998692
Physical Properties										
Conductivity	uS/cm	441	7997793	379	246	7997780	332	412	1.0	7997780
pH	pH	8.24	7997796	7.67	7.75	7997777	8.15	8.18	N/A	7997777
Physical Properties										
Total Suspended Solids	mg/L	11.0	7995594	<4.0	<4.0	7995594	<4.0	<4.0	4.0	7995594
Total Dissolved Solids	mg/L	308 (3)	7996351	242	154	8000636	210 (3)	270 (3)	10	7996356
Turbidity	NTU	76.7 (1)	7995474	0.18 (1)	11.2 (1)	7995474	4.38 (1)	0.98 (1)	0.10	7995474

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(3) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6281			MV6282			MV6283		
Sampling Date		2015/08/02 18:21			2015/08/02 13:45			2015/08/02 14:05		
COC Number		08412606			08412606			08412606		
	UNITS	MW05-05B	RDL	QC Batch	MW05-06A	RDL	QC Batch	MW05-06B	RDL	QC Batch
Misc. Inorganics										
Acidity (pH 4.5)	mg/L	<0.50	0.50	7998213	<0.50	0.50	7998213	<0.50	0.50	7998213
Acidity (pH 8.3)	mg/L	1.51	0.50	7998213	1.60	0.50	7998213	<0.50	0.50	7998213
Fluoride (F)	mg/L	0.200	0.010	7998137	0.130	0.010	7998137	0.034	0.010	7998137
Calculated Parameters										
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	0.20	7995424	<0.20	0.20	7995424	<0.20	0.20	7995424
Misc. Inorganics										
Dissolved Hardness (CaCO3)	mg/L	163	0.50	7995422	76.9	0.50	7995422	88.3	0.50	7995422
Alkalinity (Total as CaCO3)	mg/L	116	0.50	7997781	65.3	0.50	7997781	83.6	0.50	7997781
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	7997781	<0.50	0.50	7997781	<0.50	0.50	7997781
Bicarbonate (HCO3)	mg/L	142	0.50	7997781	79.6	0.50	7997781	102	0.50	7997781
Carbonate (CO3)	mg/L	<0.50	0.50	7997781	<0.50	0.50	7997781	<0.50	0.50	7997781
Hydroxide (OH)	mg/L	<0.50	0.50	7997781	<0.50	0.50	7997781	<0.50	0.50	7997781
Anions										
Orthophosphate (P)	mg/L	0.0015 (1)	0.0010	7996863	0.67 (1)	0.010	7996863	0.0038 (1)	0.0010	7996863
Dissolved Sulphate (SO4)	mg/L	39.2	0.50	7997218	15.3	0.50	7997218	7.95	0.50	7997218
Dissolved Chloride (Cl)	mg/L	0.56	0.50	7997217	<0.50	0.50	7997217	0.52	0.50	7997217
Nutrients										
Dissolved Phosphorus (P)	mg/L	0.0027	0.0020	7996871	0.876 (1)	0.020	7996872	0.0045	0.0020	7996871
Total Ammonia (N)	mg/L	0.0243 (1)	0.0050	7998708	0.0141 (1)	0.0050	7998708	<0.0050 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	0.20	7998691	<0.20 (2)	0.20	7998691	<0.20 (2)	0.20	7998691
Nitrite (N)	mg/L	<0.20 (2)	0.20	7998692	<0.20 (2)	0.20	7998692	0.21 (2)	0.20	7998692
Physical Properties										
Conductivity	uS/cm	309	1.0	7997780	168	1.0	7997780	183	1.0	7997780
pH	pH	8.01	N/A	7997777	7.80	N/A	7997777	7.78	N/A	7997777
Physical Properties										
Total Suspended Solids	mg/L	<4.0	4.0	7995594	<4.0	4.0	7995594	<4.0	4.0	7995594
Total Dissolved Solids	mg/L	198 (3)	10	7996356	108	10	8000636	94	10	8000636
Turbidity	NTU	5.29 (1)	0.10	7995474	8.53 (1)	0.10	7995474	0.11 (1)	0.10	7995474

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(3) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6284		
Sampling Date		2015/08/02 12:26		
COC Number		08412606		
	UNITS	MW08-13	RDL	QC Batch
Misc. Inorganics				
Acidity (pH 4.5)	mg/L	<0.50	0.50	7998213
Acidity (pH 8.3)	mg/L	9.03	0.50	7998213
Fluoride (F)	mg/L	0.029	0.010	7998137
Calculated Parameters				
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.20	0.20	7995424
Misc. Inorganics				
Dissolved Hardness (CaCO3)	mg/L	181	0.50	7995422
Alkalinity (Total as CaCO3)	mg/L	146	0.50	7997781
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	7997781
Bicarbonate (HCO3)	mg/L	179	0.50	7997781
Carbonate (CO3)	mg/L	<0.50	0.50	7997781
Hydroxide (OH)	mg/L	<0.50	0.50	7997781
Anions				
Orthophosphate (P)	mg/L	0.0023 (1)	0.0010	7996863
Dissolved Sulphate (SO4)	mg/L	47.1	0.50	7997220
Dissolved Chloride (Cl)	mg/L	1.7	0.50	7997219
Nutrients				
Dissolved Phosphorus (P)	mg/L	0.0186	0.0020	7996871
Total Ammonia (N)	mg/L	0.245 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	0.20	7998691
Nitrite (N)	mg/L	<0.20 (2)	0.20	7998692
Physical Properties				
Conductivity	uS/cm	381	1.0	7997780
pH	pH	7.87	N/A	7997777
Physical Properties				
Total Suspended Solids	mg/L	4.0	4.0	7995594
Total Dissolved Solids	mg/L	234 (3)	10	7996356
Turbidity	NTU	0.52 (1)	0.10	7995474

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(3) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MV6272	MV6273	MV6274		MV6275	MV6276	MV6277		
Sampling Date		2015/08/02 11:11	2015/08/02 10:55	2015/08/02 11:53		2015/08/02 12:01	2015/08/02 16:22	2015/08/02 16:49		
COC Number		08412606	08412606	08412606		08412606	08412606	08412606		
	UNITS	MW05-01A	MW05-01B	MW05-02A	QC Batch	MW05-02B	MW05-03A	MW05-03B	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	7999592	<0.010	<0.010	<0.010	0.010	7999637
RDL = Reportable Detection Limit										

Maxxam ID		MV6278	MV6279	MV6280	MV6281	MV6282	MV6283	MV6284		
Sampling Date		2015/08/02 17:30	2015/08/02 17:14	2015/08/02 18:11	2015/08/02 18:21	2015/08/02 13:45	2015/08/02 14:05	2015/08/02 12:26		
COC Number		08412606	08412606	08412606	08412606	08412606	08412606	08412606		
	UNITS	MW05-04A	MW05-04B	MW05-05A	MW05-05B	MW05-06A	MW05-06B	MW08-13	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7999637
RDL = Reportable Detection Limit										

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6272			MV6273		
Sampling Date		2015/08/02 11:11			2015/08/02 10:55		
COC Number		08412606			08412606		
	UNITS	MW05-01A	RDL	QC Batch	MW05-01B	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	0.010	7996618	<0.10	0.10	7996492
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	0.00107	0.00050	7997716	0.00254	0.00050	7997716
Dissolved Antimony (Sb)	mg/L	<0.000020	0.000020	7997716	0.000051	0.000020	7997716
Dissolved Arsenic (As)	mg/L	0.00396	0.000020	7997716	0.00545	0.000020	7997716
Dissolved Barium (Ba)	mg/L	0.0284	0.000020	7997716	0.0298	0.000020	7997716
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7997716	<0.000010	0.000010	7997716
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	0.0000050	7997716
Dissolved Boron (B)	mg/L	<0.010	0.010	7997716	<0.010	0.010	7997716
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	0.0000050	7997716
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7997716	0.00024	0.00010	7997716
Dissolved Cobalt (Co)	mg/L	0.0000060	0.0000050	7997716	0.0000335	0.0000050	7997716
Dissolved Copper (Cu)	mg/L	0.00228	0.000050	7997716	0.000265	0.000050	7997716
Dissolved Iron (Fe)	mg/L	0.0133	0.0010	7997716	2.41	0.0010	7997716
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000050	7997716	0.0000068	0.0000050	7997716
Dissolved Lithium (Li)	mg/L	0.00052	0.00050	7997716	<0.00050	0.00050	7997716
Dissolved Manganese (Mn)	mg/L	0.230	0.000050	7997716	0.286	0.000050	7997716
Dissolved Molybdenum (Mo)	mg/L	0.00598	0.000050	7997716	0.00259	0.000050	7997716
Dissolved Nickel (Ni)	mg/L	0.000358	0.000020	7997716	0.000717	0.000020	7997716
Dissolved Phosphorus (P)	mg/L	0.0105	0.0020	7997716	0.293	0.0020	7997716
Dissolved Selenium (Se)	mg/L	<0.000040	0.000040	7997716	0.000177	0.000040	7997716
Dissolved Silicon (Si)	mg/L	3.42	0.050	7997716	4.52	0.050	7997716
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	0.0000050	7997716
Dissolved Strontium (Sr)	mg/L	0.147	0.000050	7997716	0.0968	0.000050	7997716
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7997716	<0.0000020	0.0000020	7997716
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7997716	<0.00020	0.00020	7997716
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7997716	<0.00050	0.00050	7997716
Dissolved Uranium (U)	mg/L	0.0000101	0.0000020	7997716	0.0000875	0.0000020	7997716
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7997716	0.00067	0.00020	7997716
Dissolved Zinc (Zn)	mg/L	0.00185	0.00010	7997716	0.00382	0.00010	7997716
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7997716	0.00012	0.00010	7997716
Dissolved Calcium (Ca)	mg/L	40.0	0.050	7995423	36.5	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	5.49	0.050	7995423	4.00	0.050	7995423
Dissolved Potassium (K)	mg/L	1.34	0.050	7995423	1.35	0.050	7995423
Dissolved Sodium (Na)	mg/L	1.85	0.050	7995423	1.40	0.050	7995423
Dissolved Sulphur (S)	mg/L	9.4	3.0	7995423	4190	3.0	7995423

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6274			MV6275	MV6276		
Sampling Date		2015/08/02 11:53			2015/08/02 12:01	2015/08/02 16:22		
COC Number		08412606			08412606	08412606		
	UNITS	MW05-02A	RDL	QC Batch	MW05-02B	MW05-03A	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	0.010	7996618	<0.10	<0.10	0.10	7996492
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	<0.00050	0.00050	7997716	<0.00050	<0.00050	0.00050	7997716
Dissolved Antimony (Sb)	mg/L	<0.000020	0.000020	7997716	<0.000020	0.000131	0.000020	7997716
Dissolved Arsenic (As)	mg/L	0.000658	0.000020	7997716	0.00182	0.000303	0.000020	7997716
Dissolved Barium (Ba)	mg/L	0.0445	0.000020	7997716	0.148	0.0469	0.000020	7997716
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7997716	<0.000010	<0.000010	0.000010	7997716
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Boron (B)	mg/L	<0.010	0.010	7997716	<0.010	<0.010	0.010	7997716
Dissolved Cadmium (Cd)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	0.000165	0.0000050	7997716
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7997716	<0.00010	<0.00010	0.00010	7997716
Dissolved Cobalt (Co)	mg/L	<0.0000050	0.0000050	7997716	0.000193	0.000166	0.0000050	7997716
Dissolved Copper (Cu)	mg/L	0.000095	0.000050	7997716	0.000076	0.000112	0.000050	7997716
Dissolved Iron (Fe)	mg/L	0.0031	0.0010	7997716	0.0039	0.0029	0.0010	7997716
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Lithium (Li)	mg/L	0.00228	0.00050	7997716	<0.00050	0.00134	0.00050	7997716
Dissolved Manganese (Mn)	mg/L	0.204	0.000050	7997716	1.06	0.257	0.000050	7997716
Dissolved Molybdenum (Mo)	mg/L	0.00288	0.000050	7997716	0.00265	0.00280	0.000050	7997716
Dissolved Nickel (Ni)	mg/L	0.000153	0.000020	7997716	0.000390	0.00181	0.000020	7997716
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	7997716	0.0030	<0.0020	0.0020	7997716
Dissolved Selenium (Se)	mg/L	<0.000040	0.000040	7997716	<0.000040	0.000048	0.000040	7997716
Dissolved Silicon (Si)	mg/L	3.40	0.050	7997716	4.28	3.76	0.050	7997716
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7997716	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Strontium (Sr)	mg/L	0.175	0.000050	7997716	0.0901	0.195	0.000050	7997716
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	7997716	<0.0000020	0.0000037	0.0000020	7997716
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7997716	<0.00020	<0.00020	0.00020	7997716
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7997716	<0.00050	<0.00050	0.00050	7997716
Dissolved Uranium (U)	mg/L	0.00828	0.0000020	7997716	0.000173	0.0149	0.0000020	7997716
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7997716	<0.00020	<0.00020	0.00020	7997716
Dissolved Zinc (Zn)	mg/L	<0.00010	0.00010	7997716	0.00010	0.111	0.00010	7997716
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7997716	<0.00010	<0.00010	0.00010	7997716
Dissolved Calcium (Ca)	mg/L	47.3	0.050	7995423	46.2	76.1	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	20.0	0.050	7995423	8.07	9.30	0.050	7995423
Dissolved Potassium (K)	mg/L	2.26	0.050	7995423	0.430	1.72	0.050	7995423
Dissolved Sodium (Na)	mg/L	0.662	0.050	7995423	1.27	1.93	0.050	7995423
Dissolved Sulphur (S)	mg/L	12.5	3.0	7995423	<3.0	14.5	3.0	7995423

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6277	MV6278	MV6279	MV6280	MV6281		
Sampling Date		2015/08/02 16:49	2015/08/02 17:30	2015/08/02 17:14	2015/08/02 18:11	2015/08/02 18:21		
COC Number		08412606	08412606	08412606	08412606	08412606		
	UNITS	MW05-03B	MW05-04A	MW05-04B	MW05-05A	MW05-05B	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	0.024	<0.010	<0.010	<0.010	<0.010	0.010	7996618
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00055	0.00247	<0.00050	0.00350	<0.00050	0.00050	7997716
Dissolved Antimony (Sb)	mg/L	0.000115	0.000078	0.000028	0.00318	0.000033	0.000020	7997716
Dissolved Arsenic (As)	mg/L	0.000078	0.00331	0.00118	0.00314	0.00163	0.000020	7997716
Dissolved Barium (Ba)	mg/L	0.0807	0.0599	0.0565	0.0596	0.0400	0.000020	7997716
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	7997716
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7997716
Dissolved Cadmium (Cd)	mg/L	0.0254	0.00408	<0.0000050	0.000960	0.0000524	0.0000050	7997716
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	7997716
Dissolved Cobalt (Co)	mg/L	0.0000252	0.00410	0.0000139	0.00107	0.000950	0.0000050	7997716
Dissolved Copper (Cu)	mg/L	0.00311	0.000313	0.000112	0.00148	<0.000050	0.000050	7997716
Dissolved Iron (Fe)	mg/L	<0.0010	0.104	0.0181	0.0508	0.0024	0.0010	7997716
Dissolved Lead (Pb)	mg/L	0.0000278	<0.0000050	<0.0000050	0.0000297	<0.0000050	0.0000050	7997716
Dissolved Lithium (Li)	mg/L	0.00141	0.00059	0.00082	0.00235	0.00108	0.00050	7997716
Dissolved Manganese (Mn)	mg/L	0.00551	2.83	0.282	0.251	0.947	0.000050	7997716
Dissolved Molybdenum (Mo)	mg/L	0.000478	0.000930	0.00448	0.00567	0.00121	0.000050	7997716
Dissolved Nickel (Ni)	mg/L	0.00631	0.00645	0.000280	0.00607	0.00556	0.000020	7997716
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0023	<0.0020	<0.0020	0.0025	0.0020	7997716
Dissolved Selenium (Se)	mg/L	0.00497	<0.000040	<0.000040	0.000516	<0.000040	0.000040	7997716
Dissolved Silicon (Si)	mg/L	4.74	6.78	3.21	3.50	3.81	0.050	7997716
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Strontium (Sr)	mg/L	0.184	0.161	0.187	0.120	0.134	0.000050	7997716
Dissolved Thallium (Tl)	mg/L	0.0000106	0.0000374	0.0000056	0.0000228	0.0000063	0.0000020	7997716
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7997716
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	7997716
Dissolved Uranium (U)	mg/L	0.00206	0.000269	0.000825	0.0255	0.00283	0.0000020	7997716
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	7997716
Dissolved Zinc (Zn)	mg/L	2.25	0.205	0.00013	0.221	0.0850	0.00010	7997716
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	0.00012	<0.00010	0.00010	7997716
Dissolved Calcium (Ca)	mg/L	56.1	38.4	52.4	61.8	50.8	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	6.88	3.26	4.20	19.5	8.66	0.050	7995423
Dissolved Potassium (K)	mg/L	1.53	2.03	2.15	2.03	0.800	0.050	7995423
Dissolved Sodium (Na)	mg/L	10.1	1.17	1.21	0.352	1.06	0.050	7995423
Dissolved Sulphur (S)	mg/L	29.6	13.4	16.6	11.1	16.5	3.0	7995423

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6282	MV6283	MV6284		
Sampling Date		2015/08/02 13:45	2015/08/02 14:05	2015/08/02 12:26		
COC Number		08412606	08412606	08412606		
	UNITS	MW05-06A	MW05-06B	MW08-13	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	<0.010	0.025	0.010	7996618
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	<0.00050	0.00071	0.00923	0.00050	7997716
Dissolved Antimony (Sb)	mg/L	0.00103	0.000024	0.000034	0.000020	7997716
Dissolved Arsenic (As)	mg/L	0.00529	0.000057	0.000177	0.000020	7997716
Dissolved Barium (Ba)	mg/L	0.0263	0.169	0.378	0.000020	7997716
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	0.000010	7997716
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	0.010	7997716
Dissolved Cadmium (Cd)	mg/L	<0.0000050	<0.0000050	0.000109	0.0000050	7997716
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00097	0.00010	0.00010	7997716
Dissolved Cobalt (Co)	mg/L	0.000312	0.0000066	0.000117	0.0000050	7997716
Dissolved Copper (Cu)	mg/L	<0.000050	0.000237	0.00178	0.000050	7997716
Dissolved Iron (Fe)	mg/L	0.479	<0.0010	0.0236	0.0010	7997716
Dissolved Lead (Pb)	mg/L	<0.0000050	<0.0000050	0.0000110	0.0000050	7997716
Dissolved Lithium (Li)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	7997716
Dissolved Manganese (Mn)	mg/L	0.129	0.000102	1.49	0.000050	7997716
Dissolved Molybdenum (Mo)	mg/L	0.00140	0.000220	0.000305	0.000050	7997716
Dissolved Nickel (Ni)	mg/L	0.00139	0.000115	0.00498	0.000020	7997716
Dissolved Phosphorus (P)	mg/L	0.587	0.0052	0.0068	0.0020	7997716
Dissolved Selenium (Se)	mg/L	<0.000040	0.000627	0.000827	0.000040	7997716
Dissolved Silicon (Si)	mg/L	6.73	4.19	5.06	0.050	7997716
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000050	7997716
Dissolved Strontium (Sr)	mg/L	0.0254	0.0465	0.148	0.000050	7997716
Dissolved Thallium (Tl)	mg/L	0.0000022	<0.0000020	0.0000078	0.0000020	7997716
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7997716
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	7997716
Dissolved Uranium (U)	mg/L	0.000105	0.000305	0.000632	0.0000020	7997716
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	7997716
Dissolved Zinc (Zn)	mg/L	0.00123	0.00028	0.00175	0.00010	7997716
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	7997716
Dissolved Calcium (Ca)	mg/L	25.5	30.7	58.9	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	3.19	2.86	8.28	0.050	7995423
Dissolved Potassium (K)	mg/L	1.26	0.836	1.57	0.050	7995423
Dissolved Sodium (Na)	mg/L	1.92	1.34	6.81	0.050	7995423
Dissolved Sulphur (S)	mg/L	5.7	<3.0	17.3	3.0	7995423

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	5.0°C

Samples analyzed past recommended hold time for Total Dissolved Solids (TDS).

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample MV6273-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.
Sample MV6275-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.
Sample MV6276-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: JP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7995327	Total Suspended Solids	2015/08/10	106	80 - 120	103	80 - 120	<4.0	mg/L	NC	20
7995474	Turbidity	2015/08/08			101	80 - 120	<0.10	NTU	1.5 (1)	20
7995594	Total Suspended Solids	2015/08/10	105	80 - 120	102	80 - 120	<4.0	mg/L	NC	20
7996351	Total Dissolved Solids	2015/08/10	100	80 - 120	100	80 - 120	<10	mg/L		
7996356	Total Dissolved Solids	2015/08/11	99	80 - 120	112	80 - 120	<10	mg/L	NC	20
7996492	Bromide (Br)	2015/08/10	NC	78 - 120	98	80 - 120	<0.010	mg/L	4.0	20
7996618	Bromide (Br)	2015/08/10	98	78 - 120	96	80 - 120	<0.010	mg/L	NC	20
7996863	Orthophosphate (P)	2015/08/10	94	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
7996865	Orthophosphate (P)	2015/08/10	91	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
7996871	Dissolved Phosphorus (P)	2015/08/10	98	80 - 120	106	80 - 120	<0.0020	mg/L	NC	20
7996872	Dissolved Phosphorus (P)	2015/08/10	90	80 - 120	99	80 - 120	<0.0020	mg/L	NC	20
7997195	Total Ammonia (N)	2015/08/10	102	80 - 120	103	80 - 120	<0.0050	mg/L	NC	20
7997210	Total Ammonia (N)	2015/08/10	99	80 - 120	104	80 - 120	<0.0050	mg/L	0.32	20
7997217	Dissolved Chloride (Cl)	2015/08/10	NC	80 - 120	98	80 - 120	<0.50	mg/L	1.4	20
7997218	Dissolved Sulphate (SO4)	2015/08/10	NC	80 - 120	95	80 - 120	<0.50	mg/L	0.42	20
7997219	Dissolved Chloride (Cl)	2015/08/10	113	80 - 120	98	80 - 120	<0.50	mg/L	NC	20
7997220	Dissolved Sulphate (SO4)	2015/08/10	NC	80 - 120	95	80 - 120	<0.50	mg/L	9.4	20
7997716	Dissolved Aluminum (Al)	2015/08/11	101	80 - 120	108	80 - 120	0.00077, RDL=0.00050	mg/L	2.3	20
7997716	Dissolved Antimony (Sb)	2015/08/11	96	80 - 120	103	80 - 120	<0.000020	mg/L	15	20
7997716	Dissolved Arsenic (As)	2015/08/11	107	80 - 120	102	80 - 120	<0.000020	mg/L	2.7	20
7997716	Dissolved Barium (Ba)	2015/08/11	NC	80 - 120	103	80 - 120	<0.000020	mg/L	0.18	20
7997716	Dissolved Beryllium (Be)	2015/08/11	102	80 - 120	103	80 - 120	<0.000010	mg/L	NC	20
7997716	Dissolved Bismuth (Bi)	2015/08/11	93	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7997716	Dissolved Boron (B)	2015/08/11					<0.010	mg/L	NC	20
7997716	Dissolved Cadmium (Cd)	2015/08/11	90	80 - 120	101	80 - 120	<0.0000050	mg/L	0.67	20
7997716	Dissolved Chromium (Cr)	2015/08/11	100	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
7997716	Dissolved Cobalt (Co)	2015/08/11	98	80 - 120	106	80 - 120	<0.0000050	mg/L	2.9	20
7997716	Dissolved Copper (Cu)	2015/08/11	90	80 - 120	106	80 - 120	<0.000050	mg/L	0.25	20
7997716	Dissolved Iron (Fe)	2015/08/11	99	80 - 120	111	80 - 120	<0.0010	mg/L	0.32	20
7997716	Dissolved Lead (Pb)	2015/08/11	94	80 - 120	104	80 - 120	<0.0000050	mg/L	3.8	20
7997716	Dissolved Lithium (Li)	2015/08/11	NC	80 - 120	102	80 - 120	<0.00050	mg/L	17	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7997716	Dissolved Manganese (Mn)	2015/08/11	NC	80 - 120	103	80 - 120	<0.000050	mg/L	1.4	20
7997716	Dissolved Molybdenum (Mo)	2015/08/11	NC	80 - 120	101	80 - 120	<0.000050	mg/L	3.3	20
7997716	Dissolved Nickel (Ni)	2015/08/11	92	80 - 120	104	80 - 120	<0.000020	mg/L	0.039	20
7997716	Dissolved Phosphorus (P)	2015/08/11					<0.0020	mg/L		
7997716	Dissolved Selenium (Se)	2015/08/11	110	80 - 120	96	80 - 120	<0.000040	mg/L	0.16	20
7997716	Dissolved Silicon (Si)	2015/08/11					<0.050	mg/L	1.7	20
7997716	Dissolved Silver (Ag)	2015/08/11	99	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7997716	Dissolved Strontium (Sr)	2015/08/11	NC	80 - 120	98	80 - 120	<0.000050	mg/L	0.53	20
7997716	Dissolved Thallium (Tl)	2015/08/11	92	80 - 120	102	80 - 120	<0.0000020	mg/L	4.7	20
7997716	Dissolved Tin (Sn)	2015/08/11	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
7997716	Dissolved Titanium (Ti)	2015/08/11	101	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7997716	Dissolved Uranium (U)	2015/08/11	NC	80 - 120	105	80 - 120	<0.0000020	mg/L	0.51	20
7997716	Dissolved Vanadium (V)	2015/08/11	105	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
7997716	Dissolved Zinc (Zn)	2015/08/11	NC	80 - 120	107	80 - 120	<0.00010	mg/L	0.87	20
7997716	Dissolved Zirconium (Zr)	2015/08/11					<0.00010	mg/L	NC	20
7997777	pH	2015/08/11			102	97 - 103	5.41	pH	0.42	N/A
7997780	Conductivity	2015/08/11			102	80 - 120	<1.0	uS/cm	0.38	20
7997781	Alkalinity (PP as CaCO3)	2015/08/11					<0.50	mg/L	NC	20
7997781	Alkalinity (Total as CaCO3)	2015/08/11	NC	80 - 120	98	80 - 120	<0.50	mg/L	0.60	20
7997781	Bicarbonate (HCO3)	2015/08/11					<0.50	mg/L	0.60	20
7997781	Carbonate (CO3)	2015/08/11					<0.50	mg/L	NC	20
7997781	Hydroxide (OH)	2015/08/11					<0.50	mg/L	NC	20
7997791	Alkalinity (PP as CaCO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Alkalinity (Total as CaCO3)	2015/08/12	NC	80 - 120	99	80 - 120	<0.50	mg/L	8.0	20
7997791	Bicarbonate (HCO3)	2015/08/12					<0.50	mg/L	8.0	20
7997791	Carbonate (CO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Hydroxide (OH)	2015/08/12					<0.50	mg/L	NC	20
7997793	Conductivity	2015/08/12			99	80 - 120	1.0, RDL=1.0	uS/cm	0	20
7997796	pH	2015/08/12			101	97 - 103			0.74	N/A
7998137	Fluoride (F)	2015/08/11	NC	80 - 120	100	80 - 120	<0.010	mg/L	0	20
7998152	Fluoride (F)	2015/08/11	106	80 - 120	102	80 - 120	<0.010	mg/L	0	20
7998213	Acidity (pH 4.5)	2015/08/11					<0.50	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JP

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7998213	Acidity (pH 8.3)	2015/08/11			102	80 - 120	<0.50	mg/L	NC	20
7998219	Acidity (pH 4.5)	2015/08/11					<0.50	mg/L	NC	20
7998219	Acidity (pH 8.3)	2015/08/11			101	80 - 120	<0.50	mg/L	NC	20
7998691	Nitrate plus Nitrite (N)	2015/08/11	102	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7998692	Nitrite (N)	2015/08/11	95	80 - 120	102	80 - 120	<0.0020	mg/L	NC	25
7998695	Nitrate plus Nitrite (N)	2015/08/11	103	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7998696	Nitrite (N)	2015/08/11	NC	80 - 120	102	80 - 120	<0.0020	mg/L	NC	25
7998708	Total Ammonia (N)	2015/08/11	97	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
7999592	Dissolved Mercury (Hg)	2015/08/12	87	80 - 120	96	80 - 120	<0.010	ug/L	NC	20
7999637	Dissolved Mercury (Hg)	2015/08/12	96	80 - 120	98	80 - 120	<0.010	ug/L	NC	20
8000636	Total Dissolved Solids	2015/08/14	97	80 - 120	118	80 - 120	14, RDL=10	mg/L	0	20
8000853	Orthophosphate (P)	2015/08/13	97	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Sample arrived to laboratory past recommended hold time.

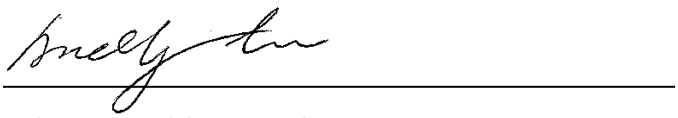
Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567761
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JP

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

B567761

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHA

08412606

ID ANALYSIS REQUEST

LAB USE ONLY — MAXXAM JOB #

ANALYSIS REQUEST

LAB USE ONLY — COC #

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #701-475 Howe Street, Vancouver, BC, V6C 2B3	TEL.: 604-638-0921 Ex.5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): James Spencer	PROJECT MANAGER: Malcom Swallow/Alex Wu
	LABORATORY CONTACT: Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	MW05-01A	MV6272	X					02-08-2015	1111	3	x	x	x	x	x	x	x
2	MW05-01B	MV6273	X					02-08-2015	1055	3	x	x	x	x	x	x	x
3	MW05-02A	MV6274	X					02-08-2015	1153	3	x	x	x	x	x	x	x
4	MW05-02B	MV6275	X					02-08-2015	1201	3	x	x	x	x	x	x	x
5	MW05-03A	MV6276	X					02-08-2015	1622	3	x	x	x	x	x	x	x
6	MW05-03B	MV6277	X					02-08-2015	1649	3	x	x	x	x	x	x	x
7	MW05-04A	MV6278	X					02-08-2015	1730	3	x	x	x	x	x	x	x
8	MW05-04B	MV6279	X					02-08-2015	1714	3	x	x	x	x	x	x	x
9	MW05-05A	MV6280	X					02-08-2015	1811	3	x	x	x	x	x	x	x
10	MW05-05B	MV6281	X					02-08-2015	1821	3	x	x	x	x	x	x	x
11	MW05-06A	MV6282	X					02-08-2015	1345	3	x	x	x	x	x	x	x
12	MW05-06B	MV6283	X					02-08-2015	1405	3	x	x	x	x	x	x	x
13	MW08-13	MV6284	X					03-08-2015	1226	3	x	x	x	x	x	x	x
		MV6285															

B567761

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	x
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 4, 6, 5

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: James Spencer	DATE: DD/MM/YY 06-08-2015	TIME: 10:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: JESSICA FWOF 2015/08/07 09:10 CS:NA

COCFORM - BC - 20070822

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your C.O.C. #: 08412609

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026240
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567762
Received: 2015/08/07, 09:10

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	4	N/A	2015/08/11	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	4	2015/08/11	2015/08/12	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	4	N/A	2015/08/10	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	4	N/A	2015/08/12	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	4	N/A	2015/08/11	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	2	N/A	2015/08/11	BBY7SOP-00002	EPA 6020a R1 m
Hardness Total (calculated as CaCO3)	2	N/A	2015/08/13	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	4	N/A	2015/08/13	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	4	N/A	2015/08/12	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	4	2015/08/13	2015/08/13	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	4	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	4	N/A	2015/08/13	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	4	N/A	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Digested LL (total)	2	2015/08/12	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	2	N/A	2015/08/11	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	2	N/A	2015/08/13	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	2	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	1	N/A	2015/08/10	BBY6SOP-00009	SM 22 4500-NH3- G m
Ammonia-N (Unpreserved)	3	N/A	2015/08/11	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	4	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	4	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	4	N/A	2015/08/12	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	4	N/A	2015/08/10	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	4	N/A	2015/08/12	BBY6SOP-00026	SM 22 4500-H+ B m
Total Dissolved Solids (Filt. Residue)	4	2015/08/10	2015/08/11	BBY6SOP-00033	SM 22 2540 C m
Total Suspended Solids	4	N/A	2015/08/10	BBY6SOP-00034	SM 22 2540 D
Turbidity	4	N/A	2015/08/08	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08412609

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026240
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567762

Received: 2015/08/07, 09:10

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin
18 Aug 2015 17:41:49 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6285		MV6286	MV6287		MV6288		
Sampling Date		2015/07/31 18:09		2015/07/31 17:57	2015/07/30 16:45		2015/07/30 18:25		
COC Number		08412609		08412609	08412609		08412609		
	UNITS	WRSS	QC Batch	NWRSS	TAILINGS SEEPAGE	QC Batch	TAILINGS SEEPAGE FILTERED	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	7998219	<0.50	<0.50	7998219	<0.50	0.50	7998213
Acidity (pH 8.3)	mg/L	20.3	7998219	4.92	<0.50	7998219	2.30	0.50	7998213
Fluoride (F)	mg/L	0.084	7998152	0.087	0.040	7998152	0.039	0.010	7998137
Calculated Parameters									
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	LAB	7996359	LAB	N/A	7996359
Total Hardness (CaCO3)	mg/L	1300	7995441	1270	158	7995441	161	0.50	7995441
Nitrate (N)	mg/L	0.40	7995424	6.05	<0.20	7995424	<0.20	0.20	7995424
Misc. Inorganics									
Dissolved Hardness (CaCO3)	mg/L	1320	7995422	1220	156	7995422	159	0.50	7995422
Alkalinity (Total as CaCO3)	mg/L	72.0	7997791	208	67.9	7997791	71.4	0.50	7997781
Alkalinity (PP as CaCO3)	mg/L	<0.50	7997791	<0.50	<0.50	7997791	<0.50	0.50	7997781
Bicarbonate (HCO3)	mg/L	87.8	7997791	254	82.8	7997791	87.1	0.50	7997781
Carbonate (CO3)	mg/L	<0.50	7997791	<0.50	<0.50	7997791	<0.50	0.50	7997781
Hydroxide (OH)	mg/L	<0.50	7997791	<0.50	<0.50	7997791	<0.50	0.50	7997781
Anions									
Dissolved Chloride (Cl)	mg/L	9.9	7997221	5.3	1.5	7997219	1.7	0.50	7997217
Nutrients									
Total Ammonia (N)	mg/L	0.805 (1)	7997210	0.0786 (1)	<0.0050 (1)	7998708	0.0074 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	0.40 (2)	7998695	6.05 (2)	<0.20 (2)	7998695	<0.20 (2)	0.20	7998691
Nitrite (N)	mg/L	<0.20 (2)	7998696	<0.20 (2)	<0.20 (2)	7998696	<0.20 (2)	0.20	7998692
Physical Properties									
Conductivity	uS/cm	2310	7997793	2550	347	7997793	356	1.0	7997780
pH	pH	7.73	7997796	8.20	7.95	7997796	7.81	N/A	7997777
Physical Properties									
Total Suspended Solids	mg/L	<4.0	7995594	4.5	5.0	7995594	<4.0	4.0	7995594
Total Dissolved Solids	mg/L	2060 (3)	7996356	2300 (3)	306 (1)	7996356	268 (1)	10	7996356
Turbidity	NTU	2.08 (1)	7995474	3.10 (1)	8.09 (1)	7995474	2.89 (1)	0.10	7995543

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample arrived to laboratory past recommended hold time.

(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

(3) Sample analysed past hold time: sample was received on the hold time expiry date which did not allow sufficient time for preparation and analysis.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MV6285	MV6286	MV6287	MV6288		
Sampling Date		2015/07/31 18:09	2015/07/31 17:57	2015/07/30 16:45	2015/07/30 18:25		
COC Number		08412609	08412609	08412609	08412609		
	UNITS	WRSS	NWRSS	TAILINGS SEEPAGE	TAILINGS SEEPAGE FILTERED	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7999637
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	8000600
RDL = Reportable Detection Limit							

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6285	MV6286			MV6287		
Sampling Date		2015/07/31 18:09	2015/07/31 17:57			2015/07/30 16:45		
COC Number		08412609	08412609			08412609		
	UNITS	WRSS	NWRSS	RDL	QC Batch	TAILINGS SEEPAGE	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.10	<0.10	0.10	7996492	0.012	0.010	7996492
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00153	0.00213	0.00050	7998253	0.00276	0.00050	7998253
Dissolved Antimony (Sb)	mg/L	0.00431	0.0124	0.000020	7998253	0.000170	0.000020	7998253
Dissolved Arsenic (As)	mg/L	0.00104	0.00193	0.000020	7998253	0.000457	0.000020	7998253
Dissolved Barium (Ba)	mg/L	0.0245	0.0293	0.000020	7998253	0.156	0.000020	7998253
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	0.000010	7998253	<0.000010	0.000010	7998253
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	0.0000050	7998253	<0.0000050	0.0000050	7998253
Dissolved Boron (B)	mg/L	0.067	0.027	0.010	7998253	<0.010	0.010	7998253
Dissolved Cadmium (Cd)	mg/L	0.0260	0.0784	0.0000050	7998253	0.0000294	0.0000050	8002208
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00010	7998253	<0.00010	0.00010	7998253
Dissolved Cobalt (Co)	mg/L	0.000320	0.0523	0.0000050	7998253	0.000147	0.0000050	7998253
Dissolved Copper (Cu)	mg/L	0.0124	0.00729	0.000050	7998253	0.00126	0.000050	7998253
Dissolved Iron (Fe)	mg/L	<0.0010	0.0087	0.0010	7998253	0.0080	0.0010	7998253
Dissolved Lead (Pb)	mg/L	0.00265	0.0127	0.0000050	7998253	0.0000325	0.0000050	7998253
Dissolved Lithium (Li)	mg/L	0.00241	0.0105	0.00050	7998253	0.00136	0.00050	7998253
Dissolved Manganese (Mn)	mg/L	0.213	8.62	0.000050	7998253	0.0279	0.000050	7998253
Dissolved Molybdenum (Mo)	mg/L	0.00111	0.00773	0.000050	7998253	0.000156	0.000050	7998253
Dissolved Nickel (Ni)	mg/L	0.121	0.0611	0.000020	7998253	0.00182	0.000020	7998253
Dissolved Phosphorus (P)	mg/L	<0.0020	<0.0020	0.0020	7998253	<0.0020	0.0020	7998253
Dissolved Selenium (Se)	mg/L	0.0451	0.0947	0.000040	7998253	0.00245	0.000040	7998253
Dissolved Silicon (Si)	mg/L	3.10	5.06	0.050	7998253	1.54	0.050	7998253
Dissolved Silver (Ag)	mg/L	0.0000062	0.0000235	0.0000050	7998253	<0.0000050	0.0000050	7998253
Dissolved Strontium (Sr)	mg/L	1.26	1.75	0.000050	7998253	0.0724	0.000050	7998253
Dissolved Thallium (Tl)	mg/L	0.000428	0.00497	0.0000020	7998253	<0.0000020	0.0000020	8002208
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	0.00020	7998253	<0.00020	0.00020	7998253
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	0.00050	7998253	<0.00050	0.00050	7998253
Dissolved Uranium (U)	mg/L	0.0116	0.0134	0.0000020	7998253	0.0000641	0.0000020	8002208
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	0.00020	7998253	<0.00020	0.00020	7998253
Dissolved Zinc (Zn)	mg/L	3.02	12.9	0.00010	7998253	0.00162	0.00010	8002208
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	0.00010	7998253	<0.00010	0.00010	7998253
Dissolved Calcium (Ca)	mg/L	446	448	0.050	7995423	51.7	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	49.7	25.2	0.050	7995423	6.54	0.050	7995423
Dissolved Potassium (K)	mg/L	10.6	17.1	0.050	7995423	0.946	0.050	7995423
Dissolved Sodium (Na)	mg/L	127	64.2	0.050	7995423	6.96	0.050	7995423
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6285	MV6286			MV6287		
Sampling Date		2015/07/31 18:09	2015/07/31 17:57			2015/07/30 16:45		
COC Number		08412609	08412609			08412609		
	UNITS	WRSS	NWRSS	RDL	QC Batch	TAILINGS SEEPAGE	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	458	445	3.0	7995423	31.1	3.0	7995423
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.0815	0.0136	0.00050	7996920	0.268	0.0030	7999599
Total Antimony (Sb)	mg/L	0.00491	0.0121	0.000020	7996920	0.000202	0.000050	7999599
Total Arsenic (As)	mg/L	0.00158	0.00425	0.000020	7996920	0.000787	0.000020	7999599
Total Barium (Ba)	mg/L	0.0299	0.0291	0.000020	7996920	0.171	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	<0.000010	0.000010	7996920	0.000013	0.000010	7999599
Total Bismuth (Bi)	mg/L	0.000241	0.0000080	0.0000050	7996920	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	0.082	0.036	0.010	7996920	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0255	0.0763	0.0000050	7996920	0.000124	0.0000050	7999599
Total Chromium (Cr)	mg/L	0.00019	0.00017	0.00010	7996920	0.00089	0.00050	7999599
Total Cobalt (Co)	mg/L	0.000442	0.0523	0.0000050	7996920	0.000518	0.000010	7999599
Total Copper (Cu)	mg/L	0.0188	0.00974	0.000050	7996920	0.00395	0.00020	7999599
Total Iron (Fe)	mg/L	0.168	0.200	0.0010	7996920	0.586	0.0050	7999599
Total Lead (Pb)	mg/L	0.0105	0.0528	0.0000050	7996920	0.00120	0.000050	7999599
Total Lithium (Li)	mg/L	0.00175	0.0107	0.00050	7996920	<0.00050	0.00050	7999599
Total Manganese (Mn)	mg/L	0.235	9.21	0.000050	7996920	0.293	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.00125	0.00815	0.000050	7996920	0.000216	0.000050	7999599
Total Nickel (Ni)	mg/L	0.123	0.0608	0.000020	7996920	0.00289	0.00010	7999599
Total Phosphorus (P)	mg/L	0.0101	0.0106	0.0020	7996920			
Total Selenium (Se)	mg/L	0.0518	0.106	0.000040	7996920	0.00275	0.000040	7999599
Total Silicon (Si)	mg/L	3.22	4.81	0.050	7996920	1.92	0.10	7999599
Total Silver (Ag)	mg/L	0.0000582	0.0000592	0.0000050	7996920	0.0000161	0.0000050	7999599
Total Strontium (Sr)	mg/L	1.42	1.88	0.000050	7996920	0.0713	0.000050	7999599
Total Thallium (Tl)	mg/L	0.000606	0.00570	0.0000020	7996920	0.0000065	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	<0.00020	0.00020	7996920	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	0.00328	0.00091	0.00050	7996920	0.0200	0.0050	7999599
Total Uranium (U)	mg/L	0.0129	0.0138	0.0000020	7996920	0.0000744	0.0000050	7999599
Total Vanadium (V)	mg/L	0.00025	<0.00020	0.00020	7996920	0.00084	0.00050	7999599
Total Zinc (Zn)	mg/L	2.91	14.4	0.00010	7996920	0.0105	0.0010	7999599
Total Zirconium (Zr)	mg/L	0.00018	<0.00010	0.00010	7996920	0.00014	0.00010	7999599
Total Calcium (Ca)	mg/L	433	463	0.050	7995442	52.0	0.25	7995442
Total Magnesium (Mg)	mg/L	53.1	26.7	0.050	7995442	6.78	0.25	7995442
Total Potassium (K)	mg/L	10.6	17.6	0.050	7995442	0.94	0.25	7995442
Total Sodium (Na)	mg/L	136	67.9	0.050	7995442	6.89	0.25	7995442
Total Sulphur (S)	mg/L	487	460	3.0	7995442	31	15	7995442

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6288		
Sampling Date		2015/07/30 18:25		
COC Number		08412609		
	UNITS	**TAILINGS SEEPAGE FILTERED**	**RDL**	**QC Batch**
ANIONS				
Bromide (Br)	mg/L	0.013	0.010	7996618
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	mg/L	0.00320	0.00050	7998253
Dissolved Antimony (Sb)	mg/L	0.000129	0.000020	7998253
Dissolved Arsenic (As)	mg/L	0.000439	0.000020	7998253
Dissolved Barium (Ba)	mg/L	0.149	0.000020	7998253
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	7998253
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	7998253
Dissolved Boron (B)	mg/L	<0.010	0.010	7998253
Dissolved Cadmium (Cd)	mg/L	0.0000479	0.0000050	7998253
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	7998253
Dissolved Cobalt (Co)	mg/L	0.0000339	0.0000050	7998253
Dissolved Copper (Cu)	mg/L	0.000638	0.000050	7998253
Dissolved Iron (Fe)	mg/L	0.0164	0.0010	7998253
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000050	7998253
Dissolved Lithium (Li)	mg/L	<0.00050	0.00050	7998253
Dissolved Manganese (Mn)	mg/L	0.0204	0.000050	7998253
Dissolved Molybdenum (Mo)	mg/L	0.000154	0.000050	7998253
Dissolved Nickel (Ni)	mg/L	0.00147	0.000020	7998253
Dissolved Phosphorus (P)	mg/L	0.0149	0.0020	7998253
Dissolved Selenium (Se)	mg/L	0.00217	0.000040	7998253
Dissolved Silicon (Si)	mg/L	1.77	0.050	7998253
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	7998253
Dissolved Strontium (Sr)	mg/L	0.0727	0.000050	7998253
Dissolved Thallium (Tl)	mg/L	<0.0000020	0.0000020	8002208
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	7998253
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	7998253
Dissolved Uranium (U)	mg/L	0.0000394	0.0000020	7998253
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	7998253
Dissolved Zinc (Zn)	mg/L	0.00266	0.00010	7998253
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	7998253
Dissolved Calcium (Ca)	mg/L	52.1	0.050	7995423
Dissolved Magnesium (Mg)	mg/L	6.92	0.050	7995423
Dissolved Potassium (K)	mg/L	0.993	0.050	7995423
Dissolved Sodium (Na)	mg/L	7.33	0.050	7995423
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6288		
Sampling Date		2015/07/30 18:25		
COC Number		08412609		
	UNITS	**TAILINGS SEEPAGE FILTERED**	**RDL**	**QC Batch**
Dissolved Sulphur (S)	mg/L	31.2	3.0	7995423
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.0598	0.0030	7999599
Total Antimony (Sb)	mg/L	0.000113	0.000050	7999599
Total Arsenic (As)	mg/L	0.000608	0.000020	7999599
Total Barium (Ba)	mg/L	0.150	0.00010	7999599
Total Beryllium (Be)	mg/L	<0.000010	0.000010	7999599
Total Bismuth (Bi)	mg/L	<0.000020	0.000020	7999599
Total Boron (B)	mg/L	<0.050	0.050	7999599
Total Cadmium (Cd)	mg/L	0.0000505	0.0000050	7999599
Total Chromium (Cr)	mg/L	<0.00050	0.00050	7999599
Total Cobalt (Co)	mg/L	0.000233	0.000010	7999599
Total Copper (Cu)	mg/L	0.00146	0.00020	7999599
Total Iron (Fe)	mg/L	0.277	0.0050	7999599
Total Lead (Pb)	mg/L	0.000190	0.000050	7999599
Total Lithium (Li)	mg/L	<0.00050	0.00050	7999599
Total Manganese (Mn)	mg/L	0.208	0.00010	7999599
Total Molybdenum (Mo)	mg/L	0.000191	0.000050	7999599
Total Nickel (Ni)	mg/L	0.00188	0.00010	7999599
Total Selenium (Se)	mg/L	0.00242	0.000040	7999599
Total Silicon (Si)	mg/L	1.97	0.10	7999599
Total Silver (Ag)	mg/L	0.0000062	0.0000050	7999599
Total Strontium (Sr)	mg/L	0.0745	0.000050	7999599
Total Thallium (Tl)	mg/L	0.0000025	0.0000020	7999599
Total Tin (Sn)	mg/L	<0.00020	0.00020	7999599
Total Titanium (Ti)	mg/L	<0.0050	0.0050	7999599
Total Uranium (U)	mg/L	0.0000412	0.0000050	7999599
Total Vanadium (V)	mg/L	<0.00050	0.00050	7999599
Total Zinc (Zn)	mg/L	0.0055	0.0010	7999599
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	7999599
Total Calcium (Ca)	mg/L	52.6	0.25	7995442
Total Magnesium (Mg)	mg/L	7.07	0.25	7995442
Total Potassium (K)	mg/L	0.98	0.25	7995442
Total Sodium (Na)	mg/L	7.42	0.25	7995442
Total Sulphur (S)	mg/L	32	15	7995442
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.7°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample MV6285-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.
Sample MV6286-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Sample MV6287, Elements by ICPMS Low Level (dissolved): Test repeated.
Sample MV6288, Elements by ICPMS Low Level (dissolved): Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7995474	Turbidity	2015/08/08			101	80 - 120	<0.10	NTU	1.5 (1)	20
7995543	Turbidity	2015/08/08			103	80 - 120	<0.10	NTU	1.4 (1)	20
7995594	Total Suspended Solids	2015/08/10	105	80 - 120	102	80 - 120	<4.0	mg/L	NC	20
7996356	Total Dissolved Solids	2015/08/11	99	80 - 120	112	80 - 120	<10	mg/L	NC	20
7996492	Bromide (Br)	2015/08/10	NC	78 - 120	98	80 - 120	<0.010	mg/L	4.0	20
7996618	Bromide (Br)	2015/08/10	98	78 - 120	96	80 - 120	<0.010	mg/L	NC	20
7996920	Total Aluminum (Al)	2015/08/10	104	80 - 120	104	80 - 120	0.00071, RDL=0.00050	mg/L	3.9	20
7996920	Total Antimony (Sb)	2015/08/10	NC	80 - 120	104	80 - 120	<0.000020	mg/L	0.93	20
7996920	Total Arsenic (As)	2015/08/10	100	80 - 120	100	80 - 120	<0.000020	mg/L	5.6	20
7996920	Total Barium (Ba)	2015/08/10	NC	80 - 120	105	80 - 120	<0.000020	mg/L	0.36	20
7996920	Total Beryllium (Be)	2015/08/10	104	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20
7996920	Total Bismuth (Bi)	2015/08/10	106	80 - 120	105	80 - 120	<0.0000050	mg/L	3.9	20
7996920	Total Boron (B)	2015/08/10					<0.010	mg/L	NC	20
7996920	Total Cadmium (Cd)	2015/08/10	NC	80 - 120	105	80 - 120	<0.0000050	mg/L	3.0	20
7996920	Total Chromium (Cr)	2015/08/10	105	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
7996920	Total Cobalt (Co)	2015/08/10	106	80 - 120	107	80 - 120	<0.0000050	mg/L	1.5	20
7996920	Total Copper (Cu)	2015/08/10	NC	80 - 120	109	80 - 120	<0.000050	mg/L	0.76	20
7996920	Total Iron (Fe)	2015/08/10	NC	80 - 120	111	80 - 120	<0.0010	mg/L	1.1	20
7996920	Total Lead (Pb)	2015/08/10	NC	80 - 120	108	80 - 120	<0.0000050	mg/L	0.71	20
7996920	Total Lithium (Li)	2015/08/10	100	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
7996920	Total Manganese (Mn)	2015/08/10	NC	80 - 120	105	80 - 120	<0.000050	mg/L	0.18	20
7996920	Total Molybdenum (Mo)	2015/08/10	102	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7996920	Total Nickel (Ni)	2015/08/10	107	80 - 120	107	80 - 120	<0.000020	mg/L	2.0	20
7996920	Total Phosphorus (P)	2015/08/10					<0.0020	mg/L	NC	20
7996920	Total Selenium (Se)	2015/08/10	NC	80 - 120	97	80 - 120	<0.000040	mg/L	1.8	20
7996920	Total Silicon (Si)	2015/08/10					<0.050	mg/L	NC	20
7996920	Total Silver (Ag)	2015/08/10	111	80 - 120	98	80 - 120	<0.0000050	mg/L	0.23	20
7996920	Total Strontium (Sr)	2015/08/10	NC	80 - 120	101	80 - 120	<0.000050	mg/L	4.8	20
7996920	Total Thallium (Tl)	2015/08/10	NC	80 - 120	106	80 - 120	<0.0000020	mg/L	3.6	20
7996920	Total Tin (Sn)	2015/08/10	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
7996920	Total Titanium (Ti)	2015/08/10	107	80 - 120	108	80 - 120	<0.00050	mg/L	NC	20
7996920	Total Uranium (U)	2015/08/10	109	80 - 120	111	80 - 120	<0.0000020	mg/L	6.5	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7996920	Total Vanadium (V)	2015/08/10	105	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
7996920	Total Zinc (Zn)	2015/08/10	NC	80 - 120	111	80 - 120	<0.00010	mg/L	0.34	20
7996920	Total Zirconium (Zr)	2015/08/10					<0.00010	mg/L	NC	20
7997210	Total Ammonia (N)	2015/08/10	99	80 - 120	104	80 - 120	<0.0050	mg/L	0.32	20
7997217	Dissolved Chloride (Cl)	2015/08/10	NC	80 - 120	98	80 - 120	<0.50	mg/L	1.4	20
7997219	Dissolved Chloride (Cl)	2015/08/10	113	80 - 120	98	80 - 120	<0.50	mg/L	NC	20
7997221	Dissolved Chloride (Cl)	2015/08/10			97	80 - 120	<0.50	mg/L		
7997777	pH	2015/08/11			102	97 - 103	5.41	pH	0.42	N/A
7997780	Conductivity	2015/08/11			102	80 - 120	<1.0	uS/cm	0.38	20
7997781	Alkalinity (PP as CaCO3)	2015/08/11					<0.50	mg/L	NC	20
7997781	Alkalinity (Total as CaCO3)	2015/08/11	NC	80 - 120	98	80 - 120	<0.50	mg/L	0.60	20
7997781	Bicarbonate (HCO3)	2015/08/11					<0.50	mg/L	0.60	20
7997781	Carbonate (CO3)	2015/08/11					<0.50	mg/L	NC	20
7997781	Hydroxide (OH)	2015/08/11					<0.50	mg/L	NC	20
7997791	Alkalinity (PP as CaCO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Alkalinity (Total as CaCO3)	2015/08/12	NC	80 - 120	99	80 - 120	<0.50	mg/L	8.0	20
7997791	Bicarbonate (HCO3)	2015/08/12					<0.50	mg/L	8.0	20
7997791	Carbonate (CO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Hydroxide (OH)	2015/08/12					<0.50	mg/L	NC	20
7997793	Conductivity	2015/08/12			99	80 - 120	1.0, RDL=1.0	uS/cm	0	20
7997796	pH	2015/08/12			101	97 - 103			0.74	N/A
7998137	Fluoride (F)	2015/08/11	NC	80 - 120	100	80 - 120	<0.010	mg/L	0	20
7998152	Fluoride (F)	2015/08/11	106	80 - 120	102	80 - 120	<0.010	mg/L	0	20
7998213	Acidity (pH 4.5)	2015/08/11					<0.50	mg/L	NC	20
7998213	Acidity (pH 8.3)	2015/08/11			102	80 - 120	<0.50	mg/L	NC	20
7998219	Acidity (pH 4.5)	2015/08/11					<0.50	mg/L	NC	20
7998219	Acidity (pH 8.3)	2015/08/11			101	80 - 120	<0.50	mg/L	NC	20
7998253	Dissolved Aluminum (Al)	2015/08/12	107	80 - 120	105	80 - 120	<0.00050	mg/L	3.6	20
7998253	Dissolved Antimony (Sb)	2015/08/12	110	80 - 120	104	80 - 120	<0.000020	mg/L	14	20
7998253	Dissolved Arsenic (As)	2015/08/12	109	80 - 120	100	80 - 120	<0.000020	mg/L	1.8	20
7998253	Dissolved Barium (Ba)	2015/08/12	NC	80 - 120	106	80 - 120	<0.000020	mg/L	1.9	20
7998253	Dissolved Beryllium (Be)	2015/08/12	106	80 - 120	104	80 - 120	<0.000010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7998253	Dissolved Bismuth (Bi)	2015/08/12	100	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Boron (B)	2015/08/12					<0.010	mg/L	NC	20
7998253	Dissolved Cadmium (Cd)	2015/08/12	103	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Chromium (Cr)	2015/08/12	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
7998253	Dissolved Cobalt (Co)	2015/08/12	102	80 - 120	105	80 - 120	<0.0000050	mg/L	6.8	20
7998253	Dissolved Copper (Cu)	2015/08/12	97	80 - 120	106	80 - 120	<0.000050	mg/L	8.7	20
7998253	Dissolved Iron (Fe)	2015/08/12	107	80 - 120	113	80 - 120	<0.0010	mg/L	7.4	20
7998253	Dissolved Lead (Pb)	2015/08/12	104	80 - 120	108	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Lithium (Li)	2015/08/12	NC	80 - 120	104	80 - 120	<0.00050	mg/L	2.4	20
7998253	Dissolved Manganese (Mn)	2015/08/12	100	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20
7998253	Dissolved Molybdenum (Mo)	2015/08/12	NC	80 - 120	100	80 - 120	<0.000050	mg/L	1.1	20
7998253	Dissolved Nickel (Ni)	2015/08/12	97	80 - 120	103	80 - 120	<0.000020	mg/L	2.3	20
7998253	Dissolved Phosphorus (P)	2015/08/12					<0.0020	mg/L		
7998253	Dissolved Selenium (Se)	2015/08/12	111	80 - 120	95	80 - 120	<0.000040	mg/L	4.0	20
7998253	Dissolved Silicon (Si)	2015/08/12					<0.050	mg/L	0.094	20
7998253	Dissolved Silver (Ag)	2015/08/12	106	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Strontium (Sr)	2015/08/12	NC	80 - 120	100	80 - 120	<0.000050	mg/L	1.1	20
7998253	Dissolved Thallium (Tl)	2015/08/12	96	80 - 120	105	80 - 120	<0.0000020	mg/L	NC	20
7998253	Dissolved Tin (Sn)	2015/08/12	107	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7998253	Dissolved Titanium (Ti)	2015/08/12	102	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7998253	Dissolved Uranium (U)	2015/08/12	NC	80 - 120	107	80 - 120	<0.0000020	mg/L	0.50	20
7998253	Dissolved Vanadium (V)	2015/08/12	108	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7998253	Dissolved Zinc (Zn)	2015/08/12	112	80 - 120	113	80 - 120	<0.00010	mg/L	10	20
7998253	Dissolved Zirconium (Zr)	2015/08/12					<0.00010	mg/L	NC	20
7998691	Nitrate plus Nitrite (N)	2015/08/11	102	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7998692	Nitrite (N)	2015/08/11	95	80 - 120	102	80 - 120	<0.0020	mg/L	NC	25
7998695	Nitrate plus Nitrite (N)	2015/08/11	103	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7998696	Nitrite (N)	2015/08/11	NC	80 - 120	102	80 - 120	<0.0020	mg/L	NC	25
7998708	Total Ammonia (N)	2015/08/11	97	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
7999599	Total Aluminum (Al)	2015/08/12	NC	80 - 120	105	80 - 120	<0.0030	mg/L	0.33	20
7999599	Total Antimony (Sb)	2015/08/12	126 (2)	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20
7999599	Total Arsenic (As)	2015/08/12	102	80 - 120	96	80 - 120	<0.000020	mg/L	2.1	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7999599	Total Barium (Ba)	2015/08/12	NC	80 - 120	103	80 - 120	<0.00010	mg/L	0.93	20
7999599	Total Beryllium (Be)	2015/08/12	108	80 - 120	99	80 - 120	<0.000010	mg/L	NC	20
7999599	Total Bismuth (Bi)	2015/08/12	108	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20
7999599	Total Boron (B)	2015/08/12					<0.050	mg/L	NC	20
7999599	Total Cadmium (Cd)	2015/08/12	99	80 - 120	99	80 - 120	<0.0000050	mg/L	11	20
7999599	Total Chromium (Cr)	2015/08/12	100	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20
7999599	Total Cobalt (Co)	2015/08/12	101	80 - 120	106	80 - 120	<0.000010	mg/L	4.5	20
7999599	Total Copper (Cu)	2015/08/12	99	80 - 120	110	80 - 120	0.00034, RDL=0.00020	mg/L	3.7	20
7999599	Total Iron (Fe)	2015/08/12	NC	80 - 120	113	80 - 120	<0.0050	mg/L	4.7	20
7999599	Total Lead (Pb)	2015/08/12	113	80 - 120	106	80 - 120	<0.000050	mg/L	3.0	20
7999599	Total Lithium (Li)	2015/08/12	NC	80 - 120	101	80 - 120	<0.00050	mg/L	4.0	20
7999599	Total Manganese (Mn)	2015/08/12	NC	80 - 120	101	80 - 120	<0.00010	mg/L	0.12	20
7999599	Total Molybdenum (Mo)	2015/08/12	NC	80 - 120	98	80 - 120	<0.000050	mg/L	0.92	20
7999599	Total Nickel (Ni)	2015/08/12	97	80 - 120	104	80 - 120	<0.00010	mg/L	0.40	20
7999599	Total Selenium (Se)	2015/08/12	95	80 - 120	90	80 - 120	<0.000040	mg/L	1.8	20
7999599	Total Silicon (Si)	2015/08/12					<0.10	mg/L	1.2	20
7999599	Total Silver (Ag)	2015/08/12	109	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7999599	Total Strontium (Sr)	2015/08/12	NC	80 - 120	97	80 - 120	<0.000050	mg/L	1.9	20
7999599	Total Thallium (Tl)	2015/08/12	107	80 - 120	100	80 - 120	<0.0000020	mg/L	10	20
7999599	Total Tin (Sn)	2015/08/12	109	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
7999599	Total Titanium (Ti)	2015/08/12	NC	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
7999599	Total Uranium (U)	2015/08/12	NC	80 - 120	108	80 - 120	<0.0000050	mg/L	0.76	20
7999599	Total Vanadium (V)	2015/08/12	105	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7999599	Total Zinc (Zn)	2015/08/12	NC	80 - 120	104	80 - 120	<0.0010	mg/L	18	20
7999599	Total Zirconium (Zr)	2015/08/12					<0.00010	mg/L	NC	20
7999637	Dissolved Mercury (Hg)	2015/08/12	96	80 - 120	98	80 - 120	<0.010	ug/L	NC	20
8000600	Total Mercury (Hg)	2015/08/13	100	80 - 120	101	80 - 120	<0.010	ug/L	NC	20
8002208	Dissolved Cadmium (Cd)	2015/08/14			92	80 - 120	<0.0000050	mg/L		
8002208	Dissolved Thallium (Tl)	2015/08/14			106	80 - 120	<0.0000020	mg/L		
8002208	Dissolved Uranium (U)	2015/08/14			106	80 - 120	<0.0000020	mg/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8002208	Dissolved Zinc (Zn)	2015/08/14			103	80 - 120	<0.00010	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Sample arrived to laboratory past recommended hold time.

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567762
Report Date: 2015/08/18

YUKON ZINC CORPORATION

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CH… 08412609 …D ANALYSIS REQUES

PAGE 1 OF 1

LAB USE ONLY
MAXXAM JOB #: B567762

…NALYSIS REQUES

LAB USE ONLY
COC #:

COMPANY NAME:	Yukon Zinc Corporation
COMPANY ADDRESS:	#701-475 Howe Street Vancouver, BC V6C 2B3
CLIENT PROJECT NO.:	
TEL:	604-638-0921 Ex.5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	James Spencer
PROJECT MANAGER:	Malcom Swallow/Alex Wu
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	TOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	WRSS	MV6285		X				31-Jul-15	1809	3	X	X		X				X	X	X	X
2	NWRSS	MV6286		X				31-Jul-15	1757	3	X	X		X				X	X	X	X
3	Talings Seepage	MV6287		X				30-Jul-15	1645	3	X	X		X				X	X	X	X
4	Tailings Seepage Filtered	MV6288		X				30-Jul-15	1825	3	X	X		X				X	X	X	X
5	Tailings Seepage			X				30-Jul-15	1415	3	X	X		X				X	X	X	X
6																					
7																					
8																					
9																					
10																					
11																					
13																					
14																					
15																					
16																					
17																					

B567762

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS _____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 5, 3, 6.
DUE DATE LOG IN CHECK:

RELINQUINSHED BY SAMPLER: James Spencer	DATE: DD/MM/YY 06-08-2015	TIME: 10:30	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: JESSICA KNOX 2015/08/07 08:09:10

Your C.O.C. #: 08412605

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026273
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567779
Received: 2015/08/07, 09:10

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	8	N/A	2015/08/11	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	8	2015/08/11	2015/08/12	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	8	N/A	2015/08/10	BBY6SOP-00011	SM 22 4500-Cl- G m
Conductance - water	8	N/A	2015/08/12	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	8	N/A	2015/08/11	BBY6SOP-00048	SM 22 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2015/08/12	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	5	N/A	2015/08/13	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	8	N/A	2015/08/12	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	8	N/A	2015/08/10	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	3	N/A	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	5	N/A	2015/08/13	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	3	N/A	2015/08/11	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	5	N/A	2015/08/12	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Unpreserved)	1	N/A	2015/08/10	BBY6SOP-00009	SM 22 4500-NH3- G m
Ammonia-N (Unpreserved)	7	N/A	2015/08/11	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	8	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	8	N/A	2015/08/11	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	8	N/A	2015/08/12	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	8	N/A	2015/08/10	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (1)	8	N/A	2015/08/12	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	6	N/A	2015/08/10	BBY6SOP-00013	SM 22 4500-P E m
Orthophosphate by Konelab (low level)	2	N/A	2015/08/13	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	7	N/A	2015/08/10	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/08/11	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	4	2015/08/10	2015/08/11	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	3	2015/08/14	2015/08/17	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	1	2015/08/15	2015/08/17	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	8	2015/08/10	2015/08/10	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	8	N/A	2015/08/11	BBY6SOP-00034	SM 22 2540 D
Turbidity	8	N/A	2015/08/08	BBY6SOP-00027	SM 22 2130 B m

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your C.O.C. #: 08412605

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/08/18
Report #: R2026273
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B567779

Received: 2015/08/07, 09:10

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin

19 Aug 2015 13:43:45 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6395		MV6396		MV6397	MV6398		
Sampling Date		2015/08/03 13:28		2015/08/03 14:25		2015/08/03 12:30	2015/08/03 15:04		
COC Number		08412605		08412605		08412605	08412605		
	UNITS	MW06-08S	QC Batch	MW06-08M	QC Batch	MW06-08D	MW06-09S	RDL	QC Batch
Misc. Inorganics									
Acidity (pH 4.5)	mg/L	<0.50	7998219	<0.50	7998219	<0.50	<0.50	0.50	7998219
Acidity (pH 8.3)	mg/L	7.07	7998219	<0.50	7998219	<0.50	<0.50	0.50	7998219
Fluoride (F)	mg/L	0.260	7998137	1.30	7998149	0.910	0.780	0.010	7998137
Calculated Parameters									
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	7996359	LAB	LAB	N/A	7996359
Nitrate (N)	mg/L	<0.20	7994069	<0.20	7994069	<0.20	<0.20	0.20	7994069
Misc. Inorganics									
Dissolved Hardness (CaCO3)	mg/L	97.8	7995104	172	7995104	252	130	0.50	7995104
Alkalinity (Total as CaCO3)	mg/L	65.5	7997791	139	7997791	223	100	0.50	7997791
Alkalinity (PP as CaCO3)	mg/L	<0.50	7997791	0.68	7997791	<0.50	<0.50	0.50	7997791
Bicarbonate (HCO3)	mg/L	79.9	7997791	168	7997791	272	122	0.50	7997791
Carbonate (CO3)	mg/L	<0.50	7997791	0.82	7997791	<0.50	<0.50	0.50	7997791
Hydroxide (OH)	mg/L	<0.50	7997791	<0.50	7997791	<0.50	<0.50	0.50	7997791
Anions									
Orthophosphate (P)	mg/L	0.0044 (1)	8000856	0.0025 (1)	7996863	0.0023 (1)	0.14 (1)	0.0010	7996863
Dissolved Sulphate (SO4)	mg/L	31.2	7997220	34.7	7997220	25.6	25.4	0.50	7997220
Dissolved Chloride (Cl)	mg/L	0.77	7997219	<0.50	7997219	<0.50	<0.50	0.50	7997219
Nutrients									
Dissolved Phosphorus (P)	mg/L	0.0462	7996871	0.0046	7996871	0.0044	0.201	0.0020	7996871
Total Ammonia (N)	mg/L	<0.0050 (1)	7998708	0.0819 (1)	7997210	0.0810 (1)	0.0412 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7998695	<0.20 (2)	7998695	<0.20 (2)	<0.20 (2)	0.20	7998695
Nitrite (N)	mg/L	<0.20 (2)	7998696	<0.20 (2)	7998696	<0.20 (2)	<0.20 (2)	0.20	7998696
Physical Properties									
Conductivity	uS/cm	207	7997793	341	7997793	458	255	1.0	7997793
pH	pH	7.72	7997796	8.31	7997796	8.30	8.16	N/A	7997796
Physical Properties									
Total Suspended Solids	mg/L	<4.0	7996316	<4.0	7996316	<4.0	<4.0	4.0	7996316
Total Dissolved Solids	mg/L	140 (3)	8001516	210 (3)	8003309	302 (3)	190 (3)	10	8001516
Turbidity	NTU	2.35 (4)	7995456	0.65 (4)	7995456	5.83 (4)	1.82 (4)	0.10	7995456

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample arrived to laboratory past recommended hold time.

(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.

(3) Sample was originally analysed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

(4) Sample analysed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		MV6399		MV6400		MV6401			MV6402		
Sampling Date		2015/08/03 15:25		2015/08/03 17:20		2015/08/03 16:31			2015/08/03 15:32		
COC Number		08412605		08412605		08412605			08412605		
	UNITS	MW06-09M	QC Batch	MW06-10S	RDL	MW06-10M	RDL	QC Batch	MW06-10D	RDL	QC Batch
Misc. Inorganics											
Acidity (pH 4.5)	mg/L	<0.50	7998219	<0.50	0.50	<0.50	0.50	7998219	<0.50	0.50	7998219
Acidity (pH 8.3)	mg/L	<0.50	7998219	<0.50	0.50	1.58	0.50	7998219	<0.50	0.50	7998219
Fluoride (F)	mg/L	0.960	7998137	0.170	0.010	0.750	0.010	7998137	0.970	0.010	7998137
Calculated Parameters											
Filter and HNO3 Preservation	N/A	LAB	7996359	LAB	N/A	LAB	N/A	7996359	LAB	N/A	7996359
Nitrate (N)	mg/L	<0.20	7994069	<0.20	0.20	<0.20	0.20	7994069	0.22	0.20	7994069
Misc. Inorganics											
Dissolved Hardness (CaCO3)	mg/L	207	7995104	143	0.50	256	0.50	7995104	266	0.50	7995104
Alkalinity (Total as CaCO3)	mg/L	169	7997791	118	0.50	200	0.50	7997791	242	0.50	7997791
Alkalinity (PP as CaCO3)	mg/L	<0.50	7997791	<0.50	0.50	<0.50	0.50	7997791	<0.50	0.50	7997791
Bicarbonate (HCO3)	mg/L	206	7997791	144	0.50	245	0.50	7997791	295	0.50	7997791
Carbonate (CO3)	mg/L	<0.50	7997791	<0.50	0.50	<0.50	0.50	7997791	<0.50	0.50	7997791
Hydroxide (OH)	mg/L	<0.50	7997791	<0.50	0.50	<0.50	0.50	7997791	<0.50	0.50	7997791
Anions											
Orthophosphate (P)	mg/L	0.011 (1)	8000856	0.010 (1)	0.0010	0.0071 (1)	0.0010	7996863	0.0043 (1)	0.0010	7996863
Dissolved Sulphate (SO4)	mg/L	31.6	7997220	28.9	0.50	49.8	0.50	7997220	24.2	0.50	7999204
Dissolved Chloride (Cl)	mg/L	0.52	7997219	0.50	0.50	0.80	0.50	7997219	0.54	0.50	7997219
Nutrients											
Dissolved Phosphorus (P)	mg/L	0.0184	7996871	0.0145	0.0020	0.0098	0.0020	7996871	0.0066	0.0020	7996871
Total Ammonia (N)	mg/L	0.0691 (1)	7998708	0.0109 (1)	0.0050	0.0736 (1)	0.0050	7998708	0.0824 (1)	0.0050	7998708
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	7998695	<0.20 (2)	0.20	<0.20 (2)	0.20	7998695	0.43 (2)	0.20	7998695
Nitrite (N)	mg/L	<0.20 (2)	7998696	<0.20 (2)	0.20	<0.20 (2)	0.20	7998696	0.21 (2)	0.20	7998696
Physical Properties											
Conductivity	uS/cm	382	7997793	286	1.0	483	1.0	7997793	487	1.0	7997793
pH	pH	8.29	7997796	8.20	N/A	8.19	N/A	7997796	8.28	N/A	7997796
Physical Properties											
Total Suspended Solids	mg/L	<4.0	7996316	<4.0	4.0	10.7 (3)	3.0	7996316	<8.0 (3)	8.0	7996316
Total Dissolved Solids	mg/L	242	7996351	210	10	340	10	7996351	330	10	7996351
Turbidity	NTU	8.81 (1)	7995474	1.90 (1)	0.10	73.3 (1)	0.10	7995474	19.9 (1)	0.10	7995474

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample arrived to laboratory past recommended hold time.
(2) RDL raised due to sample matrix interference. Sample arrived to laboratory past recommended hold time.
(3) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		MV6395	MV6396	MV6397	MV6398	MV6399	MV6400	MV6401		
Sampling Date		2015/08/03 13:28	2015/08/03 14:25	2015/08/03 12:30	2015/08/03 15:04	2015/08/03 15:25	2015/08/03 17:20	2015/08/03 16:31		
COC Number		08412605	08412605	08412605	08412605	08412605	08412605	08412605		
	UNITS	MW06-08S	MW06-08M	MW06-08D	MW06-09S	MW06-09M	MW06-10S	MW06-10M	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7999651
RDL = Reportable Detection Limit										

Maxxam ID		MV6402		
Sampling Date		2015/08/03 15:32		
COC Number		08412605		
	UNITS	MW06-10D	RDL	QC Batch
Elements				
Dissolved Mercury (Hg)	ug/L	<0.010	0.010	7999651
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6395	MV6396		MV6397		
Sampling Date		2015/08/03 13:28	2015/08/03 14:25		2015/08/03 12:30		
COC Number		08412605	08412605		08412605		
	UNITS	MW06-08S	MW06-08M	QC Batch	MW06-08D	RDL	QC Batch
ANIONS							
Bromide (Br)	mg/L	<0.010	<0.010	7996618	<0.010	0.010	7996492
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	mg/L	<0.00050	0.00183	7998253	0.00062	0.00050	7998253
Dissolved Antimony (Sb)	mg/L	0.00227	0.000179	7998253	0.000281	0.000020	7998253
Dissolved Arsenic (As)	mg/L	0.000249	0.0134	7998253	0.00320	0.000020	7998253
Dissolved Barium (Ba)	mg/L	0.0186	0.0557	7998253	0.0484	0.000020	7998253
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	7998253	<0.000010	0.000010	7998253
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	7998253	<0.0000050	0.0000050	7998253
Dissolved Boron (B)	mg/L	<0.010	<0.010	7998253	<0.010	0.010	7998253
Dissolved Cadmium (Cd)	mg/L	0.000244	0.0000215	7998253	<0.0000050	0.0000050	7998253
Dissolved Chromium (Cr)	mg/L	0.00024	<0.00010	7998253	<0.00010	0.00010	7998253
Dissolved Cobalt (Co)	mg/L	0.00148	0.0000874	7998253	0.0000483	0.0000050	7998253
Dissolved Copper (Cu)	mg/L	0.000263	0.000345	7998253	0.000064	0.000050	7998253
Dissolved Iron (Fe)	mg/L	0.0068	0.113	7998253	<0.0010	0.0010	7998253
Dissolved Lead (Pb)	mg/L	<0.0000050	0.0000917	7998253	0.0000183	0.0000050	7998253
Dissolved Lithium (Li)	mg/L	0.00116	0.00555	7998253	0.00315	0.00050	7998253
Dissolved Manganese (Mn)	mg/L	0.137	0.00808	7998253	0.00931	0.000050	7998253
Dissolved Molybdenum (Mo)	mg/L	0.00183	0.00518	7998253	0.00148	0.000050	7998253
Dissolved Nickel (Ni)	mg/L	0.0423	0.00172	7998253	0.000405	0.000020	7998253
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0077	7998253	<0.0020	0.0020	7998253
Dissolved Selenium (Se)	mg/L	0.000074	0.000259	7998253	<0.000040	0.000040	7998253
Dissolved Silicon (Si)	mg/L	5.66	2.99	7998253	4.27	0.050	7998253
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	7998253	<0.0000050	0.0000050	7998253
Dissolved Strontium (Sr)	mg/L	0.0606	0.123	7998253	0.154	0.000050	7998253
Dissolved Thallium (Tl)	mg/L	0.0000069	0.0000022	7998253	<0.0000020	0.0000020	7998253
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	7998253	<0.00020	0.00020	7998253
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	7998253	<0.00050	0.00050	7998253
Dissolved Uranium (U)	mg/L	0.0000174	0.0181	7998253	0.0127	0.0000020	7998253
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	7998253	<0.00020	0.00020	7998253
Dissolved Zinc (Zn)	mg/L	1.44	0.00158	7998253	<0.00010	0.00010	7998253
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	7998253	<0.00010	0.00010	7998253
Dissolved Calcium (Ca)	mg/L	32.8	36.3	7994506	58.8	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	3.88	19.8	7994506	25.6	0.050	7994506
Dissolved Potassium (K)	mg/L	1.01	2.09	7994506	1.74	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.20	1.79	7994506	0.429	0.050	7994506
Dissolved Sulphur (S)	mg/L	10.5	4630	7994506	8.8	3.0	7994506

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6398		MV6399		MV6400		
Sampling Date		2015/08/03 15:04		2015/08/03 15:25		2015/08/03 17:20		
COC Number		08412605		08412605		08412605		
	UNITS	MW06-09S	QC Batch	MW06-09M	QC Batch	MW06-10S	RDL	QC Batch
ANIONS								
Bromide (Br)	mg/L	<0.010	7996618	<0.010	7996492	<0.010	0.010	7996492
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00094	7998253	0.00082	7998253	0.00128	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	<0.000020	7998253	0.000337	7998253	0.000361	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.00520	7998253	0.00109	7998253	0.00397	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0551	7998253	0.0544	7998253	0.0298	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	7998253	<0.000010	7998253	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7998253	<0.0000050	7998253	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	7998253	<0.010	7998253	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	<0.0000050	7998253	<0.0000050	7998253	<0.0000050	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	7998253	<0.00010	7998253	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000624	7998253	0.0000243	7998253	0.000134	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	<0.000050	7998253	0.000081	7998253	0.000228	0.000050	7998267
Dissolved Iron (Fe)	mg/L	<0.0010	7998253	<0.0010	7998253	<0.0010	0.0010	7998267
Dissolved Lead (Pb)	mg/L	<0.0000050	7998253	<0.0000050	7998253	<0.0000050	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	0.00093	7998253	0.00227	7998253	0.00205	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.103	7998253	0.0164	7998253	0.129	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.00436	7998253	0.00455	7998253	0.000960	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000174	7998253	0.000149	7998253	0.000575	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	0.0748	7998253	<0.0020	7998253	<0.0020	0.0020	7998267
Dissolved Selenium (Se)	mg/L	<0.000040	7998253	<0.000040	7998253	<0.000040	0.000040	7998267
Dissolved Silicon (Si)	mg/L	4.04	7998253	3.35	7998253	3.83	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	7998253	<0.0000050	7998253	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.139	7998253	0.0807	7998253	0.191	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	7998253	<0.0000020	7998253	<0.0000020	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	7998253	<0.00020	7998253	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	7998253	<0.00050	7998253	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.000482	7998253	0.00390	7998253	0.00747	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	7998253	<0.00020	7998253	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	<0.00010	7998253	<0.00010	7998253	0.00039	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	7998253	<0.00010	7998253	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	43.7	7994506	63.1	7994506	49.9	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	5.11	7994506	12.1	7994506	4.33	0.050	7994506
Dissolved Potassium (K)	mg/L	1.10	7994506	1.81	7994506	2.10	0.050	7994506
Dissolved Sodium (Na)	mg/L	1.09	7994506	0.341	7994506	2.45	0.050	7994506
Dissolved Sulphur (S)	mg/L	8.6	7994506	11.1	7994506	9.8	3.0	7994506
RDL = Reportable Detection Limit								

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		MV6401	MV6402		
Sampling Date		2015/08/03 16:31	2015/08/03 15:32		
COC Number		08412605	08412605		
	UNITS	MW06-10M	MW06-10D	RDL	QC Batch
ANIONS					
Bromide (Br)	mg/L	<0.010	<0.010	0.010	7996618
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	mg/L	0.00068	<0.00050	0.00050	7998267
Dissolved Antimony (Sb)	mg/L	<0.000020	0.000096	0.000020	7998267
Dissolved Arsenic (As)	mg/L	0.000091	0.000344	0.000020	7998267
Dissolved Barium (Ba)	mg/L	0.0275	0.0530	0.000020	7998267
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	0.000010	7998267
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Boron (B)	mg/L	<0.010	<0.010	0.010	7998267
Dissolved Cadmium (Cd)	mg/L	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Chromium (Cr)	mg/L	<0.00010	<0.00010	0.00010	7998267
Dissolved Cobalt (Co)	mg/L	0.0000078	<0.0000050	0.0000050	7998267
Dissolved Copper (Cu)	mg/L	0.000163	0.000133	0.000050	7998267
Dissolved Iron (Fe)	mg/L	<0.0010	0.0026	0.0010	7998267
Dissolved Lead (Pb)	mg/L	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Lithium (Li)	mg/L	0.00206	0.00312	0.00050	7998267
Dissolved Manganese (Mn)	mg/L	0.108	0.0160	0.000050	7998267
Dissolved Molybdenum (Mo)	mg/L	0.00306	0.00498	0.000050	7998267
Dissolved Nickel (Ni)	mg/L	0.000167	0.000167	0.000020	7998267
Dissolved Phosphorus (P)	mg/L	<0.0020	<0.0020	0.0020	7998267
Dissolved Selenium (Se)	mg/L	<0.000040	<0.000040	0.000040	7998267
Dissolved Silicon (Si)	mg/L	4.14	4.15	0.050	7998267
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	0.0000050	7998267
Dissolved Strontium (Sr)	mg/L	0.150	0.178	0.000050	7998267
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	0.0000020	7998267
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	0.00020	7998267
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	0.00050	7998267
Dissolved Uranium (U)	mg/L	0.0135	0.00891	0.0000020	7998267
Dissolved Vanadium (V)	mg/L	<0.00020	<0.00020	0.00020	7998267
Dissolved Zinc (Zn)	mg/L	<0.00010	<0.00010	0.00010	7998267
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	0.00010	7998267
Dissolved Calcium (Ca)	mg/L	82.4	70.4	0.050	7994506
Dissolved Magnesium (Mg)	mg/L	12.3	21.8	0.050	7994506
Dissolved Potassium (K)	mg/L	1.91	2.30	0.050	7994506
Dissolved Sodium (Na)	mg/L	2.75	1.09	0.050	7994506
Dissolved Sulphur (S)	mg/L	19.6	9.0	3.0	7994506
RDL = Reportable Detection Limit					

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.3°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7995456	Turbidity	2015/08/08			101	80 - 120	<0.10	NTU	NC (1)	20
7995474	Turbidity	2015/08/08			101	80 - 120	<0.10	NTU	1.5 (2)	20
7996316	Total Suspended Solids	2015/08/11	112	80 - 120	95	80 - 120	<4.0	mg/L	NC	20
7996351	Total Dissolved Solids	2015/08/11	100	80 - 120	100	80 - 120	<10	mg/L	10	20
7996492	Bromide (Br)	2015/08/10	NC	78 - 120	98	80 - 120	<0.010	mg/L	4.0	20
7996618	Bromide (Br)	2015/08/10	98	78 - 120	96	80 - 120	<0.010	mg/L	NC	20
7996863	Orthophosphate (P)	2015/08/10	94	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
7996871	Dissolved Phosphorus (P)	2015/08/10	98	80 - 120	106	80 - 120	<0.0020	mg/L	NC	20
7997210	Total Ammonia (N)	2015/08/10	99	80 - 120	104	80 - 120	<0.0050	mg/L	0.32	20
7997219	Dissolved Chloride (Cl)	2015/08/10	113	80 - 120	98	80 - 120	<0.50	mg/L	NC	20
7997220	Dissolved Sulphate (SO4)	2015/08/10	NC	80 - 120	95	80 - 120	<0.50	mg/L	9.4	20
7997791	Alkalinity (PP as CaCO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Alkalinity (Total as CaCO3)	2015/08/12	NC	80 - 120	99	80 - 120	<0.50	mg/L	8.0	20
7997791	Bicarbonate (HCO3)	2015/08/12					<0.50	mg/L	8.0	20
7997791	Carbonate (CO3)	2015/08/12					<0.50	mg/L	NC	20
7997791	Hydroxide (OH)	2015/08/12					<0.50	mg/L	NC	20
7997793	Conductivity	2015/08/12			99	80 - 120	1.0, RDL=1.0	uS/cm	0	20
7997796	pH	2015/08/12			101	97 - 103			0.74	N/A
7998137	Fluoride (F)	2015/08/11	NC	80 - 120	100	80 - 120	<0.010	mg/L	0	20
7998149	Fluoride (F)	2015/08/11	NC	80 - 120	100	80 - 120	0.011, RDL=0.010	mg/L	NC	20
7998219	Acidity (pH 4.5)	2015/08/11					<0.50	mg/L	NC	20
7998219	Acidity (pH 8.3)	2015/08/11			101	80 - 120	<0.50	mg/L	NC	20
7998253	Dissolved Aluminum (Al)	2015/08/12	107	80 - 120	105	80 - 120	<0.00050	mg/L	3.6	20
7998253	Dissolved Antimony (Sb)	2015/08/12	110	80 - 120	104	80 - 120	<0.000020	mg/L	14	20
7998253	Dissolved Arsenic (As)	2015/08/12	109	80 - 120	100	80 - 120	<0.000020	mg/L	1.8	20
7998253	Dissolved Barium (Ba)	2015/08/12	NC	80 - 120	106	80 - 120	<0.000020	mg/L	1.9	20
7998253	Dissolved Beryllium (Be)	2015/08/12	106	80 - 120	104	80 - 120	<0.000010	mg/L	NC	20
7998253	Dissolved Bismuth (Bi)	2015/08/12	100	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Boron (B)	2015/08/12					<0.010	mg/L	NC	20
7998253	Dissolved Cadmium (Cd)	2015/08/12	103	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Chromium (Cr)	2015/08/12	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7998253	Dissolved Cobalt (Co)	2015/08/12	102	80 - 120	105	80 - 120	<0.0000050	mg/L	6.8	20
7998253	Dissolved Copper (Cu)	2015/08/12	97	80 - 120	106	80 - 120	<0.000050	mg/L	8.7	20
7998253	Dissolved Iron (Fe)	2015/08/12	107	80 - 120	113	80 - 120	<0.0010	mg/L	7.4	20
7998253	Dissolved Lead (Pb)	2015/08/12	104	80 - 120	108	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Lithium (Li)	2015/08/12	NC	80 - 120	104	80 - 120	<0.00050	mg/L	2.4	20
7998253	Dissolved Manganese (Mn)	2015/08/12	100	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20
7998253	Dissolved Molybdenum (Mo)	2015/08/12	NC	80 - 120	100	80 - 120	<0.000050	mg/L	1.1	20
7998253	Dissolved Nickel (Ni)	2015/08/12	97	80 - 120	103	80 - 120	<0.000020	mg/L	2.3	20
7998253	Dissolved Phosphorus (P)	2015/08/12					<0.0020	mg/L		
7998253	Dissolved Selenium (Se)	2015/08/12	111	80 - 120	95	80 - 120	<0.000040	mg/L	4.0	20
7998253	Dissolved Silicon (Si)	2015/08/12					<0.050	mg/L	0.094	20
7998253	Dissolved Silver (Ag)	2015/08/12	106	80 - 120	103	80 - 120	<0.0000050	mg/L	NC	20
7998253	Dissolved Strontium (Sr)	2015/08/12	NC	80 - 120	100	80 - 120	<0.000050	mg/L	1.1	20
7998253	Dissolved Thallium (Tl)	2015/08/12	96	80 - 120	105	80 - 120	<0.0000020	mg/L	NC	20
7998253	Dissolved Tin (Sn)	2015/08/12	107	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7998253	Dissolved Titanium (Ti)	2015/08/12	102	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7998253	Dissolved Uranium (U)	2015/08/12	NC	80 - 120	107	80 - 120	<0.0000020	mg/L	0.50	20
7998253	Dissolved Vanadium (V)	2015/08/12	108	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7998253	Dissolved Zinc (Zn)	2015/08/12	112	80 - 120	113	80 - 120	<0.00010	mg/L	10	20
7998253	Dissolved Zirconium (Zr)	2015/08/12					<0.00010	mg/L	NC	20
7998267	Dissolved Aluminum (Al)	2015/08/11	100	80 - 120	105	80 - 120	0.00055, RDL=0.00050	mg/L	4.3	20
7998267	Dissolved Antimony (Sb)	2015/08/11	101	80 - 120	105	80 - 120	<0.000020	mg/L	NC	20
7998267	Dissolved Arsenic (As)	2015/08/11	99	80 - 120	103	80 - 120	<0.000020	mg/L	9.7	20
7998267	Dissolved Barium (Ba)	2015/08/11	NC	80 - 120	103	80 - 120	<0.000020	mg/L	2.2	20
7998267	Dissolved Beryllium (Be)	2015/08/11	99	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20
7998267	Dissolved Bismuth (Bi)	2015/08/11	95	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Boron (B)	2015/08/11					<0.010	mg/L	NC	20
7998267	Dissolved Cadmium (Cd)	2015/08/11	97	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Chromium (Cr)	2015/08/11	98	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
7998267	Dissolved Cobalt (Co)	2015/08/11	99	80 - 120	106	80 - 120	<0.0000050	mg/L	5.9	20
7998267	Dissolved Copper (Cu)	2015/08/11	91	80 - 120	106	80 - 120	<0.000050	mg/L	19	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7998267	Dissolved Iron (Fe)	2015/08/11	96	80 - 120	113	80 - 120	<0.0010	mg/L	3.7	20
7998267	Dissolved Lead (Pb)	2015/08/11	97	80 - 120	104	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Lithium (Li)	2015/08/11	93	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7998267	Dissolved Manganese (Mn)	2015/08/11	NC	80 - 120	105	80 - 120	<0.000050	mg/L	7.0	20
7998267	Dissolved Molybdenum (Mo)	2015/08/11	93	80 - 120	100	80 - 120	<0.000050	mg/L	4.2	20
7998267	Dissolved Nickel (Ni)	2015/08/11	97	80 - 120	105	80 - 120	<0.000020	mg/L	6.4	20
7998267	Dissolved Phosphorus (P)	2015/08/11					<0.0020	mg/L	NC	20
7998267	Dissolved Selenium (Se)	2015/08/11	96	80 - 120	97	80 - 120	<0.000040	mg/L	2.1	20
7998267	Dissolved Silicon (Si)	2015/08/11					<0.050	mg/L	4.7	20
7998267	Dissolved Silver (Ag)	2015/08/11	102	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7998267	Dissolved Strontium (Sr)	2015/08/11	NC	80 - 120	99	80 - 120	<0.000050	mg/L	8.8	20
7998267	Dissolved Thallium (Tl)	2015/08/11	90	80 - 120	98	80 - 120	<0.0000020	mg/L	NC	20
7998267	Dissolved Tin (Sn)	2015/08/11	99	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
7998267	Dissolved Titanium (Ti)	2015/08/11	96	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
7998267	Dissolved Uranium (U)	2015/08/11	102	80 - 120	105	80 - 120	<0.0000020	mg/L	4.3	20
7998267	Dissolved Vanadium (V)	2015/08/11	99	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
7998267	Dissolved Zinc (Zn)	2015/08/11	100	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
7998267	Dissolved Zirconium (Zr)	2015/08/11					<0.00010	mg/L	NC	20
7998695	Nitrate plus Nitrite (N)	2015/08/11	103	80 - 120	104	80 - 120	<0.0020	mg/L	NC	25
7998696	Nitrite (N)	2015/08/11	NC	80 - 120	102	80 - 120	<0.0020	mg/L	NC	25
7998708	Total Ammonia (N)	2015/08/11	97	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
7999204	Dissolved Sulphate (SO4)	2015/08/11			96	80 - 120	<0.50	mg/L	0.28	20
7999651	Dissolved Mercury (Hg)	2015/08/12	96	80 - 120	98	80 - 120	<0.010	ug/L	NC	20
8000856	Orthophosphate (P)	2015/08/13	NC	80 - 120	99	80 - 120	<0.0010	mg/L	3.7	20
8001516	Total Dissolved Solids	2015/08/17	103	80 - 120	102	80 - 120	<10	mg/L	4.9	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: JS

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8003309	Total Dissolved Solids	2015/08/17	102	80 - 120	110	80 - 120	10, RDL=10	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Sample analysed past recommended hold time.

(2) Sample arrived to laboratory past recommended hold time.

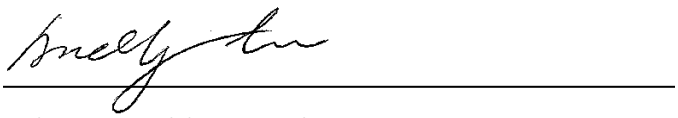
Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B567779
Report Date: 2015/08/18

YUKON ZINC CORPORATION
Sampler Initials: JS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-O[illegible] D ANALYSIS REQUEST

08412605

LAB USE ONLY
MAXXAM JOB # B567779

ANALYSIS REQUEST

LAB USE ONLY
COC #

LAB USE ONLY

PANY NAME: on Zinc Corporation

CLIENT PROJECT NO.:

PANY ADDRESS: 1-475 Howe Street couver, BC 2B3

TEL.: 604-638-0921 Ex.5022
E-MAIL: YZC Group
FAX: 604-682-5404

PLER NAME (PRINT): ies Spencer James Spencer

PROJECT MANAGER: Malcom Swallow/Alex Wu

LABORATORY CONTACT: Graham Rudkin

FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
MW06-08S	MV6395	X					03-08-2015	1328	3	x	x	x	x	x	x	x
MW06-08M	MV6396	X					03-08-2015	1425	3	x	x	x	x	x	x	x
MW06-08D	MV6397	X					03-08-2015	1230	3	x	x	x	x	x	x	x
MW06-09S	MV6398	X					03-08-2015	1504	3	x	x	x	x	x	x	x
MW06-09M	MV6399	X					03-08-2015	1525	3	x	x	x	x	x	x	x
MW06-10S	MV6400	X					03-08-2015	1720	3	x	x	x	x	x	x	x
MW06-10M	MV6401	X					03-08-2015	1631	3	x	x	x	x	x	x	x
MW06-10D	MV6402	X					03-08-2015	1532	3	x	x	x	x	x	x	x

B567779

TAT (Turnaround Time)
SS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
ome exceptions apply - ease contact laboratory
ARD 5 BUSINESS DAYS [X]
3 BUSINESS DAYS
2 BUSINESS DAYS
T 1 BUSINESS DAY
BUSINESS DAYS

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

CCME
CSR
AB TIER 1
OTHER

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 3, 3, 1
DUE DATE:
LOG IN CHECK:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

	DATE: DD/MM/YY	TIME:	
RELINQUINSHED BY SAMPLER: James Spencer	06-08-2015	10:30	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: JESSICA KLOK 2015/08/07 09:10

CUSTODY RECORD

COCFORM - BC - 20070822

CS:NA.

Maxxam
A Bureau Veritas Group Company

Your Project #: B579366

Attention:Graham Rudkin

Maxxam Analytics Burnaby
4606 Canada Way
Burnaby, BC
Canada V5G 1K5

Report Date: 2015/09/28
Report #: R3699251
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5I5560
Received: 2015/09/15, 10:56

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Radium Isotopes by Alpha Spectrometry	1	N/A	2015/09/25	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry

Remarks:

Maxxam Analytics is an ISO 17025 accredited laboratory for certain tests listed within the scope of accreditation. This test report shall not be reproduced, except in full, without written approval of Maxxam Analytics.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Simona Vatamanescu
28 Sep 2015 13:56:11 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Simona Vatamanescu,
Email: SVatamanescu@maxxam.ca
Phone# (905)826-3080

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

RESULTS OF ANALYSES OF WATER

Maxxam ID		AZD848		
Sampling Date		2015/09/09 16:40		
	UNITS	**SEEPAGE POND DISCHARGE**	**RDL**	**QC Batch**
Radium-226	Bq/L	<0.010	0.010	4199000

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

GENERAL COMMENTS

Radium-226 results have not been corrected for blanks.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
4199000	FA5	Spiked Blank	Radium-226	2015/09/26		95	%	85 - 115
4199000	FA5	Method Blank	Radium-226	2015/09/26	<0.010		Bq/L	
4199000	FA5	RPD	Radium-226	2015/09/25	NC		%	N/A

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Donald Burgess, Senior Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Your C.O.C. #: 08411700

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/09/29
Report #: R2049567
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B579366
Received: 2015/09/11, 14:05

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2015/09/14	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	1	2015/09/12	2015/09/12	BBY6SOP-00026	SM 22 2320 B m
Biochemical Oxygen Demand	1	2015/09/12	2015/09/12	BBY6SOP-00045	SM 22 5210 B m
Cyanide SAD (strong acid dissociable)	1	N/A	2015/09/14	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	1	N/A	2015/09/14	BBY6SOP-00004	SM 22 4500-CN O
Conductance - water	1	N/A	2015/09/12	BBY6SOP-00026	SM 22 2510 B m
Fecal Coliform by membrane filtration	1	N/A	2015/09/11	BBY4SOP-00001	SM 22 9222 m
Hardness Total (calculated as CaCO3)	1	N/A	2015/09/16	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Total) by CVAF	1	2015/09/28	2015/09/28	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	1	N/A	2015/09/16	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	1	N/A	2015/09/15	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	1	N/A	2015/09/16	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	1	N/A	2015/09/12	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	1	N/A	2015/09/12	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	1	N/A	2015/09/15	BBY6SOP-00010	SM 22 4500-NO3- I m
pH Water (2)	1	N/A	2015/09/12	BBY6SOP-00026	SM 22 4500-H+ B m
Sulphate by Automated Colourimetry	1	N/A	2015/09/14	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Suspended Solids	1	N/A	2015/09/15	BBY6SOP-00034	SM 22 2540 D
Turbidity	1	N/A	2015/09/12	BBY6SOP-00027	SM 22 2130 B m
Radium 226 in Water Subcontract (1)	1	N/A	2015/09/29		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Kitimat (From Burnaby)

(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Your C.O.C. #: 08411700

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/09/29
Report #: R2049567
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B579366
Received: 2015/09/11, 14:05

Encryption Key

Graham Rudkin
29 Sep 2015 17:12:07 -07:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NC5438		
Sampling Date		2015/09/09 16:40		
COC Number		08411700		
	UNITS	SEEPAGE POND DISCHARGE	RDL	QC Batch
Misc. Inorganics				
Acidity (pH 4.5)	mg/L	<0.50	0.50	8037109
Acidity (pH 8.3)	mg/L	1.74	0.50	8037109
Parameter				
Subcontract Parameter	N/A	ATTACHED	N/A	8054690
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	146	0.50	8034174
Nitrate (N)	mg/L	0.25	0.20	8034352
Demand Parameters				
Biochemical Oxygen Demand	mg/L	<6.0	6.0	8035796
Misc. Inorganics				
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00078	0.00050	8037084
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.00095	0.00050	8037188
Alkalinity (Total as CaCO3)	mg/L	83.8	0.50	8035814
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	8035814
Bicarbonate (HCO3)	mg/L	102	0.50	8035814
Carbonate (CO3)	mg/L	<0.50	0.50	8035814
Hydroxide (OH)	mg/L	<0.50	0.50	8035814
Anions				
Dissolved Sulphate (SO4)	mg/L	67.7	0.50	8037534
Nutrients				
Total Ammonia (N)	mg/L	0.025	0.0050	8040402
Nitrate plus Nitrite (N)	mg/L	0.25 (1)	0.20	8035964
Nitrite (N)	mg/L	<0.20 (1)	0.20	8035965
Physical Properties				
Conductivity	uS/cm	315	1.0	8035816
pH	pH	7.58	N/A	8035817
Physical Properties				
Total Suspended Solids	mg/L	<4.0	4.0	8036682
Turbidity	NTU	0.92	0.10	8035717

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		NC5438		
Sampling Date		2015/09/09 16:40		
COC Number		08411700		
	UNITS	SEEPAGE POND DISCHARGE	RDL	QC Batch
Elements				
Total Mercury (Hg)	ug/L	<0.010	0.010	8053659
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		NC5438		
Sampling Date		2015/09/09 16:40		
COC Number		08411700		
	UNITS	SEEPAGE POND DISCHARGE	RDL	QC Batch
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.0264	0.00050	8038177
Total Antimony (Sb)	mg/L	0.000151	0.000020	8038177
Total Arsenic (As)	mg/L	0.000558	0.000020	8038177
Total Barium (Ba)	mg/L	0.145	0.000020	8038177
Total Beryllium (Be)	mg/L	<0.000010	0.000010	8038177
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	8038177
Total Boron (B)	mg/L	0.014	0.010	8038177
Total Cadmium (Cd)	mg/L	0.0000760	0.0000050	8038177
Total Chromium (Cr)	mg/L	0.00014	0.00010	8038177
Total Cobalt (Co)	mg/L	0.000605	0.0000050	8038177
Total Copper (Cu)	mg/L	0.00102	0.000050	8038177
Total Iron (Fe)	mg/L	0.135	0.0010	8038177
Total Lead (Pb)	mg/L	0.000185	0.0000050	8038177
Total Lithium (Li)	mg/L	<0.00050	0.00050	8038177
Total Manganese (Mn)	mg/L	0.808	0.000050	8038177
Total Molybdenum (Mo)	mg/L	0.000170	0.000050	8038177
Total Nickel (Ni)	mg/L	0.00318	0.000020	8038177
Total Phosphorus (P)	mg/L	0.0147	0.0020	8038177
Total Selenium (Se)	mg/L	0.00242	0.000040	8038177
Total Silicon (Si)	mg/L	2.81	0.050	8038177
Total Silver (Ag)	mg/L	0.0000110	0.0000050	8038177
Total Strontium (Sr)	mg/L	0.0748	0.000050	8038177
Total Thallium (Tl)	mg/L	<0.0000020	0.0000020	8038177
Total Tin (Sn)	mg/L	<0.00020	0.00020	8038177
Total Titanium (Ti)	mg/L	0.00154	0.00050	8038177
Total Uranium (U)	mg/L	0.0000640	0.0000020	8038177
Total Vanadium (V)	mg/L	<0.00020	0.00020	8038177
Total Zinc (Zn)	mg/L	0.0185	0.00010	8038177
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	8038177
Total Calcium (Ca)	mg/L	47.6	0.050	8034785
Total Magnesium (Mg)	mg/L	6.70	0.050	8034785
Total Potassium (K)	mg/L	0.832	0.050	8034785
Total Sodium (Na)	mg/L	6.11	0.050	8034785
Total Sulphur (S)	mg/L	24.7	3.0	8034785
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

MICROBIOLOGY (WATER)

Maxxam ID		NC5438		
Sampling Date		2015/09/09 16:40		
COC Number		08411700		
	UNITS	**SEEPAGE POND DISCHARGE**	**RDL**	**QC Batch**
Microbiological Param.				
Fecal Coliforms	CFU/100mL	1	1	8035426
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.3°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8035717	Turbidity	2015/09/12			101	80 - 120	<0.10	NTU	NC	20
8035796	Biochemical Oxygen Demand	2015/09/12			99	85 - 115	<6.0	mg/L	0.19	20
8035814	Alkalinity (PP as CaCO3)	2015/09/12					<0.50	mg/L	NC	20
8035814	Alkalinity (Total as CaCO3)	2015/09/12	97	80 - 120	97	80 - 120	<0.50	mg/L	0.22	20
8035814	Bicarbonate (HCO3)	2015/09/12					<0.50	mg/L	0.22	20
8035814	Carbonate (CO3)	2015/09/12					<0.50	mg/L	NC	20
8035814	Hydroxide (OH)	2015/09/12					<0.50	mg/L	NC	20
8035816	Conductivity	2015/09/12			100	80 - 120	<1.0	uS/cm		
8035817	pH	2015/09/12			102	97 - 103				
8035964	Nitrate plus Nitrite (N)	2015/09/12	103	80 - 120	99	80 - 120	<0.0020	mg/L	NC	25
8035965	Nitrite (N)	2015/09/12	92	80 - 120	95	80 - 120	<0.0020	mg/L	NC	25
8036682	Total Suspended Solids	2015/09/15	95	80 - 120	97	80 - 120	<4.0	mg/L	NC	20
8037084	Strong Acid Dissoc. Cyanide (CN)	2015/09/14	103	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20
8037109	Acidity (pH 4.5)	2015/09/14					<0.50	mg/L	NC	20
8037109	Acidity (pH 8.3)	2015/09/14			97	80 - 120	<0.50	mg/L	NC	20
8037188	Weak Acid Dissoc. Cyanide (CN)	2015/09/14	61 (1)	80 - 120	103	80 - 120	0.00064, RDL=0.00050	mg/L	NC	20
8037534	Dissolved Sulphate (SO4)	2015/09/14	NC	80 - 120	114	80 - 120	<0.50	mg/L	1.8	20
8038177	Total Aluminum (Al)	2015/09/15	NC	80 - 120	102	80 - 120	<0.00050	mg/L	30 (2)	20
8038177	Total Antimony (Sb)	2015/09/15	102	80 - 120	102	80 - 120	<0.000020	mg/L	1.4	20
8038177	Total Arsenic (As)	2015/09/15	108	80 - 120	98	80 - 120	<0.000020	mg/L	0.34	20
8038177	Total Barium (Ba)	2015/09/15	NC	80 - 120	101	80 - 120	<0.000020	mg/L	0.14	20
8038177	Total Beryllium (Be)	2015/09/15	96	80 - 120	98	80 - 120	<0.000010	mg/L	NC	20
8038177	Total Bismuth (Bi)	2015/09/15	98	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20
8038177	Total Boron (B)	2015/09/15					<0.010	mg/L	1.4	20
8038177	Total Cadmium (Cd)	2015/09/15	NC	80 - 120	95	80 - 120	<0.0000050	mg/L	1.2	20
8038177	Total Chromium (Cr)	2015/09/15	99	80 - 120	100	80 - 120	<0.00010	mg/L	6.5	20
8038177	Total Cobalt (Co)	2015/09/15	NC	80 - 120	102	80 - 120	<0.0000050	mg/L	0.31	20
8038177	Total Copper (Cu)	2015/09/15	NC	80 - 120	102	80 - 120	<0.000050	mg/L	0.76	20
8038177	Total Iron (Fe)	2015/09/15	NC	80 - 120	101	80 - 120	<0.0010	mg/L	2.7	20
8038177	Total Lead (Pb)	2015/09/15	NC	80 - 120	99	80 - 120	<0.0000050	mg/L	1.8	20
8038177	Total Lithium (Li)	2015/09/15	NC	80 - 120	97	80 - 120	<0.00050	mg/L	0.66	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8038177	Total Manganese (Mn)	2015/09/15	NC	80 - 120	99	80 - 120	<0.000050	mg/L	1.2	20
8038177	Total Molybdenum (Mo)	2015/09/15	NC	80 - 120	95	80 - 120	<0.000050	mg/L	0.95	20
8038177	Total Nickel (Ni)	2015/09/15	NC	80 - 120	100	80 - 120	<0.000020	mg/L	1.1	20
8038177	Total Phosphorus (P)	2015/09/15					<0.0020	mg/L		
8038177	Total Selenium (Se)	2015/09/15	100	80 - 120	94	80 - 120	<0.000040	mg/L	1.2	20
8038177	Total Silicon (Si)	2015/09/15					<0.050	mg/L	3.3	20
8038177	Total Silver (Ag)	2015/09/15	98	80 - 120	92	80 - 120	<0.0000050	mg/L	24 (2)	20
8038177	Total Strontium (Sr)	2015/09/15	NC	80 - 120	99	80 - 120	<0.000050	mg/L	1.7	20
8038177	Total Thallium (Tl)	2015/09/15	95	80 - 120	96	80 - 120	<0.0000020	mg/L	15	20
8038177	Total Tin (Sn)	2015/09/15	100	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
8038177	Total Titanium (Ti)	2015/09/15	NC	80 - 120	96	80 - 120	<0.00050	mg/L	2.1	20
8038177	Total Uranium (U)	2015/09/15	106	80 - 120	98	80 - 120	<0.0000020	mg/L	0.46	20
8038177	Total Vanadium (V)	2015/09/15	106	80 - 120	109	80 - 120	<0.00020	mg/L	6.7	20
8038177	Total Zinc (Zn)	2015/09/15	NC	80 - 120	100	80 - 120	<0.00010	mg/L	1.9	20
8038177	Total Zirconium (Zr)	2015/09/15					<0.00010	mg/L	NC	20
8040402	Total Ammonia (N)	2015/09/16	95	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20
8053659	Total Mercury (Hg)	2015/09/28	86	80 - 120	91	80 - 120	<0.010	ug/L	NC	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate RPD above control limit - (10% of analytes failure allowed).

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B579366
Report Date: 2015/09/29

YUKON ZINC CORPORATION
Sampler Initials: KU

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUES

LAB USE ONLY
MAXXAM JOB #: B579366

NALYSIS REC

08411700

COMPANY NAME: Yukon Zinc Corporation	CLIENT PROJECT NO.:
COMPANY ADDRESS: #701-475 Howe Street, Vancouver, BC, V6C 2B3	TEL.: 604-638-0921 Ex.5022 E-MAIL: YZC Group FAX: 604-682-5404
SAMPLER NAME (PRINT): Kevin Unrau	PROJECT MANAGER: Malcom Swallow/Alex Wu
LABORATORY CONTACT: Graham Rudkin	

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	SO4	Ammonia, N02, N03	DOC	TOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TSS	BOD5	Ra226	Faecal Coliforms
1	Seepage Pond Discharge	NC5438		X				~~10/09/15~~ 09/09/15	16:40	8	X	X	X	X			X	X			X	X	X	X
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
13																								
14																								
15																								
16																								
17																								

B579366

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS: _____

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY SAMPLER:	10/09/15	09:30	
RELINQUISHED BY:	DD/MM/YY		RECEIVED BY:
RELINQUISHED BY:	DD/MM/YY		RECEIVED BY LABORATORY: Laurel Berthier 2015/09/11 14:05

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 6,6,7 CS:NA
DUE DATE LOG IN CHECK:

Maxxam
A Bureau Veritas Group Company

Your Project #: B579366

Attention:Graham Rudkin

Maxxam Analytics Burnaby
4606 Canada Way
Burnaby, BC
Canada V5G 1K5

Report Date: 2015/09/28
Report #: R3699251
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5I5560
Received: 2015/09/15, 10:56

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Radium Isotopes by Alpha Spectrometry	1	N/A	2015/09/25	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry

Remarks:

Maxxam Analytics is an ISO 17025 accredited laboratory for certain tests listed within the scope of accreditation. This test report shall not be reproduced, except in full, without written approval of Maxxam Analytics.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Simona Vatamanescu
28 Sep 2015 13:56:11 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Simona Vatamanescu,
Email: SVatamanescu@maxxam.ca
Phone# (905)826-3080

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

RESULTS OF ANALYSES OF WATER

Maxxam ID		AZD848		
Sampling Date		2015/09/09 16:40		
	UNITS	**SEEPAGE POND DISCHARGE**	**RDL**	**QC Batch**
Radium-226	Bq/L	<0.010	0.010	4199000

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

GENERAL COMMENTS

Radium-226 results have not been corrected for blanks.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
4199000	FA5	Spiked Blank	Radium-226	2015/09/26		95	%	85 - 115
4199000	FA5	Method Blank	Radium-226	2015/09/26	<0.010		Bq/L	
4199000	FA5	RPD	Radium-226	2015/09/25	NC		%	N/A

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Maxxam Job #: B5I5560
Report Date: 2015/09/28

Maxxam Analytics Burnaby
Client Project #: B579366

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Donald Burgess, Senior Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.maxxam.ca

Your C.O.C. #: 8413161

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/11/17
Report #: R2080812
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B597096
Received: 2015/10/30, 13:10

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	7	N/A	2015/11/02	BBY6SOP-00037	SM 22 2310 B m
Alkalinity - Water	7	2015/10/31	2015/10/31	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	6	N/A	2015/11/02	BBY6SOP-00011	SM 22 4500-Cl- G m
Chloride by Automated Colourimetry	1	N/A	2015/11/03	BBY6SOP-00011	SM 22 4500-Cl- G m
Cyanide SAD (strong acid dissociable)	7	N/A	2015/11/03	BBY6SOP-00004	SM 22 4500-CN O m
Cyanide WAD (weak acid dissociable)	7	N/A	2015/11/03	BBY6SOP-00004	SM 22 4500-CN O
Carbon (DOC) - field filtered/preserved (1)	2	N/A	2015/11/02	BBY6SOP-00003	SM 22 5310 C m
Carbon (DOC) - unfiltered/unpreserved (1)	5	N/A	2015/11/02	BBY6SOP-00003	SM 22 5310 C m
Conductance - water	7	N/A	2015/10/31	BBY6SOP-00026	SM 22 2510 B m
Fluoride - Mining Clients	7	N/A	2015/11/04	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO3)	7	N/A	2015/11/05	BBY7SOP-00002	EPA 6020a R1 m
Hardness (calculated as CaCO3)	7	N/A	2015/11/05	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF	7	N/A	2015/11/05	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Mercury (Total) by CVAF	7	2015/11/04	2015/11/04	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Bromide as Bromine (Br) by ICPMS	7	N/A	2015/11/02	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	7	N/A	2015/11/05	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (dissolved)	7	N/A	2015/11/04	BBY7SOP-00002	EPA 6020A R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	7	N/A	2015/11/05	BBY7SOP-00002	EPA 6020A R1 m
Elements by ICPMS Low Level (total)	7	N/A	2015/11/04	BBY7SOP-00002	EPA 6020A R1 m
Ammonia-N (Preserved)	7	N/A	2015/11/03	BBY6SOP-00009	SM 22 4500-NH3- G m
Nitrate+Nitrite (N) (low level)	7	N/A	2015/10/31	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) (low level)	7	N/A	2015/10/31	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	7	N/A	2015/10/31	BBY6SOP-00010	SM 22 4500-NO3- I m
Filter and HNO3 Preserve for Metals	7	N/A	2015/11/03	BBY7 WI-00004	BCMOE Reqs 08/14
pH Water (2)	7	N/A	2015/10/31	BBY6SOP-00026	SM 22 4500-H+ B m
Orthophosphate by Konelab (low level)	6	N/A	2015/10/31	BBY6SOP-00013	SM 22 4500-P E m
Orthophosphate by Konelab (low level)	1	N/A	2015/11/10	BBY6SOP-00013	SM 22 4500-P E m
Sulphate by Automated Colourimetry	6	N/A	2015/11/02	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate by Automated Colourimetry	1	N/A	2015/11/03	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	5	2015/11/03	2015/11/05	BBY6SOP-00033	SM 22 2540 C m

Your C.O.C. #: 8413161

Attention:Wolverine Env. Reporting List

YUKON ZINC CORPORATION
PO Box 57
Whitehorse, YT
CANADA Y1A 5X9

Report Date: 2015/11/17
Report #: R2080812
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B597096
Received: 2015/10/30, 13:10

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids (Filt. Residue)	1	2015/11/06	2015/11/09	BBY6SOP-00033	SM 22 2540 C m
Total Dissolved Solids (Filt. Residue)	1	2015/11/10	2015/11/12	BBY6SOP-00033	SM 22 2540 C m
Phosphorus-P (LL Tot, dissolved) - FF/FP	1	2015/11/03	2015/11/03	BBY6SOP-00013	SM 22 4500-P E m
Phosphorus-P (LL Tot, dissolved) - FF/FP	1	2015/11/10	2015/11/10	BBY6SOP-00013	SM 22 4500-P E m
Phosphorus-P (LL Tot, dissolved) - UF/UP	5	2015/10/31	2015/10/31	BBY6SOP-00013	SM 22 4500-P E m
Total Phosphorus	7	N/A	2015/11/03	BBY6SOP-00013	SM 22 4500-P E m
Total Suspended Solids	7	N/A	2015/11/04	BBY6SOP-00034	SM 22 2540 D
Turbidity	7	N/A	2015/10/31	BBY6SOP-00027	SM 22 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) DOC present in the sample should be considered as non-purgeable DOC.
(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Graham Rudkin
17 Nov 2015 14:12:12 -08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Graham Rudkin, Project Manager, Environmental
Email: GRudkin@maxxam.ca
Phone# (604)638-5926 Ext:5926

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5819		NN5820		NN5821		
Sampling Date		2015/10/28 10:00		2015/10/28 14:00		2015/10/28 10:45		
COC Number		8413161		8413161		8413161		
	UNITS	W22	QC Batch	W31	QC Batch	W71	RDL	QC Batch
Misc. Inorganics								
Acidity (pH 4.5)	mg/L	<0.50	8098546	<0.50	8098546	<0.50	0.50	8098546
Acidity (pH 8.3)	mg/L	<0.50	8098546	<0.50	8098546	<0.50	0.50	8098546
Fluoride (F)	mg/L	0.070	8101128	0.021	8101128	0.680	0.010	8101128
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	130	8095320	71.8	8095320	365	0.50	8095320
Nitrate (N)	mg/L	<0.20	8095467	<0.20	8095467	<0.20	0.20	8095467
Misc. Inorganics								
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8100061	<0.00050	8100061	<0.00050	0.00050	8100061
Weak Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8100062	<0.00050	8100062	<0.00050	0.00050	8100062
Dissolved Hardness (CaCO3)	mg/L	136	8095306	73.9	8095306	378	0.50	8095306
Dissolved Organic Carbon (C)	mg/L	1.97 (1)	8097331	0.93	8098828	4.65 (1)	0.50	8097331
Alkalinity (Total as CaCO3)	mg/L	105	8096964	67.0	8096964	248	0.50	8096964
Alkalinity (PP as CaCO3)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Bicarbonate (HCO3)	mg/L	129	8096964	81.8	8096964	303	0.50	8096964
Carbonate (CO3)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Hydroxide (OH)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Anions								
Orthophosphate (P)	mg/L	<0.0010	8097276	0.0026	8097276	0.011	0.0010	8097276
Dissolved Sulphate (SO4)	mg/L	31.8	8098696	9.65	8098688	116	0.50	8098688
Dissolved Chloride (Cl)	mg/L	1.1	8098691	0.60	8098677	1.0	0.50	8098677
Nutrients								
Total Ammonia (N)	mg/L	0.015	8100364	0.013	8100364	0.012	0.0050	8100364
Dissolved Phosphorus (P)	mg/L	0.0023	8097328	0.0026	8100400	0.0113	0.0020	8097328
Nitrate plus Nitrite (N)	mg/L	<0.20 (2)	8097300	<0.20 (2)	8097300	<0.20 (2)	0.20	8097300
Nitrite (N)	mg/L	<0.20 (2)	8097301	<0.20 (2)	8097301	<0.20 (2)	0.20	8097301
Total Phosphorus (P)	mg/L	<0.0020	8100396	0.0021	8100396	0.0100	0.0020	8100396
Physical Properties								
Conductivity	uS/cm	269	8096963	152	8096963	671	1.0	8096963
pH	pH	8.08	8096959	7.95	8096959	8.15	N/A	8096959
Physical Properties								
Total Suspended Solids	mg/L	<4.0	8098960	<4.0	8098960	<4.0	4.0	8098960

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample preserved to extend hold time.
(2) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5819		NN5820		NN5821		
Sampling Date		2015/10/28 10:00		2015/10/28 14:00		2015/10/28 10:45		
COC Number		8413161		8413161		8413161		
	UNITS	**W22**	**QC Batch**	**W31**	**QC Batch**	**W71**	**RDL**	**QC Batch**
Total Dissolved Solids	mg/L	164	8098762	104 (1)	8108331	414	10	8098762
Turbidity	NTU	0.15	8097208	<0.10	8097208	0.18	0.10	8097208

RDL = Reportable Detection Limit

(1) Sample was originally analysed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5822		NN5823		NN5824		
Sampling Date		2015/10/28 10:55		2015/10/28 11:20		2015/10/28 14:30		
COC Number		8413161		8413161		8413161		
	UNITS	W72	QC Batch	W73	QC Batch	W82	RDL	QC Batch
Misc. Inorganics								
Acidity (pH 4.5)	mg/L	<0.50	8098546	<0.50	8098546	<0.50	0.50	8098546
Acidity (pH 8.3)	mg/L	<0.50	8098546	<0.50	8098546	<0.50	0.50	8098546
Fluoride (F)	mg/L	0.150	8101128	0.047	8101128	0.130	0.010	8101128
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	ONSITE	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	237	8095320	117	8095320	133	0.50	8095320
Nitrate (N)	mg/L	<0.20	8095467	<0.20	8095467	<0.20	0.20	8095467
Misc. Inorganics								
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8100061	<0.00050	8100061	<0.00050	0.00050	8100061
Weak Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8100062	<0.00050	8100062	<0.00050	0.00050	8100062
Dissolved Hardness (CaCO3)	mg/L	212	8095306	118	8095306	132	0.50	8095306
Dissolved Organic Carbon (C)	mg/L	3.35 (1)	8097331	2.14 (1)	8097331	0.95	0.50	8098828
Alkalinity (Total as CaCO3)	mg/L	166	8096964	98.0	8096964	87.8	0.50	8096964
Alkalinity (PP as CaCO3)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Bicarbonate (HCO3)	mg/L	203	8096964	120	8096964	107	0.50	8096964
Carbonate (CO3)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Hydroxide (OH)	mg/L	<0.50	8096964	<0.50	8096964	<0.50	0.50	8096964
Anions								
Orthophosphate (P)	mg/L	0.013	8097276	0.0014	8097276	0.0066 (2)	0.0010	8109179
Dissolved Sulphate (SO4)	mg/L	49.4	8101416	21.4	8098696	44.2	0.50	8098688
Dissolved Chloride (Cl)	mg/L	0.70	8101412	0.92	8098691	0.93	0.50	8098677
Nutrients								
Total Ammonia (N)	mg/L	0.028	8100364	0.014	8100364	0.028	0.0050	8100364
Dissolved Phosphorus (P)	mg/L	0.0139	8097328	0.0023	8097328	0.0052	0.0020	8109181
Nitrate plus Nitrite (N)	mg/L	<0.20 (3)	8097300	<0.20 (3)	8097300	<0.20 (3)	0.20	8097300
Nitrite (N)	mg/L	<0.20 (3)	8097301	<0.20 (3)	8097301	<0.20 (3)	0.20	8097301
Total Phosphorus (P)	mg/L	0.0189	8100396	0.0044	8100396	0.0158	0.0020	8100396
Physical Properties								
Conductivity	uS/cm	404	8096963	232	8096963	276	1.0	8096963
pH	pH	8.12	8096959	8.06	8096959	7.85	N/A	8096959
Physical Properties								
Total Suspended Solids	mg/L	<4.0	8098960	<4.0	8098960	6.5	4.0	8098960

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample preserved to extend hold time.
(2) Sample was originally analysed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.
(3) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5822		NN5823		NN5824		
Sampling Date		2015/10/28 10:55		2015/10/28 11:20		2015/10/28 14:30		
COC Number		8413161		8413161		8413161		
	UNITS	W72	QC Batch	W73	QC Batch	W82	RDL	QC Batch
Total Dissolved Solids	mg/L	250	8098762	132	8098762	150 (1)	10	8104426
Turbidity	NTU	2.54	8097208	0.18	8097208	4.05	0.10	8097208

RDL = Reportable Detection Limit

(1) Sample was originally analysed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5825		
Sampling Date		2015/10/28 13:30		
COC Number		8413161		
	UNITS	T1	RDL	QC Batch
Misc. Inorganics				
Acidity (pH 4.5)	mg/L	<0.50	0.50	8098546
Acidity (pH 8.3)	mg/L	3.86	0.50	8098546
Fluoride (F)	mg/L	0.210	0.010	8101128
Calculated Parameters				
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE
Total Hardness (CaCO3)	mg/L	2020	0.50	8095320
Nitrate (N)	mg/L	<0.20	0.20	8095467
Misc. Inorganics				
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.242	0.0050	8100061
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.0526	0.00050	8100062
Dissolved Hardness (CaCO3)	mg/L	1870	0.50	8095306
Dissolved Organic Carbon (C)	mg/L	22.3 (1)	0.50	8097331
Alkalinity (Total as CaCO3)	mg/L	30.2	0.50	8096964
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	8096964
Bicarbonate (HCO3)	mg/L	36.8	0.50	8096964
Carbonate (CO3)	mg/L	<0.50	0.50	8096964
Hydroxide (OH)	mg/L	<0.50	0.50	8096964
Anions				
Orthophosphate (P)	mg/L	0.0034	0.0010	8097276
Dissolved Sulphate (SO4)	mg/L	1580	5.0	8098696
Dissolved Chloride (Cl)	mg/L	510	5.0	8098691
Nutrients				
Total Ammonia (N)	mg/L	1.1	0.010	8100364
Dissolved Phosphorus (P)	mg/L	0.133	0.0020	8097328
Nitrate plus Nitrite (N)	mg/L	0.66 (2)	0.20	8097300
Nitrite (N)	mg/L	0.65 (2)	0.20	8097301
Total Phosphorus (P)	mg/L	0.386	0.0020	8100396
Physical Properties				
Conductivity	uS/cm	3440	1.0	8096963
pH	pH	7.08	N/A	8096959
Physical Properties				
Total Suspended Solids	mg/L	6.8	4.0	8098960
Total Dissolved Solids	mg/L	3240	10	8098762

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample preserved to extend hold time.
(2) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		NN5825		
Sampling Date		2015/10/28 13:30		
COC Number		8413161		
	UNITS	**T1**	**RDL**	**QC Batch**
Turbidity	NTU	7.51	0.10	8097208
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

MERCURY BY COLD VAPOR (WATER)

Maxxam ID		NN5819	NN5820	NN5821	NN5822	NN5823	NN5824	NN5825		
Sampling Date		2015/10/28 10:00	2015/10/28 14:00	2015/10/28 10:45	2015/10/28 10:55	2015/10/28 11:20	2015/10/28 14:30	2015/10/28 13:30		
COC Number		8413161	8413161	8413161	8413161	8413161	8413161	8413161		
	UNITS	W22	W31	W71	W72	W73	W82	T1	RDL	QC Batch
Elements										
Dissolved Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8102812
Total Mercury (Hg)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8101237
RDL = Reportable Detection Limit										

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		NN5819	NN5820	NN5821	NN5822	NN5823		
Sampling Date		2015/10/28 10:00	2015/10/28 14:00	2015/10/28 10:45	2015/10/28 10:55	2015/10/28 11:20		
COC Number		8413161	8413161	8413161	8413161	8413161		
	UNITS	**W22**	**W31**	**W71**	**W72**	**W73**	**RDL**	**QC Batch**
ANIONS								
Bromide (Br)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8098054
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.00520	0.00732	0.00415	0.00498	0.00365	0.00050	8099717
Dissolved Antimony (Sb)	mg/L	0.000064	<0.000020	0.000482	0.000178	0.000096	0.000020	8099717
Dissolved Arsenic (As)	mg/L	0.000200	0.000120	0.000320	0.00148	0.000192	0.000020	8099717
Dissolved Barium (Ba)	mg/L	0.0665	0.0144	0.0560	0.0829	0.0649	0.000020	8099717
Dissolved Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	8099717
Dissolved Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	8099717
Dissolved Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8099717
Dissolved Cadmium (Cd)	mg/L	0.0000110	0.0000060	0.00281	0.000176	0.0000070	0.0000050	8099717
Dissolved Chromium (Cr)	mg/L	0.00021	<0.00010	<0.00010	<0.00010	0.00029	0.00010	8099717
Dissolved Cobalt (Co)	mg/L	0.0000200	0.0000190	0.0000330	0.0000420	0.0000100	0.0000050	8099717
Dissolved Copper (Cu)	mg/L	0.000578	0.000833	0.000606	0.000678	0.000798	0.000050	8099717
Dissolved Iron (Fe)	mg/L	0.0166	0.0014	0.0106	0.0498	0.0280	0.0010	8099717
Dissolved Lead (Pb)	mg/L	0.000111 (1)	0.0000140	0.0000260	0.0000240	0.0000070	0.0000050	8099717
Dissolved Lithium (Li)	mg/L	0.00239	<0.00050	0.00260	0.00205	0.00080	0.00050	8099717
Dissolved Manganese (Mn)	mg/L	0.00247	0.000094	0.00304	0.0811	0.00396	0.000050	8099717
Dissolved Molybdenum (Mo)	mg/L	0.000707	0.000363	0.00532	0.00263	0.000502	0.000050	8099717
Dissolved Nickel (Ni)	mg/L	0.000865	0.000056	0.0296	0.00300	0.000644	0.000020	8099717
Dissolved Phosphorus (P)	mg/L	<0.0020	<0.0020	0.0122	0.0124	<0.0020	0.0020	8099717
Dissolved Selenium (Se)	mg/L	0.000765	0.000283	0.00766	0.00147	0.000799	0.000040	8099717
Dissolved Silicon (Si)	mg/L	4.51	2.98	4.03	4.79	4.50	0.050	8099717
Dissolved Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	8099717
Dissolved Strontium (Sr)	mg/L	0.150	0.0180	0.282	0.251	0.115	0.000050	8099717
Dissolved Thallium (Tl)	mg/L	<0.0000020	<0.0000020	0.0000020	<0.0000020	<0.0000020	0.0000020	8099717
Dissolved Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	8099717
Dissolved Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	8099717
Dissolved Uranium (U)	mg/L	0.00150	0.0000260	0.0117	0.00158	0.000520	0.0000020	8099717
Dissolved Vanadium (V)	mg/L	<0.00020	0.00039	<0.00020	<0.00020	<0.00020	0.00020	8099717
Dissolved Zinc (Zn)	mg/L	0.00120 (1)	0.00057	0.564	0.0311	0.00049	0.00010	8099717
Dissolved Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	8099717
Dissolved Calcium (Ca)	mg/L	35.6	26.9	101	53.6	31.4	0.050	8095803
Dissolved Magnesium (Mg)	mg/L	11.5	1.66	30.8	19.0	9.48	0.050	8095803
Dissolved Potassium (K)	mg/L	0.858	0.444	0.707	0.693	0.281	0.050	8095803
Dissolved Sodium (Na)	mg/L	1.94	1.24	0.940	1.93	1.22	0.050	8095803

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		NN5819	NN5820	NN5821	NN5822	NN5823		
Sampling Date		2015/10/28 10:00	2015/10/28 14:00	2015/10/28 10:45	2015/10/28 10:55	2015/10/28 11:20		
COC Number		8413161	8413161	8413161	8413161	8413161		
	UNITS	W22	W31	W71	W72	W73	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	10.8	3.3	41.7	16.2	6.8	3.0	8095803
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.00713	0.00833	0.00609	0.0679	0.00677	0.00050	8100010
Total Antimony (Sb)	mg/L	0.000070	<0.000020	0.000482	0.000179	0.000096	0.000020	8100010
Total Arsenic (As)	mg/L	0.000185	0.000140	0.000352	0.00174	0.000201	0.000020	8100010
Total Barium (Ba)	mg/L	0.0745	0.0145	0.0542	0.0905	0.0645	0.000020	8100010
Total Beryllium (Be)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	8100010
Total Bismuth (Bi)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	8100010
Total Boron (B)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8100010
Total Cadmium (Cd)	mg/L	0.0000120	0.0000060	0.00285	0.000244	0.0000090	0.0000050	8100010
Total Chromium (Cr)	mg/L	0.00024	<0.00010	<0.00010	0.00014	0.00030	0.00010	8100010
Total Cobalt (Co)	mg/L	0.0000230	0.0000240	0.0000500	0.0000950	0.0000170	0.0000050	8100010
Total Copper (Cu)	mg/L	0.000481	0.000956	0.000573	0.000881	0.00102	0.000050	8100010
Total Iron (Fe)	mg/L	0.0204	0.0023	0.0249	0.226	0.0473	0.0010	8100010
Total Lead (Pb)	mg/L	0.0000160	0.0000540	0.000318	0.000190	0.0000630	0.0000050	8100010
Total Lithium (Li)	mg/L	0.00221	<0.00050	0.00261	0.00220	0.00083	0.00050	8100010
Total Manganese (Mn)	mg/L	0.00325	0.000187	0.00406	0.0947	0.00877	0.000050	8100010
Total Molybdenum (Mo)	mg/L	0.000776	0.000374	0.00518	0.00271	0.000483	0.000050	8100010
Total Nickel (Ni)	mg/L	0.000842	0.000068	0.0297	0.00319	0.000666	0.000020	8100010
Total Phosphorus (P)	mg/L	<0.0020	<0.0020	0.0116	0.0195	0.0023	0.0020	8100010
Total Selenium (Se)	mg/L	0.000724	0.000308	0.00742	0.00172	0.000831	0.000040	8100010
Total Silicon (Si)	mg/L	4.27	2.95	4.03	5.07	4.58	0.050	8100010
Total Silver (Ag)	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	8100010
Total Strontium (Sr)	mg/L	0.151	0.0181	0.277	0.254	0.118	0.000050	8100010
Total Thallium (Tl)	mg/L	<0.0000020	<0.0000020	<0.0000020	0.0000020	<0.0000020	0.0000020	8100010
Total Tin (Sn)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	8100010
Total Titanium (Ti)	mg/L	<0.00050	<0.00050	<0.00050	0.00188	<0.00050	0.00050	8100010
Total Uranium (U)	mg/L	0.00164	0.0000280	0.0118	0.00166	0.000545	0.0000020	8100010
Total Vanadium (V)	mg/L	<0.00020	0.00038	<0.00020	0.00027	<0.00020	0.00020	8100010
Total Zinc (Zn)	mg/L	0.00098	0.00124	0.568	0.0353	0.00064	0.00010	8100010
Total Zirconium (Zr)	mg/L	<0.00010	<0.00010	<0.00010	0.00014	<0.00010	0.00010	8100010
Total Calcium (Ca)	mg/L	33.2	26.0	95.4	63.6	31.3	0.050	8095804
Total Magnesium (Mg)	mg/L	11.4	1.68	30.7	19.0	9.31	0.050	8095804
Total Potassium (K)	mg/L	0.837	0.439	0.707	0.701	0.282	0.050	8095804
Total Sodium (Na)	mg/L	1.88	1.25	0.936	1.85	1.20	0.050	8095804
Total Sulphur (S)	mg/L	10.5	3.2	41.0	15.8	6.5	3.0	8095804

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		NN5824		NN5825		
Sampling Date		2015/10/28 14:30		2015/10/28 13:30		
COC Number		8413161		8413161		
	UNITS	W82	RDL	T1	RDL	QC Batch
ANIONS						
Bromide (Br)	mg/L	<0.010	0.010	0.11	0.10	8098054
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	mg/L	0.0192	0.00050	0.0413	0.00050	8099717
Dissolved Antimony (Sb)	mg/L	0.000255	0.000020	0.0462	0.000020	8099717
Dissolved Arsenic (As)	mg/L	0.000108	0.000020	0.0123	0.000020	8099717
Dissolved Barium (Ba)	mg/L	0.139	0.000020	0.171	0.000020	8099717
Dissolved Beryllium (Be)	mg/L	<0.000010	0.000010	0.000010	0.000010	8099717
Dissolved Bismuth (Bi)	mg/L	<0.0000050	0.0000050	0.0000170	0.0000050	8099717
Dissolved Boron (B)	mg/L	<0.010	0.010	<0.010	0.010	8099717
Dissolved Cadmium (Cd)	mg/L	0.00254	0.0000050	0.0112	0.0000050	8099717
Dissolved Chromium (Cr)	mg/L	<0.00010	0.00010	0.00015	0.00010	8099717
Dissolved Cobalt (Co)	mg/L	0.00140	0.0000050	0.00184	0.0000050	8099717
Dissolved Copper (Cu)	mg/L	0.00242	0.000050	0.613	0.000050	8099717
Dissolved Iron (Fe)	mg/L	0.138	0.0010	0.0871	0.0010	8099717
Dissolved Lead (Pb)	mg/L	0.0000670	0.0000050	0.156	0.0000050	8099717
Dissolved Lithium (Li)	mg/L	0.00060	0.00050	0.0151	0.00050	8099717
Dissolved Manganese (Mn)	mg/L	0.267	0.000050	0.255	0.000050	8099717
Dissolved Molybdenum (Mo)	mg/L	0.000398	0.000050	0.0973	0.000050	8099717
Dissolved Nickel (Ni)	mg/L	0.0208	0.000020	0.00663	0.000020	8099717
Dissolved Phosphorus (P)	mg/L	0.0028	0.0020	0.117	0.0020	8099717
Dissolved Selenium (Se)	mg/L	0.00284	0.000040	5.08	0.000040	8099717
Dissolved Silicon (Si)	mg/L	3.57	0.050	1.80	0.050	8099717
Dissolved Silver (Ag)	mg/L	<0.0000050	0.0000050	0.00971	0.0000050	8099717
Dissolved Strontium (Sr)	mg/L	0.123	0.000050	2.84	0.000050	8099717
Dissolved Thallium (Tl)	mg/L	0.0000030	0.0000020	0.00149	0.0000020	8099717
Dissolved Tin (Sn)	mg/L	<0.00020	0.00020	<0.00020	0.00020	8099717
Dissolved Titanium (Ti)	mg/L	<0.00050	0.00050	<0.00050	0.00050	8099717
Dissolved Uranium (U)	mg/L	0.000382	0.0000020	0.00102	0.0000020	8099717
Dissolved Vanadium (V)	mg/L	<0.00020	0.00020	<0.00020	0.00020	8099717
Dissolved Zinc (Zn)	mg/L	0.305	0.00010	0.825	0.00010	8099717
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	8099717
Dissolved Calcium (Ca)	mg/L	44.8	0.050	747	0.050	8095803
Dissolved Magnesium (Mg)	mg/L	4.82	0.050	2.26	0.050	8095803
Dissolved Potassium (K)	mg/L	1.15	0.050	58.5	0.050	8095803
Dissolved Sodium (Na)	mg/L	1.47	0.050	220	0.050	8095803
Dissolved Sulphur (S)	mg/L	16.0	3.0	1050	3.0	8095803

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		NN5824		NN5825		
Sampling Date		2015/10/28 14:30		2015/10/28 13:30		
COC Number		8413161		8413161		
	UNITS	W82	RDL	T1	RDL	QC Batch
Total Metals by ICPMS						
Total Aluminum (Al)	mg/L	0.0663	0.00050	0.0741	0.00050	8100010
Total Antimony (Sb)	mg/L	0.000284	0.000020	0.0474	0.000020	8100010
Total Arsenic (As)	mg/L	0.000333	0.000020	0.0135	0.000020	8100010
Total Barium (Ba)	mg/L	0.149	0.000020	0.184	0.000020	8100010
Total Beryllium (Be)	mg/L	<0.000010	0.000010	<0.000010	0.000010	8100010
Total Bismuth (Bi)	mg/L	0.0000050	0.0000050	0.0000150	0.0000050	8100010
Total Boron (B)	mg/L	<0.010	0.010	<0.010	0.010	8100010
Total Cadmium (Cd)	mg/L	0.00354	0.0000050	0.0119	0.0000050	8100010
Total Chromium (Cr)	mg/L	<0.00010	0.00010	0.00011	0.00010	8100010
Total Cobalt (Co)	mg/L	0.00174	0.0000050	0.00212	0.0000050	8100010
Total Copper (Cu)	mg/L	0.00613	0.000050	0.670	0.000050	8100010
Total Iron (Fe)	mg/L	0.502	0.0010	0.163	0.0010	8100010
Total Lead (Pb)	mg/L	0.00199	0.0000050	0.191	0.0000050	8100010
Total Lithium (Li)	mg/L	0.00086	0.00050	0.0165	0.00050	8100010
Total Manganese (Mn)	mg/L	0.329	0.000050	0.279	0.000050	8100010
Total Molybdenum (Mo)	mg/L	0.000372	0.000050	0.112	0.000050	8100010
Total Nickel (Ni)	mg/L	0.0221	0.000020	0.00765	0.000020	8100010
Total Phosphorus (P)	mg/L	0.0259	0.0020	0.157	0.0020	8100010
Total Selenium (Se)	mg/L	0.00307	0.000040	5.22	0.000040	8100010
Total Silicon (Si)	mg/L	3.62	0.050	2.01	0.050	8100010
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	0.00931	0.0000050	8100010
Total Strontium (Sr)	mg/L	0.124	0.000050	3.14	0.000050	8100010
Total Thallium (Tl)	mg/L	0.0000050	0.0000020	0.00155	0.0000020	8100010
Total Tin (Sn)	mg/L	<0.00020	0.00020	<0.00020	0.00020	8100010
Total Titanium (Ti)	mg/L	0.00100	0.00050	0.00091	0.00050	8100010
Total Uranium (U)	mg/L	0.000391	0.0000020	0.000974	0.0000020	8100010
Total Vanadium (V)	mg/L	<0.00020	0.00020	<0.00020	0.00020	8100010
Total Zinc (Zn)	mg/L	0.348	0.00010	0.904	0.00010	8100010
Total Zirconium (Zr)	mg/L	<0.00010	0.00010	<0.00010	0.00010	8100010
Total Calcium (Ca)	mg/L	45.6	0.050	804	0.050	8095804
Total Magnesium (Mg)	mg/L	4.75	0.050	2.51	0.050	8095804
Total Potassium (K)	mg/L	1.16	0.050	64.4	0.050	8095804
Total Sodium (Na)	mg/L	1.50	0.050	239	0.050	8095804
Total Sulphur (S)	mg/L	15.8	3.0	1140	3.0	8095804
RDL = Reportable Detection Limit						

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.7°C

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER) Comments

Sample NN5825-01 Bromide as Bromine (Br) by ICPMS: RDL raised due to sample matrix interference.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

QUALITY ASSURANCE REPORT

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8096959	pH	2015/10/31			101	97 - 103			1.5	N/A
8096963	Conductivity	2015/10/31			99	80 - 120	<1.0	uS/cm	0.18	20
8096964	Alkalinity (PP as CaCO3)	2015/10/31					<0.50	mg/L	14	20
8096964	Alkalinity (Total as CaCO3)	2015/10/31	NC	80 - 120	99	80 - 120	0.58, RDL=0.50	mg/L	9.5	20
8096964	Bicarbonate (HCO3)	2015/10/31					0.71, RDL=0.50	mg/L	NC	20
8096964	Carbonate (CO3)	2015/10/31					<0.50	mg/L	1.9	20
8096964	Hydroxide (OH)	2015/10/31					<0.50	mg/L	26 (1)	20
8097208	Turbidity	2015/10/31			99	80 - 120	<0.10	NTU	NC	20
8097276	Orthophosphate (P)	2015/10/31	103	80 - 120	100	80 - 120	0.0014, RDL=0.0010	mg/L	13	20
8097300	Nitrate plus Nitrite (N)	2015/10/31	103	80 - 120	106	80 - 120	<0.0020	mg/L	0.38	25
8097301	Nitrite (N)	2015/10/31	98	80 - 120	104	80 - 120	<0.0020	mg/L	1.6	25
8097328	Dissolved Phosphorus (P)	2015/10/31	88	80 - 120	90	80 - 120	<0.0020	mg/L	1.7	20
8097331	Dissolved Organic Carbon (C)	2015/11/02	90	80 - 120	110	80 - 120	<0.50	mg/L	7.6	20
8098054	Bromide (Br)	2015/11/02	99	78 - 120	100	80 - 120	<0.010	mg/L	NC	20
8098546	Acidity (pH 4.5)	2015/11/02					<0.50	mg/L	NC	20
8098546	Acidity (pH 8.3)	2015/11/02			101	80 - 120	0.66, RDL=0.50	mg/L	NC	20
8098677	Dissolved Chloride (Cl)	2015/11/02			112	80 - 120	<0.50	mg/L	2.2	20
8098688	Dissolved Sulphate (SO4)	2015/11/02	NC	80 - 120	94	80 - 120	<0.50	mg/L	3.0	20
8098691	Dissolved Chloride (Cl)	2015/11/02			105	80 - 120	<0.50	mg/L		
8098696	Dissolved Sulphate (SO4)	2015/11/02			91	80 - 120	<0.50	mg/L		
8098762	Total Dissolved Solids	2015/11/05	109	80 - 120	114	80 - 120	<10	mg/L	0.97	20
8098828	Dissolved Organic Carbon (C)	2015/11/02	98	80 - 120	116	80 - 120	<0.50	mg/L	NC	20
8098960	Total Suspended Solids	2015/11/04	100	80 - 120	98	80 - 120	<4.0	mg/L	NC	20
8099717	Dissolved Aluminum (Al)	2015/11/04	106	80 - 120	96	80 - 120	<0.00050	mg/L	0.045	20
8099717	Dissolved Antimony (Sb)	2015/11/04	NC	80 - 120	96	80 - 120	<0.000020	mg/L	0.91	20
8099717	Dissolved Arsenic (As)	2015/11/04	NC	80 - 120	94	80 - 120	<0.000020	mg/L	0.21	20
8099717	Dissolved Barium (Ba)	2015/11/04	NC	80 - 120	105	80 - 120	<0.000020	mg/L	1.5	20
8099717	Dissolved Beryllium (Be)	2015/11/04	100	80 - 120	93	80 - 120	<0.000010	mg/L	NC	20
8099717	Dissolved Bismuth (Bi)	2015/11/04	98	80 - 120	91	80 - 120	<0.0000050	mg/L	NC	20
8099717	Dissolved Boron (B)	2015/11/04					<0.010	mg/L	NC	20
8099717	Dissolved Cadmium (Cd)	2015/11/04	100	80 - 120	95	80 - 120	<0.0000050	mg/L	5.6	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8099717	Dissolved Chromium (Cr)	2015/11/04	100	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
8099717	Dissolved Cobalt (Co)	2015/11/04	100	80 - 120	96	80 - 120	<0.0000050	mg/L	7.4	20
8099717	Dissolved Copper (Cu)	2015/11/04	98	80 - 120	97	80 - 120	<0.000050	mg/L	0.28	20
8099717	Dissolved Iron (Fe)	2015/11/04	105	80 - 120	100	80 - 120	<0.0010	mg/L	3.6	20
8099717	Dissolved Lead (Pb)	2015/11/04	105	80 - 120	98	80 - 120	<0.0000050	mg/L	5.1	20
8099717	Dissolved Lithium (Li)	2015/11/04	101	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20
8099717	Dissolved Manganese (Mn)	2015/11/04	98	80 - 120	95	80 - 120	<0.000050	mg/L	0.42	20
8099717	Dissolved Molybdenum (Mo)	2015/11/04	NC	80 - 120	91	80 - 120	<0.000050	mg/L	0.21	20
8099717	Dissolved Nickel (Ni)	2015/11/04	99	80 - 120	96	80 - 120	0.000026, RDL=0.000020	mg/L	0.57	20
8099717	Dissolved Phosphorus (P)	2015/11/04					<0.0020	mg/L		
8099717	Dissolved Selenium (Se)	2015/11/04	96	80 - 120	99	80 - 120	<0.000040	mg/L	1.3	20
8099717	Dissolved Silicon (Si)	2015/11/04					<0.050	mg/L	1.2	20
8099717	Dissolved Silver (Ag)	2015/11/04	100	80 - 120	85	80 - 120	<0.0000050	mg/L	NC	20
8099717	Dissolved Strontium (Sr)	2015/11/04	NC	80 - 120	94	80 - 120	<0.000050	mg/L	0.52	20
8099717	Dissolved Thallium (Tl)	2015/11/04	96	80 - 120	89	80 - 120	<0.0000020	mg/L	NC	20
8099717	Dissolved Tin (Sn)	2015/11/04	93	80 - 120	94	80 - 120	<0.00020	mg/L	NC	20
8099717	Dissolved Titanium (Ti)	2015/11/04	95	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
8099717	Dissolved Uranium (U)	2015/11/04	108	80 - 120	98	80 - 120	<0.0000020	mg/L	2.9	20
8099717	Dissolved Vanadium (V)	2015/11/04	100	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
8099717	Dissolved Zinc (Zn)	2015/11/04	NC	80 - 120	97	80 - 120	<0.00010	mg/L	0.58	20
8099717	Dissolved Zirconium (Zr)	2015/11/04					<0.00010	mg/L	NC	20
8100010	Total Aluminum (Al)	2015/11/04	101	80 - 120	96	80 - 120	<0.00050	mg/L	18	20
8100010	Total Antimony (Sb)	2015/11/04	100	80 - 120	95	80 - 120	<0.000020	mg/L	NC	20
8100010	Total Arsenic (As)	2015/11/04	100	80 - 120	95	80 - 120	<0.000020	mg/L	NC	20
8100010	Total Barium (Ba)	2015/11/04	NC	80 - 120	103	80 - 120	<0.000020	mg/L	14	20
8100010	Total Beryllium (Be)	2015/11/04	102	80 - 120	93	80 - 120	<0.000010	mg/L	NC	20
8100010	Total Bismuth (Bi)	2015/11/04	99	80 - 120	93	80 - 120	<0.0000050	mg/L	NC	20
8100010	Total Boron (B)	2015/11/04					<0.010	mg/L	NC	20
8100010	Total Cadmium (Cd)	2015/11/04	99	80 - 120	97	80 - 120	<0.0000050	mg/L	7.4	20
8100010	Total Chromium (Cr)	2015/11/04	102	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
8100010	Total Cobalt (Co)	2015/11/04	101	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8100010	Total Copper (Cu)	2015/11/04	96	80 - 120	96	80 - 120	<0.000050	mg/L	1.3	20
8100010	Total Iron (Fe)	2015/11/04	104	80 - 120	104	80 - 120	<0.0010	mg/L	12	20
8100010	Total Lead (Pb)	2015/11/04	108	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20
8100010	Total Lithium (Li)	2015/11/04	95	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20
8100010	Total Manganese (Mn)	2015/11/04	91	80 - 120	94	80 - 120	<0.000050	mg/L	5.4	20
8100010	Total Molybdenum (Mo)	2015/11/04	NC	80 - 120	93	80 - 120	<0.000050	mg/L	14	20
8100010	Total Nickel (Ni)	2015/11/04	98	80 - 120	96	80 - 120	0.000022, RDL=0.000020	mg/L	12	20
8100010	Total Phosphorus (P)	2015/11/04					<0.0020	mg/L		
8100010	Total Selenium (Se)	2015/11/04	96	80 - 120	93	80 - 120	0.000071, RDL=0.000040	mg/L	9.4	20
8100010	Total Silicon (Si)	2015/11/04					<0.050	mg/L	6.9	20
8100010	Total Silver (Ag)	2015/11/04	103	80 - 120	86	80 - 120	<0.0000050	mg/L	NC	20
8100010	Total Strontium (Sr)	2015/11/04	NC	80 - 120	96	80 - 120	<0.000050	mg/L	8.0	20
8100010	Total Thallium (Tl)	2015/11/04	95	80 - 120	93	80 - 120	<0.0000020	mg/L	NC	20
8100010	Total Tin (Sn)	2015/11/04	101	80 - 120	94	80 - 120	<0.00020	mg/L	NC	20
8100010	Total Titanium (Ti)	2015/11/04	102	80 - 120	89	80 - 120	<0.00050	mg/L	NC	20
8100010	Total Uranium (U)	2015/11/04	108	80 - 120	101	80 - 120	<0.0000020	mg/L	8.1	20
8100010	Total Vanadium (V)	2015/11/04	104	80 - 120	94	80 - 120	<0.00020	mg/L	NC	20
8100010	Total Zinc (Zn)	2015/11/04	NC	80 - 120	96	80 - 120	<0.00010	mg/L	7.7	20
8100010	Total Zirconium (Zr)	2015/11/04					<0.00010	mg/L	NC	20
8100061	Strong Acid Dissoc. Cyanide (CN)	2015/11/03	96	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20
8100062	Weak Acid Dissoc. Cyanide (CN)	2015/11/03			99	80 - 120	<0.00050	mg/L		
8100364	Total Ammonia (N)	2015/11/03	100	80 - 120	107	80 - 120	0.0084, RDL=0.0050	mg/L	NC	20
8100396	Total Phosphorus (P)	2015/11/03	NC	80 - 120	97	80 - 120	<0.0020	mg/L	1.4	20
8100400	Dissolved Phosphorus (P)	2015/11/03	93	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20
8101128	Fluoride (F)	2015/11/04	NC	80 - 120	98	80 - 120	<0.010	mg/L	3.5	20
8101237	Total Mercury (Hg)	2015/11/04	94	80 - 120	104	80 - 120	<0.010	ug/L	NC	20
8101412	Dissolved Chloride (Cl)	2015/11/03	NC	80 - 120	103	80 - 120	<0.50	mg/L	2.3	20
8101416	Dissolved Sulphate (SO4)	2015/11/03			103	80 - 120	<0.50	mg/L	NC	20
8102812	Dissolved Mercury (Hg)	2015/11/05	88	80 - 120	99	80 - 120	<0.010	ug/L	NC	20

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

QUALITY ASSURANCE REPORT(CONT'D)

YUKON ZINC CORPORATION
Sampler Initials: KU

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8104426	Total Dissolved Solids	2015/11/09	100	80 - 120	88	80 - 120	<10	mg/L	14	20
8108331	Total Dissolved Solids	2015/11/12	101	80 - 120	96	80 - 120	<10	mg/L	NC	20
8109179	Orthophosphate (P)	2015/11/10			102	80 - 120	<0.0010	mg/L		
8109181	Dissolved Phosphorus (P)	2015/11/10	102	80 - 120	97	80 - 120	<0.0020	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B597096
Report Date: 2015/11/17

YUKON ZINC CORPORATION
Sampler Initials: KU

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Analytics Inc

4606 Canada Way
Burnaby, BC V5G 1K5
www.maxxam.ca

Phone: (604) 734- 7276
Fax.: (604) 630-0110
Toll-Free: 1-800-665-8566

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

08413161

LAB USE ONLY
MAXXAM JOB #: B597096

ANALYSIS REQ

B597096

COMPANY NAME:	Yukon Zinc Corporation
CLIENT PROJECT NO.:	
COMPANY ADDRESS:	#701-475 Howe Street Vancouver, BC V6C 2B3
TEL.:	604-638-0921 Ex.5022
E-MAIL:	YZC Group
FAX:	604-682-5404
SAMPLER NAME (PRINT):	Kevin Unrau
PROJECT MANAGER:	Malcom Swallow/Alex Wu
LABORATORY CONTACT:	Graham Rudkin

	FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX: GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	SAMPLING: DATE (dd/mm/yy)	TIME	# CONTAINERS	Package A including:	EC, Alk, Acidity, pH, turbidity, temperature	Total/Diss. Phosphate, SO4, PO4	Ammonia, N02, N03, F, Cl, Br	DOC	Cyanide (Total and WAD)	LL Total Metals (inc. P, Hg)	LL Dissolved Metals (inc. P, Hg)	Hardness	TDS, TSS
1	W1			X							X	X	X	X	X	X	X	X	X	X
2	W2			X							X	X	X	X	X	X	X	X	X	X
3	W22	NN5819		X				Oct 28	12:[illegible]m	8	X	X	X	X	X	X	X	X	X	X
4	W31	NN5820		X				28	2:[illegible]m	8	X	X	X	X	X	X	X	X	X	X
5	W71	NN5821		X				28	10:45	8	X	X	X	X	X	X	X	X	X	X
6	W72	NN5822		X				28	10:55	8	X	X	X	X	X	X	X	X	X	X
7	W73	NN5823		X				28	11:20	8	X	X	X	X	X	X	X	X	X	X
8	W80 AND 2015/10/30	~~NN~~		X				28	2:35	8	X	X	X	X	X	X	X	X	X	X
9	~~W82~~	NN5824		~~X~~							~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~
10	T1	NN5825		X				28	1:30	8	X	X	X	X	X	X	X	X	X	X
11																				
13																				
14																				
15																				
16																				
17																				

TAT (Turnaround Time)
LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL
* Some exceptions apply - please contact laboratory

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	
RUSH	2 BUSINESS DAYS	
URGENT	1 BUSINESS DAY	

OTHER BUSINESS DAYS

CUSTODY RECORD

PO NUMBER OR QUOTE NUMBER: n/a

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

CCME
CSR
AB TIER 1
OTHER

JARS USED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 2,2 / CS:NA
DUE DATE LOG IN CHECK:

RELINQUINSHED BY SAMPLER:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUINSHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurie Lathier 2015/10/30 13:10