



Wolverine Project

QUARTZ MINING LICENSE QML-0006

2007 ANNUAL REPORT

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(Content contained on enclosed CD)

- Appendix A Environmental Monitoring Reports
- Appendix B Acid Base Accounting and Shake Flask Testing Lab Reports
- Appendix C Groundwater Quality Lab Reports
- Appendix D Humidity Cell Update Reports (AMEC and MEA)
- Appendix E Inotec report: Treatability and Bench-Scale Bioreactor Testing of Water for Selenium Removal

1 Introduction

This Annual Report has been prepared to satisfy requirements contained within Quartz Mining License QML-0006 (QML) Section 10.5 a) to z) for activities that occurred during the period of January 1st to December 31st, 2007 at the Wolverine Project.

The report has been divided into the following sections:

- Section 1 provides a brief overview of the Wolverine Project and regulatory requirements
- Section 2 details construction activities
- Section 3 summarizes monitoring results
- Section 4 details progressive reclamation activities
- Section 5 outlines ongoing lab test work results
- Section 6 provides a summary of spill reporting
- Section 7 summarizes socioeconomic information
- Section 8 provides the proposed development activities anticipated for 2008.

Table 1-1 outlines the QML Annual Report information requirements and the corresponding Report section where the information is provided.

1.1 Project Overview

The Wolverine Project is an underground mining project that will produce copper, lead and zinc concentrates. The Wolverine Project is located within the Finlayson District in the south-eastern Yukon, approximately 280 km east of Whitehorse, 190 km northwest of Watson Lake and 135 km southeast of Ross River, near the headwaters of the Wolverine Lake watershed. The Finlayson area is within the Kaska Nation traditional territory which, in the Yukon, is comprised of the Ross River Dena Council (RRDC) and the Liard First Nation (LFN). In 2005, YZC signed a Socio-Economic Participation Agreement and a Traditional Knowledge Protocol Agreement with the RRDC, on behalf of the Kaska Nation. These agreements provide a basis for participation by all Kaska Nation members in project exploration and development activities.

The Wolverine Project property, originally staked in 1973, was extensively explored over the past two decades. In early 2005, a Type B Water Licence (QZ01-051) and Mining Land Use Permit (LQ00140) were issued to allow for advanced exploration activities. Under these approvals, Yukon Zinc completed test mining and detailed infill diamond drilling programs. A Quartz Mining License (QML-0006) and a Type A Water Licence (QZ04-065), to allow for the development and operation of the mine, were issued in December 2006 and October 2007, respectively.

The project will include operation of an underground mine with surface ramp access to produce 1400 t/d of mill feed ore. The industrial complex will include a truck shop, mill, laboratory and office buildings. Power is supplied by diesel gensets and local distribution system. Mine operation will require approximately 150 people who will live on-site in a self-contained camp. Waste water from the camp will be treated with a biological sewage treatment plant and discharged to Go Creek. Milling will involve crushing, dense media separation (DMS), and two-stage grinding followed by differential flotation processes.

Table 1-1 QML annual report information requirements and corresponding report section

QML Section	Requirement	Report Section Where Addressed
10.5 a)	A summary of mining activities at the mine.	Section 1
10.5 b)	A map showing all structures, works and installations associated with the Undertaking.	Section 2
10.5 c)	The total amount of ore and waste removed from the mine.	N/A ¹
10.5 d)	The total amount and the average head grade of ore processed through the mill.	N/A
10.5 e)	The total amount and grade of all stockpiled ore.	N/A
10.5 f)	The total amount and grade of concentrate produced, stockpiled, and transported from the Undertaking.	N/A
10.5 g)	As-built drawings of the mine and of all structures, works and installations constructed or altered in the mine.	N/A
10.5 h)	Details respecting any action taken as a result of the recommendations made by the engineer in relation to the inspection referred to in paragraph 10.1.	N/A
10.5 i)	A summary of any updates to estimates of ore reserves and mine life, including reserve category, tonnage and grade.	N/A
10.5 j)	A summary of any underground stability incidents.	N/A
10.5 k)	A summary of paste backfill placement activities conducted and their locations in the mine.	N/A
10.5 l)	A summary of humidity cell tests undertaken for waste rock and paste backfill.	Section 5
10.5 m)	A summary of quantity and related analysis of leachate collected from paste backfill.	N/A
10.5 n)	The total amount of tailings deposited in the tailings impoundment.	N/A
10.5 o)	An evaluation of the performance of the tailings facility, including an estimate of remaining available storage capacity in the facility.	N/A
10.5 p)	The data generated from the full depth sampling of the tailings.	N/A
10.5 q)	A summary of any hydrogeology studies undertaken and related analysis of these data, including groundwater flow pathways as influenced by underground workings.	N/A
10.5 r)	A summary and evaluation of data results from the field pilot test of the bio-pass system.	N/A (Section 5 – lab testwork)
10.5 s)	A summary of surface water quality monitoring, including any acute lethality testing conducted.	Section 3
10.5 t)	A summary of groundwater quality monitoring in wells downslope of the mine workings.	Section 3
10.5 u)	A summary of the programs undertaken for environmental monitoring and surveillance as outlined in the Monitoring and Surveillance Plan and the Wildlife Protection Plan, including an analysis of these data and any action taken or adaptive management strategies implemented to monitor or address any changes in environmental performance.	Monitoring – Sections 2 and 3 Ongoing Testwork – Section 5 ²
10.5 v)	A summary of progressive and ongoing reclamation activities.	Section 4
10.5 w)	A summary of proposed development and production for the coming year.	Section 8
10.5 x)	A summary of activities related to care and maintenance of the Undertaking, including any temporary closure activities, if applicable.	N/A
10.5 y)	A summary of spills and accidents that occurred as a result of the Undertaking.	Section 7
10.5 z)	A summary of the previous and projected use of the access road, including maintenance work conducted, a summary of the level of traffic, access control issues, wildlife incidents and other accidents, and upgrade or maintenance work planned for the upcoming year.	Section 2

Notes: 1 - N/A = information not available due to project phase in the initial stages of construction in 2007 (e.g., no mine or mill operations)

2 - Monitoring and Surveillance Plan and the Wildlife Protection Plan in preparation

All water from the milling process will be pumped to the tailings facility for reuse or will be discharged following treatment through a high density sludge and bioreactor processes. Treated water from the tailings facility will be discharged to Go Creek. Waste rock from the mine will be stored temporarily on a waste rock pad. This material will subsequently be mixed with cement, DMS float material, and tailings to produce a paste for backfill in the mined-out stopes.

Site access is via air or a 26 km long all season access road that connects with the Robert Campbell Highway at km 190. Metal concentrates will be trucked, via the mine access road, to the Robert Campbell Highway and then south to Stewart, BC for transportation via ocean freighter to various smelters in Asia.

The primary activities in 2007 included monitoring, continued dewatering of the underground mine, and construction of infrastructure required to commence development of or support the main facilities, including:

- Mine access road (Phase 1) construction
- Waste rock pad Phase 2 construction
- Land Treatment Farm Cell 2 construction
- Potable water well installations
- Camp foundation preparation
- Water treatment facility winterization

1.2 2007 Reporting Requirements

As summarized in Table 1-2, numerous reports were submitted to Yukon Energy, Mines and Resources and the Yukon Water Board in 2007 as per the requirements of QML-0006, Type A Water Licence QZ04-065, Type B Water Licence QZ01-051 and Quartz Mining Land Use Approval LQ00140.

In 2007, YZC was compliant with all reporting requirements of the four major permits. Although the effective date of the A Licence is October 4, 2007, the purpose of the A Licence is for quartz mining and milling. YZC has not undertaken any activities requiring the use of water or the deposition of waste for milling or mining, and is not planning on using water or depositing waste as outlined by the A Licence Application or Licence until 2008. The effective date of the Licence determines subsequent requirements such as monthly monitoring and reporting. All 2007 activities requiring the use of water or deposition of waste were permitted under B Licence QZ01-051, and monitoring and monthly reporting was completed as per B Licence conditions. In 2008, monitoring as per the A Licence requirements will be triggered by the onset of activities pertaining to quartz milling and mining. Reporting will be conducted according to the A Licence reporting schedule, with rationale provided for what monitoring activities have or have not been conducted.

Table 1-2 Summary of reports submitted for the Wolverine Project in 2007

Report Title	Licence* and Section Requirement	Date Submitted
Phase 2 All Weather Access Road Plan (V2)	QML 7.4	16-Jan-07
November 2006 Surveillance Network Monitoring Program Monthly Report	BLic 43	16-Jan-07
Revised Documentation in support of Water Use Application QZ04-065 – Volume 1,2,3	A Lic	23-Jan-07
December 2006 Surveillance Network Monitoring Program Monthly Report	BLic 43	2-Feb-07
Temporary Closure Plan (V2006-01)	QML 8.2	3-Feb-07
Type B Water Licence 2006 Annual Report	BLic 15	7-Feb-07
Mining Land Use Permit 2006 Annual Report	MLU 7	7-Feb-07
Quartz Mining License 2006 Annual Report	QML 10.5	7-Feb-07
January 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	28-Feb-07
February 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	27-Mar-07
General Site Plan (V2007-03)	QML 7	6-Apr-07
March 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	13-Apr-07
May 22, 2007 Fuel Cache – Drum Leak Spill Report	BLic 12, MLU 4	24-May-07
April 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	28-May-07
May 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	25-Jun-07
June 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	27-Jul-07
July 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	30-Aug-07
August 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	28-Sep-07
September 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	22-Oct-07
Heritage Resource Protection Plan (V2006-01)	QML 12.4	26-Nov-07
October 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	30-Nov-07
Revised Water Management and Treatment Plan	BLic 39+53, MLU 93-95	14-Dec-07
Temporary Waste Rock and Ore Storage Facility As-Constructed Report	BLic 39, MLU 92	14-Dec-07
November 2007 Surveillance Network Monitoring Program Monthly Report	BLic 43	14-Dec-07
Reclamation and Closure Plan (V2007-02) (Draft for review)	QML 8.5	14-Dec-07

*BLic = Type B Water Licence (QZ01-051); MLU = Mining Land Use Permit (LQ00140); QML = Quartz Mining License (QML-0006); ALic = Type A Water Licence (QZ04-065).

2 Construction Activities

The focus of the 2007 advanced exploration and development activities included continued dewatering of the underground test mine built in 2005, and construction of infrastructure to support water storage and treatment and the future mine development. Figure 2-1 details the location of major surface infrastructure as of the end of 2007 and the sections below describe the main construction activities undertaken in 2007.

2.1 Water Supply

Under the Type B Water Licence, YZC is authorized to obtain water from Go Creek and Wolverine Lake and to remove intercepted water from the underground workings up to 203 m³ of water per day. The three uses of water in 2007 include mine rehabilitation using mine recharge water, potable water well drilling and domestic purposes at camp.

2.1.1 Intercepted Water from Underground Workings

Recharge water from the underground workings was either discharged from the mine either for treatment, or used within the mine for shotcreting.

Mine recharge average rate, based on sump volumes and filling rates, was calculated to be approximately 1.1 L/s throughout 2007. In June and December the flow rate was calculated to be 1.3 L/s and 0.94 L/s, respectively. On average, the daily mine recharge rate in 2007 was 95 m³/day.

Shotcreting of the mine walls required ~ 400 L of water per 1000 kg bag of shotcrete. 50 bags and 22 bags of shotcrete were used during 15 days in August and during 2 days in October, respectively. Hence, a total of 28.8 m³, or ~79 L per day (over the year), of treated water was recycled for shotcreting in 2007, after settling in the surface sumps.

2.1.2 Go Creek Watershed

Water from Go Creek was required in August and November 2007 for the installation of potable water wells (required for the new mining camp). Drilling used ~20 m³ of water per day, and was in operation for a total of 12 days.

2.1.3 Wolverine Watershed

Water pumped from Wolverine Lake was filtered for potable water uses in the exploration camp kitchen and dry facilities. Based on a conservative estimate of 232 L per person per day (for showering, hand washing, laundry, food preparation and consumption, and dishwashing) the maximum amount of water used per day in 2007 was 5.75 m³ per day (25 people in camp) and the minimum was 2.07 m³ per day (9 people in camp). There are no flushing toilets in Wolverine Camp, and therefore, toilets are not a contributor to camp water consumption.

2.1.4 Total Water Consumption

The water intercepted daily from the underground workings in the 2007 advanced exploration program was 110 m³. The water used for shotcreting in 2007 totaled 28.8 m³. The water consumed daily from Go Creek and Wolverine Lake was 20 m³ and 2.07 m³ to 5.75 m³, respectively, for a maximum daily water use of 105.5 m³, and an average water consumption of 99.5 m³/day for 2007. Figure 2-2 shows the average daily water usage per month and the camp occupancy for the 2007 program.

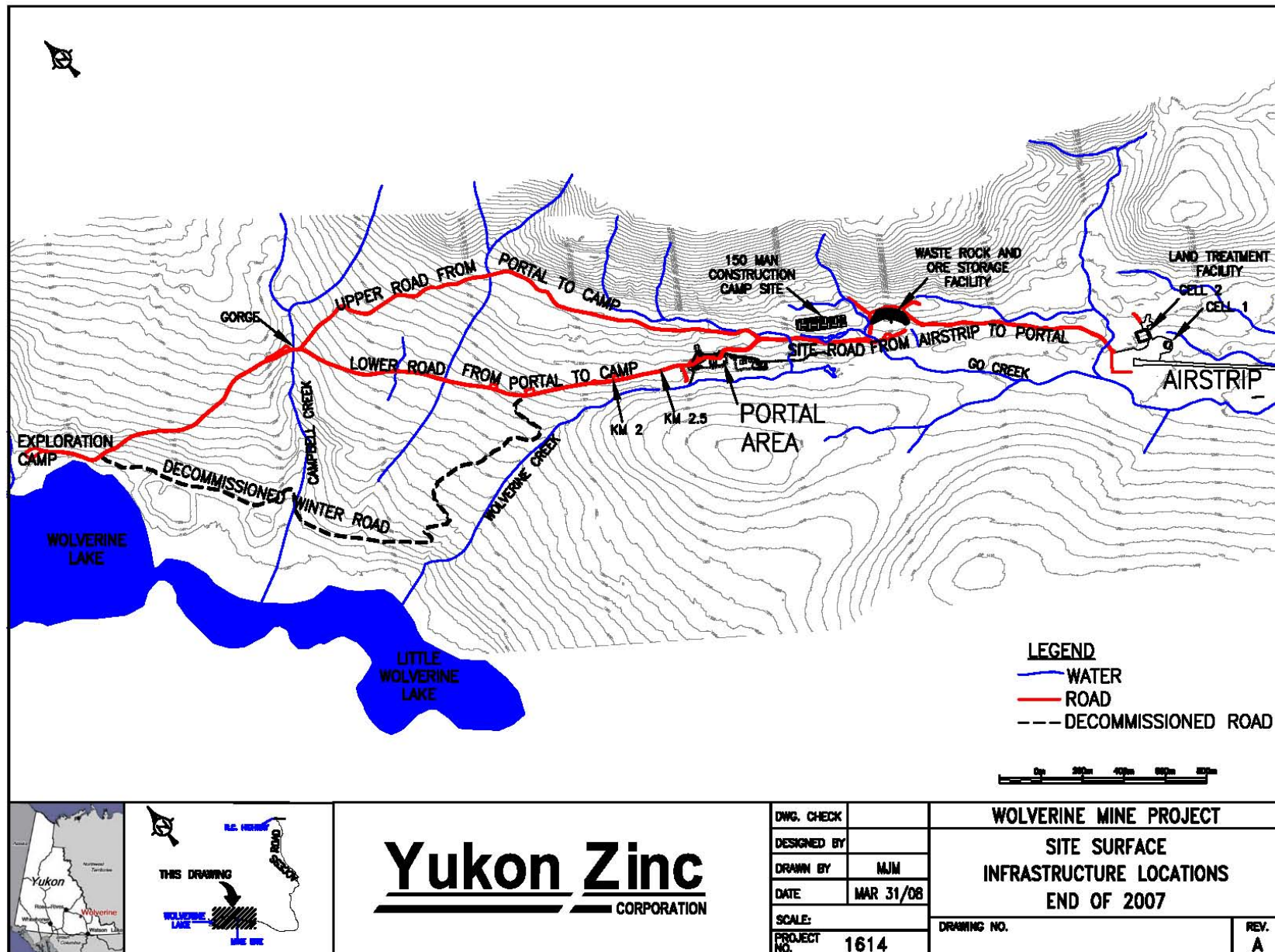


Figure 2-1 Site surface infrastructure end of 2007

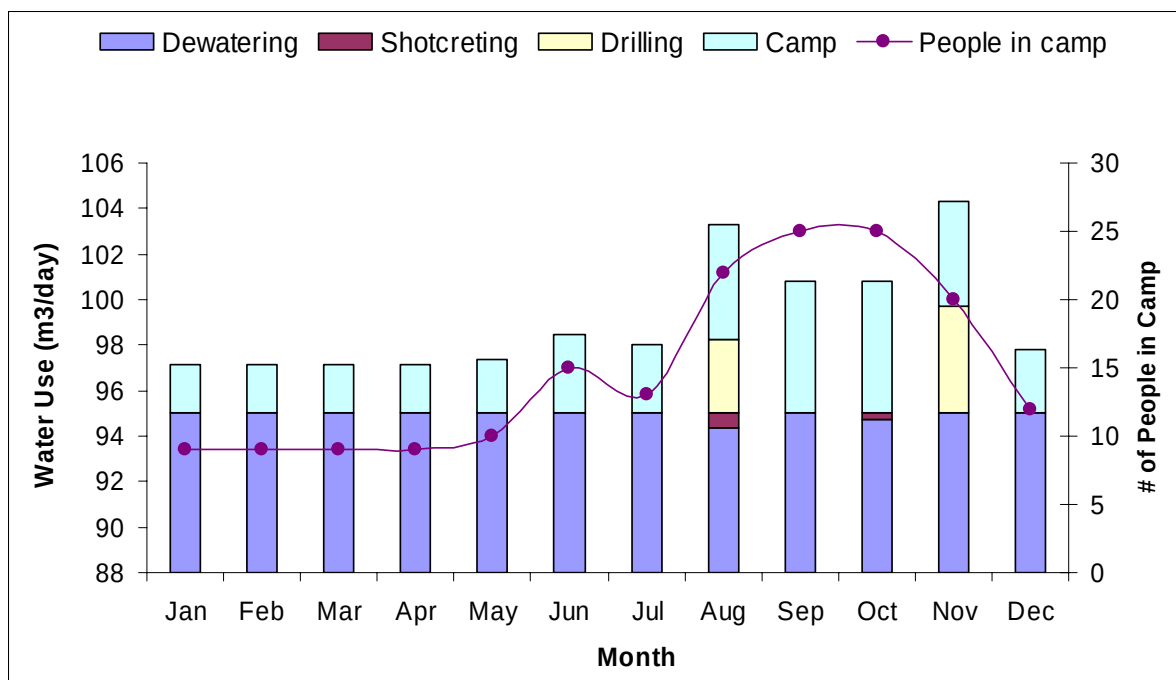


Figure 2-2 Monthly average daily water consumption 2007

2.2 Access Road Construction

In spring 2007, YZC started construction on the 24 km access road from the Robert Campbell Highway to the mine site. The objective was to complete a one-lane road that would permit transportation of supplies, equipment and fuel to site (Phase 1). The Phase 1 road alignment will be widened (to ensure slope stability and road safety) to a Phase 2 level prior to the transport of concentrate from site. Prior to the onset of road construction, several reports prepared by Yukon Engineering Services Inc. (YES) and YZC containing design specifications, sampling and monitoring details, and drawings were submitted to EMR, including:

- All Weather Access Road Plan (June 2006)
- Phase 1 All Weather Access Road (October 25, 2006)
- Phase 2 All Weather Access Road (January 16, 2007)
- Wolverine Project General Site Plan, Version 2007-03 (April 6, 2007)

The submission of these plans satisfied requirements of QML-0006, including information pertaining to the location and design of the gate installed to prevent public use of the access road. As required, the gate was installed within thirty days of obtaining approval of the plan.

In addition to the requirements outlined in QML-0006 and these reports, YZC also obtained three minor permits for road construction and operation of the contractor's construction camp (Table 2-1).

Table 2-1 Minor permits required for road construction and operation of the contractor's construction camp.

Permit	YTG Issuing Dept.	Purpose	Date Issued	Expiry Date
Resource Access Permit #1560	Highways and Public Works	To construct access from Robert Campbell Highway km 190.	March 17, 2007	March 17, 2008
Quarry Permit 07/2224	Energy, Mines and Resources	Required for gravel extraction from YTG pit	July 10, 2007	Aug. 31, 2007
Permit to Install a Sewage Disposal System #320	Health and Social Services	Required for the access road contractor's construction camp	Aug. 10, 2007	

The completed Phase 1 road at two locations (km 3 and km 18) and an example of a borrow pit (km 4) excavated for roadbed material are provided in Picture 2-1 to Picture 2-3.

**Picture 2-1 Access Road near km 3, heading south towards the mine site.****Picture 2-2 Access Road near km 18, heading south towards the mine site.**



Picture 2-3 Borrow pit near km 4+00.

During construction, additional culvert installation and bank stabilization plans were developed when conditions warranted. Plans were developed for Pitch and Putt Creeks (July 8, 2007), Mulligan Creek (July 20, 2007) and Bunker Creek (August 3, 2007). A brief description of the works conducted, plans and pictures at these four creeks are provided below.

As required by QML-0006, within sixty days of completing construction of the access road to the Phase 2 level, YZC will submit an as-built report containing as-built drawings (of the access road, stream crossings, drainage or sediment control structures, staging areas, pull-outs, gates, etc.), and descriptions of any reclamation activities undertaken or to be undertaken in relation to any borrow sites used in construction of the access road.

2.2.1 Pitch Creek

Pitch Creek, located at station 2+740, sits in a depression perpendicular to the road right-of-way. To allow for a bypass road to be constructed upstream of the ultimate culvert location, a diversion channel was excavated and a temporary culvert (900 mm) was installed. Due to spring conditions in early June, the culvert installation location was filled with approximately 1-2 m of ice and required removal with an excavator using a hydro-axe. On July 5th during a site inspection, YTG EMR Mining and YTG Water Resources Inspectors were concerned with 1) the stability of slopes adjacent to Pitch and Putt Creeks due to continued heavy spring rains, and 2) the ultimate culvert alignment and plans for diversions and erosion control. A stop work order was issued on July 5th and lifted shortly thereafter following a conference call with representatives from with EMR, YES, YZC and the inspectors and submission of report documenting plans for bank stability and culvert installation (Figure 2-3 and 2-4).

The permanent culvert (1200 mm) was installed and the water diverted by July 13th. This site was monitored daily during inclement weather and weekly or bi-weekly during drier weather. By September 23rd, all areas near Pitch Creek ROW had been covered with a layer of slate/shale material to harden up the slopes and prevent erosion from high levels of flow and/or impact of

glaciation. Organic materials were placed on top of the rocky material and grass seed applied. Erosion control matting was installed in both ditch channels draining to the outlet. The substrate matting was seeded with grass mixture, and the matting was secured with trenches and staples. The outlet of Pitch Creek directs flow back into original channel. Pictures Picture 2-4Picture 2-5 document these activities.

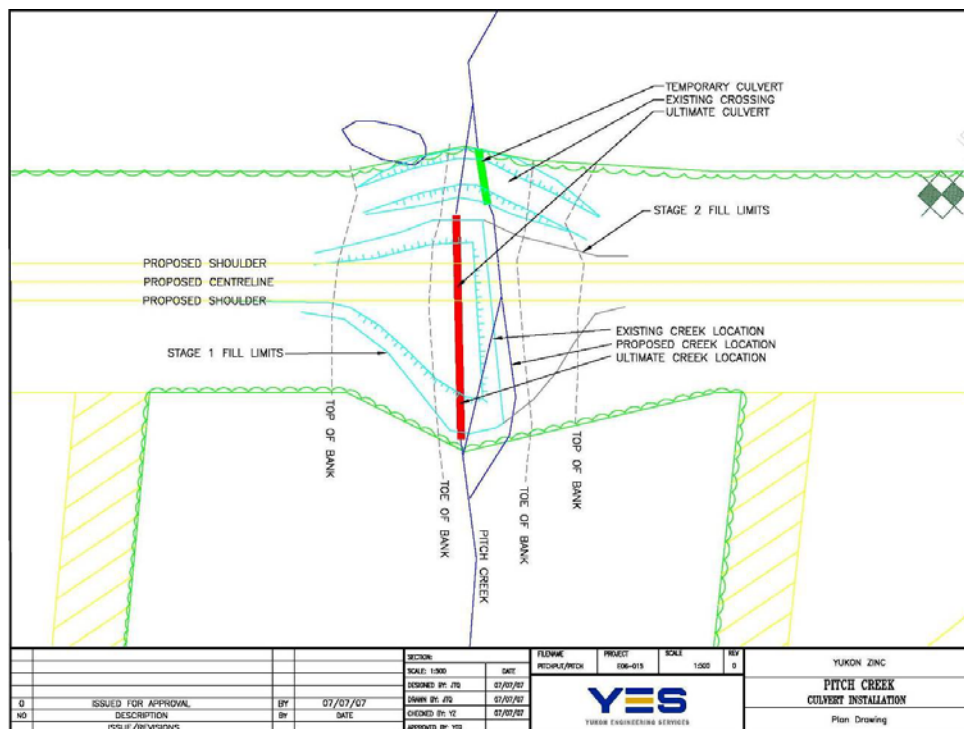


Figure 2-3 Pitch creek culvert installation design plan drawing

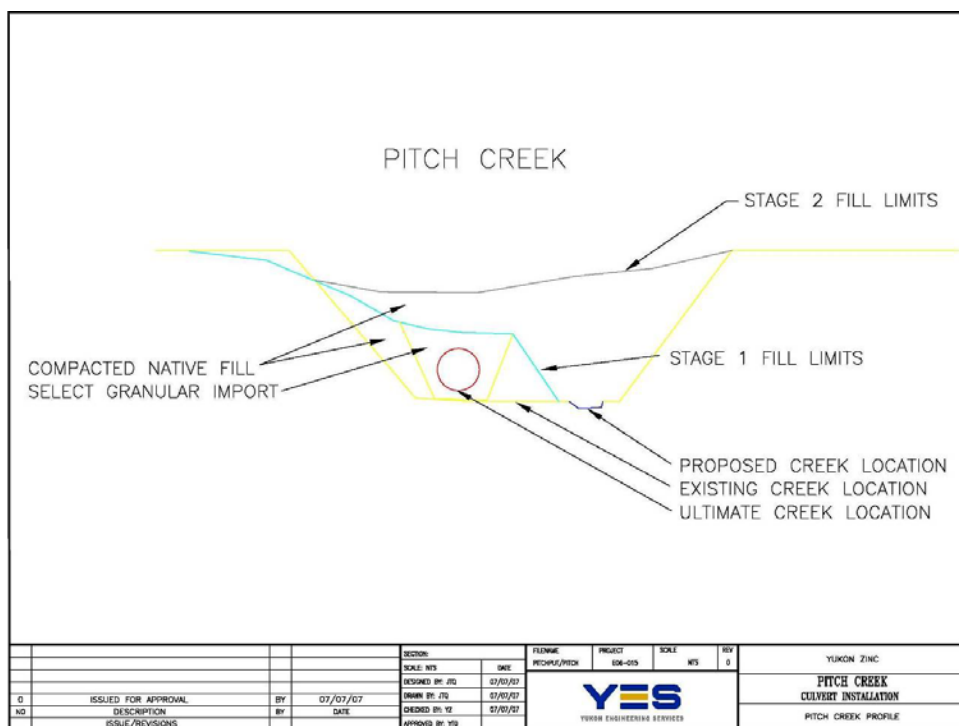


Figure 2-4 Pitch creek culvert installation design profile drawing

Site Name: Pitch Creek (02+750)	Date and Time: August 26, 2007
	
Image 0877. View of Pitch Creek culvert outlet. Downstream is to the left.	Image 0880. View of Pitch Creek culvert inlet channel. Upstream is to the right.
	
Image 0879. Close up view of the outlet. Note full isolation by silt fencing. Facing east.	Image 0881. View of inlet channel. Note full isolation by silt fencing. Facing downstream (north).

Picture 2-4 Photo plate of Pitch Creek, August 26th, 2007



Image 1266. Seeding on top of erosion control matting installed on the northeast bank of the culvert outlet.



Image 1277. View of the outlet channel during installation of erosion control matting on northwest bank.



Image 1295. Seeding on top of erosion control matting installed on the northeast bank of the culvert outlet. Note trench for securing edge of matting.



Image 1297. View of the outlet channel from the west bank, fully isolated with fencing and erosion control matting stapled in place.



Image 1298. View of the outlet channel from the east bank, fully isolated with fencing and erosion control matting stapled in place on the west bank.



Image 1376. View of the culvert outlet channel. Note abundant ice as hard overnight frosts are becoming common.

Picture 2-5 Photo plate of Pitch Creek, September 18th to 23rd, 2007

Putt Creek is located at station 2+885 in a moderate depression. Pre-disturbance, the channel was heavily vegetated with shrubby willow and other riparian species. Similar to Pitch Creek, activities commenced on June 15th and willows and trees were removed using a hydro-axe. Due to heavy rains and frozen ground conditions, the instream work at the temporary culvert site was postponed until July 14th when soils had thawed and drained significantly.

In mid September, the permanent culvert was installed and rip rap was placed at both the inlet and outlet. All banks were lined with geotextile and riprapped. Temporary diversion culverts were removed and the diversion channel was filled in. Ditching was completed with erosion control matting installed in areas most susceptible to erosion (i.e. northeast channel). Picture 2-6 to 2-8 document these activities.

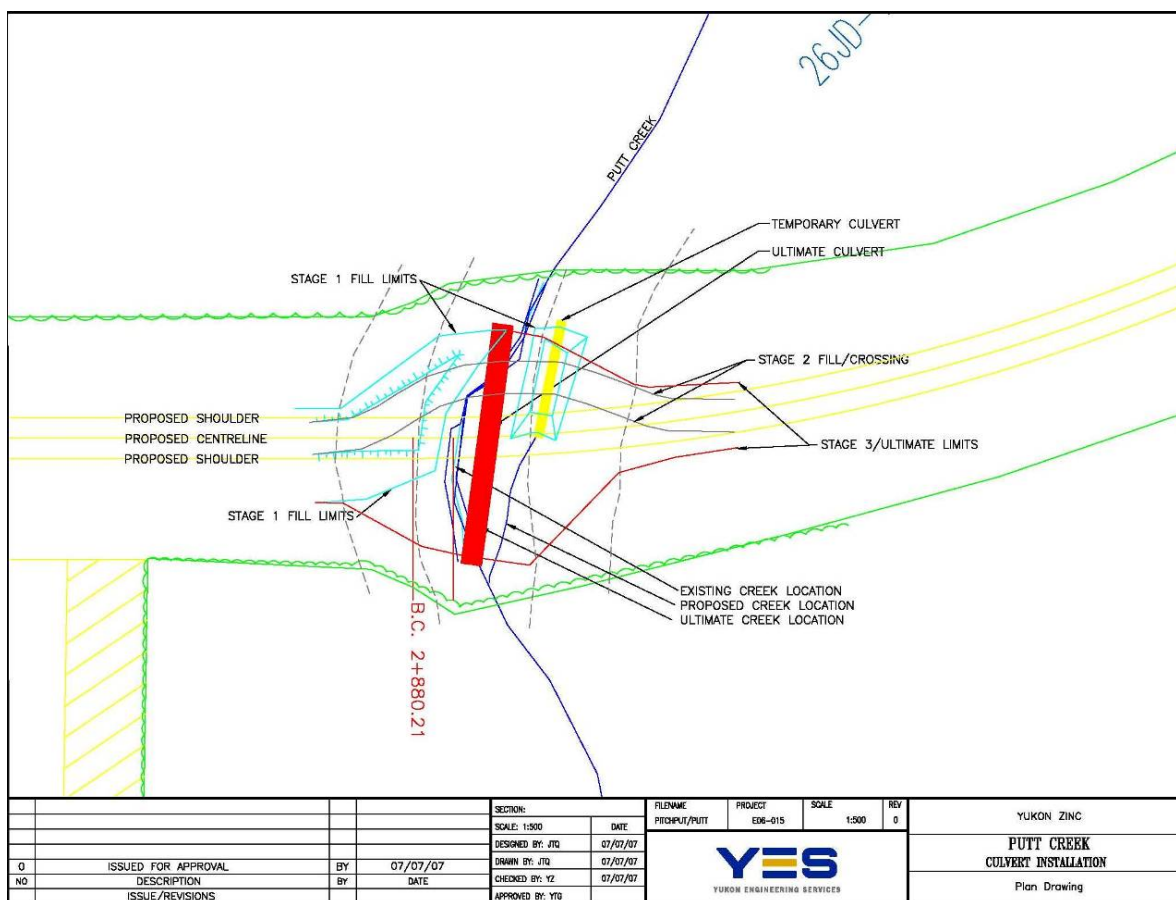


Figure 2-5 Putt creek culvert installation plan drawing



Site Name: Putt Creek	September 16-17, 2007
	
Image 1147. Inlet of temp diversion channel prior to direction of creek back to permanent culvert.	Image 1153. Outlet of culvert prior to final riprap work and release creek water.
	
Image 1157. Culvert inlet prior to final riprap work and release of creek.	Image 1165. Re-working the culvert outlet channel prior to release of creek.

Picture 2-7 Photo plate of Putt Creek, September 16th – 17th, 2007



Image 1166. Completion of riprap work around outlet of culvert prior to release of creek water.



Image 1191. Excavation of inlet channel. Visible logs are from earlier corduroy bypass road.



Image 1201. Culvert inlet channel following release of creek. West bank being prepped for riprap.



Image 1217. Final riprapped inlet channel.



Image 1227. Final riprapped outlet channel following release. Excavator is cleaning up drainage ditch.



Image 1220. Final view of Putt Creek crossing, facing east.

Picture 2-8 Photo plate of Putt Creek, September 16th – 17th, 2007

2.2.3 Mulligan Creek

Mulligan Creek, located at station 4+940, is a small ephemeral creek. On July 21st, a diversion ditch was constructed, geotextile placed along the channel and a temporary culvert (800 mm) was installed. Once the creek bed dried up, a permanent culvert was placed in the original stream channel alignment, and the diversion channel was decommissioned.

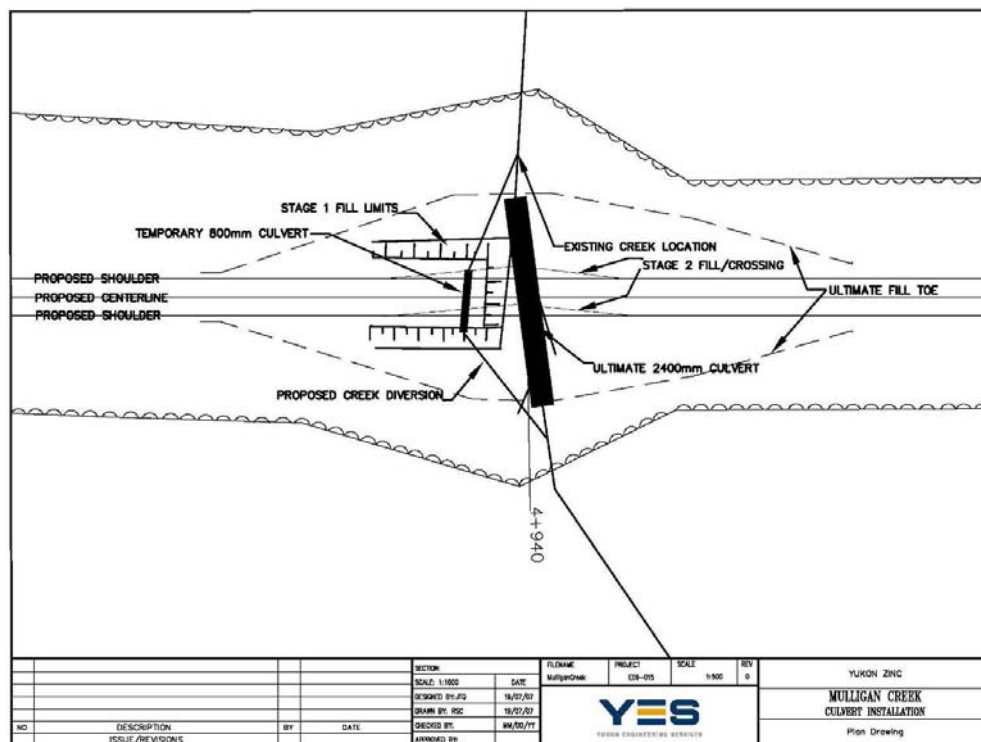


Figure 2-7 Mulligan Creek culvert installation design profile drawing

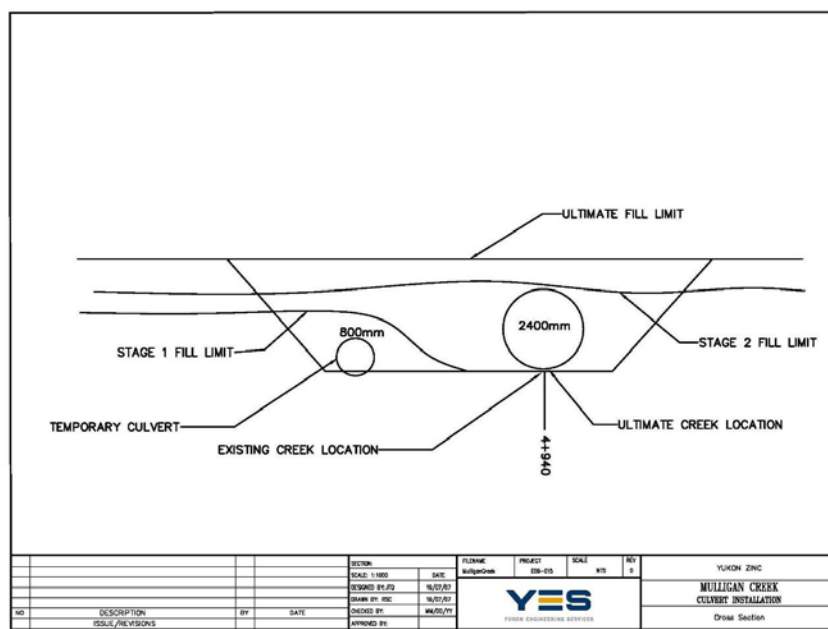


Figure 2-8 Mulligan Creek culvert installation design profile drawing

Site Name: Mulligan Creek	August - September 2007
	
Image 0946. Inlet channel of temp diversion taken in late-August. Creek flow was non-existent prior to installation of permanent culvert. Facing south.	Image 1309. Outlet of culvert prior to final riprap work and release creek water.
	
Image 1310. Inlet of culvert following installation. A berm was added to prevent flow from moving along diversion channel, which can be seen in the background. Facing north.	Image 1312. Outlet of permanent Mulligan Creek culvert. The channel still requires some re-working of the banks and placement of riprap to keep flows in original channel.

Picture 2-9 Photo plate of Mulligan Creek, August - September, 2007

2.2.4 Bunker creek

Bunker Creek is located at station 10+250. In mid-August, a temporary 30' single span bridge was installed upstream from the ultimate location of the 70' bridge (Figure 2-9), where the existing geotechnical trail crossed the creek.

The riparian area was hand cleared 5 m back from the creek and beyond that to the existing roadbed. Fill material was padded from the edge of the riparian vegetation to the edge of the creek. Shale material was used as a base padding for the log abutments that were placed on each side of the creek to support the temporary bridge. Bridge blocking consisted of placing 30' logs on top of the abutments to increase stability and prevent sediment from entering the creek. Geotechnical liner was laid over the padding and woven through the bridge blocking to act as a barrier. Silt fencing was installed at each corner of the bridge for additional sediment control. For erosion control, ditch blocks were installed on the east approach along the cut slope and a drain was added half way down the slope using geotechnical liner and logs. Pictures 2-10 and 2-11 show the bridge being installed and operational.

During Phase 2 road construction, binwall abutments will be constructed and the 70' bridge installed.

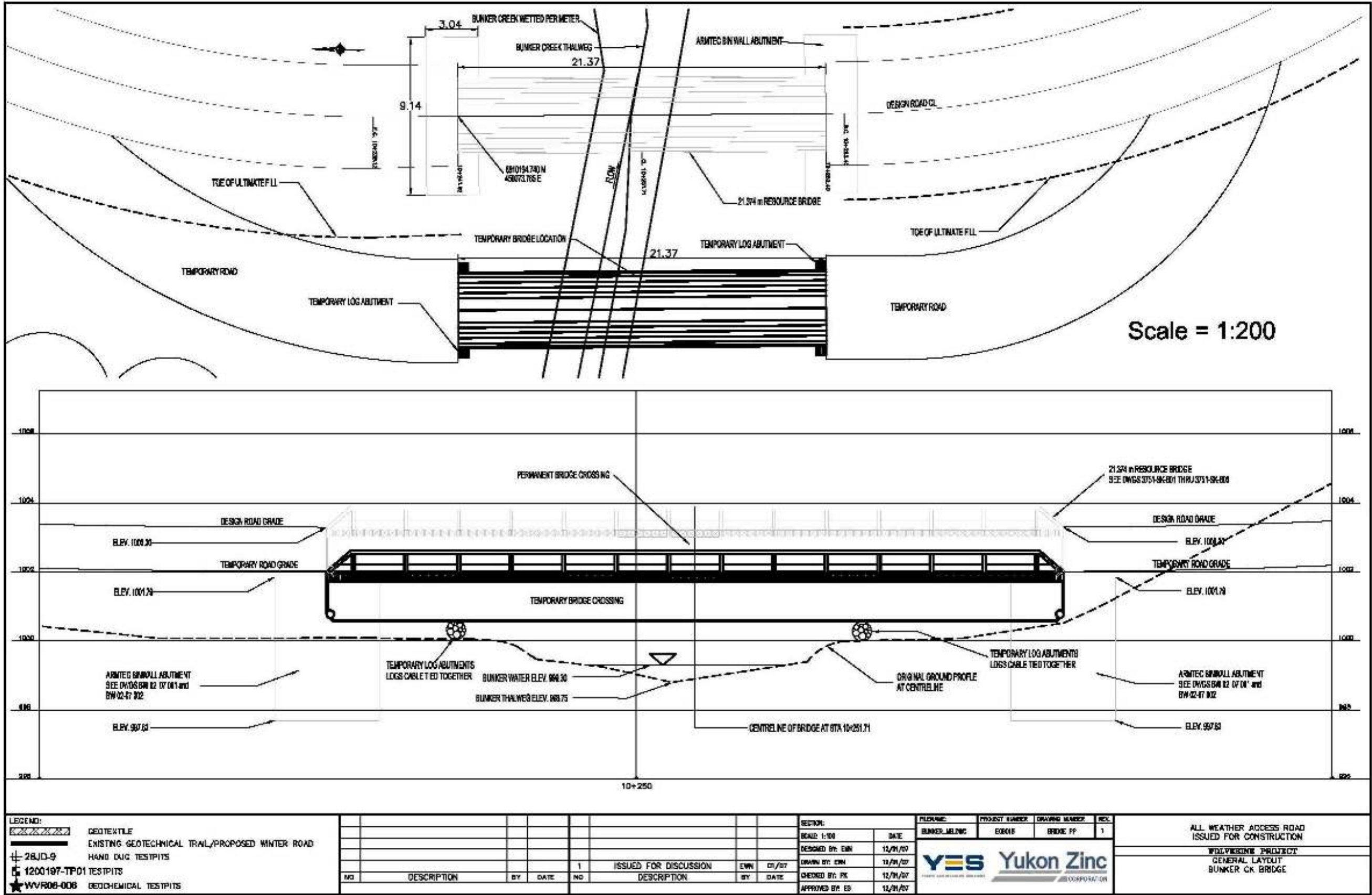


Figure 2-9 Bunker creek bridge general layout drawing



Picture 2-10 Installation of a 30 ft temporary bridge on timber abutments at Bunker Creek.



Picture 2-11 Bunker Creek temporary bridge, looking south.

2.3 Surface Water Treatment Infrastructure

Water treatment was conducted underground from January through May 2007, until warmer weather enabled the surface infrastructure to be used for water storage and treatment. From June to December 2007 water treatment with ferric sulphate dosing was conducted in-line as water was pumped from underground settling sumps to the surface settling and treatment sumps. Figure 2-10 details the location of the surface water treatment sumps with respect to the mine portal. In late August, winterizing of the water storage and treatment infrastructure commenced; a settling sump was constructed inside an existing coverall building to provide initial settling or water storage during the winter months (see Section 2.3.1). Temporary Sprung structures were erected over the water treatment plant inlet (WIS) and discharge (WDS) sumps (see Section 2.3.2).

2.3.1 Settling Sump Construction

Construction of the coverall dirty sump (CDS) contained within a pre-existing coverall structure commenced August 31st. The sump has a design volume of 540 m³ and additional design details and design drawings are provided in the *Wolverine Project Water Management and Treatment Plan* (December 2007). The completed sump is shown in Picture 2-12. A weighted silt curtain was installed (not shown in Picture 2-12) to enhance settling of solids. The sump was constructed to support the existing surface water treatment sumps, should additional settling be required, but the sump was not used in 2007. Visual monitoring was conducted daily throughout the September construction period and the applicable Environmental Monitoring reports are provided in Appendix A.



Picture 2-12 Completed CDS (September 24th, 2007)

Soil samples were taken of the material removed from the native ground during sump construction. Acid base accounting (ABA) analysis returned potentially acid generating (PAG) results (see Section 0), and based on geochemical review by from AMEC Earth and Environmental (AMEC), shake flask testing was performed. All analyzed parameters in the shake flask test samples were below *Canadian Metal Mining Effluent Regulation Schedule 4* (MMER) limits of deleterious substances, by at least one order of magnitude, and were therefore characterized by AMEC as non-acid generating (NAG), and deemed satisfactory for use in construction activities. The excavated material was used to line the temporary waste rock pad Phase 2 extension (see Section 2.4).

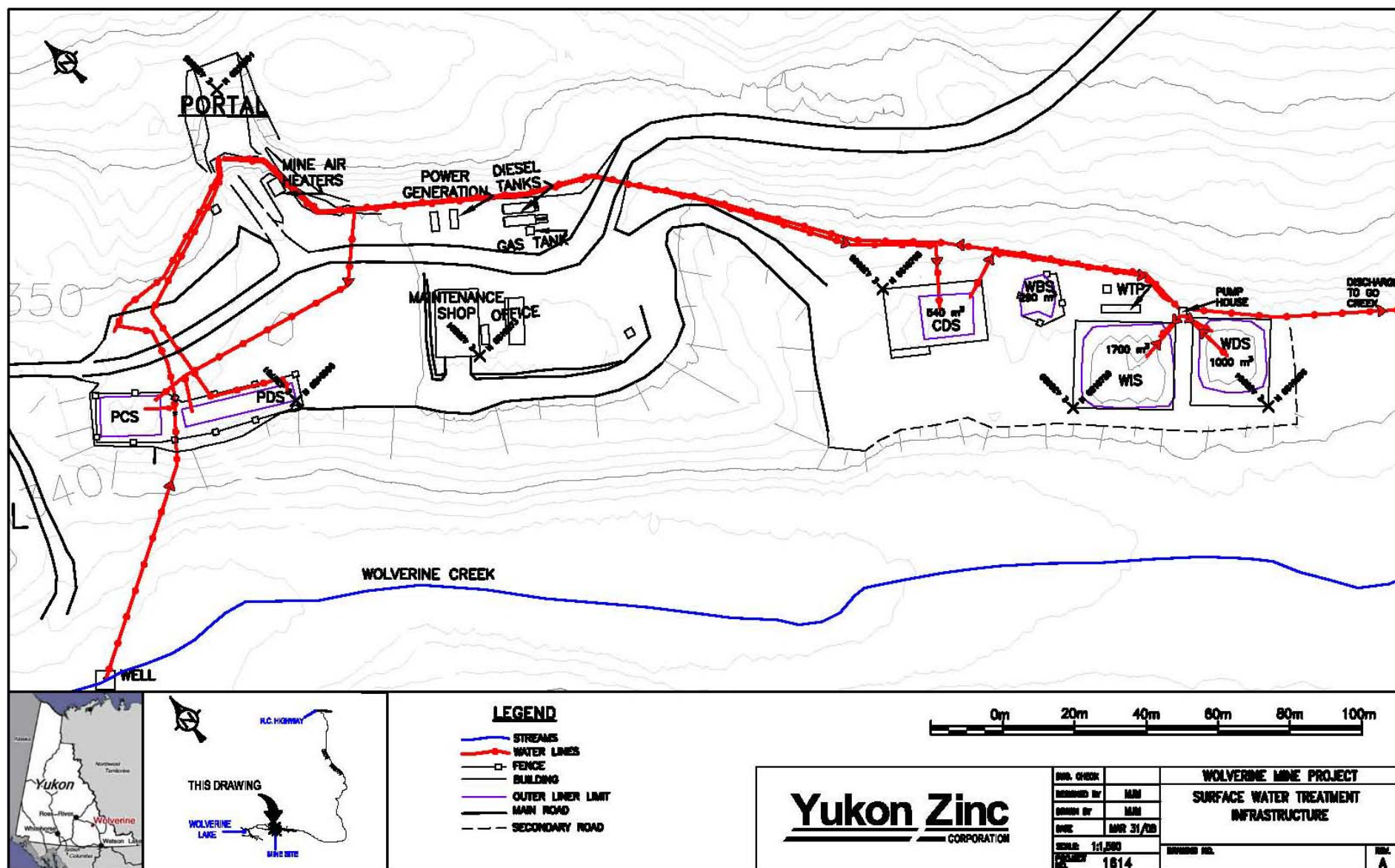


Figure 2-10 Surface water treatment infrastructure

2.3.2 Water Treatment Sump Winterization

To prevent freezing over the 2007/2008 winter period, the WIS and WDS were covered with temporary Sprung Structures and radiant heaters were installed (Picture 2-13 and Picture 2-14, respectively). Daily monitoring of the installation was conducted September 13th to October 15th inclusively and the applicable Environmental Monitoring reports are provided in Appendix A.



Picture 2-13 Completed Sprung Structures over the WIS and WDS (October 2007)



Picture 2-14 Radiant heaters within the Sprung Structure over the WDS sump (September 2007)

2.3.3 Decommissioning of Portal Settling Sumps

The portal settling sumps include the portal dirty sump (PDS) and clean sump (PCS) (see Figure 2-10) and were used from May to October 2007 for initial treatment and settling of all the water pumped from the underground test mine prior to being either discharged to Go Creek, or pumped to the lower treatment ponds for further ferric sulphate treatment. Some slumping of the bank west of the PCS was observed following spring melt, and a geotechnical engineer was consulted to evaluate the risks associated with the slumping. Upon his recommendations, the bank was monitored routinely throughout the season and the sumps were decommissioned in the winter. The associated Environmental Monitoring reports are provided in Appendix A.

2.4 Temporary Waste Rock and Ore Storage Facility

The temporary waste rock and ore storage facility currently contains ~14,600 m³ of material generated during the 2005 underground test mine construction.

In late summer the pad was extended ~150 m to the north to allow for storage of ~65,000 m³ of material that will be generated during the pre-production development program. Details and as-constructed drawings are contained in the *Temporary Waste Rock and Ore Storage Facility as-Constructed Report and Drawings Advanced Exploration Phase* (December 2007).

The storage pad and collection sump were either monitored daily during rain events and construction activities, or weekly (Environmental Monitoring reports provided in Appendix A). Material excavated from the construction of the CDS (Section 2.3.1) and the 150-man camp site (Section 2.7) was used to line the Phase 2 extension (Picture 2-15), and the geochemical results are summarized Section 0.



Picture 2-15 Temporary waste rock and ore storage facility (October 2007)

2.5 Land Treatment Facility

A 60 m³ land treatment facility cell was constructed in June 2006 to bio-remediate hydrocarbon contaminated soil resulting from a diesel spill in August 2006 (Cell 1 in Figure 2-1). In September 2007, a second cell (Cell 2 in Figure 2-1) was constructed to bio-remediate ~400 m³ of hydrocarbon contaminated soil stored on-site from various diesel spills, as well as excess material from Cell 1. The completed cell, prior to the transfer of soil, is shown in Picture 2-16. Details of the 2007 cell construction, and origin and treatment of all the material stored at the land treatment facility area are provided in the *Land Treatment Facility 2007 Annual Report* (March 2008). The land treatment facility was monitored daily to weekly June 12th through October 9th; weekly Environmental Monitoring reports are provided in Appendix A.



Picture 2-16 Completed land treatment facility cell 2 prior to acceptance of soil (September 18th, 2007)

2.6 Site Roads

2007 activities along the site roads (that connect the airstrip to the exploration camp (Figure 2-1)) focused on sediment and erosion control measures such as re-contouring of slopes, armoring of ditches, and re-vegetation. Monitoring was conducted frequently from mid-May through to the onset of winter at the beginning of October, and reports for the various sections of road are summarized in weekly Environmental Monitoring reports provided Appendix A. Erosion control activities included silt fence installation, geotextile fabric bedding underneath cobble, and seeding of re-contoured slopes. Additional information on progressive reclamation activities are provided in Section 4.

2.7 Construction Camp

In late June 2007, grubbing and clearing of an area for a 150-man construction camp commenced. The camp site is located east of the portal area. The rectangular pad is approximately 64 m x 240 m (see Figure 2-1). The pad was leveled by moving soil from the north end to the south end (as detailed in the Environmental Monitoring reports in Appendix A), and was surveyed in October 2007 to establish the grades and boundaries for additional design work.

2.8 Potable Water Wells

Potable water wells to supply the 150-man camp were investigated and drilled in 2007, with supervision by Water Management Consultants (WMC). After examining the 2005 and 2006 groundwater monitoring well results, WMC focused the site investigation to three potential producing water well sites – A, B and C (Figure 2-11). From August 21st to September 3rd, WMC supervised drilling at sites A and B. One test well (TW07-1) and one production well (PW07-1) were installed at site B. A second drilling program was conducted in November to establish a back-up production well at site B (PW07-2). Inflow pumping rates and water quality testing was conducted in August and November to determine viability for use as a potable water source for the construction camp.

PW07-2 was sampled at the beginning and near the end of the pump test and most metals of concern decreased by at least one order of magnitude during this seven hour period. The PW07-1 water quality was sampled after 4.5 hours of development when the water was running clear.

Initial results indicate that water treatment will be required to remove iron and manganese. Additional testwork will be conducted prior to plant design to confirm the 2007 results.

Pump tests at TW07-1 and PW07-2 indicated flow rates of 1.3 L/s and 0.3 L/s, respectively. As 0.3 L/s is needed for potable water at the 150-man camp, wells PW07-1 and PW07-2 have adequate flow. The construction of the drill pads and the installation of the wells were summarized in weekly Environmental Monitoring reports (Appendix A).

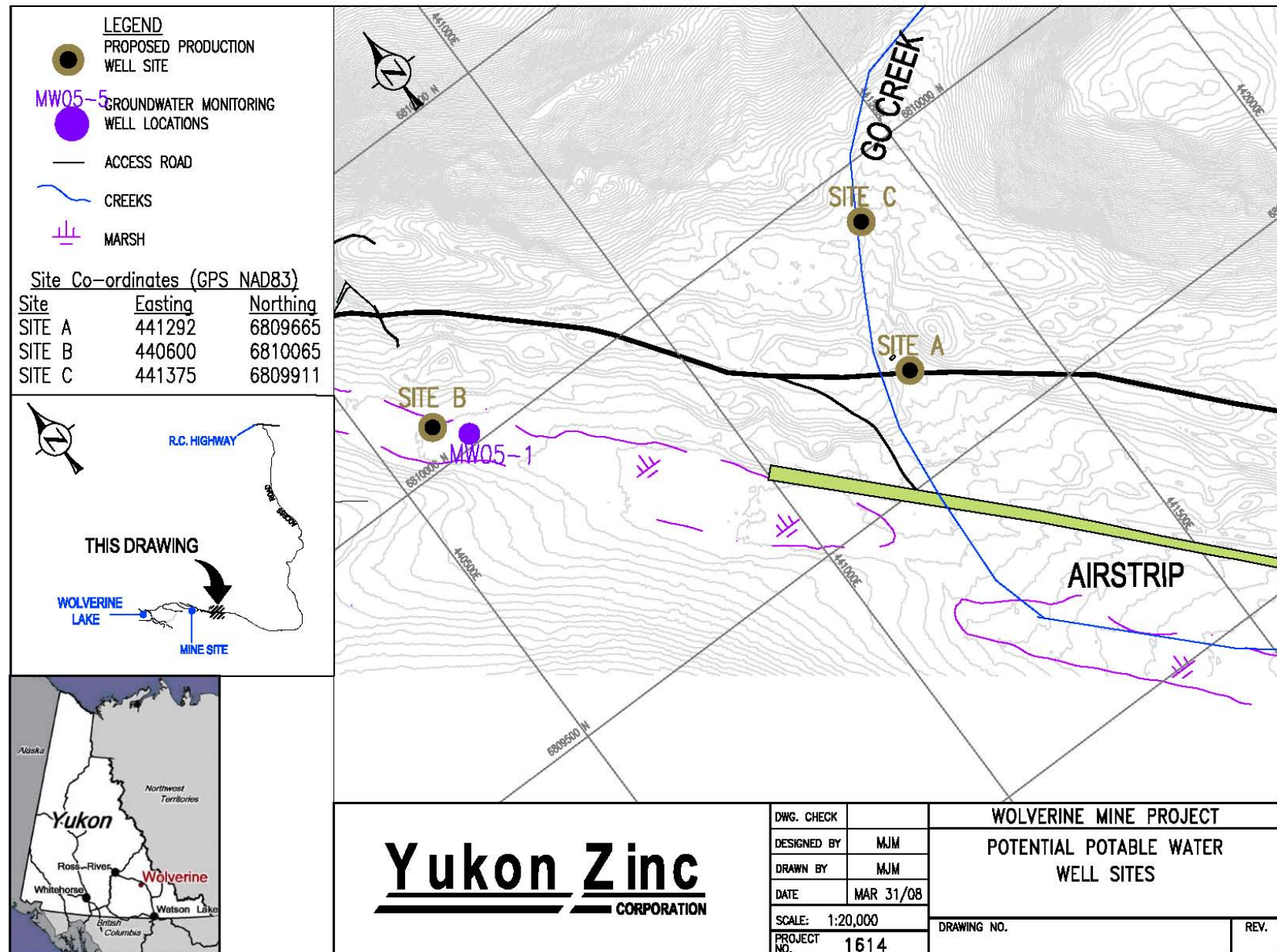


Figure 2-11 Potential potable water production well sites

3 Monitoring Activities

Monitoring conducted throughout 2007 included wildlife monitoring, geochemical characterization (acid base accounting and shake flask testing), weather monitoring, piezometer water levels, surface water quality, hydrological assessments, groundwater quality, stream sediment quality, and benthic and periphyton characterization. The surface water and sediment monitoring described below is further detailed in the *Type B Water Licence QZ01-051 Annual Report 2007* (January 2008), which includes the lab reports that comprise the tables pertaining to the water and sediment quality results (for Type B Water Licence QZ01-051 Surveillance Network Monitoring sites). Surface disturbance monitoring was conducted regularly by on-site environmental personnel, and results of the monitoring are provided in the Environmental Monitoring reports mentioned in the above sections. Monitoring of various sites was recorded on a monitoring tracking sheet filled out by on-site Environmental Technician, and is provided in Appendix A.

3.1 Wildlife Monitoring

A log of wildlife observations was kept throughout 2007 (Table 3-1). The Wildlife Protection Plan (required as per Part 12.3 of the QML) is currently in preparation.

Table 3-1 2007 Wildlife Monitoring Log

Date	Time	Location	Species	# of Animals	Activity
25-Feb	1330	In camp	Squirrel	1	Around offices, in trees
12-Mar	1800	In camp	Weasel	1	
18-Mar	1200	Site Road - km 5	Ptarmigan	~20	
27-Mar	1140	In camp	Marten	1	Around tool shack
27-Mar	1300	Site Road	Wolf	1	Black wolf near portal
27-Mar	1700	Site Road - km 2.5	Wolf	1	Black wolf
14-Apr	500	In camp	Porcupine	1	Near pantry
15-Apr	500	In camp	Wolf	1	Near pantry
15-Apr	1330	In camp	Moose	1	Young bull
16-Apr	700	On lake	Wolf	4	
26-Apr	600	In camp	Fox	1	Red fox at kitchen window
6-May	900	Site Road - km 3	Robin	1	
11-May	700	On lake	Wolf	2	
12-May	-	Site Road - km 1	Grouse	1	Seen continuously
14-May	1320	Site Road - km 1	Eagle	3	two bald and one golden eagle circling
18-May	715	In camp	Rabbit	1	Near rec centre
20-May	800	In camp	Porcupine	1	Near fire pit
25-May	1750	On lake	Loon	1	Near little Wolverine Lake
2-Jun	-	Site Road - Km 1	Grouse	1	crossing road
2-Jun	-	Site Road - Km 1	Porcupine	1	crossing road
2-Jun	-	Site Road - Km 1	Grizzly	1	running up road and into bush
27-Jun	1500	Airstrip	Moose	2	Cow and calf
29-Jun	730	In camp	Moose	2	Cow and calf on lake shore, swam away

Table 3-2 2007 Wildlife Monitoring Log (cont'd)

Date	Time	Location	Species	# of Animals	Activity
5-Jul	1600	In camp	Rabbit	1	
11-Jul	740	Site Road - Km 1	Moose	1	Large Bull moose
17-Jul	1845	On lake	Loon	1	Loon on little wolverine lake
21-Jul	-	In camp	Rabbit	1	
26-Jul	930	Site Road - Km 3	Moose	1	Young bull, approx 3 yrs
27-Jul	1900	Site Road - Km 1	Porcupine	1	
28-Jul	900	Site Road - Km 1	Wolf	1	Black wolf
29-Jul	1145	Airstrip	Caribou	1	Bull caribou
29-Jul	2100	In camp	Grizzly	1	On beach in front of the kitchen
30-Jul	1500	Highway	Lynx	4	Money creek - lynx and 3 kittens
30-Jul	1545	Highway	Wolf	1	Lone wolf at Nooga creek
5-Aug	1615	Site Road - Km 3	Moose	1	Cow on high road
11-Aug	1000	Portal	Moose	2	Cow and calf
11-Aug	700	Site Road - Km 1	Grizzly	none	Bear feces
22-Aug	1800	Airstrip	Grizzly	1	playing with fuel drums
30-Aug	1400	In camp	Black Bear	1	Near camp heli pad
3-Sep	700	Airstrip	Canada Goose	16	
27-Oct	-	Access Road	Moose	1	Km 18 - Bull
27-Oct	-	Access Road	Moose	1	Km 20 - Bull
29-Oct	-	Access Road	Caribou	3	Km 16
30-Oct	-	Access Road	Moose	2	Km 23
3-Nov	-	Access Road	Fox	1	Km 18
13-Nov	-	Access Road	Moose	2	Km 22 - bull and cow
15-Nov	-	Access Road	Moose	2	Km 19 - bull and cow
16-Nov	-	Access Road	Caribou	2	Km 16
17-Nov	-	Access Road	Moose	3	Km 22
17-Nov	-	Airstrip	Fox	1	
8-Dec	1130	Access Road	Wolf	2	On lake south of Km 14
8-Dec	945	Access Road	Ptarmigan	~40	Flying at Km 18
9-Dec	830	In camp	Fox	1	Snooping around camp, often seen around site
16-Dec	1030	Access Road	Moose	3	Km 22 - cow and two calves
17-Dec	1200	Access Road	Moose	1	Km 24 - lone cow
20-Dec	-	Access Road	Owl	1	Km 5
20-Dec	-	Access Road	Fox	1	Km 22

3.2 Geochemical Characterization

Geochemical characterization via acid base accounting was conducted on native material to establish metal leaching potential: all material that was deemed non-acid generating material (NAG) based on criterion provided by AMEC Earth and Environmental (AMEC) (as detailed in *General Site Plan (Version 2007-03)*) was used in construction activities; material that was deemed potentially acid generating material (PAG) was sent for shake flask testing.

3.2.1 Acid Base Accounting

Acid base accounting was conducted to establish neutralization potential, acid generation potential and metal leaching potential of borrow sources or excavated sites. The following analyses were conducted: paste pH, total sulphur (Total S), sulphate sulphur (Sulphate), sulphide sulphur (by difference) (Sulphide) and neutralization potential (NP). The results are summarized in Table 3-3 and full lab results provided in Appendix B. Samples labeled “km 2 old road A & B”, “New Camp Site” (from lab report VA07090006), and “New Camp Road” were all deemed NAG based on the ABA results in Table 3-3 using the AMEC criterion. All other samples summarized in Table 3-3 were deemed PAG and were sent to ALS Environmental Laboratories (ALS) for shake flask testing.

3.2.2 Shake Flask Testing

If acid base accounting results offer evidence that the borrow sources are potentially acid generating, as was the case at four sites (Gorge, km 2.5 on the upper road, 150-man camp, and coverall settling sump material), further testing to quantify the metal leaching potential of the material was required. Shake flask testing involved a 24 hour 3:1 deionized water to rock extraction procedure, and the resulting leachate was analyzed for pH and metals using ICP-MS. These results are presented in Table 3-4, and the full lab reports are presented in Appendix B. Leachate pH values ranged from 6.51 to 7.86 and are well within the acceptable range in pH as regulated by the MMER. Regulated metals arsenic, copper, lead, nickel and zinc were all at least one order of magnitude below the MMER guidelines. As such, all material samples analyzed in 2007 for ABA and shake flask were deemed NAG, and appropriate for use during construction.

Table 3-3 2007 acid base accounting results for borrow and excavation sites.

Location	Sample ID		ABA Test Results										
		Parameter	Paste pH	Fizz Rating	NP	AP	NNP	NPR	Total S	Sulphate	Sulphide	ABA based Acid Potential*	Shake flask test result
		Units			kg CaCO 3/t rock	kg CaCO 3/t rock	kg CaCO 3/t rock	-	%	S %	S %		
		Lab Report											
Gorge	VTM NAD 83 E-0439851 N-6810944	VA07040287	6.2	1	4	6.6	-3	0.61	0.21	0.19	0.02	PAG	
Gorge	VTM NAD 83 E-0438265 N-6812448	VA07040287	7.2	1	8	0.9	7	8.53	0.03	<0.01	0.03	PAG	NAG - See Shake Flask Report L539652
km 2.5 on the lower site road	km 2.5	VA07048595	6.6	1	5	1.9	3	2.67	0.06	0.05	0.01	PAG	NAG - See Shake Flask Testing Report L539652
km 2 on the upper site road	km 2 old road A & B	VA07065971	7.7	1	10	0.3	10	32	0.01	0.01	<0.01	NAG	
			7.7	1	12	0.3	12	38.4	0.01	0.01	<0.01	NAG	
150-man camp site	New Camp Site	VA07073067	7	1	7	0.6	6	11.2	0.02	0.01	0.01	PAG	NAG - See Shake Flask Report L539652
150-man camp site	New Camp Site	VA07090006	8	1	13	0.6	12	20.8	0.02	0.01	0.01	NAG	
Material from coverall settling sump	Coverall	VA07090006	7.6	1	6	6.9	-1	0.87	0.22	0.22	<0.01	PAG	NAG - See Shake Flask Report L557308
Access road to 150-man camp site	New Camp Road	VA07090006	8	1	14	0.6	13	22.4	0.02	<0.01	0.02	NAG	

*Based on criterion provided by AMEC Earth and Environmental (as detailed in the *General Site Plan Version 2007-03*).

Table 3-4 Shake flask testing results for borrow and excavation sites.

Sample ID	MMER*	NEW CAMP SITE	KM 2.5	PORTAL BORROW SITE	GORGE BORROW SITE	COVERALL MATERIAL
Date Sampled		02-Aug-07	02-Aug-07	02-Aug-07	02-Aug-07	20-Sep-07
ALS Sample ID		L539652	L539652	L539652	L539652	L557308
Leachable Anions & Nutrients						
pH	6.0-9.0	7.03	6.51	7.86	7.26	7.76
Leachable Metals						
Aluminum (Al)	0.5	4.09	1.37	0.0272	3.46	0.134
Antimony (Sb)		0.00016	0.0072	<0.00010	0.0008	0.00078
Arsenic (As)		0.00108	0.00689	0.00018	0.002	0.00133
Barium (Ba)		0.0629	0.13	1.81	0.158	0.0205
Beryllium (Be)		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth (Bi)	0.3	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)		<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)		<0.000050	0.000467	0.000054	0.000202	0.000436
Calcium (Ca)		0.6	0.6	19.3	2.2	20.1
Chromium (Cr)		0.00857	0.00542	0.00308	0.03850	<0.00050
Cobalt (Co)	0.2	0.00584	0.00068	<0.00010	0.0058	0.00019
Copper (Cu)		0.03200	0.02620	0.00931	0.04920	0.00701
Iron (Fe)		3.02	1.9	0.084	2.68	0.218
Lead (Pb)		0.001240	0.015900	<0.00020	0.006170	0.008520
Lithium (Li)		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium (Mg)	0.5	0.81	0.27	3.18	3.63	1.77
Manganese (Mn)		0.26300	0.05320	0.00352	0.13100	0.01300
Mercury (Hg)		<0.000050	<0.000050	<0.000050	<0.000050	<0.00010
Molybdenum (Mo)		0.00060	0.00817	0.00160	0.00243	0.00689
Nickel (Ni)		0.00874	0.00286	0.00058	0.0661	0.00083
Phosphorus (P)	0.5	<0.30	0.53	<0.30	<0.30	<0.30
Potassium (K)		<2.0	<2.0	<2.0	<2.0	<2.0
Selenium (Se)		<0.0010	0.0036	<0.0010	<0.0010	0.0021
Silicon (Si)		6.80	4.13	3.08	7.56	3.29
Silver (Ag)		0.000085	0.000357	0.00001	0.000131	0.000011
Sodium (Na)	0.5	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium (Sr)		0.0031	0.0365	0.0735	0.0084	0.0428
Thallium (Tl)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)		<0.00030	<0.00030	<0.00040	<0.00020	<0.00010
Titanium (Ti)		0.12	0.032	<0.010	0.082	<0.010
Uranium (U)	0.5	0.000177	0.001140	0.000063	0.000249	0.001330
Vanadium (V)		0.0171	0.0244	<0.0010	0.014	<0.0010
Zinc (Zn)		<0.010	0.0198	<0.0070	0.0356	0.0142

*MMER Schedule 4: Limits of deleterious substances

3.3 Weather Monitoring

Weather is logged continuously on an hourly basis via a “HOBO Onset” weather station located near south end of the airstrip. The station was installed May 10th, 2006 and collects the following data: temperature, relative humidity, solar radiation in and out, wind speed and direction, and barometric pressure. The weather station is downloaded approximately every two months by an Environmental Technician.

The mean, maximum, and minimum temperatures recorded by the weather station in 2007 are presented in Figure 3-1. The values for August were interpolated from July and September values due to battery failure in August. The mean monthly temperature at the project site in 2007 was -3°C. Mean monthly temperatures are below freezing October through April and above freezing May through September. The minimum recorded temperature in 2007 was -36.4°C and the maximum recorded temperature was 24.4°C.

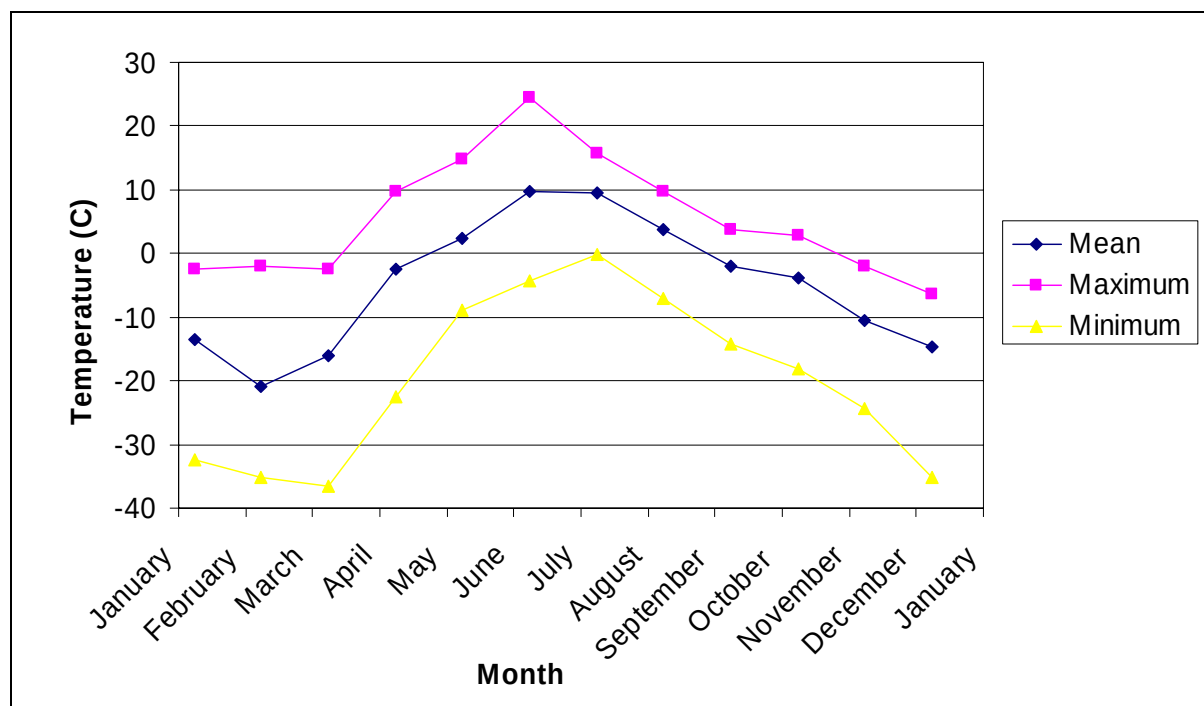


Figure 3-1 Mean, maximum and minimum temperatures (°C) by month

The monthly precipitation for 2007, as recorded by the HOBO weather station, is presented in Figure 3-2. Again, August values were interpolated from September and July values due to battery failure in early August. June was the wettest month with 58.14 mm of precipitation and December and January were the driest months with no recorded precipitation (precipitation falling as snow in that period).

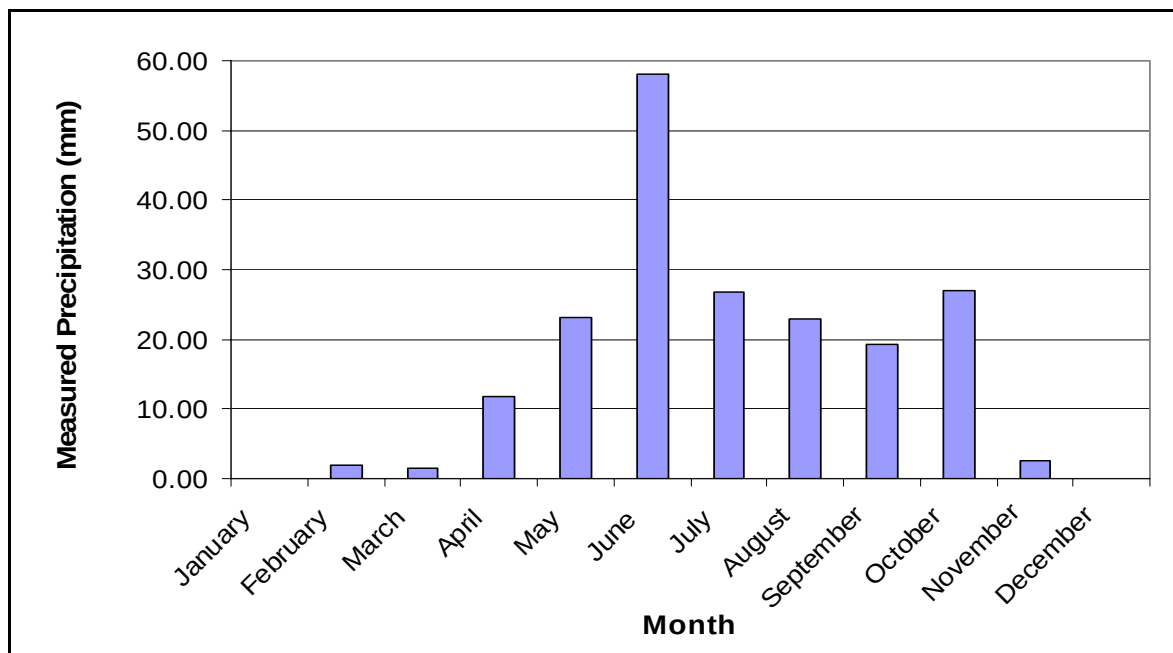


Figure 3-2 2007 monthly precipitation

3.4 Piezometer Monitoring

Piezometers installed northeast of the mine portal in two exploration boreholes monitor groundwater conditions in the mineralized zones at the anticipated depth of mining, as shown in Figure 3-3. A graph of potentiometric elevations from deep and shallow piezometer locations PZ-A and PZ-B is presented in Figure 3-4, with precipitation measurements included. PZ-A was not downloaded after October 2007, due to lack of access from snow depth, and as such, there is no data for PZ-A in November and December 2007. There was an increase in the water level with spring freshet in late May and early June; nevertheless, PZ-B levels returned to the levels measured in early 2007 by the end of December 2007.

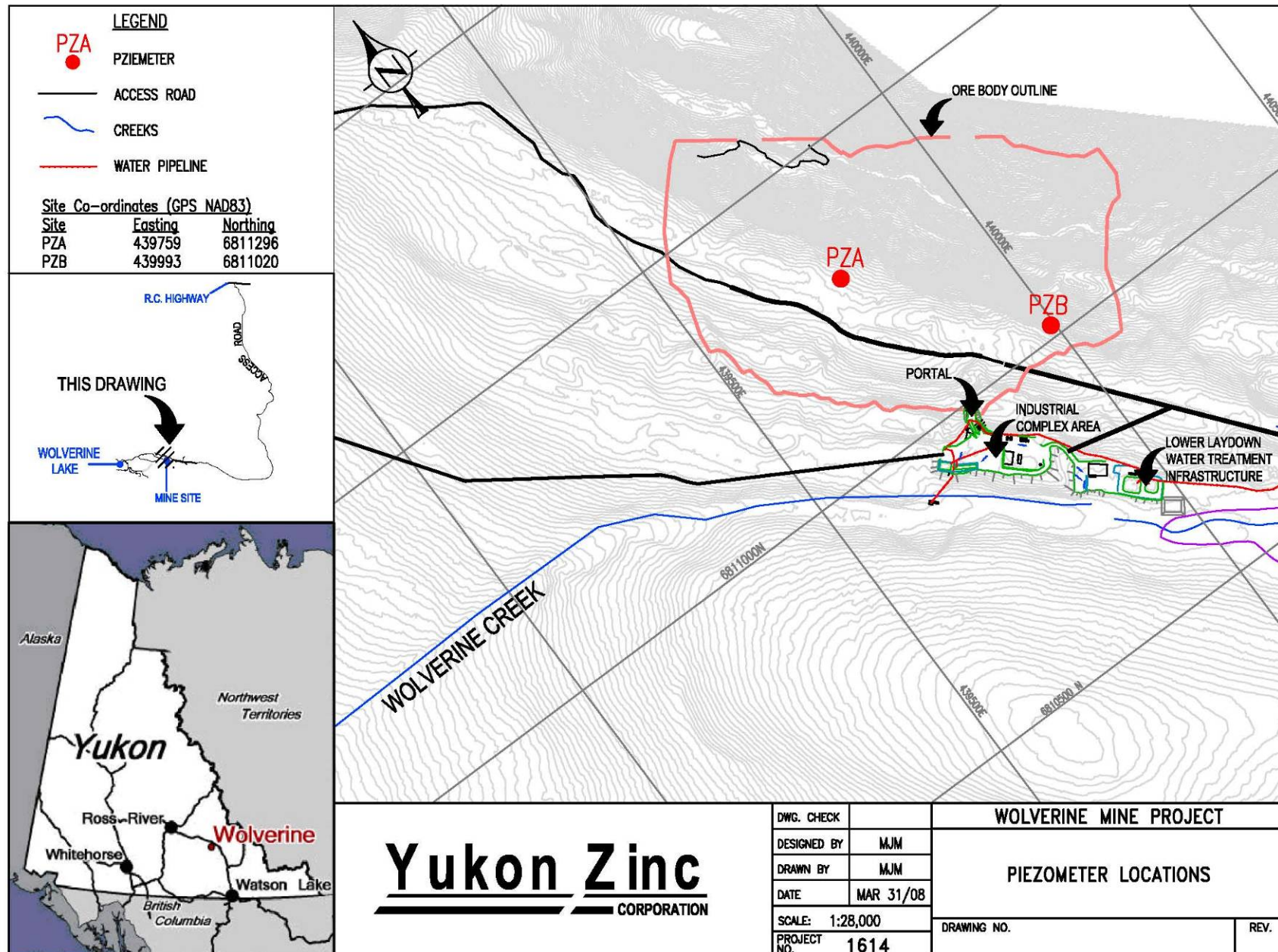


Figure 3-3 Piezometer locations and co-ordinates

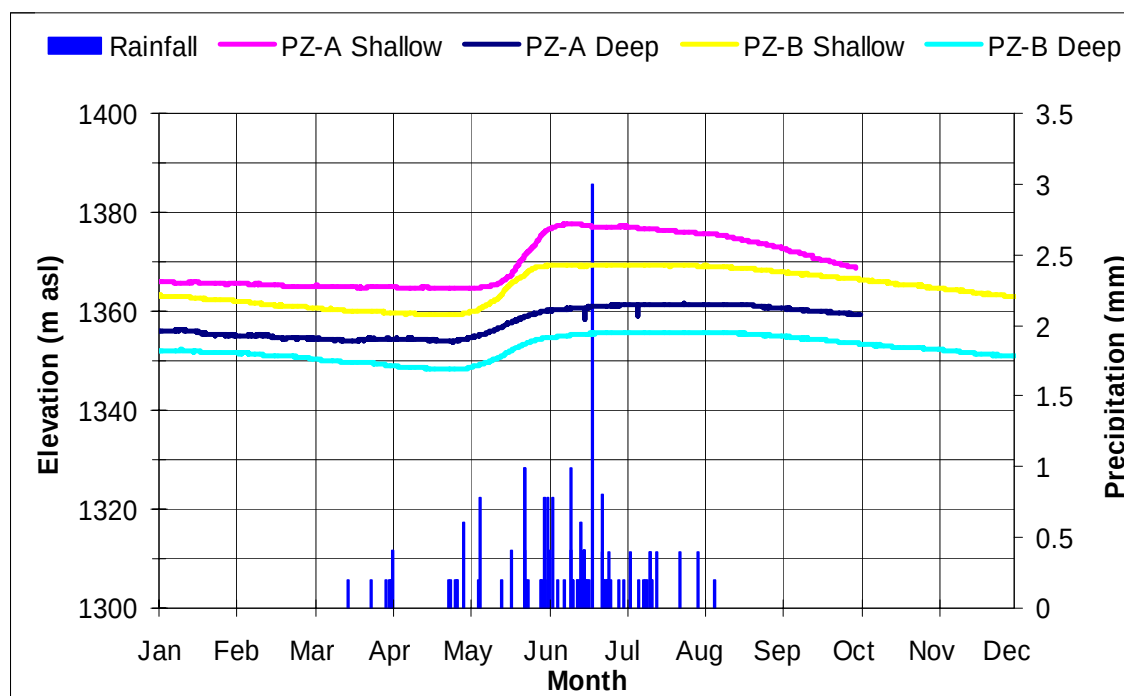


Figure 3-4 Potentiometric elevations with recorded precipitation

3.5 Water Quality Monitoring

Water quality, sediment and hydrology monitoring was conducted as per the Type B Water Licence QZ01-051 Surveillance Network Monitoring (SNM) Program. Sites were sampled more frequently than required and additional sites were also monitored to supplement the database information provided within the *Wolverine Project Environmental Assessment Report* (October 2005). The water quality stations required and actual sampling frequencies are summarized in Table 3-5, and locations are shown in Figure 3-5.

The sampling frequency of sites W9, W12, W16, UTMD, WRSS, C-PS and WTSP were set by the Type B water Licence. All other sites were sampled monthly, where possible, to provide the baseline water quality of the watersheds surrounding the Wolverine Project. It is important to note that many of these sites are also included in the Type A Water Licence QZ04-065 monitoring requirements (sampling as per the A Licence requirements will be triggered by the onset of activities pertaining to quartz milling and mining).

Clarification pertaining to sample collection sites and nomenclature is as follows:

- UTMD represents water collected underground in the underground settling sump.
- WRSS represents water sampled at the collection sump at the south end of the temporary waste rock and ore storage facility.
- C-PS represents the portal area collection sumps (PCS and PDS), as water is initially treated as it is pumped from the underground to the PDS, and flows via gravity into the PCS before being pumped to the WTSP.
- WTSP is represented by the water treatment plant (WTP) inlet sump (WIS) and WTP discharge sump (WDS) and receives the final treatment from the C-PS prior to being discharged to Go Creek.

- AWP-SP does not apply as an aggregate wash plant was not constructed.
- T1, R1 and R2 refer to the tailings pond, the retention pond and discharge from the retention pond, respectively, and are not yet constructed.

Table 3-5 Required water quality station sampling frequency and 2007 sampling summary

Water Quality Station	Required Sampling Frequency*		Sampling Conducted											
	B-Licence	A-Licence	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
W9	Q	M**	X	X	X	X	X	X	X	X	X	X	X	
W12	Q	M	X	X	X	X	X	X	X	X	X	X	X	
W16	M	M	X	X	X	X	X	X	X	X	X	X	X	X
UTMD	M	-	X	X	X	X	X	X	X	X	X	X	X	X
WRSS	W	-					X	X	X	X	X	X		
C-PS	W	-					X	X	X	X	X	X		
WTSP	W	-					X	X	X	X	X	X	X	X
AWP-SP	W	-												
W1	-	M	X	X	X	X	X	X	X	X	X	X	X	
W8	-	M	X	X	X	X	X	X	X	X	X	X	X	
W14	-	M	X	X	X	X	X	X	X	X	X	X	X	
W15	-	M	X	X	X	X	X	X	X	X	X	X	X	
W18	-	-								X				
W21	-	M				X	X	X	X	X	X	X	X	
W22	-	M									X	X	X	
W31	-	M				X	X	X	X	X	X	X		
W40	-	M	X		X	X	X	X	X	X	X	X	X	
W42A	-	-					X	X	X					
W42B	-	-					X	X	X	X				
W44	-	-					X	X	X	X				
W47	-	-	X				X	X	X	X				
W71	-	M	X		X	X	X	X	X	X	X	X	X	
W72	-	M	X		X	X	X	X	X	X	X	X	X	
W73	-	M	X		X	X	X	X	X	X	X	X	X	
W75	-	-	X		X		X	X	X	X				
W80	-	M**	X	X	X	X	X	X	X	X	X	X	X	
W81	-	M		X	X	X	X	X	X	X	X	X	X	
W82	-	M**	X	X		X	X	X	X	X	X	X	X	
W83	-	-	X	X		X	X	X	X	X				
W84	-	-	X	X	X	X		X	X	X				
L1	-	M	X	X	X	X	X	X	X	X		X	X	
P1	-	-					X	X	X	X				
P2	-	-					X	X	X	X				
P3	-	-					X	X	X	X				
T1	-	M												
R1	-	D**												
R2	-	C												

*M = Monthly, W = Weekly, Q = Quarterly, C = Continuous flow monitoring when discharging from the Retention Pond (R1)

**Sampling is daily at W80 and R1 when discharging from R1 and weekly at W82 and W9 when discharging into Wolverine Creek

For lake and creek sampling locations, water samples were analyzed for physical parameters, total suspended solids (TSS), dissolved and total metals (by ICP-MS) and dissolved organic carbon. Mine water samples were analyzed for physical parameters, TSS, dissolved and total metals (by ICP-MS as well as the hydride method for selenium analysis) and mercury (by CVAS).

Water quality at UTMD, WRSS, C-PS and WTSP were taken weekly when possible, and often more frequently as required for water treatment. The annual average water quality results for these stations are summarized in Table 3-6 for the parameters with discharge limits outlined in the Type B Water Licence.

Table 3-6 Annual average water quality at SNM stations C-PS, UTMD, WRSS and WTSP

Parameters (mg/L)	ADL*	UTMD (n=154)	C-PS (n=31)	WTSP (n=30)	WRSS (n=26)
TSS	15	149.0	24.8	10.8	5.9
Ammonia Nitrogen	2.5	0.072	0.036	0.049	0.124
Total Arsenic	0.1	0.011	0.002	0.001	0.001
Total Cadmium	0.02	0.009	0.001	0.001	0.004
Total Copper	0.2	0.194	0.013	0.006	0.011
Total Lead	0.2	0.177	0.022	0.008	0.004
Total Nickel	0.5	0.010	0.006	0.005	0.013
Total Selenium	0.015	0.031	0.022	0.012	0.100
Total Zinc	0.5	0.850	0.111	0.053	0.190

*ADL = Allowable discharge limits for a grab sample as per the Type B Water Licence; bold numbers indicate values greater than the ADL

Water quality in the underground test mine (UTMD) was representative of incoming groundwater affected by the mineral rich zone located at the lower half of the test mine. UTMD water quality typically has TSS, selenium and zinc concentrations above the ADLs. With ferric sulphate treatment and initial settling, total zinc and TSS levels drop, as can be seen in the average C-PS water quality results (Table 3-6). Total selenium remains the parameter of concern for additional ferric sulphate treatment in the WTSP sumps. Prior to discharge, all water quality at the WTSP sumps is tested to ensure it is better than the ADLs. As shown in Table 3-6, concentrations are often an order of magnitude lower than the ADLs once the settling and treatment phases are complete (see WRSS column). The waste rock collection sump (WRSS) water quality had parameter concentrations below the ADLs for all parameters except for selenium, which was consistently ten times higher than the discharge limit. As such, when required, WRSS water was trucked to the WTSP area for treatment with C-PS water.

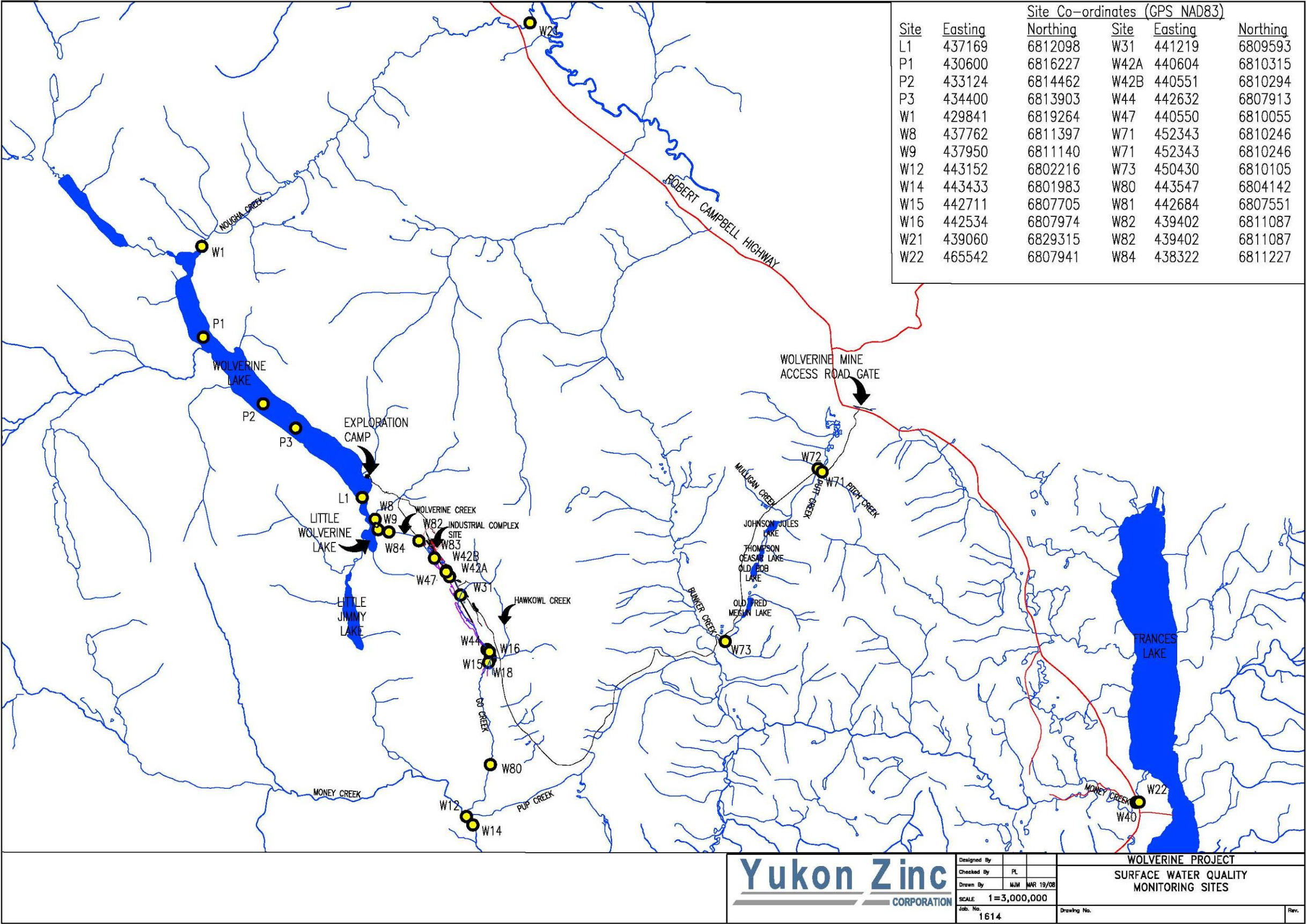


Figure 3-5 Surface water quality monitoring sites

Water quality samples at stations W9 (Wolverine Creek), W12 and W16 (Go Creek) were taken approximately monthly (more frequently than required by the Type B Water Licence), and the annual average water quality results are summarized in Table 3-7. Water quality results at W9, W12 and W16 in 2007 were comparable to concentrations measured in 2005 and 2006¹. Typically Wolverine Creek had higher metals concentrations than Go Creek, sometimes by an order of magnitude. Zinc concentrations are several orders of magnitude higher at W9, which is to be expected, due to the mineralized zone in the upper Wolverine watershed.

Table 3-7 Annual average water quality at SNM stations W9, W12 and W16

Parameters (mg/L)	CCME (mg/L)	W9	W12	W16	Total Metals (mg/L)	CCME (mg/L)	W9	W12	W16
Physical Parameters		n=11	n=11	n=12					
Conductivity		241.78	144.22	129.89	Phosphorus (P)		0.0127	0.0145	0.0125
Hardness		133.35	75.10	68.35	Potassium (K)		1.02	0.60	0.47
Total Suspended Solids	25¹	9.82	7.00	15.18	Selenium (Se)	0.001	0.0033	0.0008	0.0006
Total Dissolved Solids		157.64	104.91	90.55	Silicon (Si)		3.16	3.20	2.98
pH	6.5-9.0	8.09	7.91	7.92	Silver (Ag)	0.0001	0.000022	0.00003	0.00001
Turbidity		1.46	0.82	1.25	Sodium (Na)		0.9518	0.9718	0.9591
DOC		2.36	2.27	2.41	Strontium (Sr)		0.1119	0.0446	0.0372
Major Anions					Thallium (Tl)	0.0008	0.000003	<0.00005	<0.00005
Alkalinity-Total		99.13	60.40	58.87	Vanadium (V)		0.0004	0.0004	0.0003
Bromide		<0.1	<0.1	<0.1	Zinc (Zn)	0.03	0.1556	0.0034	0.0049
Chloride		0.70	<0.5	0.60	Dissolved Metals (mg/L)				
Fluoride		0.11	0.06	0.05	Aluminum (Al)		0.0051	0.0061	0.0077
Sulphate		32.46	13.78	8.98	Antimony (Sb)		0.0001	0.00005	0.0001
Nutrient Parameters					Arsenic (As)		0.0003	0.0003	0.0002
Ammonial Nitrogen	1.4-1.5²	<0.005	0.005	0.008	Cadmium (Cd)		0.0014	0.0000	0.0001
Nitrate Nitrogen	13	0.199	0.069	0.075	Calcium (Ca)		39.95	23.40	23.32
Nitrite Nitrogen		0.003	0.003	0.004	Chromium (Cr)		0.0003	0.0002	0.0003
Total Phosphate		0.011	0.016	0.011	Cobalt (Co)		0.000010	0.000025	0.000032
Dissolved Ortho-Phosphate		0.008	0.005	0.005	Copper (Cu)		0.0009	0.0006	0.0006
Total Metals (mg/L)					Iron (Fe)		0.0180	0.0206	0.0187
Aluminum (Al)	0.1	0.0666	0.0589	0.0563	Lead (Pb)		0.000053	0.000047	0.000040
Antimony (Sb)		0.0002	0.0001	0.00004	Magnesium (Mg)		8.15	4.06	2.46
Arsenic (As)	0.005	0.0005	0.0004	0.0003	Manganese (Mn)		0.0012	0.0098	0.0148
Cadmium (Cd)	0.00008³	0.0016	0.00002	0.0001	Mercury (Hg)		0.00001	0.00001	<0.00001
Calcium (Ca)		40.04	23.54	23.43	Molybdenum (Mo)		0.0008	0.0004	0.0004
Chromium (Cr)	0.0089	0.0006	0.0007	0.0007	Nickel (Ni)		0.0038	0.0007	0.0001
Cobalt (Co)		0.0001	0.0001	0.0001	Phosphorus (P)		0.005	0.003	0.005
Copper (Cu)	0.002⁴	0.0019	0.0009	0.0010	Potassium (K)		1.015	0.597	0.4902
Iron (Fe)	0.3	0.1856	0.1315	0.1155	Selenium (Se)		0.0033	0.0009	0.0007
Lead (Pb)	0.002³	0.0003	0.0001	0.0001	Silicon (Si)		3.10	3.14	2.88
Magnesium (Mg)		8.155	4.103	2.504	Silver (Ag)		<0.000005	0.00001	<0.000005
Manganese (Mn)		0.0145	0.0175	0.0195	Sodium (Na)		0.952	0.968	0.930
Mercury (Hg)		0.000015	0.000020	0.000010	Strontium (Sr)		0.1098	0.0446	0.0376
Molybdenum (Mo)		0.0009	0.0005	0.0004	Thallium (Tl)		0.000003	<0.000002	<0.000002
Nickel (Ni)	0.065³	0.0049	0.0007	0.0005	Vanadium (V)		0.00011	0.00011	0.00013
					Zinc (Zn)		0.1349	0.0025	0.0041

Note: *Bold numbers indicate exceedances of CCME guidelines for the protection of aquatic life. As per CCME guidelines: 1. Maximum induced TSS is 25 mg/L for 24 hours when background is less than or equal to 25; 2. At pH 8, temp 1-10°C; 3. For hardness = 60-120 mg/L CaCO₃; 4. For hardness = 0-120 mg/L CaCO₃

1. Provided in Type B Water Licence QZ01-051 Annual Report 2005 (dated April 3, 2006), and Annual Report 2006 (dated March 29, 2007).

All discharges are also required to pass a 96 hour LC₅₀ fish bioassay standard. Table 3-8 summarizes the results of the monthly 2007 bioassays. Since previous 2006 bioassay reports¹ all achieved a >100% LC₅₀, it was determined, in conjunction with Golder Associates Ltd., to limit the testing to a single toxicity test at 100% concentration. Hence, the January through July reports present the percentage survival of the test species after 96 hours in a 100% concentration test sample. In mid-August YZC reverted back to 96 hour LC₅₀ testing subsequent to an unexplainable laboratory test result (Table 3-8).

Bioassay results for both the untreated (January) and treated (February through December) water samples repeatedly achieved positive results.

Table 3-8 Bioassay results for 2007

Lab Report	Sample Identification	Sample Collection Date (Time)	96-h % Survival in 100% (v/v) Test Sample	96-h LC ₅₀ (95% Confidence Limits) [% vol/vol]
0700022	UTMD-ut	January 15, 2007	90	-
0700056	Bioassay Feb 13 07	February 13, 2007 (0830h)	100	-
0700096	UTMD 4-2T	March 13, 2007 (1230 h)	100	-
0700144	April YZC Bioassay	April 13, 2007 (0730 h)	100	-
0700198	UTMD3T	May 13, 2007 (1400h)	100	-
0700334	WTSP2	July 30, 2007 (2000h)	100	-
0700350	WTSP-1T	August 14, 2007	-	>100
	WTSP-2T	August 14, 2007	-	>100
0700351	WTSP-1T	August 15, 2007*	0/100	>100
0700356	Bioassay WTSP-2T	August 17, 2007 (0700h)	100	-
0700395	WTSP-2T	September 11, 2007 (0900)	-	>100
	CPS-1T	September 11, 2007 (0930)	-	>100
0700424	WTSP-2T	October 2, 2007 (1250h)	-	>100
0700470	WTSP-1T	November 2, 2007	-	>100
0700502	WTSP-2T	November 19, 2007 (1400h)	-	>100
0700548	WTSP-2T	December 10, 2007 (1045h)	-	>100

*Note: Two tests were conducted 100% concentration with WTSP-1T water sampled August 15th, 2007, the first achieved a 0% survival, the second, a 100% survival.

3.6 Hydrology Monitoring

Hydrological assessments are required quarterly at monitoring stations W9 and W12 and monthly at station W16 as per the Type B Water Licence. To ensure consistent monitoring, water level sensors are located at stations W9 and W12, and 3.4 km downstream of W16 at W80 (same stream reach). Water levels are measured hourly by the sensor, and monthly stream velocity measurements (Table 3-8) are taken manually when possible using a flow probe. Conversion of water level height to flow is done by plotting the manual measurements of water level versus volumetric flow and determining the trendline relationship. This relationship is then used to convert the hourly sensor water levels to hourly volumetric flow.

Table 3-9 Monthly stream velocity measurements

Station	Flow (m ³ /s)		
	W9	W12	W80
Jan	0.004	0.070	0.038*
Feb	-	-	-
Mar	-	-	-
Apr	0.006	0.024	0.020*
May	0.072	-	-
Jun	0.030	1.239	0.580*
Jul	0.053	0.567	0.600
Aug	0.034	0.360	0.350
Sep	0.024	-	0.260
Oct	0.016	0.140	0.080
Nov	0.022	0.150	0.049
Dec	-	-	-

*Indicates manual hydrology taken at W16 at time of the water quality sampling campaign, not at W80

3.7 Sediment Quality Monitoring

Sediment monitoring is required annually during summer low flows for W9, W12 and W16 for total metals. Samples were taken at the end of August 2007 in triplicate, and analyzed by ICP-MS. Sediment quality results are summarized in Table 3-10.

Values that exceed the *CCME (2004) Interim Sediment Quality Guidelines* (Sediment Guidelines) are presented as bold text in Table 3-10. Average concentrations for Cd, Cu As and Zn were above Sediment Guidelines at W9; average Cd and Cu concentrations were above Sediment Guidelines at W12; and average Cd, Cu and Zn concentrations were above Sediment Guidelines at W16. Total metal concentrations in the sediments found in Wolverine Creek (W9) are higher than those found in Go Creek (W12, W16), sometimes by an order of magnitude. These results are to be expected due to the mineralized zone in the upper Wolverine watershed. 2007 sediment concentrations are similar to 2005 and 2006¹ concentrations.

3.8 Benthic and Periphyton Monitoring

Periphyton and benthic invertebrate samples were collected at five creek sites (W9, W12, W16, W17 and W18) in the Wolverine project area to supplement the baseline database. W17 was established upstream of W16 and downstream of the Go Creek control site, W18.

The samples were collected between August 25th and 27th from natural substrates (cobble in riffle habitat) using standard methods (Resource Information Standards Committee, 1997, Freshwater Biological Sampling Manual). Three samples were collected at each site for periphyton (for biomass and taxonomy analyses) by scraping a known area (sample disc area of 7.8 cm², three scrapings, total area of 23.4 cm²). Three samples were also collected for benthic invertebrates (taxonomy analyses) using a Hess sampler, with each sample being a composite of three Hess settings (2 mm, 500 µm and 175 µm mesh size). A lake transect of Little Wolverine Lake was also conducted where five benthic invertebrate samples were collected in composites of three. The results of both the periphyton and benthic invertebrate samples are still pending and are expected to be completed by the end of April 2008. Upon receipt of these results, an addendum report will be submitted.

¹ Provided in Type B Water Licence QZ01-051 Annual Report 2005, dated April 3, 2006, and Annual Report 2006, dated March 29, 2007.

Table 3-10 W9, W12 and W16 sediment quality monitoring results 2007 (Lab Report A740740)

	Site	W9A	W9B	W9C	W12A	W12B	W12C	W16A	W16B	W16C
Parameters	Date	25-Aug	25-Aug	25-Aug	26-Aug	26-Aug	26-Aug	26-Aug	26-Aug	26-Aug
Total Metals by ICPMS (mg/kg)	ISQG (mg/kg)									
Aluminum (Al)	-	8890	9200	8550	11400	11700	12500	16000	15400	14600
Antimony (Sb)	-	1.5	1.8	1.7	0.3	0.3	0.3	0.1	0.2	0.2
Arsenic (As)	5.9	12.2	11.2	12	5.7	6.2	5.4	2	2.3	3.1
Barium (Ba)	-	382	569	398	248	252	264	122	149	175
Beryllium (Be)	-	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Bismuth (Bi)	-	0.2	0.4	0.2	0.1	0.1	0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	0.6	22	32.1	25.1	1.02	1.15	1.16	1.73	2.06	2.41
Calcium (Ca)	-	11300	16700	12200	4290	5210	5030	5490	6380	5970
Chromium (Cr)	37.3	21	20	20	31	30	33	57	56	55
Cobalt (Co)	-	11.1	11	11.7	11.7	12	12.2	18.6	17.6	17.8
Copper (Cu)	35.7	60	98.1	70	38.1	38.8	43.5	47.2	50.9	44.9
Iron (Fe)	-	23600	23700	21700	23900	25500	25200	26500	24800	25600
Lead (Pb)	35	19.5	22.8	19.6	8.7	8.8	9.3	2.1	2.3	2.2
Magnesium (Mg)	-	7280	6880	6970	6870	7320	7220	13100	11900	11900
Manganese (Mn)	-	867	1020	1000	992	1060	886	698	577	995
Mercury (Hg)	0.17	<0.05	0.07	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum (Mo)	-	2.2	2.2	2.4	0.6	0.6	0.6	0.5	0.5	0.6
Nickel (Ni)	-	118	157	131	30.8	30.6	31.8	39.4	38.3	38.1
Phosphorus (P)	-	1410	1580	1420	737	750	758	832	957	872
Potassium (K)	-	1030	964	936	459	494	485	329	344	319
Selenium (Se)	-	3.1	5.9	3.8	1.5	1.5	2.1	0.8	1.1	1.6
Silver (Ag)	-	0.36	0.57	0.39	0.15	0.2	0.19	0.09	0.12	0.09
Sodium (Na)	-	<100	<100	<100	<100	<100	<100	<100	<100	<100
Strontium (Sr)	-	48.6	68.5	53.3	16.1	18.4	17.7	13.2	16.6	15.9
Thallium (Tl)	-	0.11	0.13	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin (Sn)	-	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Titanium (Ti)	-	385	310	377	390	403	419	981	867	910
Vanadium (V)	-	47	35	36	29	28	30	39	40	39
Zinc (Zn)	123	3340	4390	3440	112	109	118	149	151	161
Zirconium (Zr)	-	0.6	0.6	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*Post-scripts A,B,C indicate triplicate sampling; ISQG=interim sediment quality guideline (CCME, 2004); bold numbers indicate that ISQG is exceeded

3.9 Groundwater Well Monitoring

Groundwater wells installed in 2005 and 2006 monitor the groundwater quality downslope of the underground mine in both the Go and Wolverine Creek watersheds. Figure 3-6 shows the location of the 2005 (MW05-X) and 2006 (MW06-X) installed groundwater wells, as well as the proposed (MW07-X) wells. No new groundwater monitoring wells were installed in 2007, however, two wells located downstream of the seepage dam (MW07-2) and upstream of the tailings facility (MW07-3) will be installed at the commencement of construction within the area.

Improvements to the 2005 and 2006 installed wells were made in the summer of 2007 and included the following:

- Installation of dedicated Waterra tubing in all the wells.
- Retrofitting of the standpipes to prevent leaking.
- Construction of foundation monuments as needed.

Monitoring of the groundwater wells was performed monthly where possible, however, during the winter months many of the well heads were frozen, and to prevent damage to the level loggers installed in the wells, samples were not taken at these locations. All groundwater samples were filtered in-line to prevent sample contamination and analyzed for physical parameters, major anions, nutrient parameters and dissolved metals (by ICP-MS). Table 3-11 summarizes the water quality sampling and/or water level monitoring dates of the groundwater monitoring wells. Average groundwater quality results are presented in Table 3-12 and the full lab reports are provided in Appendix C.

Table 3-11 Groundwater monitoring well water quality sampling and water level monitoring

Sample Site	Sampling in 2007*											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
05-1A				X	X	X	X	X	X	X		
05-1B				X	X	X	X	X	X	X		
05-2A					X	X	X	X	X	X		
05-2B					X	X	X	X	X	X		
05-3A			X	X	X	X	X	X	X	X		
05-3B			X	X	X	X	X	X	X	X		
05-4A						X	X	X	X	X		
05-4B						X	X	X	X	X		
05-5A			X	X	X	X	X	X	X	X		
05-5B			X	X	X	X	X	X	X	X		
05-7A						X	X	X	X	X		
05-7B				X	X	X	X	X	X	X		
06-8S			X	X	X	X	X	X	X	X		
06-8D			X	X	X	X	X	X	X			
06-9S			X	X	X	X	X	X	X	X		
06-9M			X	X	X	X	X	X	X	X		
06-10S			X	X	X	X	X	X	X	X		
06-10M			X	X	X	X	X	X	X	X		
06-10D			X	X	X	X	X	X	X	X		
06-11S			X	X		X	X	X	X	X		
06-12S			X	X	X	X	X	X	X	X		

*Blue indicates that water quality and water levels were monitored; Red indicates that only water levels were monitored

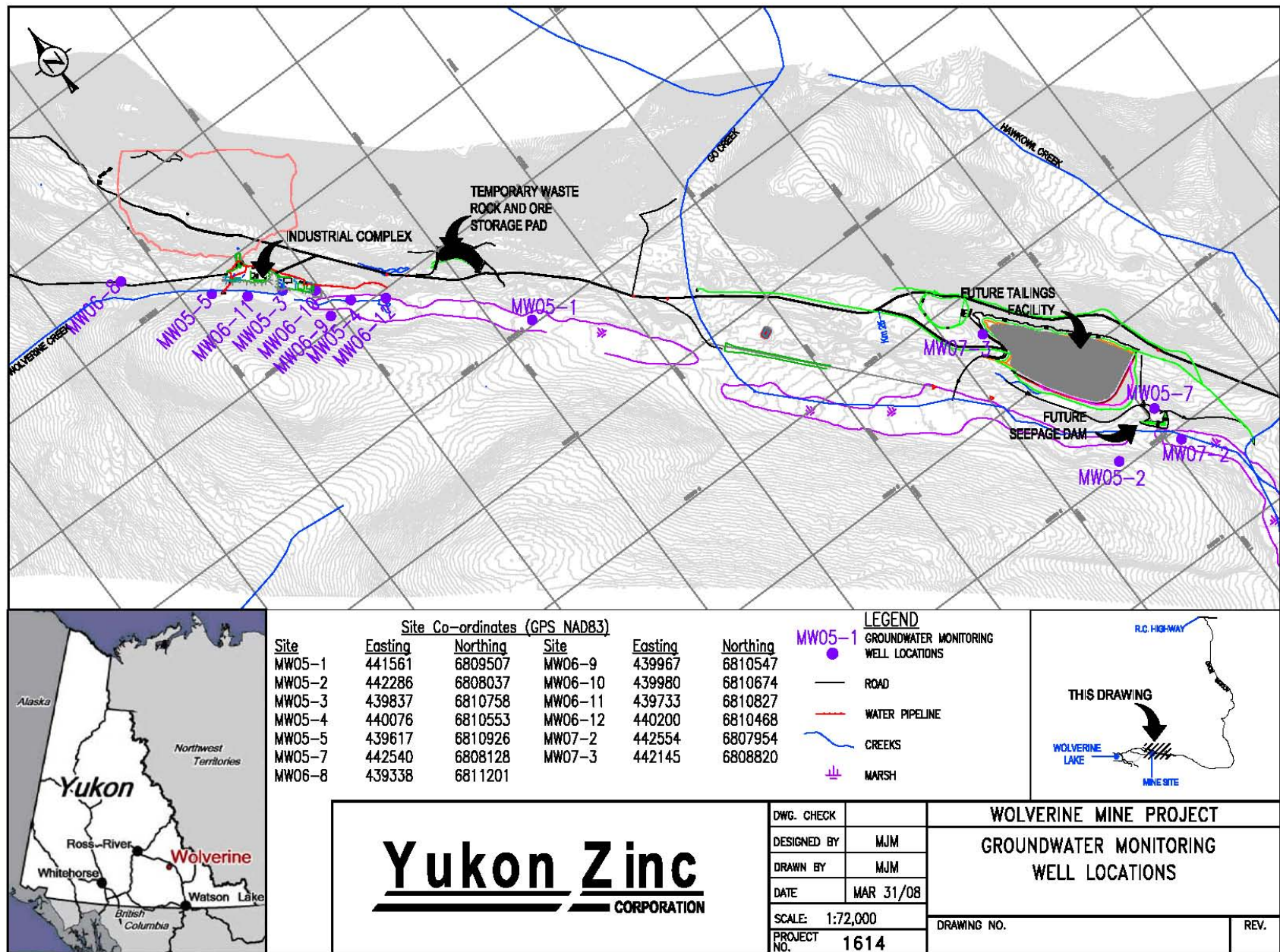


Figure 3-6 Groundwater monitoring well locations

March 2008

Yukon Zinc Corporation

Table 3-12 Groundwater water quality monitoring results 2007

Sample name Parameters (mg/L)	05-1A n=3	05-1B n=5	05-2A n=4	05-2B n=5	05-3A n=3	05-3B n=4	05-4A n=2	05-4B n=3	05-5A n=8	05-5B n=3	05-7A n=4
Physical Parameters											
Conductivity	255.3	294.8	398.8	251.8	289.7	243.5	324.7	228.0	488.4	295.7	4383.8
Dissolved Hardness	135.7	166.6	223.5	135.8	154.0	119.2	171.0	108.7	286.8	160.3	1610.8
Total Suspended Solids	<4	28.2	5	24.8	4	<4	<4	<4	5	<4	<4
Total Dissolved Solids	157.3	179.4	244.5	154.0	186.7	158.3	204.7	142.0	296.8	176.3	1155.8
pH	8.0	7.8	8.1	7.9	8.0	7.8	8.1	8.0	8.2	8.1	12.1
Turbidity	8.23	53.46	7.78	74.28	10.07	0.63	0.33	8.33	13.46	4.87	0.55
DOC	0.50	5.78	1.00	1.08	0.70	1.10	0.80	0.90	1.00	0.70	5.28
Major Anions											
Alkalinity-Total	100.2	152.8	180.0	126.8	112.9	86.0	110.7	87.7	231.0	107.7	1133.5
Bromide	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloride	1.3	1.8	2.1	0.8	3.5	1.8	1.4	0.7	2.0	1.1	3.1
Fluoride	0.51	0.17	0.29	0.08	0.33	0.18	0.93	0.52	2.27	0.26	0.10
Sulphate	30.73	4.70	32.00	6.54	33.30	34.88	52.63	43.10	34.13	42.20	8.63
Nutrient Parameters											
Ammonial Nitrogen	0.114	0.109	0.088	0.043	0.017	0.037	0.023	0.037	0.074	0.014	0.068
Nitrate Nitrogen	<0.002	0.017	0.004	0.018	<0.002	0.275	0.027	0.002	0.004	0.006	0.032
Nitrite Nitrogen	0.005	0.022	0.003	0.039	<0.002	<0.002	0.002	<0.002	0.003	<0.002	0.004
Total Phosphate	0.033	0.310	0.006	0.191	0.008	<0.005	<0.005	0.007	0.013	0.006	0.010
Dissolved Ortho-Phosphate	0.019	0.019	0.005	0.050	0.009	0.005	0.003	0.009	0.008	0.005	0.004
Dissolved Metals											
Aluminum (Al)	0.0012	0.0278	0.0134	0.0196	0.0004	0.0009	0.0016	0.0070	0.0015	0.0022	0.0597
Antimony (Sb)	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0047	0.0001	0.0003
Arsenic (As)	0.0089	0.0057	0.0007	0.0287	0.0005	0.0005	0.0003	0.0064	0.0033	0.0014	0.0006
Cadmium (Cd)	0.0006	0.0001	0.0002	0.0002	0.00633	0.01105	0.0004	0.00316	0.0002	0.0003	0.0002
Calcium (Ca)	45.00	64.18	59.10	42.22	51.87	39.68	62.07	38.53	76.51	53.30	648.50
Chromium (Cr)	0.0003	0.0006	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	0.0056
Cobalt (Co)	0.0002	0.00016	0.00008	0.00035	0.00039	0.00066	0.00005	0.00257	0.00032	0.00049	0.00037
Copper (Cu)	<0.0001	0.0002	0.0007	0.0006	0.0002	0.0024	0.0003	0.0003	<0.0001	0.0002	0.0044
Iron (Fe)	1.52	17.79	0.99	8.56	0.78	0.22	0.03	1.09	1.14	0.46	0.01
Lead (Pb)	0.00033	0.00004	0.00008	0.00020	0.00012	0.00018	<0.00002	0.00029	<0.00002	0.00016	0.00190
Magnesium (Mg)	5.60	4.95	18.30	7.34	5.94	4.89	3.87	2.99	23.28	6.68	<0.05
Manganese (Mn)	0.234	0.633	0.175	1.147	0.123	0.037	0.690	2.867	0.194	0.489	0.000
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)	0.00617	0.00117	0.00283	0.00181	0.00098	0.00071	0.00558	0.00111	0.00804	0.00218	0.00448
Nickel (Ni)	0.0011	0.0008	0.0008	0.0014	0.0041	0.0032	<0.0005	0.0059	0.0010	0.0025	0.0140
Phosphorus (P)	<0.1	0.32	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Potassium (K)	1.33	0.9672	2.1825	0.7974	1.147	1.147	2.34	1.873333333	1.74125	0.808666667	7.035
Selenium (Se)	<0.0005	0.0008	<0.0005	<0.0005	0.01295	0.01295	<0.0005	<0.0005	0.0009	<0.0005	0.001
Silicon (Si)	3.87	4.99	3.65	4.75	4.02	4.10	3.38	6.11	3.88	3.21	0.93
Silver (Ag)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium (Na)	1.76	1.16	0.59	2.91	1.31	4.80	1.36	1.13	0.67	0.85	4.70
Strontium (Sr)	0.140	0.138	0.158	0.093	0.134	0.140	0.182	0.139	0.132	0.104	1.046
Thallium (Tl)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Vanadium (V)	<0.00005	0.000942	0.00009	0.000263333	<0.00005	<0.00005	<0.00005	0.00007	0.00008	<0.00005	0.00107
Zinc (Zn)	0.00333	0.0012	0.0008	0.0027	0.8133	0.9185	0.0026	0.1720	0.0032	0.0301	0.0868
Physical Parameters											
Conductivity	156.0	176.0	457.8	280.0	368.3	279.2	473.3	467.8	327.0	828.9	
Dissolved Hardness	77.7	76.0	270.8	141.3	211.7	134.8	289.4	273.5	177.4	336.5	
Total Suspended Solids	<4	7	<4	5	9	<4	9.2	9.5	<4	<4	
Total Dissolved Solids	102.6	119.3	292.0	171.3	230.7	178.4	290.9	288.5	204.8	591.0	
pH	8.4	7.7	8.3	8.2	8.2	8.2	8.2	8.3	8.3	8.3	
Turbidity	1.70	1.38	1.53	1.07	16.23	0.40	29.14	46.18	0.42	0.87	
DOC	0.66	1.50	0.70	1.13	1.40	1.17	0.75	0.60	0.93	1.25	
Major Anions											
Alkalinity-Total	63.5	58.5	226.0	110.2	176.7	114.4	203.7	238.5	136.2	141.1	
Bromide	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chloride	6.6	2.5	1.6	3.7	0.7	3.0	2.3	2.1	2.2	4.4	
Fluoride	0.14	0.21	0.97	0.53	1.01	0.25	0.79	1.01	2.15	1.11	
Sulphate	12.76	26.00	29.10	23.27	23.50	29.34	51.13	18.23	33.30	287.75	
Nutrient Parameters											
Ammonial Nitrogen	0.017	0.039	0.071	0.020	0.043	0.017	0.056	0.071	0.139	0.162	
Nitrate Nitrogen	0.015	0.026	<0.002	0.004	0.003	0.006	0.002	<0.002	0.002	0.005	
Nitrite Nitrogen	0.002	0.005	0.007	<0.002	0.003	<0.002	0.006	0.005	<0.002	0.004	
Total Phosphate	0.044	0.028	0.007	0.348	0.066	0.037	0.039	0.018	0.027	0.029	
Dissolved Ortho-Phosphate	0.038	0.014	0.006	0.245	0.017	0.033	0.007	0.008	0.023	0.034	
Dissolved Metals											
Aluminum (Al)	0.0236	0.0057	0.0061	0.0046	0.0015	0.0054	0.0040	0.0081	0.0190	0.0025	
Antimony (Sb)	0.0002	0.0111	0.0002	0.0001	0.0001	0.0004	0.0001	0.0006	0.0011	0.0014	
Arsenic (As)	0.0011	0.0014	0.0050	0.0091	0.0009	0.0048	0.0003	0.0033	0.0033	0.0033	
Cadmium (Cd)	0.0003	0.0002	<0.0001	0.0002	0.0002	<0.00001	0.00001	0.0001	0.0006	0.0002	
Calcium (Ca)	27.10	25.17	62.05	48.37	65.00	47.08	86.67	74.75	51.06	104.14	
Chromium (Cr)	0.0004	0.0002	0.0003	0.0003	<0.0002	0.0002	<0.0002	0.0002	0.0004	0.0004	
Cobalt (Co)	0.0018	0.00456	0.00036	0.0004	0.00005	0.00018	0.00006	0.00003	0.00013	0.00064	
Copper (Cu)	0.0009	0.0002	0.0001	0.0002	0.0002	<0.0001	0.0003	<0.0001	0.0001	0.0001	
Iron (Fe)	0.05	1.31	0.21	0.41	1.29	0.12	2.81	4.13	0.17	0.17	
Lead (Pb)	0.0007	0.00005	0.00003	0.00014	0.00006	0.00004	0.00006	0.00011	0.00005	0.00003	
Magnesium (Mg)	2.34	3.08	27.00	4.75	12.00	3.94	12.43	20.85	11.68	18.10	
Manganese (Mn)	0.113	0.692	0.056	0.154	0.166	0.083	0.237	0.102	0.073	0.312	
Mercury (Hg)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Molybdenum (Mo)	0.01023	0.00314	0.00140	0.00679	0.00437	0.00192	0.00205	0.00390	0.02860	0.00913	
Nickel (Ni)	0.0023	0.0126	0.0016	0.0009	<0.0005	0.0018	0.0011	0.0011	0.0013	0.0018	
Phosphorus (P)	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Potassium (K)	0.858625	1.183833333	1.8675	1.027833333	1.986666667	1.35	1.814285714	2.5175	1.9	2.74	
Selenium (Se)	0.0006	0.0013	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.00055	0.0006	
Silver (Ag)	3.94	5.63	4.55	4.24	3.73	4.29	3.84	3.65	4.58	7.96	
Sodium (Na)	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Strontium (Sr)	1.72	3.89	0.62	1.60	0.52	8.41	2.90	1.18	4.15	57.53	
Thallium (Tl)	0.051	0.076	0.163	0.180	0.080	0.166	0.143	0.169	0.102	0.362	
Vanadium (V)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Zinc (Zn)	0.00121	0.00046	0.00019	0.00013	<0.00005	0.00016	0.00012	0.00008	0.00097	0.00143	
	0.0015	0.0534	0.0015	0.0013	0.0041	0.0015	0.0024	0.0018	0.0013	0.0032	

4 Progressive Reclamation

Reclamation activities were undertaken at four locations in 2007: two borrow sites along the site road between the exploration camp and the portal, and two culvert locations along the mine access road (Pitch and Putt Creeks). Minimal reclamation work was conducted on the site access road because the road is only complete to Phase 1, and Phase 2 will require additional surface works to install permanent culverts and expand the road profile to ensure bank stability and safe operating conditions (eg., addition of pull-out bays). Section 2.2.1 and 2.2.2 describe culvert installation and reclamation activities at Pitch and Putt Creeks, respectively.

4.1 Native Seed Mixes

Arctic Alpine Seed Ltd. designed a mix of native seed for roadside and slope applications that have been used to re-seed the areas described below (Table 4-1).

Table 4-1 Wolverine Project – Custom Seed Mixture

Use	Common Name <i>Species</i>	% in Mixture	Application Rate
Roadside	Violet wheat grass <i>Agropyron violaceum</i>	40	30kg/ha
	Slender wheat grass <i>Agoropyron pauciflorum</i>	10	
	Tickle Grass <i>Agrostis scabra</i>	5	
	Sheep Fescue <i>Festuca ovina</i>	20	
	Arctic Fescue <i>Festuca saximontana</i>	25	
	Violet wheat grass <i>Agropyron violaceum</i>	50	
	Fowl Blue grass <i>Poa palustris</i>	10	
	Tickle Grass <i>Agrostis scabra</i>	5	
Slope	Tufted Hair Grass <i>Deschampsia caespitosa</i>	10	40kg/ha
	Arctic Fescue <i>Festuca saximontana</i>	25	

4.2 Roadside Borrow Pit Seeding Test Plots

Seeding test plots were established along the lower site road between the exploration camp and portal to assess the two seed mixes with and without the use of harrowing. A total of seven test plots were established, including three control plots (Figure 4-1; Picture 4-1). On each of the four 5 m x 37 m rectangular plots, 400 g of seed was applied. Two of the four seeded test plots were harrowed. One of the unseeded control plots was harrowed and two were not harrowed. As the test plots were established and seeded in early August, and the growing season is generally from June through August, monitoring will continue in spring 2008 to assess the success of seed germination and benefit of harrowing.

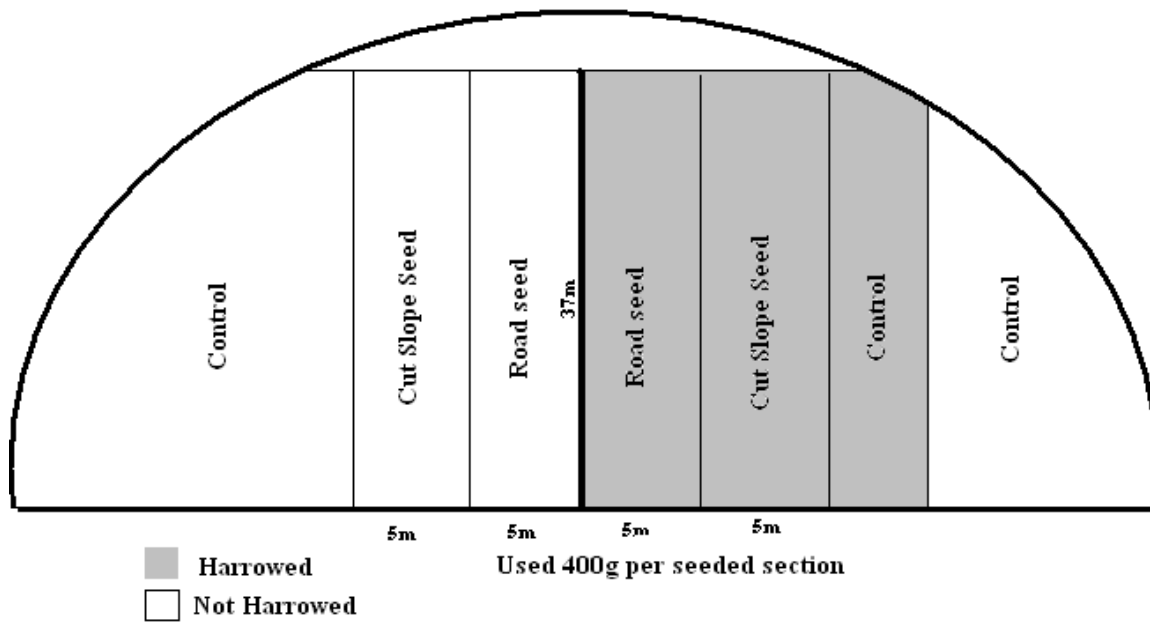


Figure 4-1 Diagram of seeded and control test plots, with and without harrowing.



Picture 4-1 Staked test plots, with center staked line corresponding to center of area in Figure 4-1

4.3 Campbell Creek Gorge Borrow Site

The objective of reclamation activities at the gorge borrow site on the west side of Campbell Creek was to stabilize and seed the old borrow pit banks (on the upslope side of the road) and to decrease the slope of the bank on the down slope side of the road to minimize erosion and possible sedimentation towards Campbell Creek.

This section of road through the gorge has a ~21% grade, and surface runoff along the road and borrow site drains into the borrow pit and towards Campbell Creek. Slopes were stabilized by re-contouring and leveling to provide land forms that conform to the surrounding terrain and provide suitable seedbeds. Organic stockpile material was used in conjunction with growth media to promote re-vegetation. Both areas in the gorge area were seeded in mid-September using the slope seed mix. As this was done late in the growing season, monitoring of re-vegetation success will commence in spring 2008. Pictures 4-2 and 4-3 document reclamation activities down slope and upslope of the road, respectively.



Picture 4-2 Bank re-contouring down slope of the road through the Campbell Creek gorge (west side)

	
May 31/07 Gorge borrow pit at commencement of reclamation work	July 1/07: Leveling of borrow pit, prior to bank work
	
August 25/07: Excavator placing organic material on re-contoured bank.	August 27/07: Machinery finishing bank stability works and establishing drainage ditch at toe of slope

Picture 4-3 Bank re-contouring upslope of the road through the Campbell Creek gorge (west side)

5 Ongoing Testwork

Testwork continues in order to support underground water quality model updates and includes waste rock, paste backfill and dense media separation (DMS) float humidity cells. Other ongoing testwork includes tailings humidity cells (started in 2005) and biological treatment for selenium reduction lab work.

5.1 Underground Water Quality Model

A water quality model was developed to predict the expected metal concentrations of the flooded mine at closure. The model utilized the current mine plan and extensive ongoing kinetic testing data to predict the loads of metals that may be released into the mine once it floods. The model used conservative assumptions regarding the geochemistry of the mine in order to provide a 'worse-case' estimate of the mine water quality.

Based on the findings of the water quality prediction, elevated concentrations of metals are predicted to occur in the mine water following flooding of the mine. Predicted concentrations are similar to those observed at existing mine sites with a similar geological and mineralogical setting. Equilibrium modeling of the predicted (mass-loading) concentration suggests that expected metals concentrations will be reduced due to solubility constraints on several of the metals. However, this reduction is pH dependent and will occur only at circum-neutral pH values.

The updated mass balance concentrations are summarized in the AMEC report provided in Appendix D, which includes data from the waste rock and paste backfill humidity cells and the DMS float humidity cells presented below.

5.1.1 Waste Rock and Paste Backfill Humidity cells

Waste rock, paste backfill and ore humidity cells have been operating since 2005. Table 5-1 summarizes the composition, the date operation begun and the weeks in operation as of December 31st, 2007.

De-ionized water (500 ml) was added weekly to each humidity cell and the leachate was analyzed for the parameters outlined in Table 5-2. The results of the humidity cell leachate analysis conducted in 2007 is summarized in the AMEC report provided in Appendix D, and showed an overall trend of near constant rate of release or slight decrease of calculated loadings. The range of values achieved over the 2007 monitoring period is summarized in Table 5-2. The data is presented as a range of concentrations achieved in 2007. If a range is not presented (i.e. <0.0002 instead of 0.0002-0.0003) then the parameter consistently achieved a result less than the reportable detection limit of the analyzing laboratory.

Table 5-1 Waste rock, paste backfill and ore humidity cell composition and duration of operation

Humidity Cell	Composition	Date Started	Weeks in operation as of December 31, 2007
HC1	Rhyolite/rhyolite fragmental	22-Dec-05	106
HC2	Iron formation	22-Dec-05	106
HC3	Rhyolite/rhyolite fragmental	22-Dec-05	106
HC4	Rhyolite/rhyolite fragmental	22-Dec-05	106
HC5	Calcite-pyrite exhalite	22-Dec-05	106
HC6	Calcite-pyrite exhalite	22-Dec-05	106
HC7	Carbonaceous argillite	22-Dec-05	106
HC8	Carbonaceous argillite	22-Dec-05	106
HC9	Non-carbonaceous argillite	12-Jan-06	103
HC10	Non-carbonaceous argillite	12-Jan-06	103
HC11	Iron formation	12-Jan-06	103
HC12	Rhyolite/argillite	12-Jan-06	103
HC13	Rhyolite/argillite	12-Jan-06	103
HC14	Ore	16-Feb-06	98
HC15	Ore	16-Feb-06	98
HC16	Ore	16-Feb-06	98
HC20	NP* depleted ore	23-May-06	84
HC21	NP depleted ore	23-May-06	84
HC22	NP depleted ore	23-May-06	84
T1	Paste backfill	23-May-06	84
T2	Paste backfill	23-May-06	84

*NP = Neutralization potential

Table 5-2 Waste rock, paste backfill and ore humidity cell results for 2007

Cell Parameter (mg/L)	HC1	HC2	HC3* ¹	HC4	HC5	HC6	HC7	HC8	HC9	HC10	HC11
pH	6.67 - 7.75	7.1 - 7.94	2.19 - 2.97	6.9 - 7.73	7.32 - 7.99	7.28 - 7.96	6.74 - 7.82	7.07 - 7.89	7.27 - 7.98	7.33 - 8.12	7.23 - 8.02
Cond.	33.3 - 102.5	76.56 - 139.19	811 - 4100	93.69 - 189.69	133.43 - 223.99	191.1 - 363.42	55.58 - 105.72	68.24 - 178.61	61.53 - 158.36	144.01 - 319.51	108.27 - 218.34
Acidity (pH 8.3)	1.42 - 6.69	1.39 - 7.77	210 - 2190	1.76 - 7.23	1.66 - 8.38	1.49 - 7.7	1.54 - 5.72	1.4 - 11.1	1.49 - 6.69	1.03 - 8.81	1.39 - 7.7
Alkalinity	12.42 - 45.56	30.93 - 51.74	75 - 1500	14.53 - 37.83	45.31 - 65.78	33.56 - 76.41	9.41 - 18	17.6 - 47.11	25.89 - 57.16	58.06 - 83.49	28.27 - 78.57
Sulphate	2 - 10	1 - 18	204 - 3310	22 - 67	28 - 59	79 - 158	15 - 34	14 - 34	8 - 25	12 - 39	12 - 52
Hardness	17.2 - 51.8	38.9 - 82.4	20.8 - 56.5	39.5 - 87.7	71.9 - 115	108 - 198	30.2 - 54.1	37.5 - 74.9	41.4 - 71.9	81.6 - 113	48.1 - 111
Al	0.013 - 0.083	0.012 - 0.58	8.05 - 90.5	0.007 - 0.085	0.008 - 0.25	0.001 - 0.073	< 0.001 - 0.16	0.018 - 0.17	0.02 - 0.17	0.008 - 0.19	0.003 - 0.059
Sb	0.0006 - 0.0025	0.0032 - 0.0084	< 0.0002 - 0.001	0.0008 - 0.0035	0.0004 - 0.0014	< 0.0002 - 0.0002	0.0003 - 0.0013	0.0012 - 0.0035	0.0014 - 0.004	0.0016 - 0.0034	< 0.0002 - 0.001
As	< 0.0002 - 0.0021	0.0005 - 0.0032	0.0014 - 0.025	0.0005 - 0.0016	< 0.0002 - 0.0004	< 0.0002 - 0.0004	< 0.0002 - 0.0004	< 0.0002 - 0.0007	0.0002 - 0.0008	0.0003 - 0.0008	< 0.0002 - 0.0004
Ba	0.035 - 0.122	0.119 - 0.308	0.01 - 0.021	0.022 - 0.045	0.026 - 0.043	0.011 - 0.022	0.011 - 0.027	0.0091 - 0.022	0.042 - 0.078	0.118 - 0.175	0.08 - 0.206
Be	< 0.0002	< 0.0002	< 0.0002 - 0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Bi	< 0.0002	< 0.0002	0.0007 - 0.019	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
B	< 0.01 - 0.02	< 0.01 - 0.02	0.03 - 0.06	< 0.01 - 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 - 0.01	< 0.01 - 0.02
Cd	< 0.00004 - 0.00083	0.00059 - 0.0021	0.0013 - 0.0127	0.00007 - 0.00061	< 0.00004 - 0.00035	< 0.00004 - 0.00024	0.00023 - 0.00091	< 0.00004 - 0.00079	< 0.00004 - 0.0012	< 0.00004 - 0.00063	< 0.00004 - 0.00057
Ca	5.76 - 17.8	14.3 - 30.9	1.65 - 5.2	9.8 - 22.2	24.6 - 39.7	31 - 56.1	11.2 - 20.2	10.7 - 22	12.5 - 22.8	24.3 - 32.4	15.1 - 34.4
Cr	< 0.0002 - 0.0011	< 0.0002 - 0.0009	0.0032 - 0.026	< 0.0002 - 0.0005	< 0.0002 - 0.0004	< 0.0002 - 0.0003	< 0.0002 - 0.0003	< 0.0002 - 0.0006	< 0.0002 - 0.0005	< 0.0002 - 0.0004	< 0.0002 - 0.0005
Co	< 0.0002 - 0.0002	< 0.0002	0.0096 - 0.1	< 0.0002 - 0.0002	< 0.0002	< 0.0002	0.0002 - 0.0008	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Cu	0.0002 - 0.0037	< 0.0002 - 0.0057	0.401 - 0.918	0.001 - 0.0037	0.0002 - 0.0034	< 0.0002 - 0.0023	0.0002 - 0.0034	0.0002 - 0.015	0.0004 - 0.0036	0.0002 - 0.0037	< 0.0002 - 0.0036
Fe	< 0.01 - 0.18	< 0.01 - 0.05	23.4 - 891	< 0.01 - 0.76	< 0.01 - 0.14	< 0.01 - 0.1	0.01 - 0.11	< 0.01 - 0.19	< 0.01 - 0.09	< 0.01 - 0.07	< 0.01 - 0.12
Pb	< 0.0002 - 0.0015	0.0003 - 0.0016	0.114 - 0.556	< 0.0002 - 0.0028	< 0.0002 - 0.0003	< 0.0002	< 0.0002	< 0.0002 - 0.0005	< 0.0002 - 0.0009	< 0.0002 - 0.0004	< 0.0002 - 0.0009
Li	< 0.0002 - 0.0022	< 0.0002 - 0.0024	0.0084 - 0.027	0.0007 - 0.0037	0.0003 - 0.0027	0.0005 - 0.0028	< 0.0002 - 0.0019	< 0.0002 - 0.002	0.0004 - 0.0029	< 0.001 - 0.0024	0.0006 - 0.0027
Mg	0.64 - 1.77	0.75 - 2.04	3.61 - 12	3.63 - 8.28	2.55 - 4.87	7.36 - 16.2	0.52 - 0.9	2.43 - 5.45	2.39 - 4.02	4.92 - 8.23	2.5 - 6.96
Mn	0.013 - 0.146	0.053 - 0.104	0.033 - 0.105	0.056 - 0.129	0.041 - 0.09	0.017 - 0.051	0.104 - 0.25	0.023 - 0.052	0.0087 - 0.06	0.0021 - 0.059	0.11 - 0.447
Hg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02 - 0.02	< 0.02	< 0.02	< 0.02 - 0.02	< 0.02
Mo	< 0.0001 - 0.0002	0.0012 - 0.0028	< 0.0001	0.0003 - 0.0011	< 0.0001 - 0.0005	< 0.0001	0.0003 - 0.0007	< 0.0001 - 0.0004	0.0011 - 0.0022	0.001 - 0.0022	0.0002 - 0.0007
Ni	0.0004 - 0.0031	< 0.0002 - 0.0004	0.0094 - 0.064	< 0.0002 - 0.0005	< 0.0002 - 0.0004	< 0.0002 - 0.0003	0.0011 - 0.007	0.0003 - 0.0006	< 0.0002 - 0.0005	0.0002 - 0.0008	0.0002 - 0.0012
P	< 0.03	< 0.03 - 0.04	< 0.03 - 0.38	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
K	0.05 - 0.25	0.04 - 0.15	0.68 - 2.02	0.47 - 1.44	0.16 - 0.36	0.1 - 0.32	0.08 - 0.18	0.05 - 0.17	0.38 - 0.88	0.22 - 0.41	0.31 - 0.91
Se	0.0004 - 0.0014	0.0098 - 0.028	0.012 - 0.053	0.0089 - 0.022	0.0007 - 0.0017	0.0004 - 0.0008	0.001 - 0.0027	0.0005 - 0.0018	< 0.0002 - 0.0033	0.0011 - 0.0024	0.0005 - 0.0018
Si	0.16 - 0.89	0.39 - 1.12	13.6 - 42.5	0.54 - 1.45	0.38 - 0.78	0.08 - 0.22	0.18 - 0.8	0.34 - 0.98	0.56 - 1.38	0.78 - 1.82	0.33 - 1.15
Ag	< 0.00005 - 0.00011	< 0.00005 - 0.00012	< 0.00005 - 0.00086	< 0.00005 - 0.0002	< 0.00005 - 0.00009	< 0.00005 - 0.00006	< 0.00005 - 0.00008	< 0.00005 - 0.00009	< 0.00005 - 0.00008	< 0.00005 - 0.00007	< 0.00005
Na	0.02 - 0.29	0.01 - 1.14	0.4 - 1.49	0.02 - 0.56	< 0.01 - 0.62	0.01 - 0.25	0.02 - 0.39	0.02 - 0.41	0.04 - 0.34	0.05 - 0.42	0.03 - 0.97
Sr	0.027 - 0.091	0.207 - 0.428	0.0096 - 0.023	0.034 - 0.098	0.113 - 0.175	0.208 - 0.393	0.015 - 0.028	0.02 - 0.051	0.068 - 0.125	0.223 - 0.342	0.097 - 0.229
Te	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Tl	< 0.00002	0.00004 - 0.00014	0.0017 - 0.0098	0.00003 - 0.00024	< 0.00002 - 0.00004	< 0.00002	< 0.00002 - 0.00016	< 0.00002 - 0.00004	< 0.00002 - 0.00012	< 0.00002 - 0.00003	0.00002 - 0.0001
Th	< 0.0001	< 0.0001	0.038 - 1.58	< 0.0001 - 0.0008	< 0.0001 - 0.0003	< 0.0001 - 0.0002	< 0.0001 - 0.0004	< 0.0001 - 0.0003	< 0.0001 - 0.0003	< 0.0001 - 0.0002	< 0.0001 - 0.0002
Sn	< 0.0002 - 0.0004	< 0.0002 - 0.0015	< 0.0002 - 0.0008	< 0.0002	< 0.0002 - 0.0005	< 0.0002 - 0.0005	< 0.0002 - 0.0004	< 0.0002 - 0.0003	< 0.0002 - 0.0005	< 0.0002 - 0.0003	< 0.0002
Ti	< 0.0002 - 0.0009	< 0.0002 - 0.0017	0.0003 - 0.0021	< 0.0002 - 0.0009	< 0.0002 - 0.0005	< 0.0002 - 0.0005	< 0.0002 - 0.0005	< 0.0002 - 0.001	< 0.0002 - 0.0008	< 0.0002 - 0.0002	< 0.0002 - 0.0005
U	< 0.0001 - 0.0002	< 0.0001 - 0.0003	0.0029 - 0.012	0.0006 - 0.0047	0.0003 - 0.0008	0.0002 - 0.0009	< 0.0001 - 0.0003	0.0001 - 0.0005	0.0002 - 0.0008	0.0001 - 0.0003	< 0.0001 - 0.0002
V	< 0.0002	< 0.0002 - 0.0003	0.0004 - 0.0021	< 0.0002 - 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 - 0.0003	< 0.0002 - 0.0004	< 0.0002
Zn	< 0.001 - 0.09	0.005 - 0.15	0.15 - 1.35	0.002 - 0.046	< 0.001 - 0.052	< 0.001 - 0.031	0.03 - 0.15	< 0.001 - 0.081	< 0.001 - 0.074	< 0.001 - 0.066	< 0.001 - 0.061
Zr	< 0.002	< 0.002	< 0.002 - 0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

*1 = Alkalinity was not taken in 2007, and is instead presented as acidity (pH 4.5)

Cell Parameter (mg/L)	HC12	HC13	HC14	HC15	HC16	HC20* ²	HC21	HC22* ²	T1	T2
pH	7.17 - 7.99	7.26 - 8.06	4.29 - 7.06	7.1 - 7.69	6.82 - 7.5	3.62 - 4.1	6.66 - 7.78	3.63 - 4.79	6.68 - 8.18	7.58 - 8.07
Cond.	69.78 - 166.46	98.83 - 229.44	173.55 - 313.58	164.09 - 343.87	219.03 - 486.88	264.94 - 1077.11	181.53 - 568.75	582.4 - 1737.79	921.14 - 2315.14	967.49 - 2245.32
Acidity (pH 8.3)	1.4 - 6.5	1.34 - 6.99	7.92 - 21.5	3.68 - 14.62	12.78 - 37.22	112.21 - 639.41	11.38 - 31.44	188.5 - 586.6	3.57 - 9.53	3.18 - 8.55
Alkalinity	32.85 - 65.78	31.73 - 69.11	-1.05 - 21.52	17.6 - 37.3	8.19 - 25.63	4.6 - 16.05	6.69 - 41.36	1.36 - 15.62	31.72 - 73.13	31.75 - 54.78
Sulphate	10 - 25	14 - 57	76 - 138	46 - 167	87 - 226	109 - 690	82 - 317	321 - 1020	506 - 1644	548 - 1581
Hardness	46 - 91.9	47.3 - 107	75.6 - 139	74 - 181	93.1 - 209	7.3 - 115	72.1 - 266	46.6 - 356	530 - 1610	545 - 1600
Al	< 0.001 - 0.11	0.019 - 0.23	< 0.001 - 0.14	< 0.001 - 0.089	< 0.001 - 0.13	0.82 - 4.1	< 0.001 - 0.12	1.29 - 5.96	0.003 - 0.075	0.002 - 0.082
Sb	0.0003 - 0.0009	0.001 - 0.003	0.0061 - 0.0093	0.016 - 0.03	0.0041 - 0.029	0.0018 - 0.008	0.0047 - 0.0065	0.0006 - 0.0031	0.015 - 0.025	0.02 - 0.029
As	< 0.0002 - 0.0003	0.0003 - 0.0009	0.0032 - 0.015	0.004 - 0.024	0.0065 - 0.035	0.033 - 0.166	0.0041 - 0.038	0.041 - 0.181	0.01 - 0.091	0.01 - 0.049
Ba	0.03 - 0.055	0.067 - 0.127	0.047 - 0.079	0.034 - 0.078	0.039 - 0.096	0.026 - 0.096	0.026 - 0.068	0.018 - 0.046	0.016 - 0.032	0.015 - 0.023
Be	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Bi	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
B	< 0.01 - 0.01	< 0.01 - 0.01	< 0.01 - 0.04	< 0.01	< 0.01 - 0.01	< 0.01 - 0.02	< 0.01 - 0.01	< 0.01 - 0.02	0.01 - 0.1	0.01 - 0.09
Cd	< 0.00004 - 0.00051	< 0.00004 - 0.00032	0.181 - 0.335	0.0484 - 0.149	0.0688 - 0.742	0.637 - 3.76	0.107 - 0.335	1.17 - 4.1	0.0024 - 0.0067	0.0015 - 0.0081
Ca	6.82 - 13.5	13.1 - 29.8	29.4 - 54.1	28.1 - 70.5	36.5 - 82.2	1.7 - 24.1	16 - 61.1	15 - 112	206 - 625	211 - 627
Cr	< 0.0002 - 0.0005	< 0.0002 - 0.0006	< 0.0002 - 0.0005	< 0.0002 - 0.0006	< 0.0002 - 0.0003	< 0.0002 - 0.0022	< 0.0002 - 0.0007	< 0.0002 - 0.0007	< 0.0002 - 0.0005	< 0.0002 - 0.0007
Co	< 0.0002	< 0.0002	0.0008 - 0.0023	0.0006 - 0.0026	0.0007 - 0.0032	0.0083 - 0.045	0.0025 - 0.011	0.0093 - 0.052	0.0022 - 0.014	0.0018 - 0.011
Cu	< 0.0002 - 0.0026	0.0002 - 0.0026	0.0019 - 0.0093	0.0039 - 0.028	0.0042 - 0.028	3.05 - 19	0.01 - 0.084	3.09 - 20.2	0.0032 - 0.019	0.0031 - 0.026
Fe	< 0.01 - 0.05	< 0.01 - 0.08	< 0.01 - 0.09	< 0.01 - 0.1	< 0.01	1.96 - 10.1	< 0.01 - 0.1	1.08 - 8.07	< 0.01 - 0.52	< 0.01 - 0.77
Pb	< 0.0002 - 0.0007	< 0.0002 - 0.0008	0.065 - 0.121	0.032 - 0.091	0.039 - 0.2	0.017 - 0.049	0.0002 - 0.0007	0.0097 - 0.071	0.0002 - 0.0008	0.0002 - 0.0009
Li	< 0.0002 - 0.0023	< 0.0002 - 0.0023	< 0.0002 - 0.002	< 0.0002 - 0.0022	< 0.0002 - 0.0023	0.0007 - 0.0063	0.0007 - 0.0038	0.002 - 0.011	0.0013 - 0.0069	0.0012 - 0.0067
Mg	6.89 - 15	3.54 - 8.55	0.49 - 0.99	0.88 - 1.78	0.43 - 1.78	0.75 - 13.4	7.8 - 27.5	1.66 - 26.6	3.68 - 15.6	3.76 - 15.2
Mn	0.0007 - 0.0099	0.0054 - 0.04	0.351 - 0.62	0.128 - 0.445	0.189 - 1.15	0.201 - 1.73	0.399 - 1.7	0.573 - 2.68	0.174 - 1.04	0.178 - 0.736
Hg (ug/L)	< 0.02	< 0.02	< 0.02	< 0.02 - 0.05	< 0.02 - 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Mo	< 0.0001 - 0.0009	0.0037 - 0.023	0.0006 - 0.0012	0.0018 - 0.0039	0.0007 - 0.0039	< 0.0001 - 0.0006	0.0006 - 0.0012	< 0.0001 - 0.0003	0.0074 - 0.025	0.008 - 0.029
Ni	< 0.0002 - 0.0004	< 0.0002 - 0.0011	0.0015 - 0.0056	0.0007 - 0.0045	0.0009 - 0.0067	0.039 - 0.274	0.0094 - 0.047	0.046 - 0.326	0.0014 - 0.011	0.001 - 0.007
P	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03 - 0.04
K	0.13 - 0.38	0.56 - 1.45	0.1 - 0.28	0.2 - 0.86	0.08 - 0.61	0.32 - 1.41	0.55 - 1.53	0.27 - 1.88	0.67 - 2.02	0.77 - 2.26
Se	< 0.0002 - 0.001	0.0018 - 0.0044	0.104 - 0.22	0.173 - 0.321	0.112 - 0.519	0.238 - 1.35	0.733 - 0.533	0.733 - 2.93	0.247 - 1.06	0.235 - 0.666
Si	0.17 - 0.53	0.56 - 1.65	0.29 - 0.82	0.35 - 0.84	0.22 - 0.84	3.03 - 11.7	0.73 - 1.83	1.95 - 9.22	2 - 4.94	2.38 - 4.44
Ag	< 0.00005	< 0.00005	< 0.00005 - 0.00018	< 0.00005 - 0.00069	< 0.00005 - 0.00058	0.00016 - 0.001	< 0.00005 - 0.00028	0.0001 - 0.00089	< 0.00005 - 0.00013	< 0.00005 - 0.00016
Na	< 0.01 - 0.92	0.11 - 0.8	0.03 - 2.06	0.02 - 0.38	0.03 - 0.39	0.06 - 0.42	0.05 - 0.55	0.06 - 0.67	0.07 - 1.33	0.08 - 0.59
Sr	0.033 - 0.078	0.207 - 0.516	0.069 - 0.144	0.075 - 0.18	0.092 - 0.203	0.0038 - 0.024	0.066 - 0.228	0.0059 - 0.038	0.403 - 2.14	0.466 - 1.95
Te	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Tl	< 0.00002 - 0.00007	< 0.00002 - 0.00004	0.0012 - 0.0024	0.0014 - 0.005	0.0024 - 0.028	0.0031 - 0.0087	0.001 - 0.0034	0.0135 - 0.0516	0.0011 - 0.0032	0.0013 - 0.0033
Th	< 0.0001 - 0.0002	< 0.0001 - 0.0001	< 0.0001	< 0.0001 - 0.0001	< 0.0001 - 0.0001	< 0.0001 - 0.0004	< 0.0001 - 0.0004	< 0.0001 - 0.0001	< 0.0001	< 0.0001
Sn	< 0.0002 - 0.0005	< 0.0002	< 0.0002 - 0.0006	< 0.0002 - 0.0004	< 0.0002 - 0.0004	< 0.0002 - 0.0005	< 0.0002 - 0.0007	< 0.0002 - 0.0018	< 0.0002 - 0.0009	< 0.0002 - 0.0009
Ti	< 0.0002 - 0.001	< 0.0002 - 0.0008	< 0.0002 - 0.0007	< 0.0002 - 0.0007	< 0.0002 - 0.0007	< 0.0002 - 0.0006	< 0.0002 - 0.0011	< 0.0002 - 0.0017	< 0.0002 - 0.003	< 0.0002 - 0.0019
U	< 0.0001 - 0.0002	0.0009 - 0.0031	< 0.0001	< 0.0001 - 0.0001	< 0.0001 - 0.0001	0.0033 - 0.021	< 0.0001 - 0.0001	0.0024 - 0.018	0.001 - 0.0094	0.0014 - 0.0088
V	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 - 0.0003	< 0.0002 - 0.0003
Zn	< 0.001 - 0.084	< 0.001 - 0.039	4.47 - 12.2	1.07 - 7.71	1.39 - 23.8	60.1 - 410	5.88 - 21.5	111 - 428	0.2 - 0.88	0.15 - 0.46
Zr	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

5.1.2 DMS Humidity cells

In February 2006 three “DMS float” cells were established to predict the weathering characteristics and leachate quality of the float material from the dense media separation (DMS) process, as summarize in Table 5-3. The results of the humidity cell leachate analysis conducted in 2007 is summarized in the AMEC report provided in Appendix D, and showed an overall trend of near constant rate of release or slight decrease of calculated loadings. The range of values achieved over the 2007 monitoring period is summarized in Table 5-4. If a range is not presented (i.e., <0.0002 instead of 0.0002-0.0003) then the parameter consistently achieved a results less than the reportable detection limit of the analyzing laboratory.

Table 5-3 DMS float humidity cell composition and duration of operation

Humidity Cell	Composition	Date Started	Weeks in operation as of December 31, 2007
HC17	DMS float	21-Feb-06	97
HC18	DMS float	21-Feb-06	97
HC19	DMS float	21-Feb-06	97

Table 5-4 DMS float humidity cell results for 2007

Cell Parameter (mg/L)	HC17	HC18	HC19	Cell Parameter (mg/L)	HC17	HC18	HC19
pH	6.55 - 7.63	7.03 - 7.61	6.94 - 7.59	Mg	1.33 - 3.52	1.39 - 4.66	1.55 - 2.68
Cond. Acidity (pH 8.3)	78.75 - 212.6	60.94 - 205.6	74.1 - 191.44	Mn	0.019 - 0.213	0.017 - 0.153	0.047 - 0.138
Alkalinity	1.09 - 5.14	1.22 - 4.63	1 - 4.2	Hg (ug/L)	< 0.02 - 0.02	< 0.02 - 0.05	< 0.02 - 0.08
Sulphate	10.38 - 22.59	10.47 - 20.74	8.98 - 17.67	Mo	0.0035 - 0.013	0.0015 - 0.0071	0.002 - 0.0067
Hardness	20 - 82	13 - 67	19 - 70	Ni	0.0006 - 0.019	0.0004 - 0.022	0.0021 - 0.024
Al	34 - 114	26.2 - 96.5	31.5 - 82.6	P	< 0.03	< 0.03	< 0.03
Sb	0.004 - 0.11	0.002 - 0.26	0.001 - 0.1	K	0.44 - 1.47	0.11 - 0.42	0.09 - 0.26
As	0.0077 - 0.026	0.0057 - 0.018	0.0048 - 0.018	Se	0.012 - 0.04	0.011 - 0.028	0.022 - 0.039
Ba	0.0017 - 0.0049	0.0008 - 0.0028	0.0011 - 0.0034	Si	0.27 - 6.44	0.15 - 6.18	0.14 - 0.54
Be	0.0093 - 0.024	0.0054 - 0.022	0.0081 - 0.022	Ag	< 0.00005 - 0.00022	< 0.00005 - 0.0011	< 0.00005 - 0.0002
Bi	< 0.0002 - 0.0002	< 0.0002	< 0.0002	Na	0.02 - 0.89	0.03 - 0.63	0.02 - 0.24
B	< 0.0002 - 0.0002	< 0.0002	< 0.0002	Sr	0.024 - 0.078	0.023 - 0.084	0.029 - 0.086
Cd	< 0.01 - 0.02	< 0.01 - 0.01	< 0.01	Te	< 0.0002	< 0.0002	< 0.0002
Ca	0.00082 - 0.0062	0.00052 - 0.0039	0.0012 - 0.0036	Tl	0.00027 - 0.00088	0.00016 - 0.00078	0.00061 - 0.002
Cr	11.2 - 39.8	8.19 - 33.2	10.1 - 28.6	Th	< 0.0001 - 0.0002	< 0.0001	< 0.0001
Co	< 0.0002 - 0.001	< 0.0002 - 0.0016	< 0.0002 - 0.003	Sn	< 0.0002 - 0.0023	< 0.0002 - 0.0007	< 0.0002 - 0.0008
Cu	0.0003 - 0.001	< 0.0002 - 0.0009	0.0002 - 0.0017	Ti	< 0.0002 - 0.0005	< 0.0002 - 0.0008	< 0.0002 - 0.0003
Fe	0.0003 - 0.013	0.0004 - 0.0052	0.0012 - 0.0083	U	0.0008 - 0.0045	0.0006 - 0.0056	0.0006 - 0.004
Pb	< 0.01 - 0.03	< 0.01 - 0.04	< 0.01 - 0.04	V	< 0.0002 - 0.0002	< 0.0002 - 0.0004	< 0.0002
Li	0.0002 - 0.0015	< 0.0002 - 0.0015	0.0004 - 0.0044	Zn	0.009 - 0.28	0.007 - 0.13	0.04 - 0.28
	0.0003 - 0.0021	< 0.0002 - 0.0019	< 0.0002 - 0.002	Zr	< 0.002	< 0.002	< 0.002

5.2 Tailings Humidity Cells

Table 5-5 summarizes the tailings humidity cells in operation and those decommissioned, including date started and weeks in operation as of December 31st, 2007. In June and July 2005 static testing of tailings was initiated. The tailings were generated from lock-cycle tests carried out to simulate the milling process to produce three tailings sub-streams: ~2% pre-float concentrate, ~88% rougher tails, and ~10% cleaner scavenger tails. The composite ore samples include the following:

- Combined Lynx ore with dilution rock composite tailings (LD) – Combines all three tailings streams generated from ore with dilution rock from the Lynx ore zone.
- Combined Wolverine composite ore with dilution rock tailings (WD) – Combines all three tailings streams generated from ore with dilution rock from the Wolverine ore zone.
- Combined overall ore composite tailings (OA) – Combines the tailings generated from using only ore from the Wolverine and Lynx ore zones, and does not include any dilution rock.
- Combined overall diluted ore composite tailings (OD) – Combines the three tailings streams generated by using ore and dilution rock from both Wolverine and Lynx ore zones.

Humidity cells LD and WD were decommissioned in October 2006, as the ore zones will not be mixed independently and therefore the overall composite samples are representative.

The results of the tailings humidity cell leachate analysis conducted in 2007, summarized in the Marsland Environmental Associates (MEA) report provided in Appendix D, showed an overall trend of near constant rate of release or slight decrease of calculated loadings. The range of values achieved over the 2007 monitoring period is summarized in Table 5-6. If a range is not presented (i.e. <0.0002 instead of 0.0002-0.0003) then the parameter consistently achieved a results less than the reportable detection limit of the analyzing laboratory.

Table 5-5 Tailings humidity cell composition and duration of operation

Humidity Cell	Composition	Date Started	Weeks in operation as of December 31, 2007
LD	Tailings - Lynx zone diluted ore composite	22-Jul-05	Complete – 63 Weeks
WD	Tailings - Wolverine zone diluted ore composite	22-Jul-05	Complete – 63 Weeks
OA	Tailings - Overall ore composite	6-Jun-05	134
OD	Tailings - Overall diluted ore composite	22-Jul-05	127

Table 5-6 Tailings humidity cell annual range of achieved values for 2007

Cell Parameter (mg/L)	OA	OD	Cell Parameter (mg/L)	OA	OD
pH	4.65 - 6.9	3.35 - 7.04	Li	0.0009 - 0.0116	0.0011 - 0.0023
Cond.	181 - 777	197 - 1280	Mg	0.134 - 7.08	0.162 - 44.3
Acidity (pH 8.3)	2 - 26	3 - 463	Mn	0.120 - 1.15	0.14 - 1.19
Alkalinity	3 - 9	3 - 21	Hg (ug/L)	62.5 - 75.8	117 - 153
Sulphate	71 - 400	320 - 880	Mo	0.00010 - 0.00143	0.00026 - 0.00158
Al	0.0006 - 0.00163	0.0013 - 0.00512	Ni	< 0.0001 - 0.0043	0.0074 - 0.0128
Sb	0.00004 - 0.0041	0.00006 - 0.0031	P	0.00272 - 0.01	< 0.0001 - 0.030
As	< 0.0005 - 0.0045	< 0.0005 - 0.005	K	0.00201 - 0.34	0.0016 - 0.780
Ba	0.0035 - 0.0246	0.0024 - 0.0246	Se	0.114 - 3.90	0.169 - 2.030
Be	< 0.01	< 0.01 - 0.02	Si	0.13 - 0.19	0.15 - 0.170
Bi	< 0.0007 - 0.0022	< 0.001 - 0.001	Ag	0.00006 - 0.143	0.00003 - 0.052
B	0.003 - 0.3	0.0009 - 0.49	Na	0.02 - 0.162	0.030 - 0.248
Cd	0.119 - 0.237	0.0468 - 0.409	Sr	0.142 - 0.254	0.239 - 0.423
Ca	5.37 - 104	16.5 - 166	Tl	0.0023 - 0.0038	0.0025 - 0.0037
Cr	0.0003 - 0.06	0.0003 - 0.04	Sn	0.0003 - 0.0005	0.0004 - 0.0009
Co	0.00087 - 0.0114	0.00106 - 0.00861	Ti	< 0.0002	< 0.0002
Cu	0.0012 - 0.0036	0.0018 - 0.0079	U	< 0.00002	0.00002 - 0.00005
Fe	< 0.01	0.03	V	0.00006 - 0.00009	< 0.00006 - 0.002
Pb	0.00001 - 0.0183	0.00005 - 0.0056	Zn	3.55 - 6.26	1.74 - 2.7

5.3 Biopass System and Biological Selenium Reduction

The Biopass system is a contingency measure to ensure that mine discharge from the backfilled mine workings does not affect the environmental integrity of Wolverine Creek and Little Wolverine Lake. The Monitoring and Surveillance Plan, as per the requirements outlined in QML Section 12.2, will be prepared in 2008. A description of the field test and proposed location of the Biopass system, including its construction details, operational protocols and a monitoring plan will be included in that document. The field test is scheduled to commence within the first year or two of operations once 'typical' mine water quality is available. Results of efforts undertaken to test the Biopass system under site conditions, should they be completed within the next two years, will be incorporated into the next revision of the Reclamation and Closure Plan (due December 2009) and summarized in the corresponding A Licence and Quartz Mining License annual reports.

Laboratory testing of biological selenium reduction continued in 2007. Starting in 2005, testwork has been ongoing to determine water treatment requirements necessary to treat the tailings facility waste water prior to discharge into Go Creek. The main element of concern in the tailings water (produced by lock-cycle metallurgical testwork) was selenium, with influent concentrations of 9 mg/L. The A-Licence discharge limit is 0.02 mg/L. Testwork has focused on 2-stage treatment using first a high density sludge process with iron salt addition followed by a polishing stage utilizing biological reduction. Testwork conducted in 2007 focused on additional bioreactor process lab testwork. Bioreactor testwork was conducted by Inotec at the University of Utah, and the work was supervised by Lorax Environmental Services (Lorax).

In 2007, four tests were conducted on two reactor types – a biochemical-enhanced material reactor and an electro-biochemical reactor. The Inotec report *Treatability and Bench-scale*

Bioreactor Testing of Waters for Selenium Removal (January 31st, 2008), provided in Appendix E, details the results of the 2007 testwork and recommendations for pilot plant testing.

6 Spill Reporting

One spill was reported in 2007. On May 22nd, 2007 a release of approximately 660 L of diesel fuel from improperly sealed fuel drums was observed at a fuel cache area. Approximately 192 m³ of contaminated soil was removed and a diversion ditch was constructed to minimize contamination of ground and surface water. Excavated material was temporarily stored at soil storage locations #3 and #4 prior to transfer to Cell 2 in September 2007. The YZC spill report and follow up report from Lorax Environmental Services were submitted in May and July 2007, respectively, and are also available in the *LTF Annual Report 2007* (submitted March 2008).

7 Socioeconomic Information

As per the EA Screening Report commitment, YZC is required to report annually on the number of Yukoners and non-Yukoners employed at the mine and the value of goods and services procured within Ross River, Watson Lake and the Yukon as a whole. Over the course of the year, 39 Yukoners and 5 non Yukoners were employed at the project site. The value of goods and services procured are provided in Table 7-1.

Table 7-1 Goods and services procured from Ross River, Watson Lake and the Yukon for 2007

Location	Value of Goods/Services
Watson Lake	\$67,385
Ross River	\$151,587
Yukon	\$3,325,108

YZC is also required to report annually on the numbers associated with promotions, training and advancement opportunities for Yukon-based mine employees. This requirement is not applicable until the mine is operating.

8 2008 Activities

The development of surface infrastructure and the underground in 2008 is dependent upon a production decision and project financing. Should the project be fully financed in 2008, the following activities will commence (seasonal conditions permitting), including:

- pre-production underground development
- clear, strip and bulk excavate the industrial complex and tailings facility areas
- establish the permanent camp and potable water wells
- establish the concrete batch plant
- pour building foundations at the industrial complex, erect buildings and install/build internal workings

These activities are detailed in *General Site Plan* (Version 2007-03; April 2007). Once a production decision is made, a revised *General Site Plan*, including an updated project development schedule, will be submitted to EMR. In the interim, current site operation, maintenance, and monitoring activities will continue as described herein.

Appendix A Environmental Monitoring Reports

The following table summarized the Environmental Monitoring Reports included in Appendix A, the monitoring period and the date of the monitoring report submission.

The table preceding the monitoring reports provides a summary of the dates monitoring was conducted, when and why (rain events, weekly as per a license, etc.) monitoring was reported, and when and why monitoring was completed.

Monitoring					Monitoring			
Site	Monitoring Period		Date of Report	Site	Monitoring Period		Date of Report	
	From	To			From	To		
Airstrip/Go Creek				Portal Clean Sump (PCS)				
	11-Sep-07		11-Sep-07		19-Apr-07 - 29-Apr-07		29-Apr-07	
	3-Jun-07 - 11-Jun-07		11-Jun-07		15-May-07 - 20-May-07		20-May-07	
	13-Nov-07 - 19-Nov-07		19-Nov-07		5-Jun-07 - 11-Jun-07		11-Jun-07	
	4-Dec-07 - 10-Dec-07		10-Dec-07		12-Jun-07 - 18-Jun-07		18-Jun-07	
Coverall Dirty Sump (CDS)					19-Jun-07 - 25-Jun-07		25-Jun-07	
	31-Aug-07 - 22-Sep-07		22-Sep-07		26-Jun-07 - 2-Jul-07		2-Jul-07	
	23-Sep-07 - 1-Oct-07		1-Oct-07		3-Jul-07 - 9-Jul-07		9-Jul-07	
Fuel Cache					10-Jul-07 - 16-Jul-07		16-Jul-07	
	22-May-07 - 28-May-07		28-May-07	Portal Diesel Storage Tanks				
	29-May-07 - 4-Jun-07		4-Jun-07		22-May-07 - 28-May-07		28-May-07	
	5-Jun-07 - 11-Jun-07		11-Jun-07		26-Jun-07 - 2-Jul-07		2-Jul-07	
	10-Jul-07 - 16-Jul-07		16-Jul-07		3-Jul-07 - 9-Jul-07		9-Jul-07	
Land Treatment Facility (LTF)					6-Aug-07 - 13-Aug-07		13-Aug-07	
	12-Jun-07 - 18-Jun-07		18-Jun-07	Excavation of Mechanic Shop				
	26-Jun-07 - 2-Jul-07		2-Jul-07		24-Jul-07 - 30-Jul-07		30-Jul-07	
	3-Jul-07 - 9-Jul-07		9-Jul-07		31-Jul-07 - 6-Aug-07		6-Aug-07	
	10-Jul-07 - 16-Jul-07		16-Jul-07		7-Aug-07 - 13-Aug-07		13-Aug-07	
	17-Jul-07 - 23-Jul-07		23-Jul-07		14-Aug-07 - 21-Aug-07		21-Aug-07	
	24-Jul-07 - 30-Jul-07		30-Jul-07	km 1.4 - 1.5 (Campbell Creek Crossing)				
	12-Sep-07 - 18-Sep-07		18-Sep-07		15-May-07 - 17-May-07		17-May-07	
	19-Sep-07 - 1-Oct-07		1-Oct-07		18-May-07 - 25-May-07		25-May-07	
	2-Oct-07 - 9-Oct-07		9-Oct-07		26-May-07 - 28-May-07		28-May-07	
150-Man Camp site					29-May-07 - 4-Jun-07		4-Jun-07	
	26-Jun-07 - 2-Jul-07		2-Jul-07		5-Jun-07 - 11-Jun-07		11-Jun-07	
	3-Jul-07 - 9-Jul-07		9-Jul-07		19-Jun-07 - 25-Jun-07		25-Jun-07	
	10-Jul-07 - 19-Jul-07		19-Jul-07		26-Jun-07 - 2-Jul-07		2-Jul-07	
	17-Jul-07 - 23-Jul-07		23-Jul-07		14-Aug-07 - 20-Aug-07		20-Aug-07	
	24-Jul-07 - 30-Jul-07		30-Jul-07		21-Aug-07 - 27-Aug-07		27-Aug-07	
	31-Jul-07 - 6-Aug-07		6-Aug-07					
	7-Aug-07 - 13-Aug-07		13-Aug-07					
	14-Aug-07 - 20-Aug-07		20-Aug-07					

	Monitoring				Monitoring		
Site	Monitoring Period		Date of Report	Site	Monitoring Period		Date of Report
	From	To			From	To	
km 1.5 (south of Campbell Creek)				Waste rock pad (WRP)			
	9-May-07		9-May-07		25-Apr-07 - 29-Apr-07		29-Apr-07
	15-May-07 - 17-May-07		17-May-07		15-May-07 - 21-May-07		21-May-07
	18-May-07 - 24-May-07		24-May-07		29-May-07 - 4-Jun-07		4-Jun-07
	25-May-07 - 29-May-07		29-May-07		5-Jun-07 - 11-Jun-07		11-Jun-07
	29-May-07 - 4-Jun-07		4-Jun-07		12-Jun-07 - 18-Jun-07		18-Jun-07
	5-Jun-07 - 11-Jun-07		11-Jun-07		19-Jun-07 - 25-Jun-07		25-Jun-07
	26-Jun-07 - 2-Jul-07		2-Jul-07		26-Jun-07 - 2-Jul-07		2-Jul-07
km 1.6 (~150 m south of km 1.5)					3-Jul-07 - 9-Jul-07		9-Jul-07
	18-May-07 - 21-May-07		21-May-07		7-Aug-07 - 13-Aug-07		13-Aug-07
	22-May-07 - 28-May-07		28-May-07		14-Aug-07 - 21-Aug-07		21-Aug-07
	29-May-07 - 4-Jun-07		4-Jun-07		21-Aug-07 - 28-Aug-07		28-Aug-07
	5-Jun-07 - 11-Jun-07		11-Jun-07		4-Sep-07 - 10-Sep-07		10-Sep-07
km 2 (culvert location)					11-Sep-07 - 22-Sep-07		22-Sep-07
	10-May-07 - 11-May-07		11-May-07		23-Sep-07 - 1-Oct-07		1-Oct-07
	19-Jun-07 - 25-Jun-07		25-Jun-07	Waste rock sump (WRS)			
km 2.1 (upper road from gorge to portal area)					20-Apr-07 - 26-Apr-07		26-Apr-07
	12-Jun-07 - 18-Jun-07		18-Jun-07		15-May-07 - 21-May-07		21-May-07
Sprung Stuctures					22-May-07 - 28-May-07		28-May-07
	13-Sep-07 - 22-Sep-07		22-Sep-07		29-May-07 - 4-Jun-07		4-Jun-07
	22-Sep-07 - 1-Oct-07		1-Oct-07		5-Jun-07 - 11-Jun-07		11-Jun-07
	2-Oct-07 - 9-Oct-07		9-Oct-07		12-Jun-07 - 18-Jun-07		18-Jun-07
	9-Oct-07 - 15-Oct-07		15-Oct-07		19-Jun-07 - 25-Jun-07		25-Jun-07
Potable Water Well Drill Sites					26-Jun-07 - 2-Jul-07		2-Jul-07
	21-Aug-07 - 3-Sep-07		3-Sep-07		3-Jul-07 - 9-Jul-07		9-Jul-07

	Monitored		Reported due to change in condition				Reported due to rain events				Reported weekly			Monitoring on hold																							
														Sprung																							
Site name	Km 1.4-1.5	Km 1.5	Km 1.6	Km 2	Fuel Cache	Diesel tanks	PCS	WRS	WRP	Go Creek	LTF	old road K2.1	New Camp Site	Portal Material	Water Drill Sites	Constructio n	New LTF	CDS	Site name	Km 1.4-1.5	Km 1.5	Km 1.6	Km 2	Fuel Cache	Diesel tanks	PCS	WRS	WRP	Go Creek	LTF	old road K2.1	New Camp Site	Portal Material	Water Drill Sites	Sprung Construction	New LTF	CDS
Date																			Date																		
1-Apr-07																			17-Aug-07	x	x					x	x	x	x	x			x				
2-Apr-07																			18-Aug-07	x	x	x	x	x	x	x	x	x	x	x							
3-Apr-07																			19-Aug-07	x	x						x	x	x			x	x				
4-Apr-07																			20-Aug-07	x	x	x	x	x	x	x	x	x			x	x					
5-Apr-07																			21-Aug-07	x	x	x	x	x	x	x	x	x	x			x					
6-Apr-07																			22-Aug-07	x	x					x	x	x	x	x	x		x	x	x		
7-Apr-07																			23-Aug-07	x	x						x	x	x	x	x		x	x	x		
8-Apr-07																			24-Aug-07	x	x					x	x	x	x	x	x		x	x	x		
9-Apr-07																			25-Aug-07	x	x					x	x					x					
10-Apr-07																			26-Aug-07	x	x																
11-Apr-07																			27-Aug-07	x	x																
12-Apr-07																			28-Aug-07	x	x				x	x	x	x	x			x	x				
13-Apr-07																			29-Aug-07	x	x			x	x	x	x	x	x			x	x	x			
14-Apr-07																			30-Aug-07	x	x						x	x				x	x				
15-Apr-07																			31-Aug-07	x	x			x	x	x	x	x			x	x					
16-Apr-07		x																	1-Sep-07	x	x			x		x	x	x				x	x				
17-Apr-07																			2-Sep-07	x	x				x	x	x	x				x	x				
18-Apr-07																			3-Sep-07	x	x			x		x	x	x		x							
19-Apr-07																			4-Sep-07	x	x					x	x	x	x			x	x				
20-Apr-07							x		x										5-Sep-07	x	x					x	x	x	x			x	x				
21-Apr-07		x					x												6-Sep-07	x	x					x	x	x				x					
22-Apr-07																			7-Sep-07	x	x				x	x	x	x	x				x				
23-Apr-07																			8-Sep-07																		
24-Apr-07	x																		9-Sep-07	x	x			x	x	x	x	x	x	x	x		x	x			
25-Apr-07		x				x		x	x										10-Sep-07	x	x	x	x	x	x	x	x	x			x	x					
26-Apr-07																			11-Sep-07	x	x	x	x		x	x	x	x				x					
27-Apr-07	x						x												12-Sep-07										x			x					
28-Apr-07																			13-Sep-07						x	x					x	x					
29-Apr-07	x	x					x	x	x	x									14-Sep-07	x	x	x	x		x	x	x	x				x					
30-Apr-07																			15-Sep-07			x	x		x	x	x				x	x					
1-May-07																			16-Sep-07						x	x	x	x				x					
2-May-07																			17-Sep-07	x	x	x	x		x	x						x					
3-May-07																			18-Sep-07								x	x									
4-May-07																			19-Sep-07						x	x					x			x			
5-May-07																			20-Sep-07							x					x			x			
6-May-07																			21-Sep-07							x	x	x			x			x			
7-May-07																			22-Sep-07	x	x	x	x			x	x				x			x			
8-May-07																			23-Sep-07							x	x	x		x		x		x			
9-May-07		x																	24-Sep-07	x	x	x	x			x	x	x				x		x			
10-May-07				x															25-Sep-07						x						x	x					
11-May-07																			26-Sep-07								x	x									
12-May-07																			27-Sep-07	x	x	x	x		x		x	x				x					
13-May-07																			28-Sep-07	x	x	x	x		x		x	x				x					
14-May-07																			29-Sep-07	x	x	x	x		x		x	x			x			x			
15-May-07	x	x					x			x									30-Sep-07						x		x	x			x			x			
16-May-07	x	x					x	x	x										1-Oct-07	x	x	x	x		x		x	x			x			x			
17-May-07	x	x						x	x	x									2-Oct-07																		
18-May-07	x	x	x					x	x	x									3-Oct-07																		
19-May-07	x	x	x					x	x	x									4-Oct-07																		
20-May-07	x	x	x				x	x	x	x									5-Oct-07																		
21-May-07	x	x	x					x	x										6-Oct-07																		
22-May-07	x	x	x		x	x		x	x	x									7-Oct-07																		
23-May-07	x	x	x		x	x		x	x	x									8-Oct-07																		
24-May-07	x	x	x		x	x		x	x	x									9-Oct-07																		
25-May-07	x	x	x		x	x		x	x	x									10-Oct-07																		
26-May-07	x	x	x		x	x		x	x	x									11-Oct-07																		
27-May-07	x	x	x		x	x		x	x	x									12-Oct-07																		
28-May-07	x	x	x		x	x		x	x										13-Oct-07																		
29-May-07	x	x					x	x											14-Oct-07																		
30-May-07	x	x			x	x				x									15-Oct-07																		
31-May-07	x	x			x	x				x									16-Oct-07																		
1-Jun-07	x	x			x	x				x									17-Oct-07																		
2-Jun-07	x	x			x	x				x									18-Oct-07																		
3-Jun-07	x	x			x	x				x	x								19-Oct-07																		
4-Jun-07	x	x			x	x				x	x								20-Oct-07																		
5-Jun-07	x	x			x	x	x	x	x	x									21-Oct-07																		
6-Jun-07	x	x			x	x	x	x	x	x									22-Oct-07																		
7-Jun-07	x	x			x	x	x	x	x	x									23-Oct-07																		
8-Jun-07	x	x			x	x	x	x	x	x									24-Oct-07																		
9-Jun-07	x	x			x	x	x	x	x	x									25-Oct-07																		
10-Jun-07	x	x			x	x	x	x	x	x									26-Oct-07																		
11-Jun-07	x	x																																			

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: June 3 rd – June 11 th .	Inspector(s): M.K., J.G & J.S.
Site Name: Go Creek	Location/Co-ordinates: Go Creek crossing at entrance to Airstrip
Site Location Description: Where Go Creek crosses the site road, at entrance of airstrip. The outflow is from water collecting in the watershed to the east. Go Creek carries on to the south to Money Creek. The defined channel fans out after crossing the site road. In the wetland area the channel re-forms. Area dominated by willows and wetland species. Channel near the culvert is well armoured from natural fluvial till (rip/rap). High flows during rain events and melt due to extent of collection area in watershed.	
Weather Conditions: Sunny and hot June 3rd, 4th, 5th. Mostly mixed sun and cloud, some rain and milder temperatures June 6th to June 11th.	
Part 2 – Site Assessment	
Activity: Heavy flows that peaked on June 3rd as a result of spring melt resulted in installation of new culverts and diversion of channel.	
Site Description: June 3rd - Heavy flows caused overflow of the two existing culverts, washing over road and onto airstrip. Creek was diverted through end of airstrip and another culvert was installed to try a minimize impact/erosion to road/airstrip. Another culvert was installed along diversion ditch to allow for crossing. June 4th – Flows remained very high, but were being handled well by culverts in place. June 7th – Heavy flows have slowed, allowing diversion channel to be closed, while still leaving a spillway for the event of another heavy flow/heavy rainfall.	
Assessed Risk: Med (High risk for erosion and sediment inflow downstream during peak flow and construction. Risk by the 7th was lowered due to reduced flows.)	
Photos Attached: Go Creek	
Samples Taken: none	
Additional Information Attached: none	
Part 3 –Mitigation Requirements	
Mitigation Required: - Remove silt fencing from area west side of airstrip - Armouring with rip rap of banks on the west and east side of both sets of culverts.	
Mitigation Condition: F. Work to be continued as flows lower and equipment/operators become available	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Continue to monitor site and condition of road erosion etc.	
Monitoring Frequency: During periods of high flows, heavy rainfall, or road/airstrip improvements	
Reporting Requirements	

Wolverine Project Environmental Inspection Form – Photos

Site Name: Go Creek



Photo 1

Date and Time: 03_06_07 1959



Photo 2

Date and Time: 03_06_07 1957



Photo 3
2000

Date and Time: 03_06_07



Photo 4

Date and Time: 03_06_07 2000

Wolverine Project Environmental Inspection Form – Photos

Site Name: Go Creek



Photo 5

Date and Time: 03_06_07 2000



Photo 6

Date and Time: 08_06_07 0905



Photo 7

11_06_07

1357



Photo 8

11_06_07

1358

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 11 th , 2007	Inspector(s): James Spencer	
Site Name: Airstrip_S	Location/Co-ordinates: South End of Airstrip @ Go Creek Crossing	
Site Location Description: Directly adjacent to Go Creek where a tributary from a spring crosses a drill road and drains in to Go Creek. Approximately 7.5 Meters from edge of Go Creek banks.		
Weather Conditions:		
Date	Conditions	Temp (°C)
11-Sep-07	Sunny and warm	15
Part 2 – Site Assessment		
Activity: Hauling freight and fuel through the lower drill road joining the south end of the airstrip has caused the area to soften in the wetland and area surrounding a small stream crossing the road.		
Site Description: The road is too close to Go Creek and the wetted perimeter is not a great location for heavy traffic. Upland there are drier rocky soils that will be more suitable for vehicle traffic than the loamy organic material in the wetland		
Assessed Risk: Med		
Photos Attached: Airstrip_S - 1		
Samples Taken: N/A		
Additional Information Attached: N/A		
Part 3 –Mitigation Requirements		
Mitigation Required: Move road up slope and install culvert across drainage or begin preparing the ultimate road to make it suitable for heavy traffic. The area affected will be re-contoured and seeded and no new traffic is to pass through the area.		
Mitigation Condition: P		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Ensure area is blocked off from traffic		
Monitoring Frequency: If change in condition		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Airstrip_S



09/11/07 Wetted area is small creek passing across road draining in to Go Creek; facing ESE

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: November 13 th - 19 th , 2007	Inspector(s): James Spencer
Site Name: Go Creek	Location/Co-ordinates: Access Road crossing at Go Creek
Site Location Description: Temporary culvert installation will divert into a new channel upstream of the culvert and below to cut out the bend in the Creek. Area is cleared to the stream bank. Meandering Creek in Oxbow pattern difficult for straight crossing of creek and concerns over how to install culvert. See Figure 1. to be amended as planning continues. Potentially sensitive stream bank running parallel to the road access.	
Weather Conditions: 13-Nov-07 Clear and warm -7 14-Nov-07 Clear and warm -9 15-Nov-07 Overcast, low cloud and light snow -8 16-Oct-07 Clear and sunny -10 17-Oct-07 Clear and sunny -8 18-Oct-07 overcast and light snow -10 19-Nov-07 Clear and sunny	
Part 2 – Site Assessment	
Activity: Preparation for temporary culvert installation. Two 1m culverts 40' long placed side by side. No clear path ahead yet. May use geotextile for temporary armouring of new creek bed. Culverts undersized for spring runoff. Can you move road to the right of access to avoid slumping in the creek?	
Site Description: The area had been grubbed to the stream bank on both sides of the road access when Artic first pushed the road through in October. Major immediate concern is Creek running parallel to road and getting filled in from snow clearing ploughing. Need to see more detailed plans for the final Diversion channels etc. to be incorporated at a later date.	
Assessed Risk: Med	
Photos Attached:	
Samples Taken: No	
Additional Information Attached: Yes, Preliminary plan drawing	
Part 3 –Mitigation Requirements	
Mitigation Required: Ensure diversion is executed properly, with plugs installed and proper Sediment and Erosion Control practices used depending on the path taken forward. Culvert on compacted and $\frac{3}{4}$ crush 1/3 of diameter below grade of creek bed. Geotech underneath culvert and possibly in temporary channel to help with armouring bank and bed. Review ESC practices.	
Mitigation Condition: N/A	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Monitor planning and construction process for the culvert installation	
Monitoring Frequency: Daily until culvert successfully installed.	
Reporting Requirements: Maintain communication with VP	

Wolverine Project Environmental Inspection Form – Photos

Site Name: Go Creek	
	 Figure1 Randy's Sketch
Photo 1 - 11/18/07 – Go Creek Looking North	Photo 2 - 09/11/07 – Pit full of water with pumps

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: December 4 th -10 th , 2007	Inspector(s): James Spencer																						
Site Name: Go Creek	Location/Co-ordinates: Access Road crossing at Go Creek																						
Site Location Description: Temporary culvert installation will divert into a new channel upstream of the culvert and below to cut out the bend in the Creek. Area is cleared to the stream bank. Meandering Creek in Oxbow pattern difficult for straight crossing of creek and concerns over how to install culvert. Potentially sensitive stream bank running parallel to the road access.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">04-Dec-07</td> <td style="width: 65%;">clear</td> <td style="width: 20%; text-align: right;">-28</td> </tr> <tr> <td>05-Dec-07</td> <td>clear</td> <td style="text-align: right;">-25</td> </tr> <tr> <td>06-Dec-07</td> <td>clear</td> <td style="text-align: right;">-12</td> </tr> <tr> <td>07-Dec-07</td> <td>clear</td> <td style="text-align: right;">-20</td> </tr> <tr> <td>08-Dec-07</td> <td>clear</td> <td style="text-align: right;">-19</td> </tr> <tr> <td>09-Dec-07</td> <td>Mixed sun and cloud</td> <td style="text-align: right;">-17</td> </tr> <tr> <td>10-Dec-07</td> <td>windy from the south, light snow</td> <td style="text-align: right;">-13</td> </tr> </table>			04-Dec-07	clear	-28	05-Dec-07	clear	-25	06-Dec-07	clear	-12	07-Dec-07	clear	-20	08-Dec-07	clear	-19	09-Dec-07	Mixed sun and cloud	-17	10-Dec-07	windy from the south, light snow	-13
04-Dec-07	clear	-28																					
05-Dec-07	clear	-25																					
06-Dec-07	clear	-12																					
07-Dec-07	clear	-20																					
08-Dec-07	clear	-19																					
09-Dec-07	Mixed sun and cloud	-17																					
10-Dec-07	windy from the south, light snow	-13																					
Part 2 – Site Assessment																							
Activity: Preparation for temporary culvert installation. Two 1.2m culverts 60' long placed side by side, geotextile used to stabilize the installation. The skew was minimized to line up the natural channel with the culvert while allowing for enough road width. Material pushed from hill on north side of culvert from the right of way to provide for fill. Culvert placed on shaley gravel with a small fraction of bony pit-run.																							
Site Description: The area had been grubbed to the stream bank on both sides of the road access when Artic first pushed the road through in October. One section of the creek that paralleled the road was bypassed. The Culvert is in place and the creek diverted to course through the culverts. Winter conditions have reduced stream to a trickle so water is freezing and damming and not running through the culverts. Road base is 15M and road top is 5M with 2:1 shoulders and 1M of fill over the culverts. Culverts centered and installed 3-8" below creek grade on inlet and 2- 4' above grade on outlet, skewed at 15 degrees from perpendicular to road.																							
Assessed Risk: Low																							
Photos Attached: 4																							
Samples Taken: No																							
Additional Information Attached: No																							
Part 3 –Mitigation Requirements																							
Mitigation Required: All ESC practices that could reasonably be incorporated during winter conditions were put in place. Work performed in dry by plugging upstream side while work in progress. Semi-circular excavation shape used for channel to minimize flow velocities. Grade maintained at 2%-4% to match the grade of the original stream path. Banks of new excavation will need silt fence and encourage re-vegetation in spring time. May need to reinforce stream bed with larger bony material to prevent excessive stream bank erosion. We had no ¾ crush to place the culvert and no sand or fine grained material so used the material available at site. Minimal compaction as ground is frozen and dry. Compacted with the hoe bucket. Rip Rap will be placed on outflow and inflow in early spring to minimize erosion																							
Mitigation Condition: Good, check for debris build up at inflow																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Will monitor again in the Spring as ground thaws																							
Monitoring Frequency: On Hold																							
Reporting Requirements: Change in Condition																							

Wolverine Project Environmental Inspection Form – Photos

Site Name: Go Creek



**Photo 1 - 12/04/07 – Semi-circular excavation
Go Creek; looking south**



Photo 2 - 12/04/07 - Placing culverts looking SE



**Photo 3 - 12/06/07 - Grading road and fill on
culverts; looking SE**

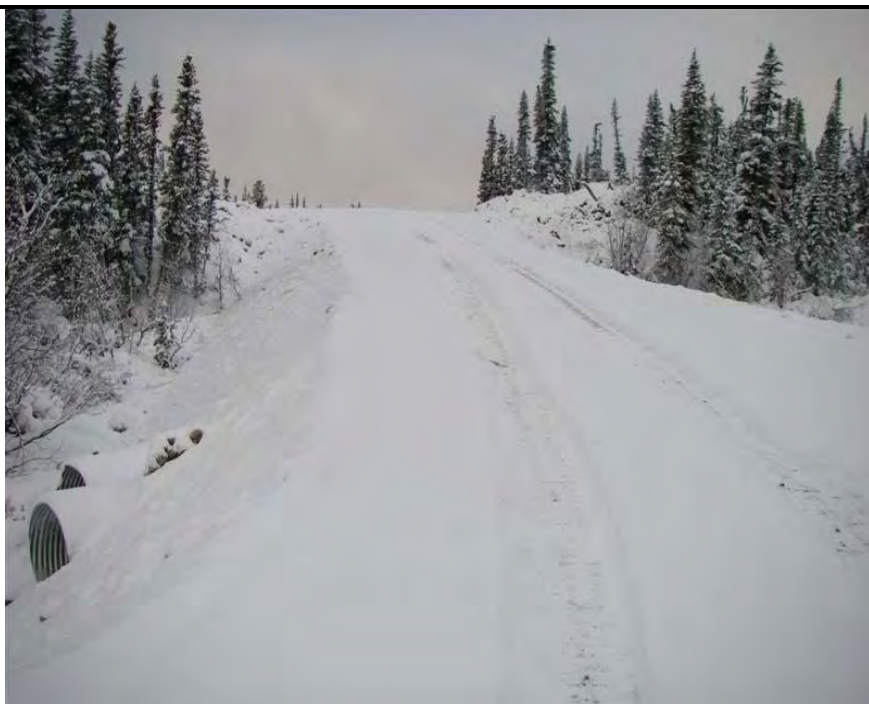


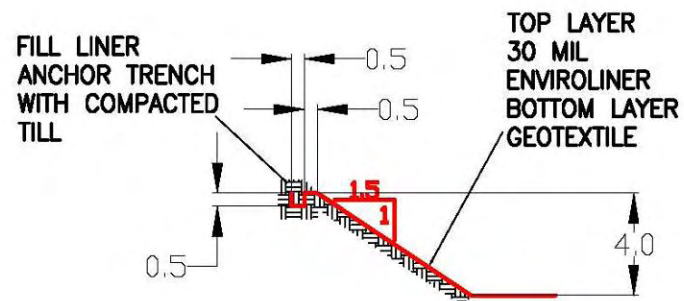
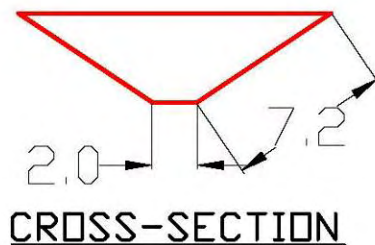
Photo 4 - 12/09/07 - Finished fill and grading; looking NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 31 st – September 22 nd , 2007	Inspector(s): James Spencer	
Site Name: Coverall Dirty Sump (CDS)	Location/Co-ordinates: lower laydown area	
Site Location Description: A settling pond built within a pre-existing coverall at the lower laydown area		
Weather Conditions:		
Date	Conditions	Temp (°C)
31-Aug-07	Rain intermittent throughout day, clearing in the afternoon	10
01-Sep-07	Rain all morning, clearing in afternoon to sun	8
02-Sep-07	Mix of clouds, and sun. Rain intermittent	13
03-Sep-07	Sunny in the morning, cloudy in the afternoon	12
04-Sep-07	Very frosty, Sun in the morning, overcast in the afternoon	8
05-Sep-07	Sunny with clouds	8
06-Sep-07	Cloudy or overcast	11
07-Sep-07	Cloudy with sunny breaks and occasional short showers	12
08-Sep-07	Frost in morning, overcast	7
09-Sep-07	Overcast	8
10-Sep-07	Very gray all day, some showers in evening	10
11-Sep-07	Sunny and warm	15
12-Sep-07	Sunny and warm	14
13-Sep-07	Sunny and warm	14
14-Sep-07	Mixed sun and cloud	13
15-Sep-07	rain showers all day, clearing in afternoon	11
16-Sep-07	Bright sunny	14
17-Sep-07	Cool and overcast, dusting of snow on high peaks	9
18-Sep-07	cool and light flurries	8
19-Sep-07	Overcast, with flurries throughout the day	6
20-Sep-07	Flurries, clearing in the afternoon	7
21-Sep-07	Flurries, rain in camp in the afternoon, low overcast	5
22-Sep-07	Clear breaks, cloudy	6
Part 2 – Site Assessment		
Activity: Construction of sump		
Site Description: Sump will be built within the coverall, as close to the edges as possible, with lock trenches being filled in by hand. (see attached design drawing)		
Assessed Risk: low		
Photos Attached: CDS - 4		
Samples Taken: Yes (ABA and shake flask)		
Additional Information Attached: CDS Design Drawing		
Part 3 –Mitigation Requirements		
Mitigation Required: No		
Mitigation Condition:		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Once water is in the sump, ensure that the liner does not fall in		
Monitoring Frequency: Weekly, as per B-Licence requirements		
Reporting Requirements: B-Licence		

**Wolverine Project
Environmental Inspection Form – Photos**

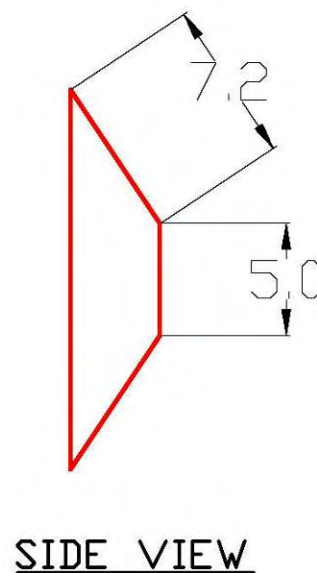
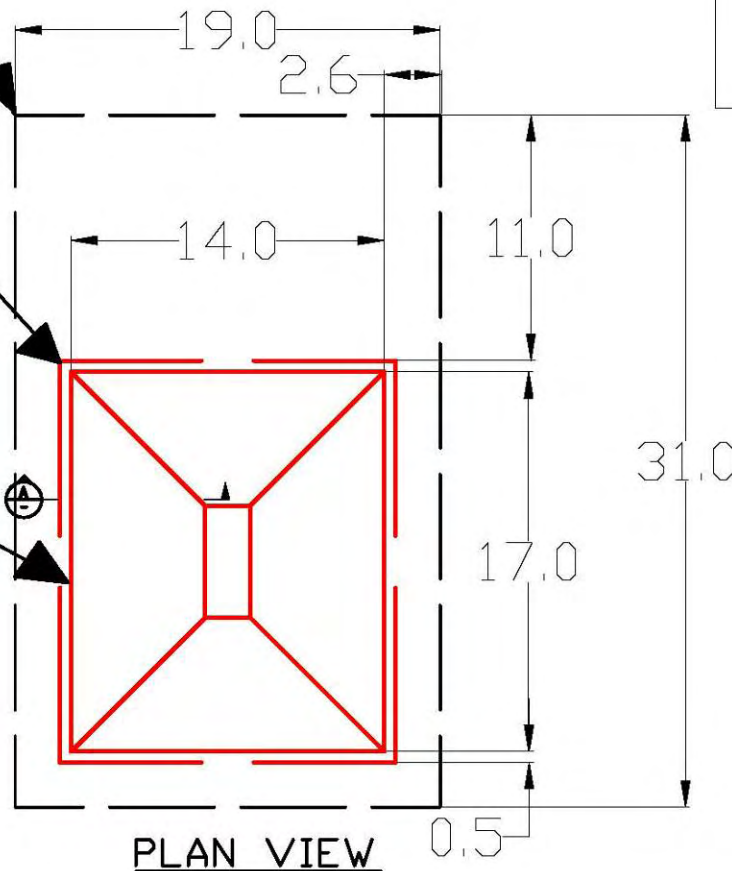
Site Name: CDS	
	
08/31/07 Construction of sump within the coverall (facing N)	09/02/07 Completed sump prior to liner installation (facing S)
	
09/17/07 Completed liner installation (facing S)	09/17/07 Lock trenching of liner (facing S)



COVER-ALL BUILDING

LOCK TRENCH

INNER LINER LIMIT



1.5:1 SLOPE
SUMP VOLUME = 544 m³
209 m² OF STORAGE

Yukon Zinc
CORPORATION

DESIGNED BY		WOLVERINE PROJECT
REV. CHECK		COVER ALL SUMP
DRAWN BY		DESIGN
SCHD.		V1
PROJECT NO.	1614	DRAWING NO.
REV.		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 23 rd – October 1 st , 2007		Inspector(s): James Spencer
Site Name: Coverall Dirty Sump (CDS)		Location/Co-ordinates: lower laydown area
Site Location Description: A settling pond built within a pre-existing coverall at the lower laydown area		
Weather Conditions:		
Date	Conditions	Temp (°C)
23-Sep-07	mixed overcast flurries	-4
24-Sep-07	mixed rain and flurries	0
25-Sep-07	rain showers all day, clearing in evening	5
26-Sep-07	Overcast, foggy	-2
27-Sep-07	Overcast, foggy	-3
28-Sep-07	Some clearing still overcast with low ceilings	-1
29-Sep-07	coolish, broken cloud cover	-5
30-Sep-07	Cool snow flurries	-2
01-Oct-07	Overcast with sunny breaks	-1
Part 2 – Site Assessment		
Activity: Construction of sump		
Site Description: Sump was built within the coverall, with lock trenches being filled in by hand.		
Assessed Risk: low		
Photos Attached: 2		
Samples Taken: Yes (ABA and shake flask)		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: No		
Mitigation Condition:		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Water sampling once upper ponds are decommissioned		
Monitoring Frequency: Weekly, as per B-Licence requirements		
Reporting Requirements: B-Licence		

Wolverine Project Environmental Inspection Form – Photos

Site Name: CDS



09/23/07 Complete CDS, with incoming mine water pipe (at top of photo); facing N



09/24/07 Completed sump; facing S

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 22 nd – 28 th , 2007	Inspector(s): James Spencer	
Site Name: Fuel Cache	Location/Co-ordinates: Just past km 3 pad on east side of site road	
Site Location Description: A low point of ground that drains through the upper bank and on to the pad during the melt. Also discovered a small spring at the southeast corner of the pad. Total affected area 125m ² . Wolverine Creek ~250 m SE.		
Weather Conditions:		
Date	Conditions	Temp (°C)
22-May-07	Clear and Sunny	14
23-May-07	Clear and Sunny	15
24-May-07	Clear and Sunny	15
25-May-07	Clear and Sunny	15
26-May-07	Cooler and light rain, front approaching from south	8
27-May-07	Sunny and hot	15
28-May-07	Sunny and warm	15
Part 2 – Site Assessment		
Activity: Fueling station had diesel barrels stored on sides that began to leak in winter and spilled 660 liters of diesel on to pad over the course of the winter since November 5 th .		
Site Description: Area drying up through week. Pads not picking up hydrocarbon. Still smell diesel in some soil		
Assessed Risk: Low		
Photos Attached: Fuel Cache - 6		
Samples Taken: 7 samples of contaminated soil for LEPH/HEPH/VPH analysis		
Additional Information Attached: Spill Report		
Part 3 –Mitigation Requirements		
Mitigation Required: Dug two trenches on 25 th , 26 th around the site to divert the surface water and subsurface flows that were contacting the spill site. Continue to apply pads to the open ponding, very little visible hydrocarbon, all soaked in to soil. 10 - 20 liters of hydrocarbon metabolizing bacteria to be applied with pump up sprayer by June 5 th , 2007. ~77 m ³ of contaminated material to be hauled to contaminated soil storage area. ~30m ³ of material wtil to remove.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination, continue to replace pads		
Monitoring Frequency: Daily.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Diesel Tanks



05/23/07 Fuel cache (blue barrels) during soil excavation; facing ESE



05/25/07 Absorbent pads placed in pooling water area; facing W



05/25/07 Excavation ditches to prevent water from entering contaminated site; facing W



05/27/07 Diversion ditch north of fuel cache; facing E

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: Diesel Tanks	
	
05/28/07 Excavation of diversion ditches; facing W	05/28/07 Completed diversion ditches; facing N

Wolverine Project - Spill Report

Report Date: May 24, 2007

Date and time of spill: Unknown, first observed diesel staining around drum storage area May 22, 2007

Date and time reported to government: May 25, 2007 11:30 am (24hr Yukon Spill Report Line); Reported to EMR and Water Resources Inspectors at 10 am May 25, 2007

Location and map co-ordinates: Diesel fuel cache in previously disturbed area along road route just north of the portal area. GPS Coordinates: UTM 09V 439409m E, 6811157m N (Elevation =1343m) (see attached photos and map)

Party Responsible: Yukon Zinc Corporation

Product Spilled and Quantity: Diesel, approximately 660 L. Two 205 L drums were nearly empty, one drum was $\frac{3}{4}$ empty and two drums were $\frac{1}{4}$ empty. Upon discovery of the staining, it was estimated that between 50 to 150 L had spilled (reportable quantity for diesel is 200 L). Upon removal of the drums and start of excavation, the estimate was revised.

Cause and Effect of Spill: Fuel was delivered from Trans North Helicopters on November 5th, 2006 and January 5th, 2007. Most of the fuel delivery was pumped to the envirotanks near the portal and surplus fuel was transfer to empty drums. In total there were 60 drums that were filled and tightened with bung wrenches. Of the five drums that leaked, two drums had defective seals and three drums did not have seals. The drums had been placed on their sides to prevent contamination from rain water.

Status of spill (terminated or continuing): Terminated

Extent of Contamination: Diesel migrated from the barrels and followed the terrain sloping to the north east where it terminated approximately 50 m from the drum cache location (see attached photos). Based on excavations conducted May 24th, most of the soil contamination is confined to a 5 m x 5 m area directly beneath the stored drums. The depth of penetration of the spill in this area varies (0.2 m to 0.6 m) and post-excavation samples will be taken by an external consultant to ensure that the remaining soil is not contaminated.

Factors affecting spill or recovery (temperatures, wind, snow, ice, terrain, buildings, etc.): Initially, it was difficult at first to ascertain which barrels had leaked due to spring

snow melt and a surface seep in the area. It was also difficult to ascertain the degree of contamination as the area is fairly wet (see attached photos – note that area is wet from surface runoff).

Containment (natural, booms, dykes or other)/no containment: Hydrocarbon absorbent pads were placed in the small areas of pooling water, but are not showing evidence of hydrocarbons.

Action (if any) taken or proposed to control, recover, clean up or dispose of spill:

At 5:30 pm on May 22nd five drums in the area where the ground was stained were righted after being identified as the sources of the spill (cache A in the photos). On May 23rd, the remaining 55 drums were righted to prevent any possible leakage. They were then moved towards the north end of the cache area, away from the spill area (cache B in the photos), and tarped. The 55 remaining drums did not show any signs of leaking. The spill area was delineated prior to excavation of the contaminated material (see Photo 1). Three loads (~7.5 m³ each) were hauled to a lined area near the airstrip and tarped. On May 24th a further four loads (~7.5 m³ each) were moved. YZC has limited the amount of excavation to minimize seepage of groundwater into the excavation site. A diversion ditch is being constructed upslope of the area to prevent clean water from entering the site. A hydrocarbon metabolizing bacterial culture will be applied to the affected area, and confirmatory sampling of the area will be conducted by Lorax Environmental Services Ltd. on June 4th, 2007.

Do you require assistance? No assistance is required.

Hazards to persons, property or environment (fire, drinking water, threat to fish or wildlife): No hazards – nearest water body is Wolverine Creek, ~100 m to the southwest. The road between the camp and portal parallels the cache area to the west (Wolverine Creek is on the other side of the road).

Agencies on site: None. 24hr Yukon Spill Report Line and Energy, Mines and Resources notified on May 25, 2007.

Others notified of spill: Pamela Ladyman, VP Environment and Raymond Mah, Chief Operating Officer, Yukon Zinc Corporation. Ross River Dena Council and Liard First Nation (May 25, 2007).

Comments and/or recommendations/further action required:

YZC will store the contaminated material in a lined and covered area until it is trucked offsite to an approved facility in August 2007. Lorax Environmental Services Ltd. will conduct confirmatory sampling of the excavated area and provide additional direction as necessary.

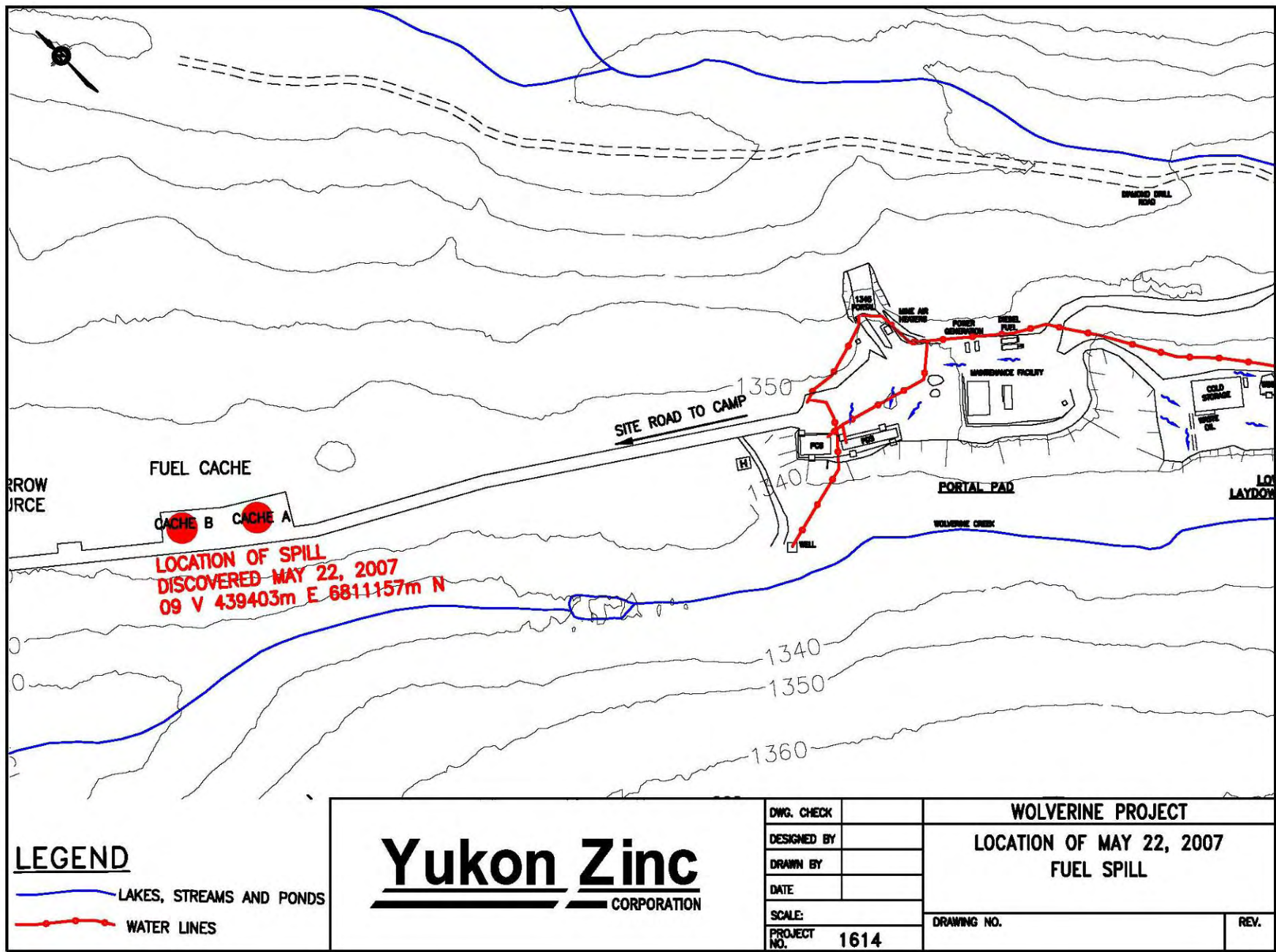
Reported by: Jimmy Spencer, Environmental Technician, Yukon Zinc Corporation

Location: Wolverine Camp

Telephone: (604) 678-4928 ext. 3

Reported to: Pamela Ladyman, VP Environment and Community Affairs, YZC

Telephone: (604) 682-5474 x 246 or (604) 644-7655



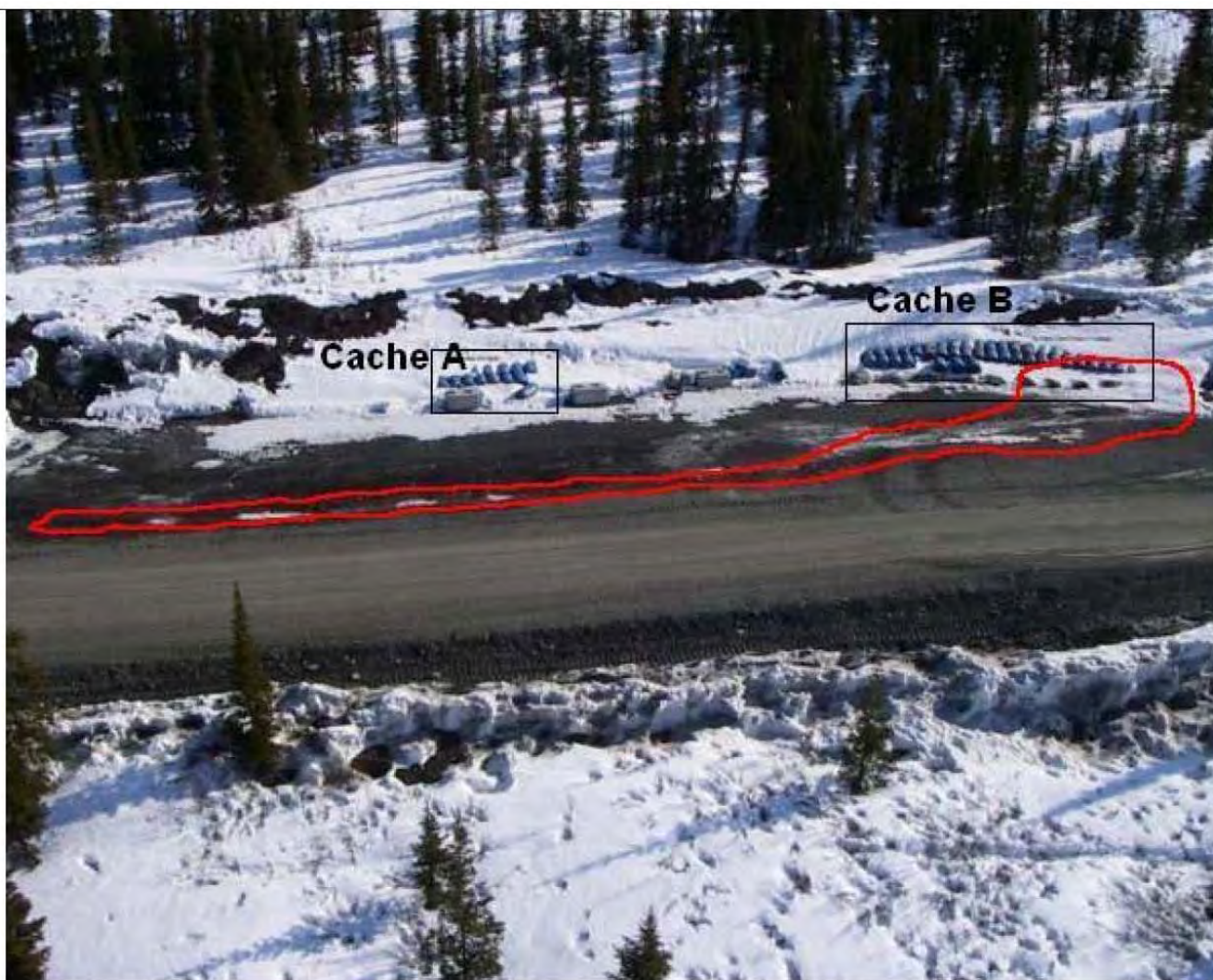


Photo 1. Aerial photo of site prior to spill; red outline depicts the affected area. Photo taken May 1, 2007 looking east.



Photo 2. Arrangement of stored diesel drums in Cache A with spilled containers placed upright. The sealed drums are on their side to prevent contamination by rain water. Taken May 23, 2007.



Photo 3. Area of spill (Cache A) with righted drums that had leaked. Note: Wetted area is from seeping surface water. No product was observed in puddles. Taken May 23, 2007.



Photo 4. Start of contaminated soil excavation (approx. 30 cm deep). Taken May 23, 2007



Photo 5. After the drums were moved from Cache A north to Cache B; midway through excavation of the contaminated soil. The red line outlines the contaminated area viewed from the north-west, looking down the site road towards the portal area. Taken May 23, 2007.

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th – June 4 th , 2007	Inspector(s): Melissa Kirby & Jennie Gjertsen	
Site Name: Fuel Cache	Location/Co-ordinates: Just past km 3 pad on east side road	
Site Location Description: A low point of ground that drains through the upper bank and on to the pad during the melt. Also discovered a small spring at the southeast corner of the pad. Total affected area ~125 m ² . Wolverine Creek around 250 m to the SE.		
Weather Conditions:		
Date	Conditions	Temp (°C)
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity:		
Continued excavation and cleanup of contaminated soil		
Government inspection done by Steve Colp.		
Site Description:		
- Contaminated soil removed to storage facility (cells closed up with tarps) - Diversion ditch retaining water as well as shallower dug out site (south end) - No longer any "sheen" to water - All remaining fuel barrels tarped and roped - Spill pads still soiling slightly - Sprayed with bacterial cleanup spray - Ground continues to have a diesel smell		
Assessed Risk: Low		
Photos Attached: -		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Bacterial spraying needs to be repeated - Have consultant Justin Stockwell remove more soil samples - Once results confirmed, either remove/treat more of site if it still shows contamination. If within acceptable parameters, fill in diversion ditches and even out surface		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination		
Monitoring Frequency: Monitoring can be discontinued until results of samples are received.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th – June 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen	
Site Name: Fuel Cache	Location/Co-ordinates: Just past km 3 pad on east side road	
Site Location Description: A low point of ground that drains through the upper bank and on to the pad during the melt. Also discovered a small spring at the southeast corner of the pad. Total affected area ~125 m ² . Wolverine Creek around 250 m to the SE.		
Weather Conditions:		
Date	Conditions	Temp (°C)
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	15
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: None		
Site Description:		
- Areas under water are not draining/drying - Flows from mountains remain high and may be affecting the volume of water in the diversion ditch		
Assessed Risk: Low		
Photos Attached: -		
Samples Taken: Soil samples collected by Justin Stockwell. Collected ten samples and sent them off for LEPH/HEPH/VPH analysis.		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Bacterial spraying needs to be repeated - Once results confirmed, either remove/treat more of site if it still shows contamination. If within acceptable parameters, fill in diversion ditches and even out surface.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination.		
Monitoring Frequency: On hold until results of soil analysis have been received		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 10 th – July 16 th , 2007	Inspector(s): Jennie Gjertsen and Mary McDougall	
Site Name: Fuel Cache	Location/Co-ordinates: Just past km 3 pad on east side road	
Site Location Description: A low point of ground that drains through the upper bank and on to the pad during the melt. Also discovered a small spring at the southeast corner of the pad. Total affected area ~125 m ² . Wolverine Creek around 250 m to the SE.		
Weather Conditions:		
Date	Conditions	Temp (°C)
10-Jul-07	Cloudy and cool	13
11-Jul-07	Sunny and windy, cool in morning, warming in afternoon	16
12-Jul-07	Cool and cloudy	12
13-Jul-07	Sunny with clouds, warm	20
14-Jul-07	Sunny with clouds	22
15-Jul-07	Sunny with clouds in afternoon	25
16-Jul-07	Heavy rain in morning, cloudy in afternoon and clearing in evening	18
Part 2 – Site Assessment		
Activity:		
- All unsealed fuel barrels that were tarped have been removed to either the access road site or used to fuel machinery on site. The remaining barrels have seals intact. - Report from Lorax was received. Only one soil sample was over commercial limits (sample #8 in report), it was collected from directly underneath the area the initial contamination area.		
Site Description:		
Site contains very little standing water and appears for the most part to be dry.		
Assessed Risk: Low		
Photos Attached: Fuel Cache - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
Diversion ditch and smear zone can be filled in, but not the area where the contaminated soil that was over in LEPH was collected.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: watch for new contamination from sealed barrels		
Monitoring Frequency: weekly, after reclamation to site has occurred		
Reporting Requirements: QMLU-0006, QZ01-051		

Site Name: Fuel Cache



07/15/07 Area of contamination; facing N



07/15/07 Area of contamination; facing ESE

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 12 th – June 18 th , 2007	Inspector(s): James Spencer	
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll	
Site Location Description: The LTF was designed to hold and treat 90 m ³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.		
Weather Conditions:		
Date	Conditions	Temp (°C)
12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening	18
13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening	14
14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening.	14
15-Jun-07	Mixed Sun and cloud, small storm systems all day	17
16-Jun-07	Mixed Sun and cloud, small storm systems all day	16
17-Jun-07	Mixed Sun and cloud, small storm systems all day	15
18-Jun-07	Rain heavy at times, mixed sun and cloud	14
Part 2 – Site Assessment		
Activity:		
- Windrowing of hydrocarbon contaminated soil for summer remediation period. - Site is over capacity for the amount of material stored there and no windrows are in place, also no barrel to contain any overflow if water capacity is limited. Material has collected on the edge of the berm outside of the liner. See photo #1.		
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil		
Assessed Risk: Med		
Photos Attached: LTF - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Move contaminated material off of the cell sides - Remove any excess material to a soil storage area that exceeds the 0.5 m height - Soil to be turned and windrowed to encourage bioremediation		
Mitigation Condition: June 11-16, P; June 18, G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor for water overflow		
Monitoring Frequency: During rain events or if condition changes		
Reporting Requirements: LTF Permit 4202-24-022		

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF		
		
Photo 1 06/16/07 Containment cell prior to windrowing; facing east	Photo 2 06/18/07 Containment cell after windrowing; facing west	
		
Photo 3 06/18/07 Containment cell after windrowing; facing south-west		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: June 26 th - July 2 nd , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll																						
Site Location Description: The LTF was designed to hold and treat 90 m ³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.																							
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2-Jul-07	patchy clouds with sunny breaks	15																					
Part 2 – Site Assessment																							
Activity: Windrows in place and removal of tarp has resulted in pooling of water during heavy rain fall. Water is threatening to overflow the liner.																							
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil																							
Assessed Risk: High																							
Photos Attached: LTF																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: Re-tarping of LTF during rainfall events and removal when sunny.																							
Mitigation: June 29 th : 800 litres of contaminated water removed to used/empty fuel barrels. Site remains uncovered until word from Vancouver office regarding compliance standards for re-tarping.																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Monitor for excess water flow																							
Monitoring Frequency: During rain events or if condition changes																							
Reporting Requirements: LTF Permit 4202-24-022																							

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF	
	
Photo 1 07/01/07 Water accumulating in treatment cell: Material from May 24 fuel spill in background; facing south east	Photo 2 07/01/07 Water accumulating in treatment cell: facing east

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																						
Date and Time: July 3 rd – July 9 th , 2007	Inspector(s): Jennie Gjertsen																					
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll																					
Site Location Description: The LTF was designed to hold and treat 90 m ³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.																						
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">3-Jul-07</td> <td style="width: 80%;">cloudy with scattered showers</td> <td style="width: 10%; text-align: right;">18</td> </tr> <tr> <td>4-Jul-07</td> <td>Thunderstorms in AM with hail, clearing in afternoon to patchy clouds</td> <td style="text-align: right;">16</td> </tr> <tr> <td>5-Jul-07</td> <td>Rain overnight, clearing to sun in afternoon, late afternoon showers</td> <td style="text-align: right;">18</td> </tr> <tr> <td>6-Jul-07</td> <td>Rain overnight and during day, cloudy in afternoon</td> <td style="text-align: right;">15</td> </tr> <tr> <td>7-Jul-07</td> <td>Cloudy throughout day, showers</td> <td style="text-align: right;">15</td> </tr> <tr> <td>8-Jul-07</td> <td>Showers and cloudy</td> <td style="text-align: right;">15</td> </tr> <tr> <td>9-Jul-07</td> <td>Cloudy with sunny periods</td> <td style="text-align: right;">20</td> </tr> </table>		3-Jul-07	cloudy with scattered showers	18	4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16	5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18	6-Jul-07	Rain overnight and during day, cloudy in afternoon	15	7-Jul-07	Cloudy throughout day, showers	15	8-Jul-07	Showers and cloudy	15	9-Jul-07	Cloudy with sunny periods	20
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7-Jul-07	Cloudy throughout day, showers	15																				
8-Jul-07	Showers and cloudy	15																				
9-Jul-07	Cloudy with sunny periods	20																				
Part 2 – Site Assessment																						
Activity: 400 litres of contaminated water was removed from LTF to prevent overflow from liner. Barrels of contaminated water were moved into the centre of the LTF to act as a high point for tarping, although not achieving the desired affect. Water pooling on tarp needs to be removed after any rainfall to prevent more water entering LTF.																						
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil																						
Assessed Risk: Med																						
Photos Attached: LTF																						
Samples Taken:																						
Additional Information Attached:																						
Part 3 –Mitigation Requirements																						
Mitigation Required: Re-tarping of LTF during rainfall events and removal when sunny.																						
Mitigation Condition: Fair																						
Part 4 –Monitoring Requirements																						
Follow-up Monitoring: Monitor for excess water flow																						
Monitoring Frequency: During rain events or if condition changes																						
Reporting Requirements: LTF Permit 4202-24-022																						

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: LTF



**Photo 1 07/07/07 Water containment in drums:
facing east**



**Photo 2 07/07/07 Water containment in drums:
facing ENE**

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: July 10 th - July 16 th , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll																						
Site Location Description: The LTF was designed to hold and treat 90 m³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.																							
Weather Conditions: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">9-Jul-07</td> <td style="width: 75%;">Cloudy with sunny periods</td> <td style="width: 10%; text-align: right;">20</td> </tr> <tr> <td>10-Jul-07</td> <td>Cloudy and cool</td> <td style="text-align: right;">13</td> </tr> <tr> <td>11-Jul-07</td> <td>Sunny and windy, cool in morning, warming in afternoon</td> <td style="text-align: right;">16</td> </tr> <tr> <td>12-Jul-07</td> <td>Cool and cloudy</td> <td style="text-align: right;">12</td> </tr> <tr> <td>13-Jul-07</td> <td>Sunny with clouds, warm</td> <td style="text-align: right;">20</td> </tr> <tr> <td>14-Jul-07</td> <td>Sunny with clouds</td> <td style="text-align: right;">22</td> </tr> <tr> <td>15-Jul-07</td> <td>Sunny, clouds in afternoon</td> <td style="text-align: right;">25</td> </tr> </table>			9-Jul-07	Cloudy with sunny periods	20	10-Jul-07	Cloudy and cool	13	11-Jul-07	Sunny and windy, cool in morning, warming in afternoon	16	12-Jul-07	Cool and cloudy	12	13-Jul-07	Sunny with clouds, warm	20	14-Jul-07	Sunny with clouds	22	15-Jul-07	Sunny, clouds in afternoon	25
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14-Jul-07	Sunny with clouds	22																					
15-Jul-07	Sunny, clouds in afternoon	25																					
Part 2 – Site Assessment																							
Activity: Windrows are still in place; site has been tarped and untarped several times. Nine barrels (1800L) of contaminated water have been removed.																							
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil																							
Assessed Risk: Med																							
Photos Attached: LTF (1)																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: Some way of tarping LTF for easier removal/replacement. The alternative would be to even out windrows and make LTF into a temporary storage facility to allow maintenance to be minimized. Windrows need to be turned monthly.																							
Mitigation Condition: fair; pooling of water on top of tarp requires frequent removal to prevent pulling tarp from edges.																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Monitor for excess water flow																							
Monitoring Frequency: During rain events or if condition changes																							
Reporting Requirements: LTF Permit 4202-24-022																							

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: LTF



Photo 1 07/10/2007 Tarped LTF cell: facing east

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: July 17 th - July 23 rd , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll																						
Site Location Description: The LTF was designed to hold and treat 90 m ³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">17-Jul-07</td> <td style="width: 75%;">Mixed Sun and cloud, warm, rain in evening</td> <td style="width: 10%; text-align: right;">20</td> </tr> <tr> <td>18-Jul-07</td> <td>Mixed Sun and cloud, warm</td> <td style="text-align: right;">20</td> </tr> <tr> <td>19-Jul-07</td> <td>Fog in morning then sunny followed by cloud in afternoon</td> <td style="text-align: right;">20</td> </tr> <tr> <td>20-Jul-07</td> <td>Mixed sun and cloud, no rain</td> <td style="text-align: right;">22</td> </tr> <tr> <td>21-Jul-07</td> <td>Light rain in morning, sunny afternoon, heavy rain early evening</td> <td style="text-align: right;">20</td> </tr> <tr> <td>22-Jul-07</td> <td>Mixed sun and cloud, no rain</td> <td style="text-align: right;">19</td> </tr> <tr> <td>23-Jul-07</td> <td>Rain overnight, clearing to sun in afternoon, late afternoon showers</td> <td style="text-align: right;">21</td> </tr> </table>			17-Jul-07	Mixed Sun and cloud, warm, rain in evening	20	18-Jul-07	Mixed Sun and cloud, warm	20	19-Jul-07	Fog in morning then sunny followed by cloud in afternoon	20	20-Jul-07	Mixed sun and cloud, no rain	22	21-Jul-07	Light rain in morning, sunny afternoon, heavy rain early evening	20	22-Jul-07	Mixed sun and cloud, no rain	19	23-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	21
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23-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	21																					
Part 2 – Site Assessment																							
Activity: Windrows are still in place; Barrels have been removed from the cell to prepare for turning in to a storage facility that will shed water, 9 barrels slung out with excavator on to pad. Tarp replaced to gather the majority of pooling water.																							
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil																							
Assessed Risk: Med																							
Photos Attached: No Photo																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: We will even out windrows and make LTF into a temporary storage facility to allow maintenance to be minimized. Not sure yet on method.																							
Mitigation Condition: fair, pooling of water on top of tarp requires frequent removal to prevent pulling tarp from edges.																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Monitor for excess water flow																							
Monitoring Frequency: During rain events or if condition changes																							
Reporting Requirements: LTF Permit 4202-24-022																							

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																				
Date and Time: July 24 th - July 30 th , 2007	Inspector(s): James Spencer																			
Site Name: LTF	Location/Co-ordinates: East side of airstrip built up on knoll																			
Site Location Description: The LTF was designed to hold and treat 90 m ³ of soil within a 30 m long x 6 m wide containment cell(actual as-built size is 28 m long x 5 m wide), with the soil windrowed to 0.5 m high. The LTF has been lined with a layer of clay to allow turning of the windrows monthly, without damaging the liner.																				
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">24-Jul-07</td> <td style="width: 75%;">Sunny most of day until showers late afternoon</td> <td style="width: 10%; text-align: right;">22</td> </tr> <tr> <td>25-Jul-07</td> <td>Rain at night, Rain in afternoon, sunny in morning</td> <td style="text-align: right;">18</td> </tr> <tr> <td>26-Jul-07</td> <td>Mixed Sun and scattered cloud, No rain, black flies, cool 3 deg. In morning</td> <td style="text-align: right;">22</td> </tr> <tr> <td>27-Jul-07</td> <td>Rain throughout day, short sunny breaks</td> <td style="text-align: right;">18</td> </tr> <tr> <td>28-Jul-07</td> <td>Sunny all morning thunder showers threatening at 2pm</td> <td style="text-align: right;">22</td> </tr> <tr> <td>29-Jul-07</td> <td>Sunny all day, isolated rain showers</td> <td style="text-align: right;">23</td> </tr> </table>			24-Jul-07	Sunny most of day until showers late afternoon	22	25-Jul-07	Rain at night, Rain in afternoon, sunny in morning	18	26-Jul-07	Mixed Sun and scattered cloud, No rain, black flies, cool 3 deg. In morning	22	27-Jul-07	Rain throughout day, short sunny breaks	18	28-Jul-07	Sunny all morning thunder showers threatening at 2pm	22	29-Jul-07	Sunny all day, isolated rain showers	23
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29-Jul-07	Sunny all day, isolated rain showers	23																		
Part 2 – Site Assessment																				
Activity: Windrows have been flattened, tarps were placed on top to separate from capping material, 13 loads (~100m ³) of material used to cap the LTF in a convex shape. Two 30x50 tarps placed on top and drainage in place to shed water.																				
Site Description: Treatment cell for ~60 m ³ of hydrocarbon contaminated soil																				
Assessed Risk: Low																				
Photos Attached: LTF (3)																				
Samples Taken:																				
Additional Information Attached:																				
Part 3 –Mitigation Requirements																				
Mitigation Required: When road is through we will re-excavate and separate good material. Contaminated material will be shipped out.																				
Mitigation Condition: Excellent, all water is shed and draining away from the LTF cell																				
Part 4 –Monitoring Requirements																				
Follow-up Monitoring: N/A																				
Monitoring Frequency: Only if condition changes																				
Reporting Requirements: LTF Permit 4202-24-022																				

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF



Photo 1 07/26/07 Placing clean soil over the flattened and tarped contaminated material; facing east



Photo 2 07/26/07 Placing clean soil over the flattened and tarped contaminated material; facing north



Photo 3 07/26/07 Final tarped cell; facing east

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 12 th – 18 th , 2007	Inspector(s): James Spencer	
Site Name: Installation of new LTF cell	Location/Co-ordinates: North-east side of airstrip	
Site Location Description: An original LTF was undersized, and consequent fuel spills have resulted in ~400 m3 of hydrocarbon contaminated material requiring storage & bioremediation. As such, an amendment to LTF permit 4202-24-022 was received in September, 2007. This 50 m x 55 m cell is the result of the amendment.		
Weather Conditions:		
Date	Conditions	Temp (°C)
12-Sep-07	Sunny and warm	14
13-Sep-07	Sunny and warm	14
14-Sep-07	Mixed sun and cloud	13
15-Sep-07	rain showers all day, clearing in afternoon	11
16-Sep-07	Bright sunny	14
17-Sep-07	Cool and overcast, dusting of snow on high peaks	9
18-Sep-07	cool and light flurries	8
Part 2 – Site Assessment		
Activity: Construction of LTF cell		
Site Description: Area north east of the airstrip will be cleared and lined, with a water collection sump at the west side.		
Assessed Risk: Low		
Photos Attached: LTF - 7		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: The water level in the sump needs to be monitored as per the “LTF operation and monitoring manual”		
Mitigation Condition:		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Soil needs to be placed in the LTF		
Monitoring Frequency: As weather events warrant, and at least twice a month April - October of each year		
Reporting Requirements: LTF Permit 4202-24-022		

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF	
	
12/09/07 Clearing and grubbing of site; facing N	13/09/07 Cleared and grubbing of site; facing W
	
14/09/07 Sloping the cell to drain into the sump; facing N	16/09/07 Sump, prior to liner installation; facing W

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF	
	
16/09/07 Geotech lined LTF cell, prior to liner installation; facing W	16/09/07 Liner installation; facing NNE
	
18/09/07 Completed LTF cell; facing W	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 19 th – October 1 st , 2007		Inspector(s): James Spencer
Site Name: new LTF cell		Location/Co-ordinates: North-east side of airstrip
Site Location Description: An original LTF was undersized, and consequent fuel spills have resulted in ~400 m ³ of hydrocarbon contaminated material needed treatment. As such, an amendment to LTF permit 4202-24-022 was received in September, 2007. This 50 m x 55 m cell is the result of the amendment.		
Weather Conditions:		
Date	Conditions	Temp (°C)
23-Sep-07	mixed overcast flurries	-4
24-Sep-07	mixed rain and flurries	0
25-Sep-07	rain showers all day, clearing in evening	5
26-Sep-07	Overcast, foggy	-2
27-Sep-07	Overcast, foggy	-3
28-Sep-07	Some clearing still overcast with low ceilings	-1
29-Sep-07	coolish, broken cloud cover	-5
30-Sep-07	Cool snow flurries	-2
01-Oct-07	Overcast with sunny breaks	-1
Part 2 – Site Assessment		
Activity:		
- Movement of soil into the LTF cell and extending the sump to maximize the liner. - The initial sump was built smaller than the liner, and as such will be extended. - The berms around the cell are also to be covered in dirt to lock in the liner. - The water that has accumulated in the sump was pumped out into organics.		
Site Description: LTF cell north of the airstrip		
Assessed Risk: Low		
Photos Attached: LTF - 5		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: The water level in the sump needs to be monitored as per the “LTF operation and monitoring manual”.		
Mitigation Condition:		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Water treatment options are to be explored		
Monitoring Frequency: As weather events warrant, and at least twice a month April - October of each year		
Reporting Requirements: LTF Permit 4202-24-022		

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF	
	
09/27/07 Soil moved into the LTF (~15" height); facing north west	09/27/07 Soil moved into the LTF (~15" height); facing west
	
09/27/07 Old LTF cell, tarped; facing south-east	09/27/07 Old LTF cell, tarped; facing south

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: LTF



09/27/07 soil storage area, after soil removal – used tarps piled at west end; facing north

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: October 2 nd – October 9 th , 2007	Inspector(s): Mary McDougall	
Site Name: new LTF cell	Location/Co-ordinates: North-east side of airstrip	
Site Location Description: An original LTF was undersized, and consequent fuel spills have resulted in ~400 m ³ of hydrocarbon contaminated material needed treatment. As such, an amendment to LTF permit 4202-24-022 was received in September, 2007. This 50 m x 55 m cell is the result of the amendment.		
Weather Conditions:		
Date	Conditions	Temp (°C)
02-Oct-07	Overcast with sunny breaks	-2
03-Oct-07	Overcast with snow flurries	-5
04-Oct-07	Overcast with sunny breaks; windy and cold	-8
05-Oct-07	Overcast and continuous snow flurries; windy and cold	-4
06-Oct-07	High overcast, breaking clouds	-4
07-Oct-07	Flurries all day	-3
08-Oct-07	Flurries off and on all day	-2
09-Oct-07	High overcast, breaking clouds	-2
Part 2 – Site Assessment		
Activity:		
- Tarping the soil in the cell to minimize contaminated water in the spring - Folding the soil storage berm over itself to prevent snow accumulation		
Site Description: LTF cell north of the airstrip		
Assessed Risk: Low		
Photos Attached: LTF - 5		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: The water level in the sump needs to be monitored as per the “LTF operation and monitoring manual”.		
Mitigation Condition:		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Water treatment options are being explored with Filterco		
Monitoring Frequency: As weather events warrant, and at least twice a month April-October of each year		
Reporting Requirements: LTF Permit 4202-24-022		

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF	
	
10/07/07 Moving plywood on soil storage berm; facing ESE	10/07/07 Folding over the berm; facing ESE
	
10/07/07 Tarp over ½ of the stored soil in the LTF; facing N	10/07/07 Tear in the middle of the berm from being pulled over; facing S

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: LTF



10/07/07 Final folded over berm

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th – July 2 nd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Construction Camp Site	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: Clearing of land in preparation for construction. Organics and topsoil have been stripped back and stockpiled at south end near entrance of camp. A pipe was installed as a temporary culvert to prevent access road washout during period of high rainfall/runoff.		
Site Description: Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: New Camp - 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements: QMLU-0006, QZ01-051		

**WolvJerine Project
Environmental Inspection Form – Photos**

Site Name: New Camp	
	
06/30/07 Aerial view of camp site	06/30/07 Aerial view of camp site
	
06/30/07 Organics stockpile	06/30/07 Culvert going through access road for drainage

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 3 rd - July 9 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
3-Jul-07	cloudy with scattered showers	18
4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16
5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18
6-Jul-07	Rain overnight and during day, cloudy in afternoon	15
7-Jul-07	Cloudy throughout day, showers	15
8-Jul-07	Showers and cloudy	15
9-Jul-07	Cloudy with sunny periods	20
Part 2 – Site Assessment		
Activity: Clearing of land in preparation for construction continues.		
Site Description: - Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp -3		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp	
	
07/07/07 Clearing of organics; facing N	07/07/07 Clearing of organics; facing NE
	
07/07/07 Clearing of organics; facing N	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 10 th - July 19 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
10-Jul-07	Cloudy and cool	13
11-Jul-07	Sunny and windy, cool in morning, warming in afternoon	16
12-Jul-07	Cool and cloudy	12
13-Jul-07	Sunny with clouds, warm	20
14-Jul-07	Sunny with clouds	22
15-Jul-07	Sunny, clouds in afternoon	25
16-Jul-07	Heavy rain in morning, cloudy in afternoon and clearing in evening	18
Part 2 – Site Assessment		
Activity: Continued preparation of land for construction.		
Site Description: - Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 3		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp	
	
07/16/07 Organics stockpile; facing E	07/16/07 Leveling of pad; facing NNW
	
07/16/07 Filling of pad; facing N	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 17 th - July 23 rd , 2007	Inspector(s): James Spencer	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
17-Jul-07	Mixed Sun and cloud, warm, rain in evening	20
18-Jul-07	Mixed Sun and cloud, warm	20
19-Jul-07	Fog in morning then sunny followed by cloud in afternoon	20
20-Jul-07	Mixed sun and cloud, no rain	22
21-Jul-07	Light rain in morning, sunny afternoon, heavy rain early evening	20
22-Jul-07	Mixed sun and cloud, no rain	19
23-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	21
Part 2 – Site Assessment		
Activity: Continued preparation of land for construction. Filling south end and cutting North end.		
Site Description: - Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 2		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: New Camp



07/20/07 Removing soil from north side to fill south side; facing N



07/21/07 Camp pad progress; facing ESE

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 24 th - July 30 th , 2007	Inspector(s): James Spencer	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
24-Jul-07	Sunny most of day until showers late afternoon	22
25-Jul-07	Rain at night, Rain in afternoon, sunny in morning	18
26-Jul-07	Mixed Sun and scattered cloud, No rain, black flies, cool 3deg. In morning	22
27-Jul-07	Rain throughout day, short sunny breaks	18
28-Jul-07	Sunny all morning thunder showers threatening at 2pm	22
29-Jul-07	Sunny all day, isolated rain showers	23
30-Jul-07	Mixed rain and sun	20
Part 2 – Site Assessment		
Activity: Continued preparation of land for construction. Filling south end cutting North end.		
Site Description: - Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 2		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp



25/07/07 Progress of camp pad; facing N



28/07/07 Progress of camp pad; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 31 st – August 6 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
31-Jul-07	Sunny in morning, thunderstorms in afternoon, clearing in evening	22
01-Aug-07	Sunny in morning, thunderstorms in afternoon, clearing in evening	18
02-Aug-07	Sunny with clouds	20
03-Aug-07	Sunny	22
04-Aug-07	Sunny	23
05-Aug-07	cloudy	18
06-Aug-07	Cloudy with rain	15
Part 2 – Site Assessment		
Activity: Continued preparation of land for construction. Filling south end cutting North end. Final surveying of site to be done soon.		
Site Description: - Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 4		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp	
	
08/02/07 Progress of camp pad construction; facing N	08/06/07 East slope of camp pad; facing N
	
08/06/07 Camp levelling; facing NW	08/06/07 Camp levelling; facing ESE

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 7 th – August 13 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: New Camp	Location/Co-ordinates: Entrance north of WRP	
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
7-Aug-07	cloudy in the morning with rain clearing in afternoon	14
8-Aug-07	Cool mostly cloudy, rain	12
9-Aug-07	Sunny with cloudy periods, very cool in morning	18
10-Aug-07	Cloudy and cool	11
11-Aug-07	Cloudy and cool	12
12-Aug-07	Frost in morning, sunny	15
13-Aug-07	Cloudy and warm	17
Part 2 – Site Assessment		
Activity: Continued preparation of land for construction. Filling and cutting has been completed. Final surveying of site to be done soon. Alternate entrance from road has been put in place to minimize entrance slope.		
Site Description:		
- Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 3		
Samples Taken: Soil sample taken from pile in camp that will be used for WRP fill material. Another soil sample was taken from hill adjacent to entrance that will be used to lift the road, to further reduce the slope.		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp	
	
08/09/07 Construction of alternate access; facing E	08/09/07 Construction of alternate access; facing E
	
08/10/07 Stockpile of material on South side of the site road just below the camp pad; facing E	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 14 th – August 20 th , 2007		Inspector(s): James Spencer
Site Name: New Camp		Location/Co-ordinates: Entrance north of WRP
Site Location Description: Large cleared area where work is undergoing to construct new construction camp. The front of the cleared area lies above site km 5 and above a wetted area, whereas the back runs up a slope. Wetted area (Wedge pond) percolates through to Go Creek. Site was staked out by Randy Olafson.		
Weather Conditions:		
Date	Conditions	Temp (°C)
14-Aug-07	Heavy rain over night, low cloud and fog in morning, clearing in afternoon	15
15-Aug-07	Sunny bluebird, hot	26
16-Aug-07	Sunny bluebird, hot	24
17-Aug-07	Sunny bluebird, hot	27
18-Aug-07	Sunny bluebird, hot	24
19-Aug-07	Hot in morning, broken cloud in afternoon, rain at airstrip	23
20-Aug-07	hot most of day, some broken cloud, rain in evening	26
Part 2 – Site Assessment		
Activity:		
- Continued preparation of land for construction. - Filling and cutting has been completed. - Material at end of Camp to be spread in to lifts over area. - Final surveying of site to be done soon. - Alternate entrance from road has been put in place to minimize entrance slope.		
Site Description:		
- Due to the location of the new site being on top of a hill the primary concern is that construction and stripping does not get too close to the down-slope which contains natural pools of water. - No evidence of collapsing or erosion, but should be monitored as work is ongoing.		
Assessed Risk: Low		
Photos Attached: NewCamp - 2		
Samples Taken: none		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping, as well as high sedimentation during rain events.		
Monitoring Frequency: Weekly as work on site progresses		
Reporting Requirements:		

Wolverine Project Environmental Inspection Form – Photos

Site Name: New Camp



08/16/07 Progress of site, taken at SE end of site; facing NW



08/20/07 Taken from site road below camp pad; facing E

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: April 19 th – 29 th , 2007	Inspector(s): James Spencer
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.	
Weather Conditions: Starting to warm up a bit +5 deg. C on April 29 th	
Part 2 – Site Assessment	
Activity: Water draining in to sump threatens to overflow and west bank has a slump	
Site Description: Surface melt continues to run down portal entrance road and follows past the portal and shop to the PCS. Also the west bank has slumping of a small section.	
Assessed Risk: High	
Photos Attached: PCS - 2	
Samples Taken: No	
Additional Information Attached:	
Part 3 –Mitigation Requirements	
Mitigation Required: Need to immediately pump out the PCS in to the Water Truck to drop water levels. 12 loads of water were trucked to the WRP Apr 19 th -28 th .	
Mitigation Condition: P - None in place until water truck running	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch levels closely and monitor slump	
Monitoring Frequency: Daily	
Reporting Requirements: QMLU-0006, QZ01-051	

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS



04/25/07 PCS; facing NNW



04/25/07 Bank slumping West of the PCS; facing S

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 15 th - 20 th , 2007	Inspector(s): James Spencer	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
15-May-07	Sunny	9
16-May-07	Sunny	9
17-May-07	Snow overnight, snowing lightly day	0
18-May-07	Overcast	5
19-May-07	Sunny	9
20-May-07	Overcast in morning, sunny with showers afternoon	12
Part 2 – Site Assessment		
Activity: Water draining in to sump threatens to overflow and the west bank has a slump		
Site Description: Surface melt continues but is slowing in this area and diversion trench dug at top of portal to divert water away from PCS. West bank, slumping of a small section still visible but unchanged and drying out.		
Assessed Risk: Low		
Photos Attached: PCS - 3		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Later in season will seed the west bank to help stabilize		
Mitigation Condition: G, water no longer filling sump, bank is stable		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS	
	
05/15/07 Melting water in PCS; facing NNW	05/15/07 Continued monitoring of the west bank slumping; facing S
	
05/17/07 Melting water in PCS; facing NNW	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th – 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	15
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: No activity other than water treatment		
Site Description: Surface melt has finished in this area, slumping can still be observed on the west bank, but there also seems to be some slumping into the sump as well.		
Assessed Risk: Medium		
Photos Attached: PCS - 2		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Later in season will seed the west bank to help stabilize - May have to add more soil to west bank to try and stabilize		
Mitigation Condition: F, Appears to be relatively stable, but this may change during periods of heavy rainfall		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: PCS



06/09/07 Bank West of PCS; facing NNE



06/09/07 West bank of PDS (sump south of PCS); facing NNE

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 12 th - 18 th , 2007	Inspector(s): James Spencer	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening	18
13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening	14
14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening.	14
15-Jun-07	Mixed sun and cloud, small storm systems all day	17
16-Jun-07	Mixed sun and cloud, small storm systems all day	16
17-Jun-07	Mixed sun and cloud, small storm systems all day	15
18-Jun-07	Rain heavy at times, mixed sun and cloud	14
Part 2 – Site Assessment		
Activity: No activity other than water treatment		
Site Description: Continue monitoring of slumping on West bank		
Assessed Risk: Medium		
Photos Attached: PCS - 1		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Later in season will seed the west bank to help stabilize - May have to add more soil to west bank to try and stabilize		
Mitigation Condition: F: Appears to be relatively stable, but this may change during periods of heavy rainfall		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: PCS



06/09/07 Bank West of PDS; facing S

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 19 th – 25 th , 2007	Inspector(s): James Spencer	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
19-Jun-07	Cloudy with Sunny periods	15
20-Jun-07	Windy from south, mostly sunny	18
21-Jun-07	Hazy, smoke clouds, sun and haze, no rain	20
22-Jun-07	Hot and Sunny, rain storms through day	21
23-Jun-07	Hot and Sunny, rain storms through day	21
24-Jun-07	Hot in morning, rain storm afternoon	22
25-Jun-07	Usual weather, hot with intermittent storms	20
Part 2 – Site Assessment		
Activity: No activity other than water treatment		
Site Description: Investigation by geotechnical engineer; cracks not discovered at toe of slope by engineer indicating that the natural ground is still holding. No major difference from last year when same crack was observed. New crack though off shoulder of PCS seen in photo #2		
Assessed Risk: Medium		
Photos Attached: PCS - 2		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Later in season will seed the west bank to help stabilize - May have to add more soil to west bank to try and stabilize - Use compacted lifts and re-slope to a reasonable 35 degrees ~2:1		
Mitigation Condition: F: Appears to be relatively stable, but this may change during periods of heavy rainfall or over time eventually will need maintenance but may be tolerable in the short term.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS



06/21/07 West bank being investigated by geotechnical engineer (below); facing NNE



06/21/07 Close up of west bank slope; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th - July 2 nd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	Patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: Water treatment, sump used for initial ferric sulphate treatment in-line as water is pumped from the underground, prior to being pumped to the lower laydown area sumps for final ferric sulphate treatment.		
Site Description:		
- Still awaiting report from geotechnical engineer. - Fracturing along bank does not appear to have changed despite heavy rainfall. - Ground where work was done putting in spillway is saturated and soft as it settles.		
Assessed Risk: Medium		
Photos Attached: PCS - 3		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Later in season will seed the west bank to help stabilize - May have to add more soil to west bank to try and stabilize - Use compacted lifts and reslope to a reasonable 35 degrees ~2:1		
Mitigation Condition: F, Appears to be relatively stable, but this may change during periods of heavy rainfall or over time eventually will need maintenance but may be tolerable in the short term.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank, Spillway between PDS and PCS needs to be monitored closely until ground dries and settles.		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS	
	
07/01/07 Puddles on West side of PDS; facing S	07/01/07 Spillway to drain PDS into PCS after initial settling; facing NNE
	
07/01/07 West bank of PCS/PDS; facing N	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 3 rd – July 9 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Portal Clean Sump (PCS)	Location/Co-ordinates: At North end of Portal Site	
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
2-Jul-07	patchy clouds with sunny breaks	15
3-Jul-07	cloudy with scattered showers	18
4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16
5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18
6-Jul-07	Rain overnight and during day, cloudy in afternoon	15
7-Jul-07	Cloudy throughout day, showers	15
8-Jul-07	Showers and cloudy	15
9-Jul-07	Cloudy with sunny periods	20
Part 2 – Site Assessment		
Activity: Water treatment, sump used for initial ferric sulphate treatment in-line as water is pumped from the underground, prior to being pumped to the lower laydown area sumps for final ferric sulphate treatment.		
Site Description:		
- Still awaiting report from geotechnical engineer. - Fracturing along bank does not appear to have changed despite heavy rainfall. - Ground where work was done putting in spillway is saturated and soft as it settles. - Ground surrounding spillway has dried slightly and is more stable, but still remains a risk.		
Assessed Risk: Medium		
Photos Attached: PCS - 4		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will seed bank this week or next, when seed arrives. - May have to add more soil to west bank to try and stabilize - Use compacted lifts and reslope to a reasonable 35 degrees ~2:1		
Mitigation Condition: Fair: Appears to be relatively stable, but this may change during periods of heavy rainfall or over time.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank, Spillway between PDS and PCS needs to be monitored closely as ground continues to stabilize and settle.		
Monitoring Frequency: daily with weekly reporting.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS	
	
07/08/07 West bank; facing NNW	07/08/07 Close up of West bank; facing NNW
	
07/08/07 West bank; facing N	07/08/07 West bank; facing S

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 10 th – July 16 th , 2007		Inspector(s): Jennie Gjertsen
Site Name: Portal Clean Sump (PCS)		Location/Co-ordinates: North end of Portal Site
Site Location Description: A 575 m ³ sump built in to fill on a steep bank 80% grade that has not re-vegetated fully. All water from the portal pad drains in to this sump. It must be monitored during high rain or melt events.		
Weather Conditions:		
Date	Conditions	Temp (°C)
9-Jul-07	Cloudy with sunny periods	20
10-Jul-07	Cloudy and cool	13
11-Jul-07	Sunny and windy, cool in morning, warming in afternoon	16
12-Jul-07	Cool and cloudy	12
13-Jul-07	Sunny with clouds, warm	20
14-Jul-07	Sunny with clouds	22
15-Jul-07	Sunny, clouds in afternoon	25
16-Jul-07	Heavy rain in morning, cloudy in afternoon and clearing in evening	18
Part 2 – Site Assessment		
Activity: Water treatment, sump used for initial ferric sulphate treatment in-line as water is pumped from the underground, prior to being pumped to the lower laydown area sumps for final ferric sulphate treatment.		
Site Description:		
- Still awaiting report from geotechnical engineer. - Fracturing along bank does not appear to have changed. - Revegetation on slopes is becoming more apparent, but area still requires seeding.		
Assessed Risk: Medium		
Photos Attached: PCS - 4		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will seed bank next week, as seed has yet to arrive - May have to add more soil to west bank to try and stabilize - Use compacted lifts and reslope to a reasonable 35 degrees ~2:1		
Mitigation Condition: F, Appears to be relatively stable, but this may change during periods of heavy rainfall or over time.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch slumping on either sides of west bank, Spillway between PDS and PCS needs to be monitored closely as ground continues to stabilize and settle.		
Monitoring Frequency: daily with weekly reporting.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: PCS		
		
07/15/07 West bank of PDS; facing NNW	07/15/07 West side of PDS; facing N	
		
07/15/07 West bank of PCS; facing NNW	07/15/07 West bank of PCS; facing W	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 22 nd – 28 th , 2007	Inspector(s): James Spencer	
Site Name: Diesel Tanks	Location/Co-ordinates: At Portal pad	
Site Location Description: Located at the portal are two double walled diesel tanks (122 m ³ apiece) and one double walled 5000 L gasoline storage tank. Water collecting beneath the tanks is contained, and water is diverted around the tanks to prevent contamination of surface water.		
Weather Conditions:		
Date	Conditions	Temp (°C)
22-May-07	Clear and Sunny	14
23-May-07	Clear and Sunny	15
24-May-07	Clear and Sunny	15
25-May-07	Clear and Sunny	15
26-May-07	Cooler and light rain, front approaching from south	8
27-May-07	Sunny and hot	15
28-May-07	Sunny and warm	15
Part 2 – Site Assessment		
Activity: Fuelling station to be maintained in good working order.		
Site Description: Area drying up through week. Pads still picking up hydrocarbons.		
Assessed Risk: Low		
Photos Attached: Diesel Tanks - 5		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: Continue to apply pads, 1 litre of hydrocarbon metabolizing bacteria to be applied with pump up sprayer by June 5 th , 2007		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination, continue to replace pads		
Monitoring Frequency: Daily.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Diesel Tanks	
	
05/22/07 Old pads under diesel tank	05/25/07 Daily inspection of pads
	
05/26/07 Daily inspection of pads	05/27/07 Daily inspection of pads

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: PCS



28/05/07 Daily inspection of pads

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th - July 2 nd . 2007	Inspector(s): Jennie Gjertsen	
Site Name: Diesel Tanks	Location/Co-ordinates: At Portal pad	
Site Location Description: Located at the portal are two double walled diesel tanks (122 m ³ apiece) and one double walled 5000 L gasoline storage tank. Water collecting beneath the tanks is contained, and water is diverted around the tanks to prevent contamination of surface water.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: Fueling station to be maintained in good working order.		
Site Description: No noticeable changes under/around main tanks. Inspectors on site June 28 th - suggested that there may be a leak at the wooden box leading from tanks to portal generators. I observed none, but have placed spill pads down for monitoring.		
Assessed Risk: Low		
Photos Attached: -		
Samples Taken: No		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Applied pads and needs monitoring for a week or so to detect if there is a leak or not.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination, continue to replace pads		
Monitoring Frequency: Daily.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 3 rd - July 9 th , 2007	Inspector(s): Jennie Gjersten	
Site Name: Diesel Tanks	Location/Co-ordinates: At Portal pad	
Site Location Description: Located at the portal are two double walled diesel tanks (122 m ³ apiece) and one double walled 5000 L gasoline storage tank. Water collecting beneath the tanks is contained, and water is diverted around the tanks to prevent contamination of surface water.		
Weather Conditions:		
Date	Conditions	Temp (°C)
2-Jul-07	patchy clouds with sunny breaks	15
3-Jul-07	cloudy with scattered showers	18
4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16
5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18
6-Jul-07	Rain overnight and during day, cloudy in afternoon	15
7-Jul-07	Cloudy throughout day, showers	15
8-Jul-07	Showers and cloudy	15
9-Jul-07	Cloudy with sunny periods	20
Part 2 – Site Assessment		
Activity: Fueling station to be maintained in good working order.		
Site Description: No noticeable changes under/around main tanks. Inspectors on site June 28 th - suggested that there may be a leak at the wooden box leading from tanks to portal generators. Spill pads that were placed down to monitor potential leak have not shown any signs of fuel contamination. Will continue to monitor site daily.		
Assessed Risk: Low		
Photos Attached: Diesel tanks - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: none required at this time		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination.		
Monitoring Frequency: Daily. Report Weekly.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Diesel Tanks	
	
07/07/07 Wooden box that the inspectors were concerned about, behind diesel tanks; facing S	07/07/07 Inside of wooden box – pump station
	
07/07/07 Inside of wooden box – pump station	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 6 th - August 13 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Diesel Tanks	Location/Co-ordinates: At Portal pad	
Site Location Description: Located at the portal are two double walled diesel tanks (122 m ³ apiece) and one double walled 5000 L gasoline storage tank. Water collecting beneath the tanks is contained, and water is diverted around the tanks to prevent contamination of surface water.		
Weather Conditions:		
Date	Conditions	Temp (°C)
7-Aug-07	cloudy in the morning with rain clearing in afternoon	14
8-Aug-07	Cool mostly cloudy, rain	12
9-Aug-07	Sunny with cloudy periods, very cool in morning	18
10-Aug-07	Cloudy and cool	11
11-Aug-07	Cloudy and cool	12
12-Aug-07	Frost in morning, sunny	15
13-Aug-07	Cloudy and warm	17
Part 2 – Site Assessment		
Activity: Fuelling station to be maintained in good working order.		
Site Description: Line inspected August 11 th , and noticed a possible leak from around some of the fittings on the motor between the diesel tanks and the generators. Spill pads were put down as a method of further detection.		
Assessed Risk: Med		
Photos Attached: -		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: Tightening and sealing of fittings required to stop possible leak and prevent further incident		
Mitigation Condition: G August 12 th - the fittings were sealed and tightened.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any new contamination.		
Monitoring Frequency: Daily. Report Weekly.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 24 th - July 30 th , 2007	Inspector(s): James Spencer	
Site Name: Shop Material @ Portal	Location/Co-ordinates: Inside Procon Shop West End	
Site Location Description: Approximately 4' of material underneath the floor of the Procon shop to be removed in 40' by 25' area. Tarp separates the top 3" from the soil beneath it. No environmental risks from activity.		
Weather Conditions:		
Date	Conditions	Temp (°C)
24-Jul-07	Sunny most of day until showers late afternoon	22
25-Jul-07	Rain at night, Rain in afternoon, sunny in morning	18
26-Jul-07	Mixed Sun and scattered cloud, No rain, black flies, cool 3deg. In morning	22
27-Jul-07	Rain throughout day, short sunny breaks	18
28-Jul-07	Sunny all morning thunder showers threatening at 2pm	22
29-Jul-07	Sunny all day, isolated rain showers	23
30-Jul-07	Mixed rain and sun	20
Part 2 – Site Assessment		
Activity: Removing the material, separating the contaminated material from non-contaminated material and pouring a concrete floor		
Site Description: Approximately 50m ³ of material was hauled out prior to consultation with environmental staff and has been sent out for VPH/LEPH/HEPH testing. The remainder of the material will be hauled out separating potentially contaminated soil from un-contaminated soil.		
Assessed Risk: Low		
Photos Attached: Shop Material – 4		
Samples Taken: Yes for VPH/LEPH/HEPH		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: When samples come back material will be stockpiled above the portal or if it is contaminated it will be hauled to a temporary storage area covered and hauled out.		
Mitigation Condition: Excellent, soil is tarped and stored and waiting for results.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Check every two days		
Monitoring Frequency: Daily		
Reporting Requirements: This week only unless condition changes		

Wolverine Project Environmental Inspection Form – Photos

Site Name: LTF



07/26/07 Area of removed soil (behind the miners, in the maintenance shop); facing W



07/26/07 Stock piling the removed soil; facing W



07/28/07 Shotcreting the maintenance shop floor; facing W



07/28/07 The piled and tarped soil after removal; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 31 st – August 6 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Shop Material at Portal	Location/Co-ordinates: Inside Procon Shop West End	
Site Location Description: Approximately 4' of material underneath the floor of the Procon shop to be removed 40' by 25' area. Tarp separates the top 3" from the soil beneath it. Mixture of organics and till material. No environments at risk from activity		
Weather Conditions:		
Date	Conditions	Temp (°C)
31-Jul-07	Sunny in morning, thunderstorms in afternoon, clearing in evening	22
01-Aug-07	Sunny in morning, thunderstorms in afternoon, clearing in evening	18
02-Aug-07	Sunny with clouds	20
03-Aug-07	Sunny	22
04-Aug-07	Sunny	23
05-Aug-07	cloudy	18
06-Aug-07	Cloudy with rain	15
Part 2 – Site Assessment		
Activity: Removal of shop soil, separating the contaminated material from non-contaminated material. Shotcrete was used to stabilize the walls and will be used on the floor to create a concrete pad.		
Site Description: Results for the material that was removed have been received and are awaiting analysis. Further material was removed and has been separated into potentially contaminated soil from un-contaminated soil. Two samples were taken from the material that was removed from on top of the liner. One sample was taken from the removed material that originated underneath the liner. These samples will be tested for LEPH/HEPH.		
Assessed Risk: Low		
Photos Attached: Shop Material - 4		
Samples Taken: 3 for LEPH/HEPH		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: When samples are analyzed, clean soil will be stockpiled above the portal and contaminated soil will be hauled to a temporary storage area covered and hauled out.		
Mitigation Condition: Excellent, soil is tarped and stored and waiting for results.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Check every two days		
Monitoring Frequency: Daily		
Reporting Requirements: This week only unless condition changes		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Portal Shop Material



08/04/07 Further material removed from shop floor, taped below and above; facing W

08/05/07 Tarped material on portal pad; facing NW



08/05/07 Shop floor following material removal

08/05/07 Shop floor following material removal

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 7 th – August 13 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Shop Material at Portal	Location/Co-ordinates: Inside Procon Shop West End	
Site Location Description: Approximately 4' of material underneath the floor of the Procon shop to be removed 40' by 25' area. Tarp separates the top 3" from the soil beneath it. Mixture of organics and till material. No environments at risk from activity		
Weather Conditions:		
Date	Conditions	Temp (°C)
7-Aug-07	cloudy in the morning with rain clearing in afternoon	14
8-Aug-07	Cool mostly cloudy, rain	12
9-Aug-07	Sunny with cloudy periods, very cool in morning	18
10-Aug-07	Cloudy and cool	11
11-Aug-07	Cloudy and cool	12
12-Aug-07	Frost in morning, sunny	15
13-Aug-07	Cloudy and warm	17
Part 2 – Site Assessment		
Activity: No activity. Waiting for results of LEPH/HEPH and BTEX testing of material.		
Site Description: Two results of the three samples taken from the large original pile of soil came back under contamination regulations. The third sample taken was over allowable limits. Mitigation is on hold until the results of the second set of samples are returned.		
Assessed Risk: Low		
Photos Attached: Shop Material – 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: When samples are analyzed, clean soil will be stockpiled above the portal and contaminated soil will be hauled to a temporary storage area and covered until it can be removed from site.		
Mitigation Condition: Good, soil is tarped and stored. Mitigation on hold until results of testing have been received.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Check every two days		
Monitoring Frequency: Daily		
Reporting Requirements: Change in condition		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Portal Shop Material



08/12/07 Soil "B" – as sample labelled; facing N

08/12/07 Soil "B" – as sample labelled



08/12/07 Soil "C" – as sample labelled

08/12/07 Soil "A" – as sample labelled; facing S

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 14 th – August 21 st , 2007	Inspector(s): James Spencer	
Site Name: Shop Material at Portal	Location/Co-ordinates: Outside Procon Shop on Pad	
Site Location Description: Approximately 4' of material underneath the floor of the Procon shop was removed 40' by 25' area. Tarp separates the top 3" from the soil beneath it. Mixture of organics and till material. No environments at risk from activity		
Weather Conditions:		
Date	Conditions	Temp (°C)
14-Aug-07	Heavy rain over night, low cloud and fog in morning, clearing in afternoon	15
15-Aug-07	Sunny bluebird, hot	26
16-Aug-07	Sunny bluebird, hot	24
17-Aug-07	Sunny bluebird, hot	27
18-Aug-07	Sunny bluebird, hot	24
19-Aug-07	Hot in morning, broken cloud in afternoon, rain at airstrip	23
20-Aug-07	hot most of day, some broken cloud, rain in evening	26
Part 2 – Site Assessment		
Activity: No activity. Waiting for results of LEPH/HEPH and BTEX testing of material.		
Site Description: Two results of the three samples taken from the large original pile of soil came back under contamination regulations. The third sample taken was over allowable limits. Mitigation is on hold until the results of the second set of samples are returned. Pile C results were received under regulations		
Assessed Risk: Low		
Photos Attached: Shop Material -2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: When samples are analyzed, clean soil will be stockpiled above the portal and contaminated soil will be hauled to a temporary storage area and covered until it can be removed from site. Pile C removed to borrow pit above Portal.		
Mitigation Condition: Good, Pile A and B soil tarped and stored. Mitigation on hold until results of testing have been received.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Check every two days		
Monitoring Frequency: Daily		
Reporting Requirements: Change in condition		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Portal Shop Material	
	
08/21/07 Bermed (brown material) material removed from underground (grey colour); facing W	08/12/07 Spray painted soil that sample was taken from

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 15 th – 17 th , 2007	Inspector(s): James Spencer	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
15-May-07	Sunny	9
16-May-07	Sunny	9
17-May-07	Snow overnight, snowing lightly day	0
Part 2 – Site Assessment		
Activity: Continued road work and work on slope		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert		
Assessed Risk: Low to Medium - site has been stable as peak run-off nears		
Photos Attached: K1.4 -1.5 - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Waiting for ground to thaw before can work on upper cut slope Approx. 3 weeks. - Reclaim the cut slope in 4 weeks around June 12 th . - Cut back to 1.5:1 grade and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road once ground thaws a little more May 26 th		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: Weekly or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.4-1.5



15/05/07 Bank on upper side of road leading into exploration camp; facing N



15/05/07 Bank on lower side of road leading into exploration camp; facing NW



17/05/07 Bank on lower side of road leading into exploration camp; facing NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 18 th – 25 th , 2007	Inspector(s): James Spencer	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
18-May-07	Overcast	5
19-May-07	Sunny	9
20-May-07	Overcast in Morning, Sunny With Showers afternoon	12
21-May-07	Clear all day, sunny warm in sun, Cool brisk North wind	12
22-May-07	Clear and Sunny	14
23-May-07	Clear and Sunny	15
24-May-07	Clear and Sunny	15
25-May-07	Clear and Sunny	15
Part 2 – Site Assessment		
Activity: Continued road work and work on slope		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert		
Assessed Risk: Low to Medium - site has been stable for peak part of run-off and fill banks are drying out		
Photos Attached: K1.4 -1.5 - 1		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Waiting for ground to thaw before can work on upper cut slope Approx. 3 weeks. - Reclaim the cutslope in 4 weeks around June 12 th . - Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road once ground thaws a little more May 26 th		
Mitigation Condition: G The reworked fill slope near the culvert is holding well. Previously it was slumping. Still need to add material there on east fill slope.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



22/05/07 Bank on lower side of road leading into exploration camp; facing NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 26 th - May 28 th , 2007	Inspector(s): James Spencer	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-May-07	Cooler and light rain, front approaching from south	8
27-May-07	Sunny and hot	15
28-May-07	Sunny and warm	15
Part 2 – Site Assessment		
Activity: Continued road work and work on slope		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert		
Assessed Risk: Low to Medium - Still peak run-off fill banks continue to dry out, frost and ground ice melting		
Photos Attached: K1.4 – 1.5 - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Waiting for ground to thaw before can work on upper cut slope Approx. 3 weeks. - Reclaim the cut slope in 4 weeks around June 12th. - Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road can do anytime, should get done before major rainfall but labour and management busy with fuel spill.		
Mitigation Condition: G The reworked fill slope near the culvert is holding well. Previously it was slumping. Still need to add material there on east fill slope.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: Weekly, during rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



**26/05/07 Road leading into exploration camp;
facing NW**



26/05/07 Borrow pit on north side of road; facing N



27/05/07 Bank on lower side of road leading into exploration camp; facing NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th -June 4 th , 2007	Inspector(s): Melissa Kirby & Jennie Gjertsen	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity: Continued road work and work on slope		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert		
Assessed Risk: Low to Medium - dependant on rainfall		
Photos Attached: K1.4 – 1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Waiting for ground to thaw before can work on upper cut slope Approx. 3 weeks. - Reclaim the cut slope in 4 weeks around June 12 th . - Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road can do anytime, should get done before major rainfall. - Corner of road to be pulled out from steep “west” bank to prevent further erosion. - Removal of 1-2m from top of hill will lower slope and provide more material for road work.		
Mitigation Condition: June 1 - Borrow pit established at top of hill, pushed back tree line (30m x 30m area.) June 1 - Material pushed back to slope, more material needed		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied, or work activity starts		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



05/31/2007 Borrow pit re-sloping; facing N



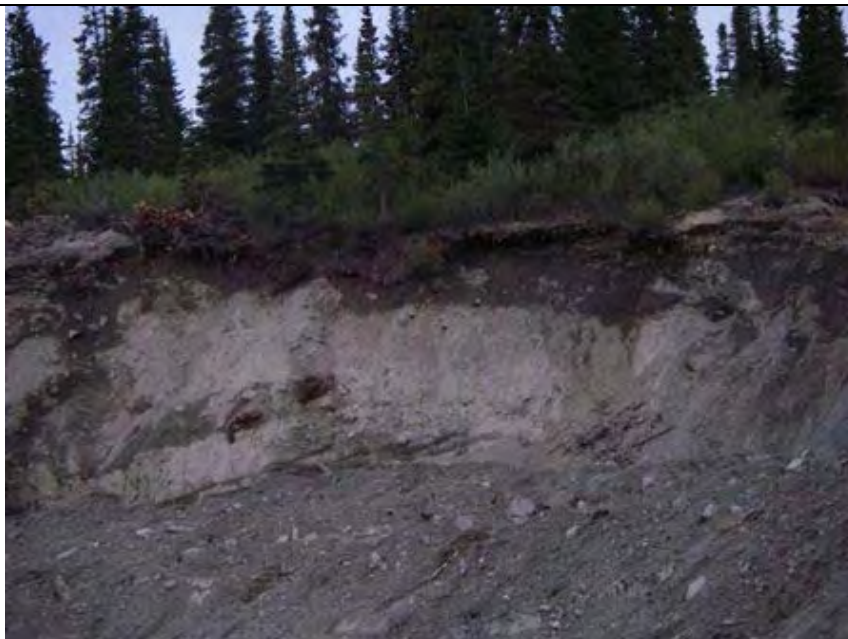
06/01/2007 View of the material pile at the top of the hill; facing E

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th – June 11 th , 2007	Inspector(s): James Spencer & Jennie Gjertsen	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	13
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: No road work being done in area this week		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert - - organics from top of slope starting to slump down		
Assessed Risk: Low to Medium - dependant on rainfall		
Photos Attached: K1.4-1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Work to upper cut slope. - Reclaim after middle of June. - Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road. - Corner of road to be pulled out from steep “west” bank to prevent further erosion. - Removal of 1-2m from top of hill will lower slope and provide more material for road work.		
Mitigation Condition: No work has been done in last week due to requirements elsewhere on site		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



11/06/2007 Borrow pit re-sloping; facing N



11/06/2007 Bank on south side of road; facing NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 19 th – June 25 th , 2007		Inspector(s): James Spencer
Site Name: K1.4 – 1.5		Location/Co-ordinates: South facing approach to Gorge
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
19-Jun-07	Cloudy with Sunny periods	15
20-Jun-07	Windy from south, mostly sunny	18
21-Jun-07	Hazy, smoke clouds, sun and haze, no rain	20
22-Jun-07	Hot and Sunny, rain storms through day	21
23-Jun-07	Hot and Sunny, rain storms through day	21
24-Jun-07	Hot in morning, rain storm afternoon	22
Part 2 – Site Assessment		
Activity: Cutting off the knoll at the top of the gorge at k1.4 to use as borrow material to cap the new road		
Site Description:		
- Steep slope both sides of road - Fracturing on “west” side by culvert - - organics from top of slope starting to slump down		
Assessed Risk: Low to Medium - dependant on rainfall		
Photos Attached: K1.4 - 1.5 - 1		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Work to upper cut slope. - Reclaim after middle of June. - Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road. - Corner of road to be pulled out from steep “west” bank to prevent further erosion. - Removal of 1-2m from top of hill will lower slope and provide more material for road work.		
Mitigation Condition:		
(P) No real effects on the area from new activity but the whole area needs to be seeded and upper slope re-worked before seeding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



06/23/07 Re-contouring work on north slope; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th – July 2 nd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: None, topping of road complete		
Site Description: - Steep slope both sides of road - Fracturing on “west” side by culvert - organics have stopped slumping - Heavy rainfall caused significant runoff down east slope and down road - slope on downside of culverts vary saturated		
Assessed Risk: Low to Medium - dependant on rainfall		
Photos Attached: K1.4-1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Work to upper cut slope. Reclaim after middle of June. Cut back to 1.5:1 and spread subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road. - Corner of road to be pulled out from steep “west” bank to prevent further erosion. - Removal of another half metre from top of hill will lower slope and provide more material for road work. - Seeding required to both slopes. A good site for test plots.		
Mitigation Condition: (P) No real effects on the area from new activity but the whole area needs to be seeded and upper slope re-worked before seeding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.4-1.5



07/01/07 Water pooling at base of borrow pit; facing N



07/01/07 Water draining towards Campbell Creek; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: Aug 14 th – Aug 20 th , 2007	Inspector(s): James Spencer	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
14-Aug-07	Heavy rain over night, low cloud and fog in morning, clearing in afternoon	15
15-Aug-07	Sunny bluebird, hot	26
16-Aug-07	Sunny bluebird, hot	24
17-Aug-07	Sunny bluebird, hot	27
18-Aug-07	Sunny bluebird, hot	24
19-Aug-07	Hot in morning, broken cloud in afternoon, rain at airstrip	23
20-Aug-07	Hot most of day, some broken cloud, rain in evening	26
Part 2 – Site Assessment		
Activity: -		
Site Description: The upslope cut bank at the borrow pit is unstable and steep 80% grade. The fill banks have been graded but the section over the culvert is too steep (1.3:1) and we need a longer culvert to do much work there. Some armouring could be applied to help stabilize the area. After a summer of no vegetation and rains rills and gullies are starting to form and fine sediment transport into the north culvert is visible. No major instabilities other than the borrow pit.		
Assessed Risk: Medium - dependant on rainfall		
Photos Attached: K1.4-1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Cut back the borrow pit to 2:1 and pull down subsoil and organics on open pit. - Silt Fence outer perimeter of old road and slope along old road. - Corner of road to be pulled out from steep “west” bank to prevent further erosion. If this does not mitigate the situation then the culverts need to be extended - Soil to be re-worked for seeding required end of September - Armouring of high flow areas		
Mitigation Condition: No real effects on the area from new activity but the whole area needs to be seeded and upper slope re-worked before seeding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank, and look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.4 - 1.5



08/21/07 Completed cobling and silt fence at gorge; facing NW



08/21/07 Sloping on south side of gorge road; facing NW

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: Aug 21 st - 27 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: K1.4 – 1.5	Location/Co-ordinates: South facing approach to Gorge	
Site Location Description: The section of road with a ~21% grade. The upslope cut bank is disturbed and devoid of vegetation. The ditch runs parallel and drains into the borrow pit toe. Campbell Creek is ~10 m from the toe of the road, and is the main parameter of concern for sediment and erosion control measures.		
Weather Conditions:		
Date	Conditions	Temp (°C)
21-Aug-07	Sunny in the morning, cloudy in the afternoon	20
22-Aug-07	Warm with thundershowers throughout the day	20
23-Aug-07	Cold in the morning with thundershowers, clouds and rain all day	15
24-Aug-07	Rain in the morning, cloudy	14
25-Aug-07	Mostly cloudy, some showers	15
26-Aug-07	Frost in morning, sunny	12
27-Aug-07	Sunny, some rain/hail	12
Part 2 – Site Assessment		
Activity: Work done to minimize sedimentation into Campbell Creek		
Site Description: - Organics at top of slope cut back, and angle reduced, organics spread over top portion of slope. Slope has been stepped to direct road runoff into vegetation. Stepped area has been ditched and filled with large rocks to reduce the speed of runoff water. - A culvert extension was added to the north culvert and the grade of the area at the culvert discharge was reduced. - A diversion ditch was dug out and cobbled to prevent water from entering the northern culvert and approximately 1m was cut off to remove a crushed section.		
Assessed Risk: Low		
Photos Attached: K1.4-1.5 - 8		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Silt Fence outer perimeter of old road and slope along old road. - Soil to be re-worked for seeding required end of September - Armouring of high flow areas		
Mitigation Condition: Good; seeding, armouring and fencing to follow soon, but all heavy equipment work has finished.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs		
Monitoring Frequency: During rain events or when mitigation applied		
Reporting Requirements: QML-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.4-1.5



08/27/07 Culvert inlet at Campbell Creek



08/27/07 Campbell Creek prior to cobble installation



08/27/07 Re-contouring of borrow source; facing N



08/27/07 Re-contouring of borrow source; facing NW

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.4-1.5



08/27/07 Ditching and organic placement at borrow source at gorge; facing SE



08/27/07 Culvert inlet at Campbell Creek prior to cobble placement



08/27/07 Cobble installed at Campbell Creek; facing N



08/27/07 Cobble installed at Campbell Creek; facing N

Environmental Inspection Form

Version: April 27, 2007

Part 1 – Site DescriptionReport Date and Time: May 9th, 2007

Inspector(s): Mary McDougall

Site Name: km 1.5

Location/Co-ordinates:

Site Location Description:

Culvert under road for Campbell Creek

Weather Conditions: Sunny, flurries, cloudy, ~ 5 C

Part 2 – Site Assessment

Activity:

Need to install rip-rap and geotech fences to prevent runoff from entering the creek

Site Description:

No activity currently, however, with increased runoff, the sediment needs to be mitigated.

Assessed Risk: Med

Photos Attached: yes (see below)

Samples Taken: no

Additional Information Attached: no

Part 3 –Mitigation Requirements

Mitigation Required:

Installing rip-rap up the ditches and along the banks of the creeks to minimize sediment flow into the creek. Geotech “fences” were also installed ~ 100m and 200m up the road from the creek

Mitigation Condition: One silt fence installed, existing mitigation very poor.

Part 4 –Monitoring Requirements

Follow-up Monitoring:

Monitor sediment flow into the creek, if it continues, install more geotech fences up slope

Monitoring Frequency:

Daily

Reporting Requirements: QML-0006, QZ01-051

Pre-Installation Photos



North view of water flowing down the
ditches into Campbell Creek



Silt flowing into the culvert



Looking South

Post-Installation Photos



View looking North



Looking South



Geo-tech fence installation

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 15 th – 17 th , 2007	Inspector(s): James Spencer	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at it's base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
15-May-07	Sunny	9
16-May-07	Sunny	9
17-May-07	Snow overnight, snowing lightly day	0
Part 2 – Site Assessment		
Activity: Monitoring of rip-rap installed May 9 th		
Site Description: No activity currently, however, with increased runoff, the sediment needs to be mitigated.		
Assessed Risk: Low to Medium - site has been stable for peak part of run-off		
Photos Attached: K1.4 – 1.5 - 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will re-cobble the fill side of the culverts to 1.5:1 but may have to wait for lower flows. - Will monitor that slope and pull back as required until flows are down and organics unfrozen. Start date ~ June 11th.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: Weekly or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.4-1.5



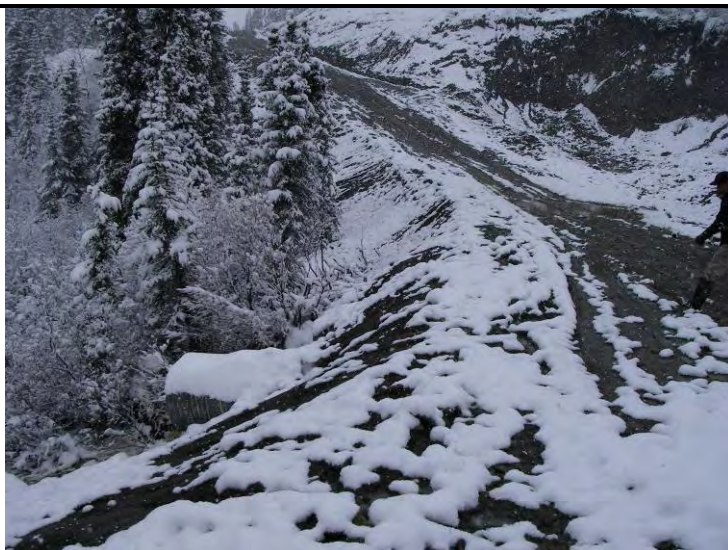
15/05/07 Ditch runoff entering Campbell Creek; facing N



15/05/07 Enhanced flow from Campbell Creek; facing N



17/05/07 Ditch runoff entering Campbell Creek; facing N



17/05/07 Downslope bank; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 18 th – 24 th , 2007	Inspector(s): James Spencer	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at its base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
18-May-07	Overcast	5
19-May-07	Sunny	9
20-May-07	Overcast in Morning, Sunny With Showers afternoon	12
21-May-07	Clear all day, sunny warm in sun, Cool brisk North wind	12
22-May-07	Clear and Sunny	14
23-May-07	Clear and Sunny	15
24-May-07	Clear and Sunny	15
Part 2 – Site Assessment		
Activity: No activity this week		
Site Description: No activity currently, however, with increased runoff, the sediment needs to be mitigated.		
Assessed Risk: Low to Medium - site stable through peak runoff, banks drying up		
Photos Attached: K1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will re-cobble the fill side of the culverts to 1.5:1 but may have to wait for lower flows. - Will monitor that slope and pull back as required until flows are down and organics unfrozen. - Start date ~ June 11th.		
Mitigation Condition: G Rip rap and slopes are holding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: : Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.5



05/21/07 South slope of road at gorge area; facing N



05/22/07 Road at gorge area; facing N

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 25 th – 29 th , 2007	Inspector(s): James Spencer	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at its base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
25-May-07	Clear and Sunny	15
26-May-07	Cooler and light rain, front approaching from south	8
27-May-07	Sunny and hot	15
28-May-07	Sunny and warm	15
29-May-07	Sunny and warm	9
Part 2 – Site Assessment		
Activity: No activity this week		
Site Description: No activity currently, however, with increased runoff, the sediment needs to be mitigated.		
Assessed Risk: Low to Medium - site stable through peak runoff, banks drying up		
Photos Attached: K1.5 - 5		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will re-cobble the fill side of the culverts to 1.5:1 but may have to wait for lower flows. - Will monitor that slope and pull back as required until flows are down and organics unfrozen. - Start date ~ June 11th.		
Mitigation Condition: G Rip rap and slopes are holding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: : Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.5



05/26/07 Road at gorge; facing N



05/26/07 Ditch flow into Campbell Creek; facing N



05/26/07 Culvert flow from Campbell Creek; facing N



05/26/07 Culvert flow from Campbell Creek; facing N

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.5



05/27/07 Flow on south side of road from culvert; facing W

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th – June 4 th	Inspector(s): M.K. and J.G.	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at its base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity: Slope work being done on slope north of Campbell Creek		
Site Description: June 1 - A berm has been built up to try and detour most slope runoff through vegetation and into creek June 3 - Campbell Creek has very high runoff June 3 rd . Water started to erode in corner of creek (East side of road, culvert on north side)		
Assessed Risk: Low to Medium - Area compromised during high runoff June 3 rd		
Photos Attached: K 1.5 - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: Will re-cobble the fill side of the culverts to 1.5:1 but may have to wait for lower flows. Will monitor that slope and pull back as required until flows are down and organics unfrozen. Start date ~ June 11 th .		
Mitigation Condition: G Rip rap and slopes are holding except during very high flows on June 3 rd and 4 th , some eroding in corner.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: : Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: During rain events, when mitigation applied or work activity takes place		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.5



Photo 1

Date and Time: 05/31/2007 930



Photo 2

Date and Time: 06/03/2007 1829



Photo 3

Date and Time: 06_03_2007 2003

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th - June 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at its base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	15
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: Pipe installed in ditch so that old road can be accessed without creating high sedimentation in creek		
Site Description:		
- Heavy flows continue in creek. - Area has not been affected by very much erosion, culverts seem to be holding well, heavy sedimentation into creek has not been observed.		
Assessed Risk: Low to Medium - If high flow continues, further erosion to current mitigation could occur		
Photos Attached: K1.5 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Re-cobble the fill side of the culverts to 1.5:1 but need to wait for lower flows. - Longer culverts should be installed - Diversion of creek into main two Campbell Creek culverts, and leave the northern culvert for periods of very high flow. This will hopefully lower the risk of collapse of the west slope near the exit of culvert		
Mitigation Condition: G		
Rip rap and slopes are holding		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: : Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: During rain events, high flows, observed sediment movement, or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.5



Photo 1

Date and Time: 11/06/07 2134



Photo 2

Date and Time: 11/06/07 2135

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th – July 2 nd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: K1.5	Location/Co-ordinates: Culverts at Campbell Creek	
Site Location Description: Slope entering the gorge with Campbell Creek at its base. The road was built in fall 2006 with ditches on the east side directing runoff into Campbell Creek.		
Weather Conditions:		
Date	Conditions	Temp (°C)
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: Heavy rainfall affecting sedimentation into Campbell Creek		
Site Description:		
- Heavy flows continue in creek - Heavy sedimentation into creek observed due to heavy rainfall and runoff from road slopes. All three slopes converging in one place on road, draining straight into creek.		
Assessed Risk: Low to Medium, dependant on rainfall.		
Photos Attached: K1.5 - 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Re-cobble the fill side of the culverts to 1.5:1 but need to wait for lower flows. - Longer culverts should be installed - Diversion of creek into main two Campbell Creek culverts, and leave the northern culvert for periods of very high flow. This will hopefully lower the risk of collapse of the west slope near the exit of culvert		
Mitigation Condition: F		
- Rip rap and slopes are holding, west slope very saturated by culvert exits. - July 1- water from road slopes diverted to run through vegetation instead of draining directly into Campbell creek (north culvert). - Ditch on south side of culverts had water steps put in place to try and filter some sedimentation.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor banks, particularly fill bank at culverts and look for failure signs		
Monitoring Frequency: Weekly, and daily during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.5



Photo 1

Date and Time: 07/01/0734



Photo 2

Date and Time: 07/01/07 1036



Photo 3

Date and Time: 07/01/07 1036



Photo 4

Date and Time: 07/01/07 1037

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 18 th – 21 st , 2007	Inspector(s): James Spencer	
Site Name: K1.6	Location/Co-ordinates: 150m North of K1.5	
Site Location Description: The site faces southwest and is the cut slope above the road. The ditch is bringing water to Campbell Creek ~150m downstream, slope is 12% grade		
Weather Conditions:		
Date	Conditions	Temp (°C)
18-May-07	Overcast	5
19-May-07	Sunny	9
20-May-07	Overcast in Morning, Sunny With Showers afternoon	12
21-May-07	Clear all day, sunny warm in sun, Cool brisk North wind	12
Part 2 – Site Assessment		
Activity: Ditch was dug out deeper to accommodate flow		
Site Description: Melt is becoming heavier so sediment laden water is reaching Campbell Creek.		
Assessed Risk: Medium		
Photos Attached: K1.6 - 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
Will insert culvert (slope drain) to reduce sediment load at Campbell creek by reducing volume and velocity		
Mitigation Condition: F mitigation in place consists of a few check dams		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: : Monitor sediment load in ditch and reaching K1.5		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.6



Photo 1 Date and Time: 18/05/07 0930



Photo 2 Date and Time: 18/05/07 1316



Photo 3 Date and Time: 18/05/07 1337



Photo 4 Date and Time: 19/05/07 1502

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 22 nd – 28 th , 2007	Inspector(s): James Spencer	
Site Name: K1.6	Location/Co-ordinates: 150m North of K1.5	
Site Location Description: The site faces southwest and is the cut slope above the road. Ground ice and permafrost with pine, willow and mosses is melting and unstable. The area affected is 20m x 5m. Oozing soils and subsoil and overburden are blocking the ditch and sending sediment downstream. There is a ditch cut and water is undercutting the slope.		
Weather Conditions:		
Date	Conditions	Temp (°C)
22-May-07	Clear and Sunny	14
23-May-07	Clear and Sunny	15
24-May-07	Clear and Sunny	15
25-May-07	Clear and Sunny	15
26-May-07	Cooler and light rain, front approaching from south	8
27-May-07	Sunny and hot	15
28-May-07	Sunny and warm	15
Part 2 – Site Assessment		
Activity: Culvert was installed for reducing volume/velocity to Campbell Creek		
Site Description: Flows undercutting bank and on May 21 st in the p.m. a slope failure around 5m x 3m blocked the ditch and the road was damaged. Area of ground ice still melting and oozing out of bank and remains unstable. Not dangerous but needs to be mitigated.		
Assessed Risk: Medium		
Photos Attached: K 1.6 - 6		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will need to re-grade the cut slope cut off overhang. - Insulate and vegetate the area but must wait for thaw so that ground and organics are workable. - May require geotech and mulch to insulate along with permafrost tolerant and wet loving vegetation to reclaim.		
Mitigation Condition: F mitigation not possible until thaw is further along, slope continues to recede gradually.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor sediment load in ditch and reaching K1.5, check slope stability		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K1.6



Photo 1 **Date and Time: 23/05/07 1119**



Photo 2 **Date and Time: 22/05/07 1723**



Photo 3 **Date and Time: 24/05/07 1317**



Photo 4 **Date and Time: 25/05/07 1713**

Site Name: K1.6



Photo 5 Date and Time: 26/05/07 1630



Photo 6 Date and Time: 27/05/07 1712

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th – June 4 th , 2007	Inspector(s): Melissa Kirby and Jennie Gjertsen	
Site Name: K1.6	Location/Co-ordinates: 150m North of K1.5	
Site Location Description: The site faces southwest and is the cut slope above the road. Ground ice and permafrost with pine, willow and mosses is melting and unstable. The area affected is 20m x 5m. Oozing soils and subsoil and overburden are blocking the ditch and sending sediment downstream. There is a ditch cut and water is undercutting the slope.		
Weather Conditions:		
Date	Conditions	Temp (°C)
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity: Continued road work, no work on bank/slope		
Site Description: Melting and oozing has slowed/stopped from vegetation. Installed culvert is helping to reduce Campbell creek water. Roadway continues to shift as a result of melting of permafrost.		
Assessed Risk: Medium		
Photos Attached: -		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Will need to re-grade the cut slope cut off overhang. - Insulate and vegetate the area but must wait for thaw so that ground and organics are workable. - May require geotech and mulch to insulate along with permafrost tolerant and wet loving vegetation to reclaim. - Roadway requires another 0.5m of material and grading until settled		
Mitigation Condition: F mitigation not possible until thaw is further along, slope continues to recede gradually		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor sediment load in ditch and reaching K1.5, check slope stability		
Monitoring Frequency: Weekly during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th – June 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen	
Site Name: K1.6	Location/Co-ordinates: 150m North of K1.5	
Site Location Description: The site faces southwest and is the cut slope above the road. Ground ice and permafrost with pine, willow and mosses is melting and unstable. The area affected is 20m x 5m. Oozing soils and subsoil and overburden are blocking the ditch and sending sediment downstream. There is a ditch cut and water is undercutting the slope.		
Weather Conditions:		
Date	Conditions	Temp (°C)
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	15
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: Continued road work, no work on bank/slope		
Site Description: -Melting and draining through vegetation can no longer be observed, but ground and vegetation continue to shift. Some trees have fallen along roadway. -Low water flow through ditch. -Roadway continues to shift as a result of melting of permafrost.		
Assessed Risk: Low		
Photos Attached: K1.6 - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: - Will need to re-grade cut slope, cut off overhang, insulate and vegetate the area but must wait for thaw so that ground and organics are workable. - May require geotech and mulch to insulate along with permafrost tolerant and wet loving vegetation to reclaim. - Roadway requires another 0.5m of material and grading until settled. Old road will be used in conjunction with new road to allow work to occur.		
Mitigation Condition: F mitigation not possible until thaw is further along, slope continues to recede gradually		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitor sediment load in ditch and reaching K1.5. Check slope stability		
Monitoring Frequency: During rain events, high flows, observed movement or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K1.6



Photo 1 Date and Time: 11/06/07 2131

Photo 2 Date and Time: 11/06/07 2132



Photo 3 Date and Time: 11/06/07 2132

Photo 4 Date and Time:

Environmental Inspection Form

Version: April 27, 2007

Part 1 – Site DescriptionReport Date and Time: May 10th -11th ,
2007 8:30am

Inspector(s): Mary McDougall

Site Name: Km 2

Location/Co-ordinates:

Site Location Description:

Culvert under road

Not close to any fish bearing streams

About 2km run to Little Wolverine lake via Wolverine Creek

Weather Conditions:

Date	Conditions	Temp (°C)
10-May-07	Overcast, sunny breaks, warm in the sunshine	5
11-May-07	Overcast, sunny breaks, warm in the sunshine	6

Part 2 – Site Assessment

Activity:

Need to install rip-rap to minimize runoff

Site Description:

A culvert was installed over the winter to improve water flow under the road. Ditching was improved in April, and the sides and bottom of the water trail need to be rip-rapped to minimize runoff

Assessed Risk: Low

Photos Attached: K2 - 6

Samples Taken: -

Additional Information Attached: -

Part 3 –Mitigation Requirements

Mitigation Required:

Installing rip-rap up the ditches and along the banks to minimize sediment flow.

The NE side is to be completely armored, the SW side is to be armored as much as possible (i.e. As far as the backhoe can reach from the road, since the side slopes are very soft and not safe to drive on)

Mitigation Condition: No existing mitigation

Part 4 –Monitoring Requirements

Follow-up Monitoring:

Monitor sediment flow, if it continues, install geotech fences up slope

Monitoring Frequency:

Discontinued low risk, will file report if situation changes

Reporting Requirements: QMLU-0006, QZ01-051

Pre-Installation Photos



North view of the north-east side of the road



Looking south-east at the south slope



Rip-rap installation (looking North-West)

Post-Installation Photos



Installation in progress, view looking east



Completed north side, looking northwest



Completed north side; view looking west

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 19 th – 25 th , 2007	Inspector(s): James Spencer	
Site Name: K2	Location/Co-ordinates: K2 new Road with culvert	
Site Location Description: The area that supports the culvert and the area that surrounds and drains in to the creek. The creek drains in to Wolverine Lake via Wolverine Creek. Around 1km away. Lots of willows and shrubbery downstream. The road and surrounding area is on fairly flat ground with some rolling features. The area has been grubbed to accommodate the road building		
Weather Conditions:		
Date	Conditions	Temp (°C)
19-Jun-07	Cloudy with Sunny periods	15
20-Jun-07	Windy from south, mostly sunny	18
21-Jun-07	Hazy, smoke clouds, sun and haze, no rain	20
22-Jun-07	Hot and Sunny, rain storms through day	21
23-Jun-07	Hot and Sunny, rain storms through day	21
24-Jun-07	Hot sunny morning , rain storm in afternoon	21
Part 2 – Site Assessment		
Activity: Pull back strippings onto sloped fill bank, rework the edge of the road and perimeter of inflow and outflow of culvert.		
Site Description: Jun 19 – 23, site is not landscaped, organics are not pulled back over the stripped area. Erosion is therefore not being minimized. New culvert installed last week and banks are more stable.		
Assessed Risk: Low, Does not threaten a sensitive habitat, no threats of failure		
Photos Attached: K2 - 2		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Pull back organics and landscape the area - Seed the area		
Mitigation Condition: June 19-23 ; June 23-25, G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for any changes in stability of culvert, a		
Monitoring Frequency: Discont'd, no risk, reactivate if work takes place		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: K2



Photo 1

21/06/07

0949



Photo 2

21/06/07

0950

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 12 th -18 th , 2007	Inspector(s): James Spencer	
Site Name: K2.1 Old Road	Location/Co-ordinates: At Top of south side of Gorge hill	
Site Location Description: A seasonal creek that drains the upper watershed to the east. It is on a steep slope and the road grade is also steep. The water flow is a long distance from Wolverine Creek, ~1.5km. Relatively low flows most of time and seasonal high flows.		
Weather Conditions:		
Date	Conditions	Temp (°C)
12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening	18
13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening	14
14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening.	14
15-Jun-07	Mixed Sun and cloud, small storm systems all day	17
16-Jun-07	Mixed Sun and cloud, small storm systems all day	16
17-Jun-07	Mixed Sun and cloud, small storm systems all day	15
18-Jun-07	Rain heavy at times, mixed sun and cloud	14
Part 2 – Site Assessment		
Activity: No use of road until reactivated. Seasonal melt water had excavated an impassable trench. Needed culvert Installation, culvert installation complete and handling flows. Capped with local material.		
Site Description: Flows continue to erode the road base but are likely to slow down as melt water subsides. On June 14 th culvert installation takes place photo #1-3, June 15 th site is running clean and culvert handling entire flow 9 photo #4		
Assessed Risk: Low		
Photos Attached: K2.1 Old Road - 4		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required:		
- Install 30' culvert - Build check dams upstream - Armour culvert		
Mitigation Condition: June 14 th P, none there ; June 15 th G check dams slowing flows and culvert protected and running clean		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Check that installation is handling flows and road remains hard and isn't softening up, monitor sediment flows.		
Monitoring Frequency: Jun 14 th daily, during rain events. Jun 15 th , discontinued, low risk and stable		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: K2.1 Old Road



Photo1 14/06/07



Photo 2 14/06/07



Photo 3 14/06/07



Photo 4 15/06/07

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 13 th – 22 nd , 2007	Inspector(s): James Spencer	
Site Name: Sprung Structures	Location/Co-ordinates: Lower Laydown Area	
Site Location Description: Two Sprung structures (80' x 90' & 90' x 105') are being installed at the lower laydown area to provide shelter for the WDS & WIS over the 07/08 winter period. Superior Propane is to install propane radiant heaters and pool covers to prevent the ponds from freezing. Arctic construction is providing assistance to the Sprung company.		
Weather Conditions:		
Date	Conditions	Temp (°C)
11-Sep-07	Sunny and warm	15
12-Sep-07	Sunny and warm	14
13-Sep-07	Sunny and warm	14
14-Sep-07	Mixed sun and cloud	13
15-Sep-07	rain showers all day, clearing in afternoon	11
16-Sep-07	Bright sunny	14
17-Sep-07	Cool and overcast, dusting of snow on high peaks	9
18-Sep-07	cool and light flurries	8
19-Sep-07	Overcast, with flurries throughout the day	6
20-Sep-07	Flurries, clearing in the afternoon	7
21-Sep-07	Flurries, rain in camp in the afternoon, low overcast	5
22-Sep-07	Clear breaks, cloudy	6
Part 2 – Site Assessment		
Activity: The south side of the WIS and creek side of both ponds needed to be upgraded to allow room for the crane to move around the ponds, this was done by YZC operators. The sprung structures are 90% erected West of the WDS, and then moved into place over the ponds.		
Site Description: Lower laydown area, over the ponds.		
Assessed Risk: The environmental risk is low, although caution when upgraded in the road access around the ponds was necessary to prevent material from falling down into the creek.		
Photos Attached: Sprung Structures - 7		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping		
Monitoring Frequency: Daily as work progresses		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structure erection



09/13/07 Initial set-up of 80' x 90' frame (facing E)



09/13/07 Corner brace nut & bolt assembly



09/17/07 80' x 90' assembly (facing W)



09/18/07 80' x 90' assembly continued (facing W)

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structure erection



09/18/07 Installation of tie downs using air jack (SE)

09/18/07 Upgrading of creek side road (facing SE)



09/18/07 80' x 90' assembly (interior view)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: September 23 rd – October 1 st , 2007		Inspector(s): James Spencer
Site Name: Sprung Structures		Location/Co-ordinates: Lower Laydown Area
Site Location Description: Two Sprung structures (80' x 90' & 90' x 105') are being installed at the lower laydown area to provide shelter for the WDS & WIS over the 07/08 winter period. Superior Propane is to install propane radiant heaters and pool covers to prevent the ponds from freezing. Arctic construction is providing assistance to the Sprung company.		
Weather Conditions:		
Date	Conditions	Temp (°C)
23-Sep-07	mixed overcast flurries	-4
24-Sep-07	mixed rain and flurries	0
25-Sep-07	rain showers all day, clearing in evening	5
26-Sep-07	Overcast, foggy	-2
27-Sep-07	Overcast, foggy	-3
28-Sep-07	Some clearing still overcast with low ceilings	-1
29-Sep-07	coolish, broken cloud cover	-5
30-Sep-07	Cool snow flurries	-2
01-Oct-07	Overcast with sunny breaks	-1
Part 2 – Site Assessment		
Activity: The road upgrading is complete, the installation of the Sprung Structures and the propane heaters continues.		
Site Description: Lower laydown area, over the ponds.		
Assessed Risk: Low environmental risk, however, personal caution must be taken when working around the ponds.		
Photos Attached: 14		
Samples Taken: none		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: N/A		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping		
Monitoring Frequency: Daily as work progresses		
Reporting Requirements: QMLU-0006, QZ01-051		

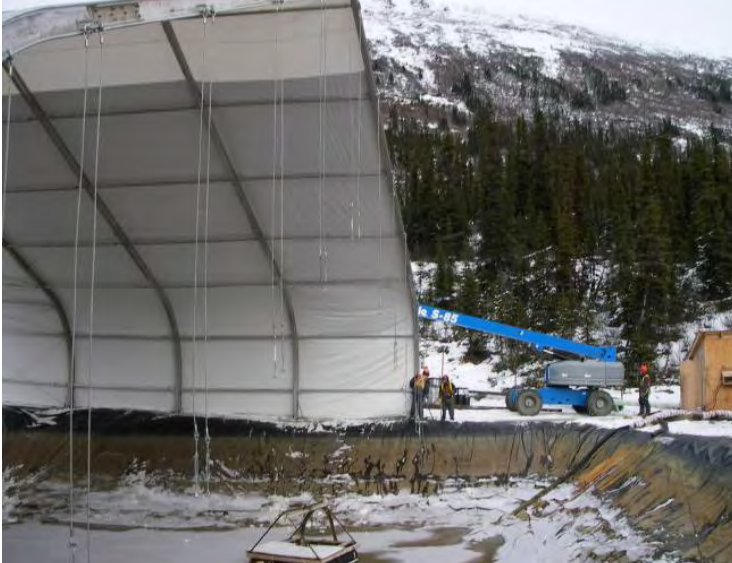
Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures	
	
09/23/07 Erection of 80' x 90' frame (facing E)	09/23/07 Moving the structure over the WDS (facing SW)
	
09/23/07 Hanging the propane heaters over the WDS (facing S)	09/24/07 Erecting the structure over the WDS (facing S)

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures	
	
09/24/07 Inside the structure over the WDS (facing SE)	09/24/07 Completed structure over the WDS (facing S)
	
09/27/07 Erecting the WIS structure (facing S)	09/28/07 Moving the WIS structure (facing SSE)

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structurs	
	
09/29/07 WIS structure erection over the pond (facing NNW)	09/30/07 Propane vents on the outside of the WDS structure (facing E)
	
09/30/07 Continuing to erect the WIS structure over the pond (facing E)	09/30/07 Propane heaters over the WDS (facing N)

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures



10/01/07 Installing the South facing wall on the WDS pond (facing N)



10/01/07 Installing the propane tank SSE of the WDS (facing S)

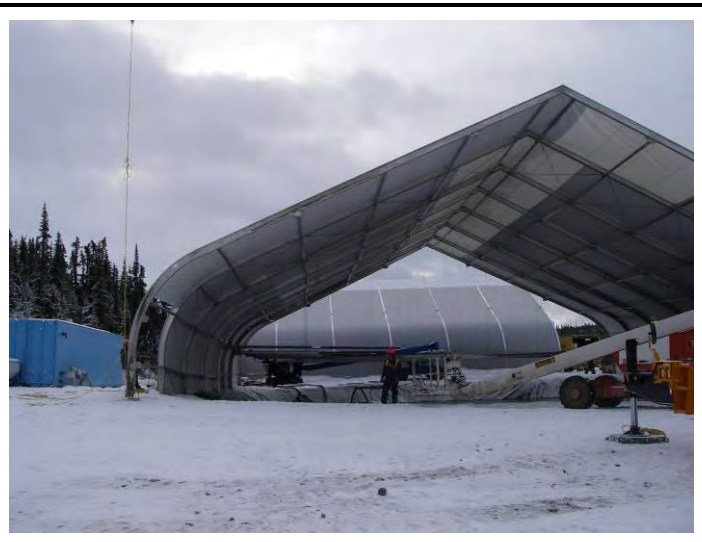
Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: October 2 nd – October 9 th , 2007		Inspector(s): Mary McDougall
Site Name: Sprung Structures		Location/Co-ordinates: Lower Laydown Area
Site Location Description: Two Sprung structures (80' x 90' & 90' x 105') are being installed at the lower laydown area to provide shelter for the WDS & WIS over the 07/08 winter period. Superior Propane is to install propane radiant heaters and pool covers to prevent the ponds from freezing. Arctic construction is providing assistance to the Sprung company.		
Weather Conditions:		
Date	Conditions	Temp (°C)
02-Oct-07	Overcast with sunny breaks	-2
03-Oct-07	Overcast with snow flurries	-5
04-Oct-07	Overcast with sunny breaks; windy and cold	-8
05-Oct-07	Overcast and continuous snow flurries; windy and cold	-4
06-Oct-07	High overcast, breaking clouds	-4
07-Oct-07	Flurries all day	-3
08-Oct-07	Flurries off and on all day	-2
09-Oct-07	High overcast, breaking clouds	-2
Part 2 – Site Assessment		
Activity: Continued installation of Sprung Structures and propane heaters		
Site Description: Lower laydown area, over the ponds.		
Assessed Risk: The environmental risk is low, although caution when working around the sumps because the liner is very slippery and tools have been dropped in the sumps.		
Photos Attached: 9		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: N/A		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch down slope for signs of erosion and slumping		
Monitoring Frequency: Daily as work progresses		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures	
	
10/04/07 Erecting the WIS building (facing SE)	10/04/07 Completed WDS building, with WIS building in the background (facing N)
	
10/04/07 Propane system inside WDS building (facing E)	10/04/07 Erecting the WIS building (facing N)

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures	
	
10/04/07 Propane tank (facing SE)	10/04/07 Propane tank (facing NNW) with WDS building in the background
	
10/06/07 Erecting the WIS structure (facing NNW)	10/06/07 Installing the Propane heaters (facing SE)

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: Sprung Structures



10/08/07 Installing the center panel on the South wall of the WIS structure (facing S)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: October 9 th – October 15 th , 2007		Inspector(s): James Spencer
Site Name: Sprung Structures		Location/Co-ordinates: Lower Laydown Area
Site Location Description: Two Sprung structures (80' x 90' & 90' x 105') are being installed at the lower laydown area to provide shelter for the WDS & WIS over the 07/08 winter period. Superior Propane is to install propane radiant heaters and pool covers to prevent the ponds from freezing. Arctic construction is providing assistance to the Sprung company.		
Weather Conditions:		
Date	Conditions	Temp (°C)
9-Oct-07	High overcast, breaking clouds	-2
10-Oct-07	Mixed sun and cloud, overcast 7000'	-1
11-Oct-07	Mixed sun and cloud, snow overnight 1round 8"	-2
12-Oct-07	Sunny all day nice	0
13-Oct-07	Foggy and cloudy, snowing wet snow	0
14-Oct-07	Sunny beautiful all day	2
15-Oct-07	mixed sun and cloud	-3
Part 2 – Site Assessment		
Activity: On October 12 th , the Sprung structures were complete. Superior still needs to install aquastats and thermostats, and to complete safety items: ladders, extinguishers and solar blankets.		
Site Description: Lower laydown area, over the ponds.		
Assessed Risk: The environmental risk is low, although caution when working around the ponds is always necessary.		
Photos Attached: 5		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: none		
Mitigation Condition: N/A		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Monitoring of the Sprung Structure installation is complete.		
Monitoring Frequency: N/A		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: Sprung Structures	
	
10/09/07 Inside of WIS as flat end is installed (facing N)	10/09/07 Inside of WIS as flat end is installed (facing NW)
	
10/13/07 Completed WIS Structure (facing SSE)	10/13/07 Complete WIS Structure (facing S)

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: Sprung



10/13/07 Completed WDS Structure (facing E)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 21 st - September 3 rd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: Drill sites A and B	Location/Co-ordinates: Site A – 0441343, 6809565 Site B - 0440619, 6810072	
Site Location Description: A- To the East of the airstrip, behind the location for the new LTF. Area contains low shrubs, mosses, and is fairly well drained, no waterways are located closeby. B- In the Go Creek watershed, close to MW05-1 groundwater wells. Go Creek drainage streams run through area.		
Weather Conditions:		
Date	Conditions	Temp (°C)
21-Aug-07	Sunny in the morning, cloudy in the afternoon	20
22-Aug-07	Warm with thundershowers throughout the day	20
23-Aug-07	Cold in the morning with thundershowers, clouds and rain all day	15
24-Aug-07	Rain in the morning, cloudy	14
25-Aug-07	Mostly cloudy, some showers	15
26-Aug-07	Frost in morning, sunny	12
27-Aug-07	Sunny, some rain/hail	12
28-Aug-07	Sunny	14
29-Aug-07	Sunny with some cloud in afternoon	10
30-Aug-07	Cloudy	13
31-Aug-07	Rain intermittent throughout day, clearing in the afternoon	10
1-Sep-07	Rain all morning, clearing in afternoon to sun	8
2-Sep-07	Mix of clouds, and sun. Rain intermittent	13
3-Sep-07	Sunny in the morning, cloudy in the afternoon	12
Part 2 – Site Assessment		
Activity: Drilling for potable water wells Site B was drilled first. Material from the airstrip was brought in on an old drill road to establish pads for drilling and to maintain a driveable access road. A test well was originally installed, and followed up with a permanent well. Both of the wells are outside of 30m from Go Creek. A temporary wooden stopper was used to stop the test well from discharging, but both wells will need some other kind of permanent stopper.		
Site A was drilled second. Three attempts were made to drill but due to a failure in equipment (the weld on the steel casings), none were successful. Two steel casings remain in the ground at the site at from near the surface to a depth of approximately 40 feet. The location of the steel casings have been staked and flagged.		
Site Description: Areas have been cleaned up, except for one fuel barrel remaining at site A.		
Assessed Risk: Low		
Photos Attached: Drillsite A (4 photos), Drillsite B (4 photos)		
Samples Taken: Water sample from permanent well PW07-1, sent to Maxxam		
Additional Information Attached: -		

Part 3 –Mitigation Requirements**Mitigation Required:**

Little. The road to site B will remain, as further development of the permanent well is likely to occur in the upcoming months. As site A is next to the future location of the new LTF, recovering with organics can be done as that project is worked on.

Mitigation Condition: Good

Part 4 –Monitoring Requirements

Follow-up Monitoring: Monitor banks, particularly cut bank look for failure signs

Monitoring Frequency: During rain events or when mitigation applied

Reporting Requirements: QMLU-0006, QZ01-051

Wolverine Project Environmental Inspection Form – Photos

Site Name: Drill Site A



08/31/07 Drill site A facing North



08/31/07 Drill cleaning facing NE at airstrip



09/02/07 After teardown at site A facing NW



09/02/07 Steel casing underground marked with stakes

Wolverine Project Environmental Inspection Form – Photos

Site Name: Drill Site B



08/21/07 Site B facing West



08/21/07 Site B access facing SE



08/28/07 Sump for drill cuttings



08/28/07 Permanent well and test well

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: April 25 th – 29 th , 2007	Inspector(s): James Spencer
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.	
Weather Conditions: Still 2-3' snow but surface melt starting at lower elevations.	
Part 2 – Site Assessment	
Activity: Monitoring started as we began to move water from the PCS to the WRP to prevent overflow at PCS	
Site Description: Surface melt continues. Added a total of 12 loads: 7 loads by 25 th , 5 loads by 29 th . Levels rising in pond with about 0.75m freeboard on 29 th	
Assessed Risk: Med	
Photos Attached: 2	
Samples Taken: -	
Additional Information Attached: -	
Part 3 –Mitigation Requirements	
Mitigation Required: Pump out water to WDS if levels threaten to overflow. Need to treat the pond when thawed and discharge.	
Mitigation Condition: P	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch for slumping of earthen dyke and watch water levels	
Monitoring Frequency: Daily, during rain events or when mitigation applied	
Reporting Requirements: QMLU-0006, QZ01-051	

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRP



04/25/07 Water collected on pad beginning to melt (facing W)



Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: May 15 th – 21 st , 2007	Inspector(s): James Spencer
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.	
Weather Conditions:	
15-May-07	Sunny 9
16-May-07	Sunny 9
17-May-07	Snow overnight, snowing lightly day 0
18-May-07	Overcast 5
19-May-07	Sunny 9
20-May-07	Overcast in Morning, Sunny With Showers afternoon 12
21-May-07	Clear all day, sunny warm in sun, Cool brisk North wind 12
Part 2 – Site Assessment	
Activity: Treat water collected on pad with ferric sulphate to remove selenium and other metals.	
Site Description: Levels rising in pond about 0.5m freeboard on May 19 th , dropped 1' on 21 st	
Assessed Risk: Med	
Photos Attached: 3	
Samples Taken: Water samples taken on May 19 th and May 21 st	
Additional Information Attached:	
Part 3 –Mitigation Requirements	
Mitigation Required: Pump out water to WDS if levels threaten to overflow. Treatment completed on WRP. Results due on May 25 th .	
Mitigation Condition: F, Looks like surface melt is subsiding	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch for slumping of earthen dyke and watch water levels.	
Monitoring Frequency: Daily, during rain events or when mitigation applied	
Reporting Requirements: QMLU-0006, QZ01-051	

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
05/15/07 WRP prior to treatment (facing W)	05/17/07 Treatment of WRP via ferric sulphate re-circulation (facing E)
	
05/20/07 WRP following ferric sulphate treatment (facing S)	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th - June 4 th , 2007	Inspector(s): Jennie Gjertsen and Melissa Kirby	
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N	
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity: Water treatment and storage		
Site Description: Earthen dyke slumping at base, as well as face looking up at road. Soil is very saturated on other side of dyke.		
Assessed Risk: Med, High		
Photos Attached: -		
Samples Taken: Weekly water quality samples		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required:		
Need to discharge as soon as results allow, to reduce risk of saturation of soil.		
Need to do some work on sides of pad to prevent slumping into water		
Mitigation Condition: Earthen dyke still holding well.		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for slumping of earthen dyke level.		
Monitoring Frequency: Daily, during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 5 th – June 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen	
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N	
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
5-Jun-07	Sunny and hot in morning, rainy in afternoon	20
6-Jun-07	Windy and cloudy during day, rain at night	12
7-Jun-07	Rain last night, cloudy in morning clearing to sunny in afternoon	12
8-Jun-07	Sunny and mild	15
9-Jun-07	Sunny and warm	15
10-Jun-07	Cloudy and chilly all day, clearing at night	10
11-Jun-07	Cloudy with sunny periods	15
Part 2 – Site Assessment		
Activity: Water treatment		
Site Description: Earthen dyke slumping at base, and along east face		
Assessed Risk: Med		
Photos Attached: 1		
Samples Taken: Weekly water quality samples		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Discharge when treatment passes WQ parameters. Requires more material being placed on east face		
Mitigation Condition: F, Earthen dyke still holding well, but east face continues to lose material into sump		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for slumping of earthen dyke level, and off of slope		
Monitoring Frequency: Weekly, during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRP



07/11/07 WRP water collected within pad, after ferric sulphate treatment (facing S)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: June 12 th – June 18 th , 2007	Inspector(s): James Spencer																						
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																						
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">12-Jun-07</td> <td style="width: 75%;">Cloudy in morning, sunny and hot in the afternoon, rain in the evening</td> <td style="width: 10%; text-align: right;">18</td> </tr> <tr> <td>13-Jun-07</td> <td>Sunny and warm in morning, cloudy in afternoon, rain in the evening</td> <td style="text-align: right;">14</td> </tr> <tr> <td>14-Jun-07</td> <td>Cloudy with some sun, showers in the afternoon, clearing in the evening.</td> <td style="text-align: right;">14</td> </tr> <tr> <td>15-Jun-07</td> <td>Mixed Sun and cloud, small storm systems all day</td> <td style="text-align: right;">17</td> </tr> <tr> <td>16-Jun-07</td> <td>Mixed Sun and cloud, small storm systems all day</td> <td style="text-align: right;">16</td> </tr> <tr> <td>17-Jun-07</td> <td>Mixed Sun and cloud, small storm systems all day</td> <td style="text-align: right;">15</td> </tr> <tr> <td>18-Jun-07</td> <td>Rain heavy at times, mixed sun and cloud</td> <td style="text-align: right;">14</td> </tr> </table>			12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening	18	13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening	14	14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening.	14	15-Jun-07	Mixed Sun and cloud, small storm systems all day	17	16-Jun-07	Mixed Sun and cloud, small storm systems all day	16	17-Jun-07	Mixed Sun and cloud, small storm systems all day	15	18-Jun-07	Rain heavy at times, mixed sun and cloud	14
12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening	18																					
13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening	14																					
14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening.	14																					
15-Jun-07	Mixed Sun and cloud, small storm systems all day	17																					
16-Jun-07	Mixed Sun and cloud, small storm systems all day	16																					
17-Jun-07	Mixed Sun and cloud, small storm systems all day	15																					
18-Jun-07	Rain heavy at times, mixed sun and cloud	14																					
Part 2 – Site Assessment																							
Activity: Water treatment																							
Site Description: Earthen dyke slumping at base, and along east face. Water evaporating and water level dropping.																							
Assessed Risk: Med																							
Photos Attached: 2																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: Discharge when treatment passes WQ parameters. Stable and no more material required to be added to dyke																							
Mitigation Condition: G, Earthen dyke holding better and drying up, water levels dropping																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Watch for slumping of earthen dyke and water level																							
Monitoring Frequency: Weekly, during rain events or when mitigation applied																							
Reporting Requirements: QMLU-0006, QZ01-051																							

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
06/11/07 WRP water storage (facing S)	06/16/07 WRP water storage (facing N)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 19 th – June 25 th , 2007		Inspector(s): James Spencer
Site Name: Temporary waste rock and ore storage facility		Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
19-Jun-07	Cloudy with Sunny periods	15
20-Jun-07	Windy from south, mostly sunny	18
21-Jun-07	Hazy, smoke clouds, sun and haze, no rain	20
22-Jun-07	Hot and Sunny, rain storms through day	21
23-Jun-07	Hot and Sunny, rain storms through day	21
Part 2 – Site Assessment		
Activity: Water treatment in-situ did not drop selenium concentrations to below discharge limits, therefore the water stored at the WRP was trucked to the WDS for further treatment with ferric sulphate.		
Site Description: Earthen dyke slumping at base, and along east face. Water evaporating and water level dropping (21 st photo). ~80 m ³ of water removed with water truck to WDS on June 22 nd & 23 rd (23 rd photo)		
Assessed Risk: Low		
Photos Attached: 2		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Stable and no more material required to be added to dyke		
Mitigation Condition: G, Earthen dyke holding better and drying up, water levels dropping		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for slumping of earthen dyke and water level		
Monitoring Frequency: June 19 th : Weekly, during rain events or when mitigation applied June 23 rd : Discontinued monitoring because the water was removed and the risk was eliminated		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
06/21/07 Water stored in the WRP prior to trucking to WDS (facing N)	06/23/07 Pumping the water from the WRP to the water truck

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: June 26 th – July 2 nd , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																						
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">26-Jun-07</td> <td style="width: 75%;">Cloudy</td> <td style="width: 10%; text-align: right;">18</td> </tr> <tr> <td>27-Jun-07</td> <td>Thunderstorm in AM, cloudy with sunny periods in afternoon</td> <td style="text-align: right;">17</td> </tr> <tr> <td>28-Jun-07</td> <td>Cloudy with showers, some sunny breaks</td> <td style="text-align: right;">17</td> </tr> <tr> <td>29-Jun-07</td> <td>Rain heavy in the morning, cloudy with showers in afternoon, clearing</td> <td style="text-align: right;">15</td> </tr> <tr> <td>30-Jun-07</td> <td>Cloudy most of the day, sunny and warm in afternoon</td> <td style="text-align: right;">18</td> </tr> <tr> <td>1-Jul-07</td> <td>Heavy rain at night and all morning, rain all afternoon, foggy in evening</td> <td style="text-align: right;">12</td> </tr> <tr> <td>2-Jul-07</td> <td>patchy clouds with sunny breaks</td> <td style="text-align: right;">15</td> </tr> </table>			26-Jun-07	Cloudy	18	27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17	28-Jun-07	Cloudy with showers, some sunny breaks	17	29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15	30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18	1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12	2-Jul-07	patchy clouds with sunny breaks	15
26-Jun-07	Cloudy	18																					
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17																					
28-Jun-07	Cloudy with showers, some sunny breaks	17																					
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15																					
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18																					
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12																					
2-Jul-07	patchy clouds with sunny breaks	15																					
Part 2 – Site Assessment																							
Activity: None, remaining water unable to be moved due to water truck pump being broken. Probably one truck of water remaining in pad.																							
Site Description: East face continues to slump (roadside). Very little water remaining in pad.																							
Assessed Risk: Low																							
Photos Attached: 1																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: work to be done on east face when pad extension starts																							
Mitigation Condition: G, Earthen dyke holding better and drying up, water levels negligible.																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Watch for slumping of earthen dyke, and east face.																							
Monitoring Frequency: Only needed in rain events or when area undergoes further work.																							
Reporting Requirements: QMLU-0006, QZ01-051																							

**WolvJerine Project
Environmental Inspection Form – Photos**

Site Name: WRP



07/02/07 WRP (facing W)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: July 3 rd – July 9 th , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																						
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">3-Jul-07</td> <td style="width: 75%;">cloudy with scattered showers</td> <td style="width: 10%; text-align: right;">18</td> </tr> <tr> <td>4-Jul-07</td> <td>Thunderstorms in AM with hail, clearing in afternoon to patchy clouds</td> <td style="text-align: right;">16</td> </tr> <tr> <td>5-Jul-07</td> <td>Rain overnight, clearing to sun in afternoon, late afternoon showers</td> <td style="text-align: right;">18</td> </tr> <tr> <td>6-Jul-07</td> <td>Rain overnight and during day, cloudy in afternoon</td> <td style="text-align: right;">15</td> </tr> <tr> <td>7-Jul-07</td> <td>Cloudy throughout day, showers</td> <td style="text-align: right;">15</td> </tr> <tr> <td>8-Jul-07</td> <td>Showers and cloudy</td> <td style="text-align: right;">15</td> </tr> <tr> <td>9-Jul-07</td> <td>Cloudy with sunny periods</td> <td style="text-align: right;">20</td> </tr> </table>			3-Jul-07	cloudy with scattered showers	18	4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16	5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18	6-Jul-07	Rain overnight and during day, cloudy in afternoon	15	7-Jul-07	Cloudy throughout day, showers	15	8-Jul-07	Showers and cloudy	15	9-Jul-07	Cloudy with sunny periods	20
3-Jul-07	cloudy with scattered showers	18																					
4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16																					
5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18																					
6-Jul-07	Rain overnight and during day, cloudy in afternoon	15																					
7-Jul-07	Cloudy throughout day, showers	15																					
8-Jul-07	Showers and cloudy	15																					
9-Jul-07	Cloudy with sunny periods	20																					
Part 2 – Site Assessment																							
Activity: None, water truck still broken. Probably one truck of water remaining in pad.																							
Site Description: East face continues to slump (roadside). Very little water remaining in pad.																							
Assessed Risk: Low																							
Photos Attached: 1																							
Samples Taken:																							
Additional Information Attached:																							
Part 3 –Mitigation Requirements																							
Mitigation Required: work to be done on east face when pad extension starts, or more waste rock added to slumping face.																							
Mitigation Condition: G																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: Watch for slumping of earthen dyke, and east face.																							
Monitoring Frequency: Only needed in rain events or when area undergoes further work.																							
Reporting Requirements: QMLU-0006, QZ01-051																							

**WolvJerine Project
Environmental Inspection Form – Photos**

Site Name: WRP



07/07/07 Slumping of clay liner on East side of WRP (facing W)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 7 th - August 13 th , 2007		Inspector(s): Jennie Gjertsen
Site Name: Temporary waste rock and ore storage facility		Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
7-Aug-07	cloudy in the morning with rain clearing in afternoon	14
8-Aug-07	Cool mostly cloudy, rain	12
9-Aug-07	Sunny with cloudy periods, very cool in morning	18
10-Aug-07	Cloudy and cool	11
11-Aug-07	Cloudy and cool	12
12-Aug-07	Frost in morning, sunny	15
13-Aug-07	Cloudy and warm	17
Part 2 – Site Assessment		
Activity: Water has been removed from Pad. Work is starting on area for pad extension and lining.		
August 10 th – Area grubbed		
August 11 th – Organics removed and stockpiled at organics pile for new camp site		
Site Description: Liner and clay lined sides and bottom. Area has been cleared, for liner installation. Probably some fill required before installation of liner. Surveyor to site next week.		
Assessed Risk: Low		
Photos Attached: 8: 4 before grubbing, 4 after grubbing		
Samples Taken: soil sampled at new camp site for ABA testwork to determine if it can be used for filling and levelling.		
Additional Information Attached: N/A		
Part 3 –Mitigation Requirements		
Mitigation Required: work to be done on east face when pad extension starts, or sloping of slumping face. Grubbing of area for extension has revealed a pretty steep slope now no longer covered in vegetation. Construction supervisor to do some road work to lessen slope in the following weeks.		
Mitigation Condition: Good		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for slumping of earthen berm, and east face.		
Monitoring Frequency: Daily during construction then when there is a change of condition and work being one in area.		
Reporting Requirements: B Licence		

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
08/10/07 Extension prior to grubbing (facing W)	08/10/07 Extension prior to grubbing (facing N)
	
08/10/07 Extension prior to grubbing (facing SW)	08/10/07 Extension prior to grubbing (facing NW)

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP – After grubbing	
	
08/11/07 Extension after grubbing (facing SE)	08/11/07 Extension after grubbing (facing SE)
	
08/11/07 Extension after grubbing (facing NE)	08/11/07 Extension after grubbing (facing SSE)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 14 th - August 21 st , 2007		Inspector(s): James Spencer
Site Name: Temporary waste rock and ore storage facility		Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
14-Aug-07	Heavy rain over night, low cloud and fog in morning, clearing in afternoon	15
15-Aug-07	Sunny bluebird, hot	26
16-Aug-07	Sunny bluebird, hot	24
17-Aug-07	Sunny bluebird, hot	27
18-Aug-07	Sunny bluebird, hot	24
19-Aug-07	Hot in morning, broken cloud in afternoon, rain at airstrip	23
20-Aug-07	hot most of day, some broken cloud, rain in evening	26
21-Aug-07	Sunny in the morning, cloudy in the afternoon	20
Part 2 – Site Assessment		
Activity: Extension of Phase I pad to Phase II		
Site Description: Haul road above waste rock pad widened and area surveyed and being cut to accommodate liner and 2:1 grades. Cutting down road and areas where lock trench will be dug on the banks		
Assessed Risk: Low		
Photos Attached: 3		
Samples Taken: soil sampled at new camp site that can be used for filling and levelling.		
Additional Information Attached: N/A		
Part 3 –Mitigation Requirements		
Mitigation Required: None required		
Mitigation Condition: N/A		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch for slumping of earthen dyke, and east face.		
Monitoring Frequency: Daily during construction and when there is a change of condition and work being done in area.		
Reporting Requirements: B licence		

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP – Contouring			
			
08/16/07	Before road cut (facing SE)	08/20/07	After road cut (facing SE)
			
08/20/07		After road cut (facing NW)	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: August 21 st - August 28 th , 2007		Inspector(s): Jennie Gjertsen
Site Name: Temporary waste rock and ore storage facility		Location/Co-ordinates: 6810410 E 440584 N
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.		
Weather Conditions:		
21-Aug-07	Sunny in the morning, cloudy in the afternoon	20
22-Aug-07	Warm with thundershowers throughout the day	20
23-Aug-07	Cold in the morning with thundershowers, clouds and rain all day	15
24-Aug-07	Rain in the morning, cloudy	14
25-Aug-07	Mostly cloudy, some showers	15
26-Aug-07	Frost in morning, sunny	12
27-Aug-07	Sunny, some rain/hail	12
28-Aug-07	Sunny	14
Part 2 – Site Assessment		
Activity: Packer was in this week to strengthen and pack basin of the new pad. Water from inside the pad was removed and pumped to the waste rock sump. The clay berm was removed and the old liner exposed, so that welding of the old liner and the new liner could take place. Lock trench was started in preparation for liner installation.		
Site Description: Area has been prepped for liner		
Assessed Risk: Low		
Photos Attached:		
Samples Taken: none		
Additional Information Attached: none		
Part 3 –Mitigation Requirements		
Mitigation Required: None required		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: As liner is installed, make sure that it is not compromised by equipment or rocks		
Monitoring Frequency: When there is a change of condition and work being done in area.		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																							
Date and Time: Sept 4 th - Sept 10 th , 2007	Inspector(s): Jennie Gjertsen																						
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																						
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																							
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">4-Sep-07</td> <td style="width: 75%;">Very frosty, Sun in the morning, overcast in the afternoon</td> <td style="width: 10%; text-align: right;">8</td> </tr> <tr> <td>5-Sep-07</td> <td>Sunny with clouds</td> <td style="text-align: right;">8</td> </tr> <tr> <td>6-Sep-07</td> <td>Cloudy or overcast</td> <td style="text-align: right;">11</td> </tr> <tr> <td>7-Sep-07</td> <td>Cloudy with sunny breaks and occasional short showers</td> <td style="text-align: right;">12</td> </tr> <tr> <td>8-Sep-07</td> <td>Frost in morning, overcast</td> <td style="text-align: right;">7</td> </tr> <tr> <td>9-Sep-07</td> <td>Overcast</td> <td style="text-align: right;">8</td> </tr> <tr> <td>10-Sep-07</td> <td>Very gray all day, some showers in evening</td> <td style="text-align: right;">10</td> </tr> </table>			4-Sep-07	Very frosty, Sun in the morning, overcast in the afternoon	8	5-Sep-07	Sunny with clouds	8	6-Sep-07	Cloudy or overcast	11	7-Sep-07	Cloudy with sunny breaks and occasional short showers	12	8-Sep-07	Frost in morning, overcast	7	9-Sep-07	Overcast	8	10-Sep-07	Very gray all day, some showers in evening	10
4-Sep-07	Very frosty, Sun in the morning, overcast in the afternoon	8																					
5-Sep-07	Sunny with clouds	8																					
6-Sep-07	Cloudy or overcast	11																					
7-Sep-07	Cloudy with sunny breaks and occasional short showers	12																					
8-Sep-07	Frost in morning, overcast	7																					
9-Sep-07	Overcast	8																					
10-Sep-07	Very gray all day, some showers in evening	10																					
Part 2 – Site Assessment																							
Activity: WRP liner installation.																							
Site Description: Geotextile has been laid down and welded for entire base of pad. Welding of liner approximately one third complete. Looking to finish welding liner on Friday. Project will be completed once area is covered with another layer of geotextile and then lined with clay.																							
Assessed Risk: Low																							
Photos Attached: 4																							
Samples Taken: none																							
Additional Information Attached: none																							
Part 3 –Mitigation Requirements																							
Mitigation Required: None required																							
Mitigation Condition: N/A																							
Part 4 –Monitoring Requirements																							
Follow-up Monitoring: As liner is installed, make sure that it is not compromised by equipment or rocks																							
Monitoring Frequency: Daily until completion of Phase II and then when there is a change of condition and work being done in area.																							
Reporting Requirements: B Licence																							

Wolvserine Project Environmental Inspection Form – Photos

Site Name: WRP



09/07/07 Exposing the Phase I liner in preparation for welding (facing W)



09/08/07 Laying down geotextile fabric (facing N)



09/09/07 Rolling out the Enviro Liner over the geotextile fabric (facing W)



09/10/07 Laying the geotextile and Liner (facing E)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																																						
Date and Time: Sept 11 th - Sept 22 nd , 2007	Inspector(s): James Spencer																																					
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																																					
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																																						
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">11-Sep-07</td> <td style="width: 75%;">Sunny and warm</td> <td style="width: 10%; text-align: right;">15</td> </tr> <tr> <td>12-Sep-07</td> <td>Sunny and warm</td> <td style="text-align: right;">14</td> </tr> <tr> <td>13-Sep-07</td> <td>Sunny and warm</td> <td style="text-align: right;">14</td> </tr> <tr> <td>14-Sep-07</td> <td>Mixed sun and cloud</td> <td style="text-align: right;">13</td> </tr> <tr> <td>15-Sep-07</td> <td>rain showers all day, clearing in afternoon</td> <td style="text-align: right;">11</td> </tr> <tr> <td>16-Sep-07</td> <td>Bright sunny</td> <td style="text-align: right;">14</td> </tr> <tr> <td>17-Sep-07</td> <td>Cool and overcast, dusting of snow on high peaks</td> <td style="text-align: right;">9</td> </tr> <tr> <td>18-Sep-07</td> <td>cool and light flurries</td> <td style="text-align: right;">8</td> </tr> <tr> <td>19-Sep-07</td> <td>Overcast, with flurries throughout the day</td> <td style="text-align: right;">6</td> </tr> <tr> <td>20-Sep-07</td> <td>Flurries, clearing in the afternoon</td> <td style="text-align: right;">7</td> </tr> <tr> <td>21-Sep-07</td> <td>Flurries, rain in camp in the afternoon, low overcast</td> <td style="text-align: right;">5</td> </tr> <tr> <td>22-Sep-07</td> <td>Clear breaks, cloudy</td> <td style="text-align: right;">6</td> </tr> </table>			11-Sep-07	Sunny and warm	15	12-Sep-07	Sunny and warm	14	13-Sep-07	Sunny and warm	14	14-Sep-07	Mixed sun and cloud	13	15-Sep-07	rain showers all day, clearing in afternoon	11	16-Sep-07	Bright sunny	14	17-Sep-07	Cool and overcast, dusting of snow on high peaks	9	18-Sep-07	cool and light flurries	8	19-Sep-07	Overcast, with flurries throughout the day	6	20-Sep-07	Flurries, clearing in the afternoon	7	21-Sep-07	Flurries, rain in camp in the afternoon, low overcast	5	22-Sep-07	Clear breaks, cloudy	6
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22-Sep-07	Clear breaks, cloudy	6																																				
Part 2 – Site Assessment																																						
Activity: WRP liner installation.																																						
Site Description: Completion of liner installation, and beginning to line the WRP with material from the new camp site.																																						
Assessed Risk: Low																																						
Photos Attached: 8																																						
Samples Taken: none																																						
Additional Information Attached: none																																						
Part 3 –Mitigation Requirements																																						
Mitigation Required: None required																																						
Mitigation Condition: N/A																																						
Part 4 –Monitoring Requirements																																						
Follow-up Monitoring: Until the clay lining is complete																																						
Monitoring Frequency: Daily until completion of Phase II addition and then when there is a change of condition and work being done in area.																																						
Reporting Requirements: B Licence																																						

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP



LAYFIELD GEOMEMBRANE TRIAL SEAM LOG

PROJECT NUMBER: 07C-093 PROJECT TITLE: Yukon Zinc Wolverine Wastrock Pad
OWNER: Yukon Zinc Corp. CONTRACTOR: Yukon Zinc
LOCATION: Wolverine Mine Site SHEET NUMBER: 1

TS - # = SOLVENT

☒ TF - # FUSION ☒ TX - # EXTRUSION

SAMPLE NUMBER	APPROX. DATE	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES		WIND SPEED	TEST RESULTS		PASS OR RETEST	CHECKED BY	REMARKS	
				PREHEAT OR AMBIENT AIR TEMP	EXTRUSION TEMP		INSIDE PEEL MODE STRENGTH	OUTSIDE PEEL MODE STRENGTH				
TX#1	13-03	Don'tek #1	CB	3°C	700	750	20/24/71/75	73/24/76/76	93 / 93	Pass	CB	FTB's
TX#1	13-03	Don'tek #1	CB	3°C	470	470	26/24/79/94/50		92 / 95	Pass	CB	FTB's
TX#2	07-30	Don'tek #1	CN	9°C	470	470	21/24/98/92/51		93 / 96	Pass	CB	FTB's
TX#2	07-30	Don'tek #1	CB	9°C	700	750	22/24/71/97/79	22/21/72/71/69/94	93 / 93	Pass	CB	FTB's
TX#3	07-30	Don'tek #1	CN	9°C	470	470	22/25/94/92/50		92 / 94	Pass	CB	FTB's
TX#3	10-03	Don'tek #1	CB	9°C	700	750	26/24/75/91/72	23/23/79/92/73	91 / 98	Pass	CB	FTB's
TX#4	07-30	Don'tek #1	CN	5°C	470	470	22/24/77/92/50		95 / 93	Pass	P.B.	FTB's
TX#4	07-30	Don'tek #1	CB	5°C	700	750	24/24/75/77/79	23/21/73/75/90	92 / 95	Pass	CB	FTB's
TX#5	07-30	Don'tek #1	CN	10°C	470	470	21/24/99/96/50		75 / 79	Pass	CB	FTB's
TX#6	07-30	Don'tek #1	CB	12°C	470	470	20/24/71/91/97			Pass	CB	FTB's

LS FORM 3 LAYFIELD ENVIRONMENTAL SYSTEMS

SUBMITTED BY: DATE:

09/12/07 Layfield Plastics aligning the liner

09/12/07 Layfield's QA/QC seam log



09/12/07 Completed liner (facing SE)

09/12/07 Welding the liner

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
09/15/07 Completed WRP with liner and geotextile (facing NW)	09/15/07 Lock Trenching the liner (facing E)
	
09/21/07 Clay lining (looking NW)	09/21/07 Clay lining (looking NW)

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																												
Date and Time: Sept 23 rd – Oct 1 st , 2007	Inspector(s): James Spencer																											
Site Name: Temporary waste rock and ore storage facility	Location/Co-ordinates: 6810410 E 440584 N																											
Site Location Description: The temporary waste rock and ore storage facility currently contains ~14,600 m ³ of material generated during the 2005 underground test mine construction, and consists of a waste rock and ore storage pad, and a water collection sump.																												
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">23-Sep-07</td> <td style="width: 75%;">mixed overcast flurries</td> <td style="width: 10%; text-align: right;">-4</td> </tr> <tr> <td>24-Sep-07</td> <td>mixed rain and flurries</td> <td style="text-align: right;">0</td> </tr> <tr> <td>25-Sep-07</td> <td>rain showers all day, clearing in evening</td> <td style="text-align: right;">5</td> </tr> <tr> <td>26-Sep-07</td> <td>Overcast, foggy</td> <td style="text-align: right;">-2</td> </tr> <tr> <td>27-Sep-07</td> <td>Overcast, foggy</td> <td style="text-align: right;">-3</td> </tr> <tr> <td>28-Sep-07</td> <td>Some clearing still overcast with low ceilings</td> <td style="text-align: right;">-1</td> </tr> <tr> <td>29-Sep-07</td> <td>coolish, broken cloud cover</td> <td style="text-align: right;">-5</td> </tr> <tr> <td>30-Sep-07</td> <td>Cool snow flurries</td> <td style="text-align: right;">-2</td> </tr> <tr> <td>01-Oct-07</td> <td>Overcast with sunny breaks</td> <td style="text-align: right;">-1</td> </tr> </table>		23-Sep-07	mixed overcast flurries	-4	24-Sep-07	mixed rain and flurries	0	25-Sep-07	rain showers all day, clearing in evening	5	26-Sep-07	Overcast, foggy	-2	27-Sep-07	Overcast, foggy	-3	28-Sep-07	Some clearing still overcast with low ceilings	-1	29-Sep-07	coolish, broken cloud cover	-5	30-Sep-07	Cool snow flurries	-2	01-Oct-07	Overcast with sunny breaks	-1
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01-Oct-07	Overcast with sunny breaks	-1																										
Part 2 – Site Assessment																												
Activity: Complete WRP clay lining																												
Site Description: Line the WRP with clay from the new camp site area for ore placement from the north, and waste rock placement from the south.																												
Assessed Risk: Low																												
Photos Attached: 3																												
Samples Taken: none																												
Additional Information Attached: none																												
Part 3 –Mitigation Requirements																												
Mitigation Required: None required																												
Mitigation Condition: G																												
Part 4 –Monitoring Requirements																												
Follow-up Monitoring: Finished clay lining on the 24 th , therefore no more monitoring required unless changes occur																												
Monitoring Frequency: When there is a change of condition and work being done in area.																												
Reporting Requirements: QMLU-0006, QZ01-051																												

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRP	
	
09/24/07 Clay lining (facing SE)	09/24/07 Clay lining (facing SE)
	
09/25/07 Completed WRP (facing NW)	

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: April 20 th – 26 th , 2007	Inspector(s): James Spencer
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.	
Weather Conditions: Still 2-3' snow but surface melt starting at lower elevations.	
Part 2 – Site Assessment	
Activity: Monitoring started as we monitor the surface melt and ground melt through spring run-off.	
Site Description: Surface melt starting to show wetting in sump around 1m freeboard, levels rising ~1" day	
Assessed Risk: Med	
Photos Attached: WRS - 2	
Samples Taken: -	
Additional Information Attached: -	
Part 3 –Mitigation Requirements	
Mitigation Required: Pump out water to WDS if levels threaten to overflow. Need to treat the pond when thawed and discharge ASAP.	
Mitigation Condition: G	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch water levels	
Monitoring Frequency: Daily, during rain events or when mitigation applied	
Reporting Requirements: QMLU-0006, QZ01-051	

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRS



Photo 1

Date and Time: 20/04/07 1154



Photo 2

Date and Time: 25/04/07 1029

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 15 th – 21 st , 2007	Inspector(s): James Spencer	
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad	
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.		
Weather Conditions:		
15-May-07	Sunny	9
16-May-07	Sunny	9
17-May-07	Snow overnight, snowing lightly day	0
18-May-07	Overcast	5
19-May-07	Sunny	9
20-May-07	Overcast in Morning, Sunny With Showers afternoon	12
21-May-07	Clear all day, sunny warm in sun, Cool brisk North wind	12
Part 2 – Site Assessment		
Activity: Monitoring started, monitor the surface melt and ground melt through spring run-off.		
Site Description: Surface melt starting to show wetting in sump, around 1m freeboard, levels rising ~1" day		
Assessed Risk: Med		
Photos Attached: WRS - 3		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: Pump out water to WDS if levels threaten to overflow. Need to treat the pond when thawed and discharge ASAP.		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch water levels		
Monitoring Frequency: Daily, during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS	
	
Photo 1	Date and Time: 15/05/07 1117
	
Photo 3	Date and Time: 21/05/07 0810

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																						
Date and Time: May 22 nd – 28 th , 2007	Inspector(s): James Spencer																					
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad																					
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.																						
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">22-May-07</td> <td style="width: 75%;">Clear and Sunny</td> <td style="width: 10%; text-align: right;">14</td> </tr> <tr> <td>23-May-07</td> <td>Clear and Sunny</td> <td style="text-align: right;">15</td> </tr> <tr> <td>24-May-07</td> <td>Clear and Sunny</td> <td style="text-align: right;">15</td> </tr> <tr> <td>25-May-07</td> <td>Clear and Sunny</td> <td style="text-align: right;">15</td> </tr> <tr> <td>26-May-07</td> <td>Cooler and light rain, front approaching from south</td> <td style="text-align: right;">8</td> </tr> <tr> <td>27-May-07</td> <td>Sunny and hot</td> <td style="text-align: right;">15</td> </tr> <tr> <td>28-May-07</td> <td>Sunny and warm</td> <td style="text-align: right;">15</td> </tr> </table>		22-May-07	Clear and Sunny	14	23-May-07	Clear and Sunny	15	24-May-07	Clear and Sunny	15	25-May-07	Clear and Sunny	15	26-May-07	Cooler and light rain, front approaching from south	8	27-May-07	Sunny and hot	15	28-May-07	Sunny and warm	15
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27-May-07	Sunny and hot	15																				
28-May-07	Sunny and warm	15																				
Part 2 – Site Assessment																						
Activity: Monitoring started as we monitor the surface melt and ground melt through spring run-off.																						
Site Description: Surface melt continues, water rising 1" per day, 0.30 m freeboard																						
Assessed Risk: Med																						
Photos Attached: WRS																						
Samples Taken: yes, water quality, May 24,26,28																						
Additional Information Attached:																						
Part 3 –Mitigation Requirements																						
Mitigation Required: Pump out water to WDS if levels threaten to overflow. Treated pond on May 22, 23, results due May 31 st .																						
Mitigation Condition: G																						
Part 4 –Monitoring Requirements																						
Follow-up Monitoring: Watch water levels																						
Monitoring Frequency: Daily, during rain events or when mitigation applied																						
Reporting Requirements: QMLU-0006, QZ01-051																						

Wolverine Project Environmental Inspection Form – Photos

Site Name: WRS



Photo 1

Date and Time: 22/05/07 1658



Photo 2

Date and Time: 23/05/07 1035



Photo 3

Date and Time: 24/05/07 1050



Photo 4

Date and Time: 26/05/07 1555

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS



Photo 5

Date and Time: 27/05/07 1102

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: May 29 th to June 4 th , 2007	Inspector(s): Jennie Gjertsen and Melissa Kirby	
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad	
Site Location Description: Approximately 221m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.		
Weather Conditions:		
29-May-07	Sunny and warm	9
30-May-07	Rain intermix with some sun hail late in the day	10
31-May-07	Sunny	15
1-Jun-07	Sunny	15
2-Jun-07	Sunny	16
3-Jun-07	Sunny and hot	22
4-Jun-07	Sunny and hot	27
Part 2 – Site Assessment		
Activity: None		
Site Description: Surface melt has slowed and overflow not as much a concern		
Assessed Risk: Low, except during periods of high rainfall		
Photos Attached: -		
Samples Taken: -		
Additional Information Attached: -		
Part 3 –Mitigation Requirements		
Mitigation Required: -		
Mitigation Condition: G		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch water levels		
Monitoring Frequency: Daily during rain events or when mitigation applied		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: June 5 th – 11 th , 2007	Inspector(s): James Spencer and Jennie Gjertsen
Site Name: WRS	Location/Co-ordinates: Water at southwest corner of pad
Site Location Description: Approximately 221m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.	
Weather Conditions:	
Part 2 – Site Assessment	
Activity: Water treatment	
Site Description: no changes have been observed. Melt has finished with no overflow from the sump.	
Assessed Risk: Med	
Photos Attached: WRS - 1	
Samples Taken: -	
Additional Information Attached: -	
Part 3 –Mitigation Requirements	
Mitigation Required: none	
Mitigation Condition: G	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch water levels	
Monitoring Frequency: Daily	
Reporting Requirements: QMLU-0006, QZ01-051	

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS



Photo 1

Date and Time: 11/06/07

1401

Wolverine Project Environmental Inspection Form

Part 1 – Site Description	
Date and Time: June 12 th – 18 th , 2007	Inspector(s): James Spencer
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.	
Weather Conditions:	
12-Jun-07	Cloudy in morning, sunny and hot in the afternoon, rain in the evening 18
13-Jun-07	Sunny and warm in morning, cloudy in afternoon, rain in the evening 14
14-Jun-07	Cloudy with some sun, showers in the afternoon, clearing in the evening. 14
15-Jun-07	Mixed Sun and cloud, small storm systems all day 17
16-Jun-07	Mixed Sun and cloud, small storm systems all day 16
17-Jun-07	Mixed Sun and cloud, small storm systems all day 15
18-Jun-07	Rain heavy at times, mixed sun and cloud 14
Part 2 – Site Assessment	
Activity: Water treatment	
Site Description: Melt has finished with no overflow from the sump. Evaporation continues to lower water levels throughout the week	
Assessed Risk: Med	
Photos Attached: 2	
Samples Taken:	
Additional Information Attached:	
Part 3 –Mitigation Requirements	
Mitigation Required: none	
Mitigation Condition: G, Water levels still 5-6' from overflow, June 16: Water levels 8" from overflow	
Part 4 –Monitoring Requirements	
Follow-up Monitoring: Watch water levels	
Monitoring Frequency: June 12 th Daily, During rain events or changes noted, June 18 th Weekly, rain or changes noted	
Reporting Requirements: QMLU-0006, QZ01-051	

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS					
					
Photo 1	11/06/07	1401	Photo 2	16/06/07	0825

Wolverine Project Environmental Inspection Form

Part 1 – Site Description																				
Date and Time: June 19 th – 25 th , 2007	Inspector(s): James Spencer																			
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad																			
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.																				
Weather Conditions: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">19-Jun-07</td> <td style="width: 70%;">Cloudy with Sunny periods</td> <td style="width: 15%; text-align: right;">15</td> </tr> <tr> <td>20-Jun-07</td> <td>Windy from south, mostly sunny</td> <td style="text-align: right;">18</td> </tr> <tr> <td>21-Jun-07</td> <td>Hazy, smoke clouds, sun and haze, no rain</td> <td style="text-align: right;">20</td> </tr> <tr> <td>22-Jun-07</td> <td>Hot and Sunny, rain storms through day</td> <td style="text-align: right;">21</td> </tr> <tr> <td>23-Jun-07</td> <td>Hot and Sunny, rain storms through day</td> <td style="text-align: right;">21</td> </tr> <tr> <td>24-Jun-07</td> <td>Hot in morning, rain storm afternoon</td> <td style="text-align: right;">22</td> </tr> </table>			19-Jun-07	Cloudy with Sunny periods	15	20-Jun-07	Windy from south, mostly sunny	18	21-Jun-07	Hazy, smoke clouds, sun and haze, no rain	20	22-Jun-07	Hot and Sunny, rain storms through day	21	23-Jun-07	Hot and Sunny, rain storms through day	21	24-Jun-07	Hot in morning, rain storm afternoon	22
19-Jun-07	Cloudy with Sunny periods	15																		
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23-Jun-07	Hot and Sunny, rain storms through day	21																		
24-Jun-07	Hot in morning, rain storm afternoon	22																		
Part 2 – Site Assessment																				
Activity: Water treatment																				
Site Description: Melt has finished with no overflow from the sump. Evaporation continues to lower water levels throughout the week. Still minor risk of WRP rock slipping in to sump and overflowing the area																				
Assessed Risk: Med																				
Photos Attached: WRS - 1																				
Samples Taken: -																				
Additional Information Attached: -																				
Part 3 –Mitigation Requirements																				
Mitigation Required: Waiting for water quality results, then will pump out water and transfer to WDS for discharge																				
Mitigation Condition: G, June 19, water levels 11" from overflow June 24: Water levels 14" from overflow																				
Part 4 –Monitoring Requirements																				
Follow-up Monitoring: Watch water levels																				
Monitoring Frequency: Weekly, rain or changes noted																				
Reporting Requirements: QMLU-0006, QZ01-051																				

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS



Photo 1

21_06_07

0927

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: June 26 th - July 2 nd , 2007	Inspector(s): Jennie Gjertsen	
Site Name: WRS	Location/Co-ordinates: Water collection sump at southwest corner of pad	
Site Location Description: Approximately 221 m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.		
Weather Conditions:		
26-Jun-07	Cloudy	18
27-Jun-07	Thunderstorm in AM, cloudy with sunny periods in afternoon	17
28-Jun-07	Cloudy with showers, some sunny breaks	17
29-Jun-07	Rain heavy in the morning, cloudy with showers in afternoon, clearing	15
30-Jun-07	Cloudy most of the day, sunny and warm in afternoon	18
1-Jul-07	Heavy rain at night and all morning, rain all afternoon, foggy in evening	12
2-Jul-07	patchy clouds with sunny breaks	15
Part 2 – Site Assessment		
Activity: Water treatment. Several attempts to help evaporation by spraying water onto WRP rock for ten minutes at a time		
Site Description: Evaporation continues to lower water levels throughout the week. Still minor risk of WRP rock slipping in to sump and overflowing the area.		
Assessed Risk: Med		
Photos Attached: WRS		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Retreating is ongoing, must exercise caution when spraying the waste rock to avoid saturation and slipping of material. Ditching is required in the road across from the top of the waste rock pad, to minimize rainfall runoff into sump.		
Mitigation Condition: G, water level was not affected adversely my rain		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch water levels		
Monitoring Frequency: Weekly, rain or changes noted		
Reporting Requirements: QMLU-0006, QZ01-051		

Wolverine Project Environmental Inspection Form

Part 1 – Site Description		
Date and Time: July 3 rd – July 9 th , 2007	Inspector(s): Jennie Gjertsen	
Site Name: WRS	Location/Co-ordinates: Water at southwest corner of pad	
Site Location Description: Approximately 221m ³ lined sump. Designed to collect contaminated storage from waste rock pile. All water there drains through to the WRS Ore and waste rock piled ~100' high and steep (1.5:1) at north end of sump. Sits in Go Creek drainage.		
Weather Conditions:		
3-Jul-07	cloudy with scattered showers	18
4-Jul-07	Thunderstorms in AM with hail, clearing in afternoon to patchy clouds	16
5-Jul-07	Rain overnight, clearing to sun in afternoon, late afternoon showers	18
6-Jul-07	Rain overnight and during day, cloudy in afternoon	15
7-Jul-07	Cloudy throughout day, showers	15
8-Jul-07	Showers and cloudy	15
9-Jul-07	Cloudy with sunny periods	20
Part 2 – Site Assessment		
Activity: Water treatment		
Site Description: Evaporation continues to lower water levels throughout the week. Still minor risk of WRP rock slipping in to sump and overflowing the area. Ditching work was done this week on the road above the WRS, to minimize the water flowing into the sump during periods of melt/runoff/rainfall		
Assessed Risk: Low		
Photos Attached: WRS		
Samples Taken:		
Additional Information Attached:		
Part 3 –Mitigation Requirements		
Mitigation Required: Retreating is ongoing, must exercise caution when spraying the waste rock to avoid saturation and slipping of material.		
Mitigation Condition: G, water level was not affected adversely my rain		
Part 4 –Monitoring Requirements		
Follow-up Monitoring: Watch water levels		
Monitoring Frequency: Weekly, rain or changes noted		
Reporting Requirements: QMLU-0006, QZ01-051		

**Wolverine Project
Environmental Inspection Form – Photos**

Site Name: WRS



Photo 1 07/07/07 1645



Photo 2 07/07/07 1645

Appendix B Acid Base Accounting and Shake Flask Testing Lab Reports

Appendix B includes the following lab reports:

From ALS Laboratory Group – Minerals Division – ALS Chemex:

VA07040287

VA07048595

VA07065971

VA07073067

VA07090006

From ALS Laboratory Group – Environmental Division:

L539652

L557308



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ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: YUKON ZINC CORPORATION

701-475 HOWE ST

VANCOUVER BC V6C 2B3

Page: 1

Finalized Date: 2-MAY-2007

Account: MPO

CERTIFICATE VA07040287

Project: WOLVERINE

P.O. No.:

This report is for 2 Rock samples submitted to our lab in Vancouver, BC, Canada on 24-APR-2007.

The following have access to data associated with this certificate:

PAMELA LADYMAN

RANDY OLAFSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	LECO
S-GRA06a	Sulfate Sulfur (HCl leachable)	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

To: YUKON ZINC CORPORATION
ATTN: PAMELA LADYMAN
701-475 HOWE ST
VANCOUVER BC V6C 2B3

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



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Page: 2 - A

Total # Pages: 2 (A)

Finalized Date: 2-MAY-2007

Account: MPO

Project: WOLVERINE

CERTIFICATE OF ANALYSIS VA07040287

Sample Description	Method Analyte Units LOR	WEI-21	OA-VOL08	OA-VOL08	OA-VOL08	OA-VOL08	OA-ELE07	OA-VOL08	S-IR08	S-GRA06	S-CAL06	S-GRA06a
		Recvd Wt.	MPA	NNP	FIZZ RAT	NP	pH	Ratio (N	S	S	S	S
		kg	tCaCO3/1000t	tCaCO3/1000t	Unity	tCaCO3/1000t	Unity	Unity	%	%	%	%
		0.02	0.3	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01
VTM NAD 83 E-0439851 N-6810944		9.32	6.6	-3	1	4	6.2	0.61	0.21	0.19	0.02	0.20
VTM NAD 83 E-0438265 N-6812448		8.84	0.9	7	1	8	7.2	8.53	0.03	<0.01	0.03	<0.01



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Page: 1

Finalized Date: 1-JUN-2007

Account: MPO

CERTIFICATE VA07048595

Project: WOLVERINE

P.O. No.:

This report is for 1 Rock sample submitted to our lab in Vancouver, BC, Canada on 16-MAY-2007.

The following have access to data associated with this certificate:

PAMELA LADYMAN

RANDY OLAFSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	LECO
S-GRA06a	Sulfate Sulfur (HCl leachable)	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

To: YUKON ZINC CORPORATION
ATTN: RANDY OLAFSON
701-475 HOWE ST
VANCOUVER BC V6C 2B3

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Signature:

Lawrence Ng, Laboratory Manager - Vancouver



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Page: 2 - A

Total Pages: 2 (A)

Finalized Date: 1-JUN-2007

Account: MPO

Project: WOLVERINE

CERTIFICATE OF ANALYSIS VA07048595

Sample Description	Method Analyte Units LOR	WEI-21	OA-VOL08	OA-VOL08	OA-VOL08	OA-VOL08	OA-ELE07	OA-VOL08	S-IR08	S-GRA06	S-CAL06	S-GRA06a
		Recvd Wt.	MPA	NNP	FIZZ RAT	NP	pH	Ratio (N	S	S	S	S
		kg	tCaCO3/1000t	tCaCO3/1000t	Unity	tCaCO3/1000t	Unity	Unity	%	%	%	%
		0.02	0.3	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01
KM 2.5	NAG	3.08	1.9	3	1	5	6.6	2.67	0.06	0.05	0.01	0.05
							75.5 72			2 0.390		



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To: YUKON ZINC CORPORATION

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Page: 1

Finalized Date: 12-JUL-2007

Account: MPO

CERTIFICATE VA07065971

Project: WOLVERINE

P.O. No.:

This report is for 2 Rock samples submitted to our lab in Vancouver, BC, Canada on 25-JUN-2007.

The following have access to data associated with this certificate:

PAMELA LADYMAN

RANDY OLAFSON

RECEIVED

JUL 19 2007

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	LECO
S-GRA06a	Sulfate Sulfur (HCl leachable)	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

To: YUKON ZINC CORPORATION
ATTN: PAMELA LADYMAN
701-475 HOWE ST
VANCOUVER BC V6C 2B3

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Signature:

Lawrence Ng, Laboratory Manager - Vancouver



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Page: 2 - A

Total # Pages: 2 (A)

Finalized Date: 12-JUL-2007

Account: MPO

Project: WOLVERINE

CERTIFICATE OF ANALYSIS VA07065971

Sample Description	Method Analyte Units LOR	WEI-21	OA-VOL08	OA-VOL08	OA-VOL08	OA-VOL08	OA-ELE07	OA-VOL08	S-IR08	S-GRA06	S-CAL06	S-GRA06a
		Recvd Wt. kg	MPA tCaCO3/1000t	NNP tCaCO3/1000t	FIZZ RAT Unity	NP tCaCO3/1000t	pH Unity	Ratio (N) Unity	S %	S %	S %	S %
		0.02	0.3	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01
KM 2 OLD ROAD A		4.76	0.3	10	1	10	7.7	32.00	0.01	0.01	<0.01	<0.01
KM 2 OLD ROAD B		4.64	0.3	12	1	12	7.7	38.40	0.01	0.01	<0.01	0.01



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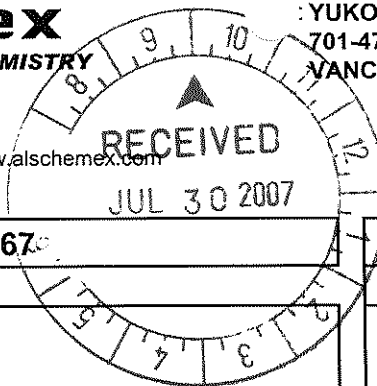
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Page: 1

Finalized Date: 25-JUL-2007

Account: MPO



CERTIFICATE VA07073067

Project: Wolverine

P.O. No.:

This report is for 1 Rock sample submitted to our lab in Vancouver, BC, Canada on 13-JUL-2007.

The following have access to data associated with this certificate:

PAMELA LADYMAN

MARY MCDOUGALL

RANDY OLAFSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	LECO
S-GRA06a	Sulfate Sulfur (HCl leachable)	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

To: YUKON ZINC CORPORATION
ATTN: PAMELA LADYMAN
701-475 HOWE ST
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Signature:

Lawrence Ng, Laboratory Manager - Vancouver



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Page: 2 - A

Total # Pages: 2 (A)

Finalized Date: 25-JUL-2007

Account: MPO

Project: Wolverine

CERTIFICATE OF ANALYSIS VA07073067

Sample Description	Method Analyte Units LOR	WEI-21	OA-VOL08	OA-VOL08	OA-VOL08	OA-VOL08	OA-ELE07	OA-VOL08	S-IR08	S-GRA06	S-CAL06	S-GRA06a
		Recvd Wt.	MPA	NNP	FIZZ RAT	NP	pH	Ratio (N	S	S	S	S
		kg	tCaCO3/1000t	tCaCO3/1000t	Unity	tCaCO3/1000t	Unity	Unity	%	%	%	%
		0.02	0.3	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01
NEW CAMP SITE		7.42	0.6	6	1	7	7.0	11.20	0.02	0.01	0.01	<0.01



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TO: YUKON ZINC CORPORATION

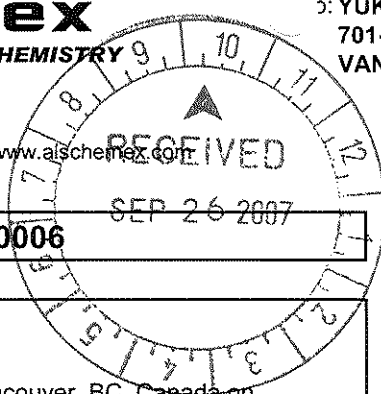
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Page: 1

Finalized Date: 19-SEP-2007

Account: MPO



CERTIFICATE VA07090006

Project: WOLVERINE

P.O. No.:

This report is for 3 Soil samples submitted to our lab in Vancouver, BC, Canada on 16-AUG-2007.

The following have access to data associated with this certificate:

PAMELA LADYMAN

MARY MCDUGALL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	LECO
S-GRA06a	Sulfate Sulfur (HCl leachable)	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

To: YUKON ZINC CORPORATION
ATTN: PAMELA LADYMAN
701-475 HOWE ST
VANCOUVER BC V6C 2B3

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Lawrence Ng, Laboratory Manager - Vancouver



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Page: 2 - A

Total # Pages: 2 (A)

Finalized Date: 19-SEP-2007

Account: MPO

Project: WOLVERINE

CERTIFICATE OF ANALYSIS VA07090006

Sample Description	Method Analyte Units LOR	WEI-21	OA-VOL08	OA-VOL08	OA-VOL08	OA-VOL08	OA-ELE07	OA-VOL08	S-IR08	S-GRA06	S-CAL06	S-GRA06a
		Recvd Wt.	MPA	NNP	FIZZ RAT	NP	pH	Ratio (N	S	S	S	S
		kg	tCaCO3/1000t	tCaCO3/1000t	Unity	tCaCO3/1000t	Unity	Unity	%	%	%	%
		0.02	0.3	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01
NEW CAMP SITE		6.10	0.6	12	1	13	8.0	20.80	0.02	0.01	0.01	0.01
COVERALL		6.20	6.9	-1	1	6	7.6	0.87	0.22	0.22	<0.01	0.18
NEW CAMP ROAD		5.70	0.6	13	1	14	8.0	22.40	0.02	<0.01	0.02	0.01



Environmental Division

ANALYTICAL REPORT

YUKON ZINC CORPORATION

ATTN: PAMELA LADYMAN

701 - 475 HOWE STREET

VANCOUVER BC V6C 2B3

Reported On: 21-AUG-07 03:50 PM

Lab Work Order #: **L539652**

Date Received: **08-AUG-07**

Project P.O. #:

Job Reference: WOLVERINE - 1614

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Timothy Guy Crowther
General Manager, Vancouver

For any questions about this report please contact your Account Manager:

Andre Langlais

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ALS LABORATORY GROUP ANALYTICAL REPORT

		Sample ID				
		Description				
		Sampled Date				
		Sampled Time				
		Client ID				
Grouping	Analyte					
SOIL						
Leachable Anions & Nutrients	pH (pH)	7.03	6.51	7.86	7.26	
Leachable Metals	Aluminum (Al)-Leachable (mg/L)	4.09	1.37	0.0272	3.46	
	Antimony (Sb)-Leachable (mg/L)	0.00016	0.00720	<0.00010	0.00080	
	Arsenic (As)-Leachable (mg/L)	0.00108	0.00689	0.00018	0.00200	
	Barium (Ba)-Leachable (mg/L)	0.0629	0.130	1.81	0.158	
	Beryllium (Be)-Leachable (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Leachable (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Leachable (mg/L)	<0.010	<0.010	<0.010	<0.010	
	Cadmium (Cd)-Leachable (mg/L)	<0.000050	0.000467	0.000054	0.000202	
	Calcium (Ca)-Leachable (mg/L)	0.616	0.576	19.3	2.19	
	Chromium (Cr)-Leachable (mg/L)	0.00857	0.00542	0.00308	0.0385	
	Cobalt (Co)-Leachable (mg/L)	0.00584	0.00068	<0.00010	0.00580	
	Copper (Cu)-Leachable (mg/L)	0.0320	0.0262	0.00931	0.0492	
	Iron (Fe)-Leachable (mg/L)	3.02	1.90	0.084	2.68	
	Lead (Pb)-Leachable (mg/L)	0.00124	0.0159	<0.00020	0.00617	
	Lithium (Li)-Leachable (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Magnesium (Mg)-Leachable (mg/L)	0.81	0.27	3.18	3.63	
	Manganese (Mn)-Leachable (mg/L)	0.263	0.0532	0.00352	0.131	
	Mercury (Hg)-Leachable (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Molybdenum (Mo)-Leachable (mg/L)	0.000595	0.00817	0.00160	0.00243	
	Nickel (Ni)-Leachable (mg/L)	0.00874	0.00286	0.00058	0.0661	
	Phosphorus (P)-Leachable (mg/L)	<0.30	0.53	<0.30	<0.30	
	Potassium (K)-Leachable (mg/L)	<2.0	<2.0	<2.0	<2.0	
	Selenium (Se)-Leachable (mg/L)	<0.0010	0.0036	<0.0010	<0.0010	
	Silicon (Si)-Leachable (mg/L)	6.80	4.13	3.08	7.56	
	Silver (Ag)-Leachable (mg/L)	0.000085	0.000357	0.000010	0.000131	
	Sodium (Na)-Leachable (mg/L)	<2.0	<2.0	<2.0	<2.0	
	Strontium (Sr)-Leachable (mg/L)	0.00305	0.0365	0.0735	0.00835	
	Thallium (Tl)-Leachable (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Tin (Sn)-Leachable (mg/L)	<0.00030	<0.00030	<0.00040	<0.00020	
	Titanium (Ti)-Leachable (mg/L)	0.120	0.032	<0.010	0.082	
	Uranium (U)-Leachable (mg/L)	0.000177	0.00114	0.000063	0.000249	
	Vanadium (V)-Leachable (mg/L)	0.0171	0.0244	<0.0010	0.0140	
	Zinc (Zn)-Leachable (mg/L)	<0.010	0.0198	<0.0070	0.0356	

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
HG-SHKFLSK-CVAFS-VA	Soil	Mercury by CVAFS (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).			
MET-SHKFLSK-ICP-VA	Soil	Metals by ICPOES (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).			
MET-SHKFLSK-MS-VA	Soil	Metals by ICPMS (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using inductively coupled plasma - mass spectrophotometry (EPA Method 6020A).			
PH-SHKFLSK-MAN-VA	Soil	pH by Manual Meter (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.			
PH-SHKFLSK-PCT-VA	Soil	pH by PCT (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.			

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

The last two letters of the above ALS Test Code column indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Environmental Division

ANALYTICAL REPORT

YUKON ZINC CORPORATION

ATTN: PAMELA LADYMAN

701 - 475 HOWE STREET

VANCOUVER BC V6C 2B3

Reported On: 18-OCT-07 05:31 PM

Lab Work Order #: **L557308**

Date Received: **21-SEP-07**

Project P.O. #:

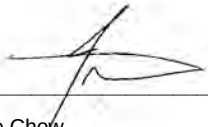
Job Reference: WOLVERINE-1614

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:


Joyce Chow
General Manager, Vancouver

For any questions about this report please contact your Account Manager:

Andre Langlais

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ALS LABORATORY GROUP ANALYTICAL REPORT

		Sample ID	L557308-1				
		Description					
		Sampled Date	20-SEP-07				
		Sampled Time	10:00				
		Client ID	COVERALL MATERIAL				
Grouping	Analyte						
SOIL							
Leachable Anions & Nutrients	pH (pH)		7.76				
Leachable Metals	Aluminum (Al)-Leachable (mg/L)		0.134				
	Antimony (Sb)-Leachable (mg/L)		0.00078				
	Arsenic (As)-Leachable (mg/L)		0.00133				
	Barium (Ba)-Leachable (mg/L)		0.0205				
	Beryllium (Be)-Leachable (mg/L)		<0.00050				
	Bismuth (Bi)-Leachable (mg/L)		<0.00050				
	Boron (B)-Leachable (mg/L)		<0.010				
	Cadmium (Cd)-Leachable (mg/L)		0.000436				
	Calcium (Ca)-Leachable (mg/L)		20.1				
	Chromium (Cr)-Leachable (mg/L)		<0.00050				
	Cobalt (Co)-Leachable (mg/L)		0.00019				
	Copper (Cu)-Leachable (mg/L)		0.00701				
	Iron (Fe)-Leachable (mg/L)		0.218				
	Lead (Pb)-Leachable (mg/L)		0.00852				
	Lithium (Li)-Leachable (mg/L)		<0.0050				
	Magnesium (Mg)-Leachable (mg/L)		1.77				
	Manganese (Mn)-Leachable (mg/L)		0.0130				
	Mercury (Hg)-Leachable (mg/L)		<0.00010				
	Molybdenum (Mo)-Leachable (mg/L)		0.00689				
	Nickel (Ni)-Leachable (mg/L)		0.00083				
	Phosphorus (P)-Leachable (mg/L)		<0.30				
	Potassium (K)-Leachable (mg/L)		<2.0				
	Selenium (Se)-Leachable (mg/L)		0.0021				
	Silicon (Si)-Leachable (mg/L)		3.29				
	Silver (Ag)-Leachable (mg/L)		0.000011				
	Sodium (Na)-Leachable (mg/L)		<2.0				
	Strontium (Sr)-Leachable (mg/L)		0.0428				
	Thallium (Tl)-Leachable (mg/L)		<0.00010				
	Tin (Sn)-Leachable (mg/L)		<0.00010				
	Titanium (Ti)-Leachable (mg/L)		<0.010				
	Uranium (U)-Leachable (mg/L)		0.00133				
	Vanadium (V)-Leachable (mg/L)		<0.0010				
	Zinc (Zn)-Leachable (mg/L)		0.0142				

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
HG-SHKFLSK-CVAFS-VA	Soil	Mercury by CVAFS (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).			
MET-SHKFLSK-ICP-VA	Soil	Metals by ICPOES (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).			
MET-SHKFLSK-MS-VA	Soil	Metals by ICPMS (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using inductively coupled plasma - mass spectrophotometry (EPA Method 6020A).			
PH-SHKFLSK-PCT-VA	Soil	pH by PCT (SHAKEFLASK)	BC MINISTRY OF ENERGY AND MINES
This analysis is based upon the extraction procedure outlined in "Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia" BC Ministry of Energy and Mines, (Dr. William A. Price, 1997). In summary, the sample is extracted at a 3:1 liquid to solids ratio for 24 hours using deionized water . The extract is then allowed to settle and subsequently filtered through a 0.45 micron membrane filter and analysed using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.			

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

The last two letters of the above ALS Test Code column indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA		

GLOSSARY OF REPORT TERMS

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Appendix C Groundwater Quality Lab Reports

Appendix C includes the following lab reports from Maxxam Analytics Inc.:

A710946

A717990

A719951

A724712

A725184

A731839

A741295

A745736

A748794

Your C.O.C. #: 08192705

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/03/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A710946

Received: 2007/03/19, 14:20

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	3	2007/03/20	2007/03/20	ING413 Rev.1.7	Based on SM2320B
Bromide (IC-EC)	3	N/A	2007/03/22	BRN SOP-00002 V1.0	SM 4110 B
Chloride by Automated Colourimetry @	3	N/A	2007/03/20	BRN-SOP 00116	Based on EPA 325.2
Conductance - water	3	N/A	2007/03/20	ING413 REV 1.7	Based on SM-2510B
Hardness (calculated as CaCO3)	3	N/A	2007/03/19		
Mercury (dissolved; low level)	3	2007/03/20	2007/03/21	BRN SOP-00044 V1.0	Based on EPA 245.1
Elements by ICP-AES (dissolved)	3	2007/03/21	2007/03/21	BRN SOP-00040 V1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) @	3	2007/03/21	2007/03/21	BRN SOP-00042 V1.0	Based on EPA 200.8
Ammonia (N)	3	N/A	2007/03/21	ING232 Rev.3.5	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	3	N/A	2007/03/21	ING233 Rev.4.4	Based on EPA 353.2
Nitrite (N) (low level)	3	N/A	2007/03/21	ING233 Rev.4.4	EPA 353.2
Nitrogen - Nitrate (as N)	3	N/A	2007/03/19		
pH Water	3	N/A	2007/03/20	BRN SOP-00014 V2.0	Based on SM-4500H+B
Sulphate by Automated Colourimetry @	3	N/A	2007/03/20	BRN-SOP 00117 V1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	3	N/A	2007/03/21	ING443 Rev.5.1	APHA 2540C
Total Suspended Solids @	3	N/A	2007/03/20	ING444 Rev.2.3	Based on SM - 2540 D
Turbidity	3	N/A	2007/03/20	BRN SOP-00021 V2.0	SM - 2130B

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

(1) SCC/CAEAL

../2

Your C.O.C. #: 08192705

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/03/26

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 10

Maxxam Job #: A710946
Report Date: 2007/03/26

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		E71194	E71195		E71196		
Sampling Date		2007/03/14	2007/03/14		2007/03/14		
COC Number		08192705	08192705		08192705		
	Units	05-5A	06-9S	RDL	06-12S	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	0.1	<0.1	0.1	1538447
Calculated Parameters							
Nitrate (N)	mg/L	0.007	0.005	0.002	0.003	0.002	1531601
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	290	138	0.5	262	0.5	1531600
Alkalinity (Total as CaCO ₃)	mg/L	236	102	0.5	112	0.5	1532831
Anions							
Dissolved Sulphate (SO ₄)	mg/L	24.3	26.1	0.5	372	5	1532237
Chloride (Cl)	mg/L	3.2	4.9	0.5	5.8	0.5	1532186
Nutrients							
Ammonia (N)	mg/L	0.086	0.019	0.005	0.139	0.005	1534850
Nitrate plus Nitrite (N)	mg/L	0.007	0.005	0.002	0.003	0.002	1534788
Nitrite (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1534820
Physical Properties							
Conductivity	uS/cm	498	267	1	983	1	1532568
pH	pH Units	8.2	8.1	0.1	8.0	0.1	1532556
Physical Properties							
Total Suspended Solids	mg/L	5	<4	4	<4	4	1531999
Total Dissolved Solids	mg/L	336	186	10	658	10	1531948
Turbidity	NTU	21.9	0.3	0.1	0.2	0.1	1529965
RDL = Reportable Detection Limit							

Maxxam Job #: A710946
Report Date: 2007/03/26

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		E71194	E71195	E71196		
Sampling Date		2007/03/14	2007/03/14	2007/03/14		
COC Number		08192705	08192705	08192705		
	Units	05-5A	06-9S	06-12S	RDL	QC Batch

Dissolved Metals by ICP						
Dissolved Boron (B)	mg/L	<0.008	<0.008	0.031	0.008	1536998
Dissolved Calcium (Ca)	mg/L	76.5	47.2	79.5	0.05	1536998
Dissolved Iron (Fe)	mg/L	1.58	0.046	0.008	0.005	1536998
Dissolved Magnesium (Mg)	mg/L	24.0	4.88	15.5	0.05	1536998
Dissolved Phosphorus (P)	mg/L	<0.1	0.3	<0.1	0.1	1536998
Dissolved Silicon (Si)	mg/L	4.06	4.48	6.34	0.05	1536998
Dissolved Sodium (Na)	mg/L	0.76	2.20	118	0.05	1536998
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	0.005	1536998
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	1.1	4.1	7.4	0.2	1534607
Dissolved Antimony (Sb)	ug/L	1.07	0.11	2.07	0.05	1534607
Dissolved Arsenic (As)	ug/L	1.4	6.3	4.3	0.1	1534607
Dissolved Barium (Ba)	ug/L	106	48.3	21.4	0.02	1534607
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	0.05	1534607
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	0.05	1534607
Dissolved Cadmium (Cd)	ug/L	0.01	0.01	0.03	0.01	1534607
Dissolved Chromium (Cr)	ug/L	0.8	0.3	0.4	0.2	1534607
Dissolved Cobalt (Co)	ug/L	0.30	<0.02	0.72	0.02	1534607
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	0.1	1534607
Dissolved Lead (Pb)	ug/L	<0.02	0.02	0.02	0.02	1534607
Dissolved Lithium (Li)	ug/L	1.9	1.1	8.7	0.2	1534607
Dissolved Manganese (Mn)	ug/L	545	105	210	0.02	1534607
Dissolved Molybdenum (Mo)	ug/L	8.11	6.81	29.7	0.02	1534607
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	2.8	0.5	1534607
Dissolved Potassium (K)	ug/L	1510	1270	3270	50	1534607
Dissolved Selenium (Se)	ug/L	0.6	<0.5	0.8	0.5	1534607
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	0.01	1534607
Dissolved Strontium (Sr)	ug/L	133	164	253	0.01	1534607
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	1534607
Dissolved Tin (Sn)	ug/L	0.09	0.09	1.36	0.05	1534607
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	0.5	1534607
Dissolved Uranium (U)	ug/L	9.79	0.31	11.9	0.01	1534607
Dissolved Vanadium (V)	ug/L	0.07	0.21	2.46	0.05	1534607
RDL = Reportable Detection Limit						

Maxxam Job #: A710946
Report Date: 2007/03/26

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		E71194	E71195	E71196		
Sampling Date		2007/03/14	2007/03/14	2007/03/14		
COC Number		08192705	08192705	08192705		
	Units	05-5A	06-9S	06-12S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	<0.5	<0.5	<0.5	0.5	1534607
Mercury by CVAA						
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	0.01	1533209

RDL = Reportable Detection Limit

Maxxam Job #: A710946
Report Date: 2007/03/26

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

General Comments

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA710946

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1529965 CK	SPIKE	Turbidity	2007/03/20		103	%	80 - 120
	BLANK	Turbidity	2007/03/20	<0.1		NTU	
	RPD	Turbidity	2007/03/20	NC		%	25
1531948 CK	MATRIX SPIKE	Total Dissolved Solids	2007/03/21		98	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/03/21		100	%	80 - 120
	BLANK	Total Dissolved Solids	2007/03/21	<10		mg/L	
	RPD	Total Dissolved Solids	2007/03/21	1.5		%	25
1531999 FS1	MATRIX SPIKE						
	[E71195-01]	Total Suspended Solids	2007/03/20		94	%	N/A
	SPIKE	Total Suspended Solids	2007/03/20		98	%	N/A
	BLANK	Total Suspended Solids	2007/03/20	<4		mg/L	
	RPD [E71196-01]	Total Suspended Solids	2007/03/20	NC		%	25
1532186 NN	MATRIX SPIKE	Chloride (Cl)	2007/03/20		111	%	80 - 120
	SPIKE	Chloride (Cl)	2007/03/20		101	%	80 - 120
	BLANK	Chloride (Cl)	2007/03/20	<0.5		mg/L	
	RPD	Chloride (Cl)	2007/03/20	NC		%	20
1532237 NN	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/03/20		108	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/03/20		95	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/03/20	<0.5		mg/L	
	RPD	Dissolved Sulphate (SO4)	2007/03/20	1.4		%	20
1532556 MM3	SPIKE	pH	2007/03/20		102	%	96 - 104
	RPD [E71196-01]	pH	2007/03/20	0.2		%	25
1532568 MM3	SPIKE	Conductivity	2007/03/20		100	%	80 - 120
	BLANK	Conductivity	2007/03/20	<1		uS/cm	
	RPD	Conductivity	2007/03/20	0.9		%	25
1532831 MM3	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/03/20		102	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/03/20		96	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/03/20	0.5, RDL=0.5		mg/L	
	RPD	Alkalinity (Total as CaCO3)	2007/03/20	3.9		%	25
1533209 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/03/21		110	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/03/21		102	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/03/21		86	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/03/21	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/03/21	NC		%	25
1534607 AA1	MATRIX SPIKE	Dissolved Arsenic (As)	2007/03/21		111	%	75 - 125
		Dissolved Cadmium (Cd)	2007/03/21		107	%	75 - 125
		Dissolved Chromium (Cr)	2007/03/21		106	%	75 - 125
		Dissolved Cobalt (Co)	2007/03/21		105	%	75 - 125
		Dissolved Copper (Cu)	2007/03/21		111	%	75 - 125
		Dissolved Lead (Pb)	2007/03/21		112	%	75 - 125
		Dissolved Selenium (Se)	2007/03/21		106	%	75 - 125
		Dissolved Thallium (Tl)	2007/03/21		108	%	75 - 125
		Dissolved Zinc (Zn)	2007/03/21		106	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/03/21		95	%	75 - 125
		Dissolved Cadmium (Cd)	2007/03/21		96	%	75 - 125
		Dissolved Chromium (Cr)	2007/03/21		106	%	75 - 125
		Dissolved Cobalt (Co)	2007/03/21		109	%	75 - 125
		Dissolved Copper (Cu)	2007/03/21		106	%	75 - 125
		Dissolved Lead (Pb)	2007/03/21		105	%	75 - 125
		Dissolved Selenium (Se)	2007/03/21		91	%	75 - 125
		Dissolved Thallium (Tl)	2007/03/21		97	%	75 - 125
		Dissolved Zinc (Zn)	2007/03/21		100	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/03/21	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/03/21	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/03/21	<0.1		ug/L	

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA710946

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1534607 AA1	BLANK	Dissolved Barium (Ba)	2007/03/21	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/03/21	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/03/21	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/03/21	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/03/21	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/03/21	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/03/21	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/03/21	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/03/21	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/03/21	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/03/21	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/03/21	<0.5		ug/L	
		Dissolved Potassium (K)	2007/03/21	<50		ug/L	
		Dissolved Selenium (Se)	2007/03/21	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/03/21	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/03/21	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/03/21	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/03/21	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/03/21	<0.5		ug/L	
		Dissolved Uranium (U)	2007/03/21	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/03/21	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/03/21	<0.5		ug/L	
	RPD	Dissolved Aluminum (Al)	2007/03/21	0.5		%	25
		Dissolved Antimony (Sb)	2007/03/21	3.4		%	25
		Dissolved Arsenic (As)	2007/03/21	2.3		%	25
		Dissolved Barium (Ba)	2007/03/21	2.5		%	25
		Dissolved Beryllium (Be)	2007/03/21	NC		%	25
		Dissolved Bismuth (Bi)	2007/03/21	NC		%	25
		Dissolved Cadmium (Cd)	2007/03/21	1.9		%	25
		Dissolved Chromium (Cr)	2007/03/21	NC		%	25
		Dissolved Cobalt (Co)	2007/03/21	NC		%	25
		Dissolved Copper (Cu)	2007/03/21	0.5		%	25
		Dissolved Lead (Pb)	2007/03/21	3.1		%	25
		Dissolved Lithium (Li)	2007/03/21	NC		%	25
		Dissolved Manganese (Mn)	2007/03/21	2.8		%	25
		Dissolved Molybdenum (Mo)	2007/03/21	0.4		%	25
		Dissolved Nickel (Ni)	2007/03/21	NC		%	25
		Dissolved Potassium (K)	2007/03/21	2.5		%	25
		Dissolved Selenium (Se)	2007/03/21	NC		%	25
		Dissolved Silver (Ag)	2007/03/21	NC		%	25
		Dissolved Strontium (Sr)	2007/03/21	3.9		%	25
		Dissolved Thallium (Tl)	2007/03/21	NC		%	25
		Dissolved Tin (Sn)	2007/03/21	NC		%	25
		Dissolved Titanium (Ti)	2007/03/21	NC		%	25
		Dissolved Uranium (U)	2007/03/21	1.6		%	25
		Dissolved Vanadium (V)	2007/03/21	NC		%	25
		Dissolved Zinc (Zn)	2007/03/21	6.6		%	25
1534788 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/03/21		104	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/03/21		105	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/03/21	<0.002		mg/L	
	RPD [E71194-01]	Nitrate plus Nitrite (N)	2007/03/21	NC		%	25
1534820 BB3	SPIKE	Nitrite (N)	2007/03/21		101	%	80 - 120
	BLANK	Nitrite (N)	2007/03/21	<0.002		mg/L	
	RPD [E71194-01]	Nitrite (N)	2007/03/21	NC		%	25
	MATRIX SPIKE	Ammonia (N)	2007/03/21		71 (1)	%	80 - 120

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA710946

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1534850 NN	SPIKE	Ammonia (N)	2007/03/21		108	%	80 - 120
	BLANK	Ammonia (N)	2007/03/21	<0.005		mg/L	
	RPD	Ammonia (N)	2007/03/21	NC		%	25
1536998 GS2	BLANK	Dissolved Boron (B)	2007/03/21	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/03/21	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/03/21	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/03/21	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/03/21	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/03/21	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/03/21	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/03/21	<0.005		mg/L	
	RPD	Dissolved Boron (B)	2007/03/21	NC		%	25
		Dissolved Calcium (Ca)	2007/03/21	1.0		%	25
		Dissolved Iron (Fe)	2007/03/21	2.4		%	25
		Dissolved Magnesium (Mg)	2007/03/21	1.3		%	25
		Dissolved Phosphorus (P)	2007/03/21	NC		%	25
		Dissolved Sodium (Na)	2007/03/21	1.3		%	25
		Dissolved Zirconium (Zr)	2007/03/21	NC		%	25
1538447 AH3	MATRIX SPIKE	Bromide (Br)	2007/03/22		113	%	80 - 120
	SPIKE	Bromide (Br)	2007/03/22		112	%	80 - 120
	BLANK	Bromide (Br)	2007/03/22	<0.1		mg/L	
	RPD	Bromide (Br)	2007/03/22	NC		%	25
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference (1) Matrix Spike invalid due to high sample concentration.							

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08193654

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/05/11

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A717990

Received: 2007/05/03, 13:05

Sample Matrix: Water

Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	4	2007/05/07	2007/05/07	ING413 Rev.1.7	Based on SM2320B
Bromide (IC-EC)	4	N/A	2007/05/08	BRN SOP-00002 V1.0	SM 4110 B
Chloride by Automated Colourimetry @	4	N/A	2007/05/08	BRN-SOP 00116	Based on EPA 325.2
Conductance - water	4	N/A	2007/05/07	ING413 REV 1.7	Based on SM-2510B
Hardness (calculated as CaCO3)	4	N/A	2007/05/04		
Mercury (dissolved; low level)	4	2007/05/03	2007/05/04	BRN SOP-00044 V1.0	Based on EPA 245.1
Elements by ICP-AES (dissolved)	4	2007/05/03	2007/05/03	BRN SOP-00040 V1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) @	4	2007/05/03	2007/05/04	BRN SOP-00042 V1.0	Based on EPA 200.8
Ammonia (N)	4	N/A	2007/05/05	ING232 Rev.3.5	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	4	N/A	2007/05/04	ING233 Rev.4.4	Based on EPA 353.2
Nitrite (N) (low level)	4	N/A	2007/05/04	ING233 Rev.4.4	EPA 353.2
Nitrogen - Nitrate (as N)	4	N/A	2007/05/04		
pH Water	4	N/A	2007/05/07	BRN SOP-00014 V2.0	Based on SM-4500H+B
Orthophosphate by Konelab @	4	N/A	2007/05/04	ING236 Rev. 2.0	SM 4500 PF
Sulphate by Automated Colourimetry @	4	N/A	2007/05/08	BRN-SOP 00117 V1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	4	N/A	2007/05/07	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	4	N/A	2007/05/09	ING237 Rev.5.0	SM 4500
Total Suspended Solids @	4	N/A	2007/05/08	ING444 Rev.2.3	Based on SM - 2540 D
Turbidity	4	N/A	2007/05/08	BRN SOP-00021 V2.0	SM - 2130B

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

(1) SCC/CAEAL

..12

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08193654

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/05/11

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 11

Maxxam Job #: A717990
Report Date: 2007/05/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F12001	F12002		F12003		
Sampling Date		2007/04/26	2007/04/27		2007/04/26		
COC Number		08193654	08193654		08193654		
	Units	05-5A	06-10M	RDL	06-12S	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	0.1	<0.1	0.1	1612826
Calculated Parameters							
Nitrate (N)	mg/L	0.002	<0.002	0.002	0.013	0.002	1604990
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	257	256	0.5	319	0.5	1604989
Alkalinity (Total as CaCO ₃)	mg/L	225	204	0.5	158	0.5	1611085
Anions							
Orthophosphate (P)	mg/L	0.006	0.006	0.001	0.050	0.001	1606576
Dissolved Sulphate (SO ₄)	mg/L	36.2	61.3	0.5	285	5	1612088
Dissolved Chloride (Cl)	mg/L	0.9	<0.5	0.5	<0.5	0.5	1612084
Nutrients							
Ammonia (N)	mg/L	0.115	0.063	0.005	0.195	0.005	1608720
Nitrate plus Nitrite (N)	mg/L	0.002	<0.002	0.002	0.013	0.002	1606140
Nitrite (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1606143
Total Phosphorus (P)	mg/L	<0.005	<0.005	0.005	0.052	0.005	1605724
Physical Properties							
Conductivity	uS/cm	481	488	1	871	1	1611223
pH	pH Units	8.2	8.2	0.1	8.6	0.1	1611089
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	4	<4	4	1611350
Total Dissolved Solids	mg/L	298	316	10	642	10	1609295
Turbidity	NTU	0.4	2.6	0.1	2.8	0.1	1611190
RDL = Reportable Detection Limit							

Maxxam Job #: A717990
Report Date: 2007/05/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F12004		
Sampling Date		2007/04/27		
COC Number		08193654		
	Units	05-7B	RDL	QC Batch

Misc. Inorganics				
Bromide (Br)	mg/L	<0.1	0.1	1612826
Calculated Parameters				
Nitrate (N)	mg/L	0.032	0.002	1604990
Misc. Inorganics				
Dissolved Hardness (CaCO ₃)	mg/L	86.5	0.5	1604989
Alkalinity (Total as CaCO ₃)	mg/L	72.5	0.5	1611085
Anions				
Orthophosphate (P)	mg/L	0.014	0.001	1606576
Dissolved Sulphate (SO ₄)	mg/L	14.1	0.5	1612088
Dissolved Chloride (Cl)	mg/L	<0.5	0.5	1612084
Nutrients				
Ammonia (N)	mg/L	<0.005	0.005	1608720
Nitrate plus Nitrite (N)	mg/L	0.032	0.002	1606140
Nitrite (N)	mg/L	<0.002	0.002	1606143
Total Phosphorus (P)	mg/L	0.021	0.005	1605724
Physical Properties				
Conductivity	uS/cm	175	1	1611223
pH	pH Units	8.0	0.1	1611089
Physical Properties				
Total Suspended Solids	mg/L	<4	4	1611350
Total Dissolved Solids	mg/L	120	10	1609295
Turbidity	NTU	6.1	0.1	1611190
RDL = Reportable Detection Limit				

Maxxam Job #: A717990
Report Date: 2007/05/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F12001	F12002	F12003	F12004		
Sampling Date		2007/04/26	2007/04/27	2007/04/26	2007/04/27		
COC Number		08193654	08193654	08193654	08193654		
	Units	05-5A	06-10M	06-12S	05-7B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	0.024	<0.008	0.008	1605407
Dissolved Calcium (Ca)	mg/L	68.9	83.6	102	29.9	0.05	1605407
Dissolved Iron (Fe)	mg/L	0.017	0.176	0.007	0.179	0.005	1605407
Dissolved Magnesium (Mg)	mg/L	20.7	11.4	15.6	2.87	0.05	1605407
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1605407
Dissolved Silicon (Si)	mg/L	3.82	3.78	9.04	3.82	0.05	1605407
Dissolved Sodium (Na)	mg/L	1.49	2.86	65.6	1.59	0.05	1605407
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1605407
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	0.6	<0.2	2.3	99.7	0.2	1606260
Dissolved Antimony (Sb)	ug/L	4.33	0.05	1.90	0.32	0.05	1606260
Dissolved Arsenic (As)	ug/L	1.1	0.1	4.1	1.9	0.1	1606260
Dissolved Barium (Ba)	ug/L	80.9	38.7	24.9	102	0.02	1606260
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1606260
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1606260
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	0.03	0.04	0.01	1606260
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1606260
Dissolved Cobalt (Co)	ug/L	0.35	0.07	0.77	0.57	0.02	1606260
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	0.1	2.4	0.1	1606260
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.05	0.12	0.02	1606260
Dissolved Lithium (Li)	ug/L	3.4	2.2	9.6	2.9	0.2	1606260
Dissolved Manganese (Mn)	ug/L	237	244	364	159	0.02	1606260
Dissolved Molybdenum (Mo)	ug/L	10.3	2.11	12.3	12.0	0.02	1606260
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	2.0	4.9	0.5	1606260
Dissolved Potassium (K)	ug/L	2040	1690	2260	915	50	1606260
Dissolved Selenium (Se)	ug/L	1.2	<0.5	0.5	<0.5	0.5	1606260
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1606260
Dissolved Strontium (Sr)	ug/L	143	148	441	69.3	0.01	1606260
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1606260
Dissolved Tin (Sn)	ug/L	0.14	<0.05	0.20	0.48	0.05	1606260
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	0.9	6.1	0.5	1606260
Dissolved Uranium (U)	ug/L	18.2	8.61	13.3	0.46	0.01	1606260
Dissolved Vanadium (V)	ug/L	0.09	0.12	3.29	2.10	0.05	1606260
RDL = Reportable Detection Limit							

Maxxam Job #: A717990
Report Date: 2007/05/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F12001	F12002	F12003	F12004		
Sampling Date		2007/04/26	2007/04/27	2007/04/26	2007/04/27		
COC Number		08193654	08193654	08193654	08193654		
	Units	05-5A	06-10M	06-12S	05-7B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	2.4	<0.5	10.2	1.9	0.5	1606260
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1604885

RDL = Reportable Detection Limit

Maxxam Job #: A717990
Report Date: 2007/05/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

General Comments

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA717990

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1604885 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/05/04		92	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/05/04		101	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/05/04		94	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/05/04	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/05/04	NC		%	25
1605407 GS2	BLANK	Dissolved Boron (B)	2007/05/03	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/05/03	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/05/03	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/05/03	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/05/03	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/05/03	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/05/03	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/05/03	<0.005		mg/L	
		RPD					
		Dissolved Calcium (Ca)	2007/05/03	0		%	25
		Dissolved Magnesium (Mg)	2007/05/03	0.3		%	25
1605724 SC2	MATRIX SPIKE	Total Phosphorus (P)	2007/05/09		86	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/05/09		101	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/05/09	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/05/09	NC		%	25
1606140 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/05/04		101	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/05/04		101	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/05/04	<0.002		mg/L	
	RPD [F12003-01]	Nitrate plus Nitrite (N)	2007/05/04	8.0		%	25
1606143 BB3	MATRIX SPIKE	Nitrite (N)	2007/05/04		102	%	80 - 120
	SPIKE	Nitrite (N)	2007/05/04		100	%	80 - 120
	BLANK	Nitrite (N)	2007/05/04	<0.002		mg/L	
	RPD [F12003-01]	Nitrite (N)	2007/05/04	NC		%	25
1606260 AA1	MATRIX SPIKE	Dissolved Arsenic (As)	2007/05/04		109	%	75 - 125
		Dissolved Cadmium (Cd)	2007/05/04		109	%	75 - 125
		Dissolved Chromium (Cr)	2007/05/04		105	%	75 - 125
		Dissolved Cobalt (Co)	2007/05/04		106	%	75 - 125
		Dissolved Copper (Cu)	2007/05/04		107	%	75 - 125
		Dissolved Lead (Pb)	2007/05/04		105	%	75 - 125
		Dissolved Selenium (Se)	2007/05/04		106	%	75 - 125
		Dissolved Thallium (Tl)	2007/05/04		108	%	75 - 125
		Dissolved Zinc (Zn)	2007/05/04		121	%	75 - 125
		SPIKE					
		Dissolved Arsenic (As)	2007/05/04		100	%	75 - 125
		Dissolved Cadmium (Cd)	2007/05/04		97	%	75 - 125
		Dissolved Chromium (Cr)	2007/05/04		115	%	75 - 125
		Dissolved Cobalt (Co)	2007/05/04		110	%	75 - 125
		Dissolved Copper (Cu)	2007/05/04		112	%	75 - 125
		Dissolved Lead (Pb)	2007/05/04		108	%	75 - 125
		Dissolved Selenium (Se)	2007/05/04		106	%	75 - 125
		Dissolved Thallium (Tl)	2007/05/04		106	%	75 - 125
		Dissolved Zinc (Zn)	2007/05/04		108	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/05/04	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/05/04	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/05/04	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/05/04	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/05/04	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/05/04	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/05/04	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/05/04	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/05/04	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/05/04	<0.1		ug/L	

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA717990

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1606260 AA1	BLANK	Dissolved Lead (Pb)	2007/05/04	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/05/04	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/05/04	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/05/04	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/05/04	<0.5		ug/L	
		Dissolved Potassium (K)	2007/05/04	<50		ug/L	
		Dissolved Selenium (Se)	2007/05/04	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/05/04	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/05/04	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/05/04	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/05/04	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/05/04	<0.5		ug/L	
		Dissolved Uranium (U)	2007/05/04	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/05/04	0.07, RDL=0.05		ug/L	
	RPD	Dissolved Zinc (Zn)	2007/05/04	<0.5		ug/L	
		Dissolved Aluminum (Al)	2007/05/04	4.3		%	25
		Dissolved Antimony (Sb)	2007/05/04	NC		%	25
		Dissolved Arsenic (As)	2007/05/04	NC		%	25
		Dissolved Barium (Ba)	2007/05/04	0.5		%	25
		Dissolved Beryllium (Be)	2007/05/04	NC		%	25
		Dissolved Bismuth (Bi)	2007/05/04	NC		%	25
		Dissolved Cadmium (Cd)	2007/05/04	0.3		%	25
		Dissolved Chromium (Cr)	2007/05/04	NC		%	25
		Dissolved Cobalt (Co)	2007/05/04	NC		%	25
		Dissolved Copper (Cu)	2007/05/04	2.4		%	25
		Dissolved Lead (Pb)	2007/05/04	NC		%	25
		Dissolved Lithium (Li)	2007/05/04	NC		%	25
		Dissolved Manganese (Mn)	2007/05/04	1.4		%	25
		Dissolved Molybdenum (Mo)	2007/05/04	1.3		%	25
		Dissolved Nickel (Ni)	2007/05/04	2.6		%	25
		Dissolved Potassium (K)	2007/05/04	0.4		%	25
		Dissolved Selenium (Se)	2007/05/04	2.7		%	25
		Dissolved Silver (Ag)	2007/05/04	NC		%	25
		Dissolved Strontium (Sr)	2007/05/04	0.3		%	25
		Dissolved Thallium (Tl)	2007/05/04	NC		%	25
		Dissolved Tin (Sn)	2007/05/04	NC		%	25
		Dissolved Titanium (Ti)	2007/05/04	NC		%	25
		Dissolved Uranium (U)	2007/05/04	2.6		%	25
		Dissolved Vanadium (V)	2007/05/04	NC		%	25
		Dissolved Zinc (Zn)	2007/05/04	3.0		%	25
1606576 SC2	MATRIX SPIKE	Orthophosphate (P)	2007/05/04		96	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/05/04		102	%	80 - 120
	BLANK	Orthophosphate (P)	2007/05/04	<0.001		mg/L	
	RPD [F12002-01]	Orthophosphate (P)	2007/05/04	10.6		%	20
	RPD [F12004-01]	Orthophosphate (P)	2007/05/04	18.8		%	20
1608720 SC2	MATRIX SPIKE	Ammonia (N)	2007/05/05		103	%	80 - 120
	SPIKE	Ammonia (N)	2007/05/05		106	%	80 - 120
	BLANK	Ammonia (N)	2007/05/05	<0.005		mg/L	
	RPD	Ammonia (N)	2007/05/05	NC		%	25
1609295 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/05/07		106	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/05/07		102	%	80 - 120
	BLANK	Total Dissolved Solids	2007/05/07	<10		mg/L	
	RPD	Total Dissolved Solids	2007/05/07	0		%	25
1611085 MM3	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/05/07		95	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/05/07		96	%	80 - 120

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Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA717990

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1611085 MM3	BLANK	Alkalinity (Total as CaCO ₃)	2007/05/07	<0.5		mg/L	
1611089 MM3	SPIKE	pH	2007/05/07		102	%	96 - 104
	RPD	pH	2007/05/07	0.4		%	25
1611190 CK	SPIKE	Turbidity	2007/05/08		102	%	80 - 120
	BLANK	Turbidity	2007/05/08	<0.1		NTU	
	RPD [F12004-01]	Turbidity	2007/05/08	0		%	25
1611223 MM3	SPIKE	Conductivity	2007/05/07		99	%	80 - 120
	BLANK	Conductivity	2007/05/07	1, RDL=1		uS/cm	
	RPD	Conductivity	2007/05/07	0.5		%	25
1611350 FS1	MATRIX SPIKE	Total Suspended Solids	2007/05/08		105	%	N/A
	SPIKE	Total Suspended Solids	2007/05/08		98	%	N/A
	BLANK	Total Suspended Solids	2007/05/08	<4		mg/L	
	RPD	Total Suspended Solids	2007/05/08	NC		%	25
1612084 SC2	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/05/08		102	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/05/08		106	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/05/08	<0.5		mg/L	
	RPD	Dissolved Chloride (Cl)	2007/05/08	0		%	20
1612088 SC2	MATRIX SPIKE	Dissolved Sulphate (SO ₄)	2007/05/08		107	%	75 - 125
	SPIKE	Dissolved Sulphate (SO ₄)	2007/05/08		96	%	80 - 120
	BLANK	Dissolved Sulphate (SO ₄)	2007/05/08	<0.5		mg/L	
	RPD	Dissolved Sulphate (SO ₄)	2007/05/08	0.01		%	20
1612826 AH3	MATRIX SPIKE	Bromide (Br)	2007/05/08		116	%	80 - 120
	SPIKE	Bromide (Br)	2007/05/08		106	%	80 - 120
	BLANK	Bromide (Br)	2007/05/08	<0.1		mg/L	
	RPD	Bromide (Br)	2007/05/08	NC		%	25
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference							

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08193817

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/05/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A719951

Received: 2007/05/15, 15:00

Sample Matrix: Water

Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	4	2007/05/16	2007/05/18	ING413 Rev.1.7	Based on SM2320B
Bromide (IC-EC)	4	N/A	2007/05/16	BRN SOP-00002 V1.0	SM 4110 B
Chloride by Automated Colourimetry	4	N/A	2007/05/18	BRN-SOP 00116	Based on EPA 325.2
Carbon (DOC)	4	N/A	2007/05/15	ING211 Rev. 2.4	Based on SM-5310C
Hardness (calculated as CaCO ₃)	4	N/A	2007/05/17		
Mercury (dissolved; low level)	4	2007/05/15	2007/05/17	BRN SOP-00044 V1.0	Based on EPA 245.1
Elements by ICP-AES (dissolved)	4	2007/05/16	2007/05/16	BRN SOP-00040 V1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) Ø	4	2007/05/16	2007/05/16	BRN SOP-00042 V1.0	Based on EPA 200.8
Ammonia (N)	4	N/A	2007/05/17	ING232 Rev.3.5	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	4	N/A	2007/05/16	ING233 Rev.4.4	Based on EPA 353.2
Nitrite (N) (low level)	4	N/A	2007/05/16	ING233 Rev.4.4	EPA 353.2
Nitrogen - Nitrate (as N)	4	N/A	2007/05/17		
pH Water	4	N/A	2007/05/18	BRN SOP-00014 V2.0	Based on SM-4500H+B
Orthophosphate by Konelab Ø	4	N/A	2007/05/17	ING236 Rev. 2.0	SM 4500 PF
Sulphate by Automated Colourimetry	4	N/A	2007/05/18	BRN-SOP 00117 V1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	4	N/A	2007/05/17	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	4	N/A	2007/05/18	ING237 Rev.5.0	SM 4500
Total Suspended Solids Ø	4	N/A	2007/05/16	ING444 Rev.2.3	Based on SM - 2540 D
Turbidity	4	N/A	2007/05/17	BRN SOP-00021 V2.0	SM - 2130B

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

(1) SCC/CAEAL

../2

Your C.O.C. #: 08193817

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/05/23

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 11

Maxxam Job #: A719951
Report Date: 2007/05/23

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F25180	F25181		F25182		
Sampling Date		2007/05/09	2007/05/09		2007/05/10		
COC Number		08193817	08193817		08193817		
	Units	05-05A	06-10M	RDL	06-12S	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	0.1	<0.1	0.1	1626720
Calculated Parameters							
Nitrate (N)	mg/L	0.003	<0.002	0.002	0.003	0.002	1624800
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	297	282	0.5	353	0.5	1624799
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	0.5	2.1	0.5	1624258
Alkalinity (Total as CaCO ₃)	mg/L	236	196	0.5	151	0.5	1626965
Anions							
Orthophosphate (P)	mg/L	0.005	0.006	0.001	0.043	0.001	1628341
Dissolved Sulphate (SO ₄)	mg/L	37.3	67.9	0.5	287	5	1630466
Dissolved Chloride (Cl)	mg/L	2.4	4.1	0.5	3.0	0.5	1630441
Nutrients							
Ammonia (N)	mg/L	0.069	0.066	0.005	0.193	0.005	1627969
Nitrate plus Nitrite (N)	mg/L	0.003	0.003	0.002	0.008	0.002	1625779
Nitrite (N)	mg/L	<0.002	0.006	0.002	0.005	0.002	1625780
Total Phosphorus (P)	mg/L	<0.005	<0.005	0.005	0.042	0.005	1627199
Physical Properties							
pH	pH Units	8.4	8.3	0.1	8.4	0.1	1626962
Physical Properties							
Total Suspended Solids	mg/L	<4	5	4	<4	4	1625602
Total Dissolved Solids	mg/L	278	288	10	576	10	1627572
Turbidity	NTU	3.2	39.8	0.1	<0.1	0.1	1624779
RDL = Reportable Detection Limit							

Maxxam Job #: A719951
Report Date: 2007/05/23

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F25183		
Sampling Date		2007/05/13		
COC Number		08193817		
	Units	05-7B	RDL	QC Batch
Misc. Inorganics				
Bromide (Br)	mg/L	<0.1	0.1	1626720
Calculated Parameters				
Nitrate (N)	mg/L	0.015	0.002	1624800
Misc. Inorganics				
Dissolved Hardness (CaCO ₃)	mg/L	81.8	0.5	1624799
Dissolved Organic Carbon (C)	mg/L	0.7	0.5	1624258
Alkalinity (Total as CaCO ₃)	mg/L	62.3	0.5	1626965
Anions				
Orthophosphate (P)	mg/L	0.033	0.001	1628341
Dissolved Sulphate (SO ₄)	mg/L	6.2	0.5	1630466
Dissolved Chloride (Cl)	mg/L	8.1	0.5	1630441
Nutrients				
Ammonia (N)	mg/L	0.006	0.005	1627969
Nitrate plus Nitrite (N)	mg/L	0.015	0.002	1625779
Nitrite (N)	mg/L	<0.002	0.002	1625780
Total Phosphorus (P)	mg/L	0.032	0.005	1627199
Physical Properties				
pH	pH Units	8.0	0.1	1626962
Physical Properties				
Total Suspended Solids	mg/L	<4	4	1625602
Total Dissolved Solids	mg/L	88	10	1627572
Turbidity	NTU	0.2	0.1	1624779
RDL = Reportable Detection Limit				

Maxxam Job #: A719951
Report Date: 2007/05/23

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F25180	F25181	F25182	F25183		
Sampling Date		2007/05/09	2007/05/09	2007/05/10	2007/05/13		
COC Number		08193817	08193817	08193817	08193817		
	Units	05-05A	06-10M	06-12S	05-7B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	0.009	<0.008	0.008	1626698
Dissolved Calcium (Ca)	mg/L	79.5	93.7	112	28.7	0.05	1626698
Dissolved Iron (Fe)	mg/L	0.518	2.81	<0.005	0.028	0.005	1626698
Dissolved Magnesium (Mg)	mg/L	23.9	11.7	18.2	2.46	0.05	1626698
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1626698
Dissolved Silicon (Si)	mg/L	4.04	4.19	9.74	3.96	0.05	1626698
Dissolved Sodium (Na)	mg/L	0.50	3.38	60.2	1.72	0.05	1626698
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1626698
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	1.2	0.9	2.6	22.6	0.2	1625199
Dissolved Antimony (Sb)	ug/L	5.44	<0.05	1.99	0.13	0.05	1625199
Dissolved Arsenic (As)	ug/L	3.1	<0.1	4.0	0.8	0.1	1625199
Dissolved Barium (Ba)	ug/L	56.6	47.0	23.4	65.3	0.02	1625199
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1625199
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1625199
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	0.02	0.04	0.01	1625199
Dissolved Chromium (Cr)	ug/L	0.3	<0.2	<0.2	<0.2	0.2	1625199
Dissolved Cobalt (Co)	ug/L	0.33	0.07	0.62	0.27	0.02	1625199
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	0.7	0.1	1625199
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	<0.02	0.04	0.02	1625199
Dissolved Lithium (Li)	ug/L	3.1	2.4	9.1	0.7	0.2	1625199
Dissolved Manganese (Mn)	ug/L	160	186	407	151	0.02	1625199
Dissolved Molybdenum (Mo)	ug/L	7.48	2.00	8.20	9.80	0.02	1625199
Dissolved Nickel (Ni)	ug/L	0.8	<0.5	1.3	2.8	0.5	1625199
Dissolved Potassium (K)	ug/L	1670	1950	2770	848	50	1625199
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1625199
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1625199
Dissolved Strontium (Sr)	ug/L	135	151	375	53.4	0.01	1625199
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1625199
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	0.07	0.10	0.05	1625199
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	1.3	0.5	1625199
Dissolved Uranium (U)	ug/L	22.8	9.94	13.1	0.19	0.01	1625199
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	2.27	2.04	0.05	1625199
RDL = Reportable Detection Limit							

Maxxam Job #: A719951
Report Date: 2007/05/23

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F25180	F25181	F25182	F25183		
Sampling Date		2007/05/09	2007/05/09	2007/05/10	2007/05/13		
COC Number		08193817	08193817	08193817	08193817		
	Units	05-05A	06-10M	06-12S	05-7B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	2.9	<0.5	<0.5	0.8	0.5	1625199
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1623865

RDL = Reportable Detection Limit

Maxxam Job #: A719951
Report Date: 2007/05/23

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

General Comments

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA719951

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1623865 JT3	MATRIX SPIKE						
	[F25183-01]	Dissolved Mercury (Hg)	2007/05/17		89	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/05/17		99	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/05/17		88	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/05/17	<0.01		ug/L	
	RPD [F25182-01]	Dissolved Mercury (Hg)	2007/05/17	NC		%	25
1624258 MX	RPD [F25183-01]	Dissolved Mercury (Hg)	2007/05/17	NC		%	25
	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/05/15		106	%	80 - 120
	SPIKE	Dissolved Organic Carbon (C)	2007/05/15		107	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/05/15	<0.5		mg/L	
1624779 CK	RPD [F25183-01]	Dissolved Organic Carbon (C)	2007/05/15	NC		%	20
	SPIKE	Turbidity	2007/05/17		99	%	80 - 120
	BLANK	Turbidity	2007/05/17	<0.1		NTU	
	RPD [F25183-01]	Turbidity	2007/05/17	NC		%	25
1625199 AA1	MATRIX SPIKE						
	[F25180-01]	Dissolved Arsenic (As)	2007/05/16		122	%	75 - 125
		Dissolved Cadmium (Cd)	2007/05/16		108	%	75 - 125
		Dissolved Chromium (Cr)	2007/05/16		110	%	75 - 125
		Dissolved Cobalt (Co)	2007/05/16		113	%	75 - 125
		Dissolved Copper (Cu)	2007/05/16		112	%	75 - 125
		Dissolved Lead (Pb)	2007/05/16		102	%	75 - 125
		Dissolved Selenium (Se)	2007/05/16		118	%	75 - 125
		Dissolved Thallium (Tl)	2007/05/16		103	%	75 - 125
		Dissolved Zinc (Zn)	2007/05/16		115	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/05/16		104	%	75 - 125
		Dissolved Cadmium (Cd)	2007/05/16		101	%	75 - 125
		Dissolved Chromium (Cr)	2007/05/16		118	%	75 - 125
		Dissolved Cobalt (Co)	2007/05/16		122	%	75 - 125
		Dissolved Copper (Cu)	2007/05/16		116	%	75 - 125
		Dissolved Lead (Pb)	2007/05/16		105	%	75 - 125
		Dissolved Selenium (Se)	2007/05/16		105	%	75 - 125
		Dissolved Thallium (Tl)	2007/05/16		106	%	75 - 125
		Dissolved Zinc (Zn)	2007/05/16		115	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/05/16	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/05/16	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/05/16	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/05/16	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/05/16	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/05/16	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/05/16	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/05/16	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/05/16	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/05/16	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/05/16	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/05/16	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/05/16	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/05/16	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/05/16	<0.5		ug/L	
		Dissolved Potassium (K)	2007/05/16	<50		ug/L	
		Dissolved Selenium (Se)	2007/05/16	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/05/16	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/05/16	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/05/16	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/05/16	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/05/16	<0.5		ug/L	

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA719951

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1625199 AA1	BLANK	Dissolved Uranium (U)	2007/05/16	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/05/16	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/05/16	<0.5		ug/L	
	RPD [F25180-01]	Dissolved Aluminum (Al)	2007/05/16	2.0		%	25
		Dissolved Antimony (Sb)	2007/05/16	1.6		%	25
		Dissolved Arsenic (As)	2007/05/16	1.6		%	25
		Dissolved Barium (Ba)	2007/05/16	1.9		%	25
		Dissolved Beryllium (Be)	2007/05/16	NC		%	25
		Dissolved Bismuth (Bi)	2007/05/16	NC		%	25
		Dissolved Cadmium (Cd)	2007/05/16	NC		%	25
		Dissolved Chromium (Cr)	2007/05/16	NC		%	25
		Dissolved Cobalt (Co)	2007/05/16	0.3		%	25
		Dissolved Copper (Cu)	2007/05/16	NC		%	25
		Dissolved Lead (Pb)	2007/05/16	NC		%	25
		Dissolved Lithium (Li)	2007/05/16	5.6		%	25
		Dissolved Manganese (Mn)	2007/05/16	1.0		%	25
		Dissolved Molybdenum (Mo)	2007/05/16	3.5		%	25
		Dissolved Nickel (Ni)	2007/05/16	NC		%	25
		Dissolved Potassium (K)	2007/05/16	1		%	25
		Dissolved Selenium (Se)	2007/05/16	NC		%	25
		Dissolved Silver (Ag)	2007/05/16	NC		%	25
		Dissolved Strontium (Sr)	2007/05/16	0.8		%	25
		Dissolved Thallium (Tl)	2007/05/16	NC		%	25
		Dissolved Tin (Sn)	2007/05/16	NC		%	25
		Dissolved Titanium (Ti)	2007/05/16	NC		%	25
		Dissolved Uranium (U)	2007/05/16	0.5		%	25
		Dissolved Vanadium (V)	2007/05/16	NC		%	25
		Dissolved Zinc (Zn)	2007/05/16	4.9		%	25
1625602 FS1	MATRIX SPIKE	Total Suspended Solids	2007/05/16		103	%	N/A
		Total Suspended Solids	2007/05/16		102	%	N/A
	BLANK	Total Suspended Solids	2007/05/16	<4		mg/L	
	RPD	Total Suspended Solids	2007/05/16	NC		%	25
1625779 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/05/16		110	%	80 - 120
		Nitrate plus Nitrite (N)	2007/05/16		105	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/05/16	<0.002		mg/L	
	RPD	Nitrate plus Nitrite (N)	2007/05/16	NC		%	25
1625780 BB3	SPIKE	Nitrite (N)	2007/05/16		108	%	80 - 120
	BLANK	Nitrite (N)	2007/05/16	<0.002		mg/L	
1626698 GS2	BLANK	Dissolved Boron (B)	2007/05/16	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/05/16	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/05/16	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/05/16	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/05/16	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/05/16	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/05/16	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/05/16	<0.005		mg/L	
	RPD	Dissolved Boron (B)	2007/05/16	0.6		%	25
		Dissolved Calcium (Ca)	2007/05/16	0.2		%	25
		Dissolved Iron (Fe)	2007/05/16	0.4		%	25
		Dissolved Magnesium (Mg)	2007/05/16	0.7		%	25
		Dissolved Phosphorus (P)	2007/05/16	NC		%	25
		Dissolved Silicon (Si)	2007/05/16	0.7		%	25
		Dissolved Sodium (Na)	2007/05/16	0.8		%	25
		Dissolved Zirconium (Zr)	2007/05/16	NC		%	25
		Bromide (Br)	2007/05/16		110	%	80 - 120
1626720 AH3	MATRIX SPIKE	Bromide (Br)	2007/05/16		110	%	80 - 120

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Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA719951

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1626720 AH3	SPIKE	Bromide (Br)	2007/05/16		106	%	80 - 120
	BLANK	Bromide (Br)	2007/05/16	<0.1		mg/L	
	RPD	Bromide (Br)	2007/05/16	2.9		%	25
1626962 CK	SPIKE	pH	2007/05/18		102	%	96 - 104
	RPD	pH	2007/05/18	0		%	25
1626965 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/05/18		99	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/05/18		99	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/05/18	<0.5		mg/L	
	RPD	Alkalinity (Total as CaCO3)	2007/05/18	0.1		%	25
1627199 SC2	MATRIX SPIKE	Total Phosphorus (P)	2007/05/18		85	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/05/18		109	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/05/18	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/05/18	NC		%	25
1627572 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/05/17		104	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/05/17		102	%	80 - 120
	BLANK	Total Dissolved Solids	2007/05/17	<10		mg/L	
	RPD	Total Dissolved Solids	2007/05/17	0		%	25
1627969 SC2	MATRIX SPIKE	Ammonia (N)	2007/05/17		90	%	80 - 120
	SPIKE	Ammonia (N)	2007/05/17		85	%	80 - 120
	BLANK	Ammonia (N)	2007/05/17	<0.005		mg/L	
	RPD	Ammonia (N)	2007/05/17	NC		%	25
1628341 BB3	MATRIX SPIKE	Orthophosphate (P)	2007/05/17		92	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/05/17		89	%	80 - 120
	BLANK	Orthophosphate (P)	2007/05/17	<0.001		mg/L	
	RPD	Orthophosphate (P)	2007/05/17	NC		%	20
1630441 SC2	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/05/18		111	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/05/18		106	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/05/18	<0.5		mg/L	
	RPD [F25180-01]	Dissolved Chloride (Cl)	2007/05/18	NC		%	20
1630466 SC2	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/05/18		107	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/05/18		98	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/05/18	<0.5		mg/L	
	RPD [F25180-01]	Dissolved Sulphate (SO4)	2007/05/18	0.6		%	20

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08194179, 08194180

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/06/21

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A724712

Received: 2007/06/11, 12:15

Sample Matrix: Water

Samples Received: 13

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	6	2007/06/15	2007/06/18	BRN SOP-00264 R2.0	Based on SM2320B
Alkalinity - Water	7	2007/06/16	2007/06/19	BRN SOP-00264 R2.0	Based on SM2320B
Bromide (IC-EC)	13	N/A	2007/06/18	BRN SOP-00251 R1.0	SM 4110 B
Chloride by Automated Colourimetry	13	N/A	2007/06/19	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	6	N/A	2007/06/14	BRN SOP-00224 R3.0	Based on SM-5310C
Carbon (DOC)	6	N/A	2007/06/21	BRN SOP-00224 R3.0	Based on SM-5310C
Conductance - water	6	N/A	2007/06/18	BRN SOP-00264 R2.0	Based on SM-2510B
Conductance - water	7	N/A	2007/06/19	BRN SOP-00264 R2.0	Based on SM-2510B
Fluoride	13	N/A	2007/06/19	ING222 Rev.4.2	Based SM - 4500 F C
Hardness (calculated as CaCO3)	13	N/A	2007/06/19		
Mercury (dissolved; low level)	13	2007/06/15	2007/06/19	BRN SOP-00205	Based on EPA 245.1
Elements by ICP-AES (dissolved)	13	2007/06/18	2007/06/18	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) Ø	13	2007/06/18	2007/06/19	BRN SOP-00204	Based on EPA 200.8
Ammonia (N)	6	N/A	2007/06/15	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Ammonia (N)	7	N/A	2007/06/20	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	6	N/A	2007/06/15	ING233 Rev.4.4	Based on EPA 353.2
Nitrate+Nitrite (N) (low level)	7	N/A	2007/06/18	ING233 Rev.4.4	Based on EPA 353.2
Nitrite (N) (low level)	6	N/A	2007/06/15	ING233 Rev.4.4	EPA 353.2
Nitrite (N) (low level)	7	N/A	2007/06/18	ING233 Rev.4.4	EPA 353.2
Nitrogen - Nitrate (as N)	6	N/A	2007/06/15		
Nitrogen - Nitrate (as N)	7	N/A	2007/06/19		
pH Water	6	N/A	2007/06/16	BRN SOP-00264 R2.0	Based on SM-4500H+B
pH Water	7	N/A	2007/06/19	BRN SOP-00264 R2.0	Based on SM-4500H+B
Orthophosphate by Konelab Ø	13	N/A	2007/06/19	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	13	N/A	2007/06/19	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	13	N/A	2007/06/19	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	6	N/A	2007/06/18	BRN SOP-00236 R4.0	SM 4500
Total Phosphorus	7	N/A	2007/06/20	BRN SOP-00236 R4.0	SM 4500
Total Suspended Solids Ø	12	N/A	2007/06/19	BRN SOP-00277 R2.0	Based on SM - 2540 D
Turbidity	6	N/A	2007/06/15	BRN SOP-00265 R3.0	SM - 2130B
Turbidity	7	N/A	2007/06/16	BRN SOP-00265 R3.0	SM - 2130B

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

(1) SCC/CAEAL

Your C.O.C. #: 08194179, 08194180

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/06/21

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F61517	F61522	F61523	F61524		
Sampling Date		2007/06/06	2007/06/06	2007/06/06	2007/06/06		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-9S	MW 06-9M	MW 06-10S	MW 06-10M	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.88	1.05	0.26	0.83	0.01	1683352
Calculated Parameters							
Nitrate (N)	mg/L	0.002	<0.002	<0.002	<0.002	0.002	1677717
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	144	217	141	277	0.5	1677716
Dissolved Organic Carbon (C)	mg/L	0.8	<0.5	0.7	<0.5	0.5	1676425
Alkalinity (Total as CaCO ₃)	mg/L	114	191	116	202	0.5	1679751
Anions							
Orthophosphate (P)	mg/L	0.179	0.004	0.054	0.003	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	24.4	10.2	29.5	53.0	0.5	1683577
Dissolved Chloride (Cl)	mg/L	<0.5	0.7	4.9	0.9	0.5	1683546
Nutrients							
Ammonia (N)	mg/L	0.016	0.008	0.017	0.057	0.005	1678793
Nitrate plus Nitrite (N)	mg/L	0.002	<0.002	<0.002	<0.002	0.002	1678985
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	1678992
Total Phosphorus (P)	mg/L	0.323	0.075	0.051	0.056	0.005	1678360
Physical Properties							
Conductivity	uS/cm	266	364	296	467	1	1679748
pH	pH Units	8.2	8.3	8.2	8.3	0.1	1679724
Physical Properties							
Total Suspended Solids	mg/L	5	13	<4	10	4	1685560
Total Dissolved Solids	mg/L	164	204	180	286	10	1684412
Turbidity	NTU	0.8	18.1	0.3	39.7	0.1	1677261
RDL = Reportable Detection Limit							

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F61526	F61527	F61528	F61530		
Sampling Date		2007/06/06	2007/06/08	2007/06/08	2007/06/08		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-10D	MW 05-05A	MW 05-02A	MW 05-02B	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1682862
Fluoride (F)	mg/L	1.08	2.34	0.31	0.08	0.01	1683352
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.002	0.004	0.003	0.002	1680238
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	278	301	231	131	0.5	1680237
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	<0.5	1.0	0.5	1690790
Alkalinity (Total as CaCO ₃)	mg/L	237	235	179	131	0.5	1680539
Anions							
Orthophosphate (P)	mg/L	0.003	0.003	0.003	0.004	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	21.8	35.6	33.3	5.9	0.5	1683577
Dissolved Chloride (Cl)	mg/L	3.4	2.5	1.8	0.5	0.5	1683546
Nutrients							
Ammonia (N)	mg/L	0.043	0.044	0.077	<0.005	0.005	1686567
Nitrate plus Nitrite (N)	mg/L	0.003	0.004	0.006	0.003	0.002	1681596
Nitrite (N)	mg/L	0.002	0.002	0.002	<0.002	0.002	1681637
Total Phosphorus (P)	mg/L	0.025	0.009	0.006	0.100	0.005	1683540
Physical Properties							
Conductivity	uS/cm	463	494	392	254	1	1680537
pH	pH Units	8.4	8.4	8.2	8.0	0.1	1680532
Physical Properties							
Total Suspended Solids	mg/L	13	<4	<4	38	4	1685560
Total Dissolved Solids	mg/L	272	288	234	160	10	1684412
Turbidity	NTU	49.4	13.3	7.6	34.2	0.1	1680460
RDL = Reportable Detection Limit							

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F61531	F61532		F61539		
Sampling Date		2007/06/08	2007/06/07		2007/06/07		
COC Number		08194179	08194179		08194179		
	Units	MW 05-07A	MW 05-07B	QC Batch	MW 06-08D	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	1682862	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.11	0.14	1683352	0.98	0.01	1683352
Calculated Parameters							
Nitrate (N)	mg/L	0.044	0.005	1680238	<0.002	0.002	1677717
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	2420	75.4	1680237	276	0.5	1677716
Dissolved Organic Carbon (C)	mg/L	9.5	0.5	1690790	<0.5	0.5	1676425
Alkalinity (Total as CaCO ₃)	mg/L	811	56.1	1680539	228	0.5	1679751
Anions							
Orthophosphate (P)	mg/L	0.002	0.027	1684483	0.004	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	7.2	14.8	1683577	29.0	0.5	1683577
Dissolved Chloride (Cl)	mg/L	6.5	5.0	1683546	<0.5	0.5	1683546
Nutrients							
Ammonia (N)	mg/L	0.064	<0.005	1686567	0.074	0.005	1678793
Nitrate plus Nitrite (N)	mg/L	0.049	0.007	1681596	<0.002	0.002	1678985
Nitrite (N)	mg/L	0.005	0.002	1681637	<0.002	0.002	1678992
Total Phosphorus (P)	mg/L	0.013	0.041	1683540	0.008	0.005	1678360
Physical Properties							
Conductivity	uS/cm	3010	158	1680537	457	1	1679748
pH	pH Units	12.1	8.3	1680532	8.4	0.1	1679724
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	1685560	<4	4	1685560
Total Dissolved Solids	mg/L	1050	102	1684412	268	10	1684412
Turbidity	NTU	<0.1	<0.1	1680460	1.5	0.1	1677261
RDL = Reportable Detection Limit							

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F61540		F61541		
Sampling Date		2007/06/07		2007/06/11		
COC Number		08194180		08194180		
	Units	MW 06-08S	QC Batch	TRAVEL BLANK	RDL	QC Batch

Misc. Inorganics						
Bromide (Br)	mg/L	<0.1	1682862	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.28	1683352	0.01	0.01	1683352
Calculated Parameters						
Nitrate (N)	mg/L	0.016	1677717	<0.002	0.002	1680238
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	70.4	1677716	<0.5	0.5	1680237
Dissolved Organic Carbon (C)	mg/L	3.3	1676425		0.5	
Alkalinity (Total as CaCO ₃)	mg/L	90.9	1679751	0.7	0.5	1680539
Anions						
Orthophosphate (P)	mg/L	0.005	1684483	<0.001	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	21.9	1683577	<0.5	0.5	1683577
Dissolved Chloride (Cl)	mg/L	2.6	1683546	<0.5	0.5	1683546
Nutrients						
Ammonia (N)	mg/L	0.126	1678793	<0.005	0.005	1686567
Nitrate plus Nitrite (N)	mg/L	0.018	1678985	<0.002	0.002	1681596
Nitrite (N)	mg/L	0.002	1678992	<0.002	0.002	1681637
Total Phosphorus (P)	mg/L	0.030	1678360	<0.005	0.005	1683540
Physical Properties						
Conductivity	uS/cm	234	1679748	1	1	1680537
pH	pH Units	8.1	1679724	6.3	0.1	1680532
Physical Properties						
Total Suspended Solids	mg/L	7	1685560		4	
Total Dissolved Solids	mg/L	140	1684412	<10	10	1684412
Turbidity	NTU	3.3	1677261	<0.1	0.1	1680460
RDL = Reportable Detection Limit						

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61517	F61522	F61523	F61524		
Sampling Date		2007/06/06	2007/06/06	2007/06/06	2007/06/06		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-9S	MW 06-9M	MW 06-10S	MW 06-10M	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1681696
Dissolved Calcium (Ca)	mg/L	49.4	66.6	49.8	90.0	0.05	1681696
Dissolved Iron (Fe)	mg/L	0.121	0.256	0.207	4.84	0.005	1681696
Dissolved Magnesium (Mg)	mg/L	5.05	12.3	4.10	12.7	0.05	1681696
Dissolved Phosphorus (P)	mg/L	0.2	<0.1	<0.1	<0.1	0.1	1681696
Dissolved Silicon (Si)	mg/L	4.09	3.98	3.96	3.89	0.05	1681696
Dissolved Sodium (Na)	mg/L	1.37	0.45	9.03	3.15	0.05	1681696
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1681696
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	7.3	0.6	5.3	3.7	0.2	1682735
Dissolved Antimony (Sb)	ug/L	0.08	<0.05	0.39	<0.05	0.05	1682735
Dissolved Arsenic (As)	ug/L	5.4	0.3	5.3	0.4	0.1	1682735
Dissolved Barium (Ba)	ug/L	51.9	181	24.9	45.4	0.02	1682735
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Cadmium (Cd)	ug/L	0.02	0.01	<0.01	<0.01	0.01	1682735
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1682735
Dissolved Cobalt (Co)	ug/L	0.03	0.06	0.19	0.09	0.02	1682735
Dissolved Copper (Cu)	ug/L	0.2	0.2	<0.1	<0.1	0.1	1682735
Dissolved Lead (Pb)	ug/L	0.25	0.05	0.03	<0.02	0.02	1682735
Dissolved Lithium (Li)	ug/L	0.8	2.8	0.9	2.2	0.2	1682735
Dissolved Manganese (Mn)	ug/L	115	322	90.0	235	0.02	1682735
Dissolved Molybdenum (Mo)	ug/L	5.68	3.60	1.99	2.02	0.02	1682735
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	1.4	<0.5	0.5	1682735
Dissolved Potassium (K)	ug/L	1040	2060	1220	1950	50	1682735
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1682735
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1682735
Dissolved Strontium (Sr)	ug/L	161	85.4	164	142	0.01	1682735
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Tin (Sn)	ug/L	0.08	<0.05	<0.05	0.84	0.05	1682735
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1682735
Dissolved Uranium (U)	ug/L	0.21	0.49	8.51	5.45	0.01	1682735
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	0.18	<0.05	0.05	1682735

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61517	F61522	F61523	F61524		
Sampling Date		2007/06/06	2007/06/06	2007/06/06	2007/06/06		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-9S	MW 06-9M	MW 06-10S	MW 06-10M	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	1.1	<0.5	0.6	<0.5	0.5	1682735
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61526	F61527	F61528	F61530		
Sampling Date		2007/06/06	2007/06/08	2007/06/08	2007/06/08		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-10D	MW 05-05A	MW 05-02A	MW 05-02B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	0.009	<0.008	<0.008	<0.008	0.008	1681696
Dissolved Calcium (Ca)	mg/L	75.0	80.5	61.2	43.1	0.05	1681696
Dissolved Iron (Fe)	mg/L	5.04	1.25	1.17	7.42	0.005	1681696
Dissolved Magnesium (Mg)	mg/L	22.1	24.3	18.9	5.58	0.05	1681696
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1681696
Dissolved Silicon (Si)	mg/L	4.00	3.85	3.75	5.79	0.05	1681696
Dissolved Sodium (Na)	mg/L	1.39	0.40	0.64	9.85	0.05	1681696
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1681696
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	19.6	2.3	44.9	88.4	0.2	1682735
Dissolved Antimony (Sb)	ug/L	1.08	6.66	0.07	0.09	0.05	1682735
Dissolved Arsenic (As)	ug/L	0.3	4.7	0.9	35.4	0.1	1682735
Dissolved Barium (Ba)	ug/L	78.8	47.2	50.8	217	0.02	1682735
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Cadmium (Cd)	ug/L	<0.01	0.02	0.01	0.03	0.01	1682735
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1682735
Dissolved Cobalt (Co)	ug/L	0.03	0.24	0.14	0.92	0.02	1682735
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	0.7	0.6	0.1	1682735
Dissolved Lead (Pb)	ug/L	0.14	<0.02	0.12	0.20	0.02	1682735
Dissolved Lithium (Li)	ug/L	3.7	3.1	2.6	1.9	0.2	1682735
Dissolved Manganese (Mn)	ug/L	97.6	92.8	164	1560	0.02	1682735
Dissolved Molybdenum (Mo)	ug/L	4.50	7.15	2.82	1.72	0.02	1682735
Dissolved Nickel (Ni)	ug/L	<0.5	1.1	0.7	1.4	0.5	1682735
Dissolved Potassium (K)	ug/L	2740	1610	2080	1420	50	1682735
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1682735
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1682735
Dissolved Strontium (Sr)	ug/L	169	135	159	123	0.01	1682735
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Tin (Sn)	ug/L	4.96	0.13	0.20	0.06	0.05	1682735
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	2.0	2.2	0.5	1682735
Dissolved Uranium (U)	ug/L	3.41	24.7	8.67	0.63	0.01	1682735
Dissolved Vanadium (V)	ug/L	0.08	<0.05	0.09	0.62	0.05	1682735

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61526	F61527	F61528	F61530		
Sampling Date		2007/06/06	2007/06/08	2007/06/08	2007/06/08		
COC Number		08194179	08194179	08194179	08194179		
	Units	MW 06-10D	MW 05-05A	MW 05-02A	MW 05-02B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	3.8	5.0	0.9	4.7	0.5	1682735
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1680240
RDL = Reportable Detection Limit							

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61531	F61532	F61539	F61540		
Sampling Date		2007/06/08	2007/06/07	2007/06/07	2007/06/07		
COC Number		08194179	08194179	08194179	08194180		
	Units	MW 05-07A	MW 05-07B	MW 06-08D	MW 06-08S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	0.008	<0.008	<0.008	0.008	1681696
Dissolved Calcium (Ca)	mg/L	969	26.3	64.4	23.4	0.05	1681696
Dissolved Iron (Fe)	mg/L	0.012	0.066	0.258	2.32	0.005	1681696
Dissolved Magnesium (Mg)	mg/L	<0.05	2.36	27.9	2.92	0.05	1681696
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1681696
Dissolved Silicon (Si)	mg/L	0.23	3.82	4.63	5.90	0.05	1681696
Dissolved Sodium (Na)	mg/L	8.47	1.81	0.80	6.28	0.05	1681696
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1681696
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	49.6	36.7	6.0	13.3	0.2	1682735
Dissolved Antimony (Sb)	ug/L	0.12	0.13	0.39	8.93	0.05	1682735
Dissolved Arsenic (As)	ug/L	0.7	1.2	5.8	2.4	0.1	1682735
Dissolved Barium (Ba)	ug/L	3220	37.7	47.8	66.2	0.02	1682735
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Cadmium (Cd)	ug/L	0.02	0.03	<0.01	0.01	0.01	1682735
Dissolved Chromium (Cr)	ug/L	7.7	0.4	0.3	<0.2	0.2	1682735
Dissolved Cobalt (Co)	ug/L	0.57	0.22	0.38	2.01	0.02	1682735
Dissolved Copper (Cu)	ug/L	7.3	1.0	0.1	0.1	0.1	1682735
Dissolved Lead (Pb)	ug/L	4.12	0.07	0.04	0.06	0.02	1682735
Dissolved Lithium (Li)	ug/L	48.3	0.4	2.6	1.0	0.2	1682735
Dissolved Manganese (Mn)	ug/L	0.58	124	51.4	702	0.02	1682735
Dissolved Molybdenum (Mo)	ug/L	4.83	9.07	1.36	2.83	0.02	1682735
Dissolved Nickel (Ni)	ug/L	16.6	0.7	2.0	3.9	0.5	1682735
Dissolved Potassium (K)	ug/L	13600	845	1870	984	50	1682735
Dissolved Selenium (Se)	ug/L	1.7	0.6	0.6	1.8	0.5	1682735
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1682735
Dissolved Strontium (Sr)	ug/L	2010	46.1	162	59.6	0.01	1682735
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1682735
Dissolved Tin (Sn)	ug/L	0.70	0.23	0.08	0.12	0.05	1682735
Dissolved Titanium (Ti)	ug/L	1.0	2.1	0.6	1.3	0.5	1682735
Dissolved Uranium (U)	ug/L	<0.01	0.09	12.7	0.04	0.01	1682735
Dissolved Vanadium (V)	ug/L	0.58	0.97	0.33	1.43	0.05	1682735
RDL = Reportable Detection Limit							

Maxxam Job #: A724712
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Yukon Zinc Corporation
Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61531	F61532	F61539	F61540		
Sampling Date		2007/06/08	2007/06/07	2007/06/07	2007/06/07		
COC Number		08194179	08194179	08194179	08194180		
	Units	MW 05-07A	MW 05-07B	MW 06-08D	MW 06-08S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	269	1.5	2.8	0.9	0.5	1682735
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61541		
Sampling Date		2007/06/11		
COC Number		08194180		
	Units	TRAVEL BLANK	RDL	QC Batch

Dissolved Metals by ICP				
Dissolved Boron (B)	mg/L	<0.008	0.008	1681696
Dissolved Calcium (Ca)	mg/L	<0.05	0.05	1681696
Dissolved Iron (Fe)	mg/L	<0.005	0.005	1681696
Dissolved Magnesium (Mg)	mg/L	<0.05	0.05	1681696
Dissolved Phosphorus (P)	mg/L	<0.1	0.1	1681696
Dissolved Silicon (Si)	mg/L	<0.05	0.05	1681696
Dissolved Sodium (Na)	mg/L	0.09	0.05	1681696
Dissolved Zirconium (Zr)	mg/L	<0.005	0.005	1681696
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	<0.2	0.2	1682735
Dissolved Antimony (Sb)	ug/L	<0.05	0.05	1682735
Dissolved Arsenic (As)	ug/L	<0.1	0.1	1682735
Dissolved Barium (Ba)	ug/L	0.10	0.02	1682735
Dissolved Beryllium (Be)	ug/L	<0.05	0.05	1682735
Dissolved Bismuth (Bi)	ug/L	<0.05	0.05	1682735
Dissolved Cadmium (Cd)	ug/L	<0.01	0.01	1682735
Dissolved Chromium (Cr)	ug/L	<0.2	0.2	1682735
Dissolved Cobalt (Co)	ug/L	<0.02	0.02	1682735
Dissolved Copper (Cu)	ug/L	<0.1	0.1	1682735
Dissolved Lead (Pb)	ug/L	<0.02	0.02	1682735
Dissolved Lithium (Li)	ug/L	<0.2	0.2	1682735
Dissolved Manganese (Mn)	ug/L	<0.02	0.02	1682735
Dissolved Molybdenum (Mo)	ug/L	<0.02	0.02	1682735
Dissolved Nickel (Ni)	ug/L	<0.5	0.5	1682735
Dissolved Potassium (K)	ug/L	<50	50	1682735
Dissolved Selenium (Se)	ug/L	<0.5	0.5	1682735
Dissolved Silver (Ag)	ug/L	<0.01	0.01	1682735
Dissolved Strontium (Sr)	ug/L	0.02	0.01	1682735
Dissolved Thallium (Tl)	ug/L	<0.05	0.05	1682735
Dissolved Tin (Sn)	ug/L	<0.05	0.05	1682735
Dissolved Titanium (Ti)	ug/L	<0.5	0.5	1682735
Dissolved Uranium (U)	ug/L	<0.01	0.01	1682735

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F61541		
Sampling Date		2007/06/11		
COC Number		08194180		
	Units	TRAVEL BLANK	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	<0.05	0.05	1682735
Dissolved Zinc (Zn)	ug/L	<0.5	0.5	1682735
Mercury by CVAA				
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A724712
Report Date: 2007/06/21

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample F61531-01 pH Water: pH result greater than the highest calibration standard of pH 12.

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA724712

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1676425 MX	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/06/14		110	%	80 - 120
	SPIKE	Dissolved Organic Carbon (C)	2007/06/14		98	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/06/14	<0.5		mg/L	
	RPD	Dissolved Organic Carbon (C)	2007/06/14	1.1		%	20
1677261 CK	SPIKE	Turbidity	2007/06/15		102	%	80 - 120
	BLANK	Turbidity	2007/06/15	<0.1		NTU	
	RPD	Turbidity	2007/06/15	NC		%	25
1678360 MX	MATRIX SPIKE	Total Phosphorus (P)	2007/06/18		94	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/06/18		100	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/06/18	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/06/18	0.04		%	25
1678793 SC2	MATRIX SPIKE	Ammonia (N)	2007/06/15		97	%	80 - 120
	SPIKE	Ammonia (N)	2007/06/15		87	%	80 - 120
	BLANK	Ammonia (N)	2007/06/15	<0.005		mg/L	
	RPD	Ammonia (N)	2007/06/15	NC		%	25
1678985 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/06/15		103	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/06/15		104	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/06/15	<0.002		mg/L	
	RPD	Nitrate plus Nitrite (N)	2007/06/15	5.3		%	25
1678992 BB3	MATRIX SPIKE	Nitrite (N)	2007/06/15		104	%	80 - 120
	SPIKE	Nitrite (N)	2007/06/15		101	%	80 - 120
	BLANK	Nitrite (N)	2007/06/15	<0.002		mg/L	
	RPD	Nitrite (N)	2007/06/15	NC		%	25
1679724 CK	SPIKE	pH	2007/06/16		101	%	96 - 104
	RPD	pH	2007/06/16	0.3		%	25
1679748 CK	SPIKE	Conductivity	2007/06/18		101	%	80 - 120
	BLANK	Conductivity	2007/06/18	<1		uS/cm	
	RPD	Conductivity	2007/06/18	1.2		%	25
1679751 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/06/18		91	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/06/18		97	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/06/18	<0.5		mg/L	
	RPD	Alkalinity (Total as CaCO3)	2007/06/18	0.7		%	25
1680240 JT3	MATRIX SPIKE						
	[F61541-01]	Dissolved Mercury (Hg)	2007/06/19		109	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/06/19		114	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/06/19		102	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/06/19	<0.01		ug/L	
	RPD [F61517-01]	Dissolved Mercury (Hg)	2007/06/19	NC		%	25
	RPD [F61541-01]	Dissolved Mercury (Hg)	2007/06/19	NC		%	25
1680460 CK	SPIKE	Turbidity	2007/06/16		101	%	80 - 120
	BLANK	Turbidity	2007/06/16	<0.1		NTU	
	RPD	Turbidity	2007/06/16	0.6		%	25
1680532 CK	SPIKE	pH	2007/06/19		101	%	96 - 104
	RPD [F61527-01]	pH	2007/06/19	0.1		%	25
1680537 CK	SPIKE	Conductivity	2007/06/19		101	%	80 - 120
	BLANK	Conductivity	2007/06/19	<1		uS/cm	
	RPD [F61527-01]	Conductivity	2007/06/19	1.0		%	25
1680539 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/06/19		98	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/06/19		98	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/06/19	<0.5		mg/L	
	RPD [F61527-01]	Alkalinity (Total as CaCO3)	2007/06/19	1.2		%	25
1681596 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/06/18		97	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/06/18		103	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/06/18	<0.002		mg/L	
	RPD	Nitrate plus Nitrite (N)	2007/06/18	2.9		%	25

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Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA724712

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1681637 BB3	MATRIX SPIKE	Nitrite (N)	2007/06/18		95	%	80 - 120
	SPIKE	Nitrite (N)	2007/06/18		101	%	80 - 120
	BLANK	Nitrite (N)	2007/06/18	<0.002		mg/L	
	RPD	Nitrite (N)	2007/06/18	NC		%	25
1681696 GS2	BLANK	Dissolved Boron (B)	2007/06/18	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/06/18	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/06/18	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/06/18	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/06/18	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/06/18	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/06/18	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/06/18	<0.005		mg/L	
	RPD	Dissolved Boron (B)	2007/06/18	NC		%	25
		Dissolved Calcium (Ca)	2007/06/18	0.7		%	25
		Dissolved Iron (Fe)	2007/06/18	NC		%	25
		Dissolved Magnesium (Mg)	2007/06/18	0.7		%	25
		Dissolved Phosphorus (P)	2007/06/18	NC		%	25
		Dissolved Sodium (Na)	2007/06/18	0.3		%	25
		Dissolved Zirconium (Zr)	2007/06/18	NC		%	25
1682735 AA1	MATRIX SPIKE [F61541-01]	Dissolved Arsenic (As)	2007/06/19		112	%	75 - 125
		Dissolved Cadmium (Cd)	2007/06/19		111	%	75 - 125
		Dissolved Chromium (Cr)	2007/06/19		101	%	75 - 125
		Dissolved Cobalt (Co)	2007/06/19		107	%	75 - 125
		Dissolved Copper (Cu)	2007/06/19		111	%	75 - 125
		Dissolved Lead (Pb)	2007/06/19		107	%	75 - 125
		Dissolved Selenium (Se)	2007/06/19		118	%	75 - 125
		Dissolved Thallium (Tl)	2007/06/19		105	%	75 - 125
		Dissolved Zinc (Zn)	2007/06/19		116	%	75 - 125
		Dissolved Arsenic (As)	2007/06/19		100	%	75 - 125
		Dissolved Cadmium (Cd)	2007/06/19		104	%	75 - 125
		Dissolved Chromium (Cr)	2007/06/19		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/06/19		111	%	75 - 125
		Dissolved Copper (Cu)	2007/06/19		112	%	75 - 125
		Dissolved Lead (Pb)	2007/06/19		107	%	75 - 125
		Dissolved Selenium (Se)	2007/06/19		101	%	75 - 125
		Dissolved Thallium (Tl)	2007/06/19		107	%	75 - 125
		Dissolved Zinc (Zn)	2007/06/19		106	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/06/19	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/06/19	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/06/19	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/06/19	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/06/19	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/06/19	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/06/19	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/06/19	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/06/19	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/06/19	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/06/19	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/06/19	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/06/19	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/06/19	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/06/19	<0.5		ug/L	
		Dissolved Potassium (K)	2007/06/19	<50		ug/L	
		Dissolved Selenium (Se)	2007/06/19	<0.5		ug/L	

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Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA724712

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1682735 AA1	BLANK	Dissolved Silver (Ag)	2007/06/19	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/06/19	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/06/19	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/06/19	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/06/19	<0.5		ug/L	
		Dissolved Uranium (U)	2007/06/19	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/06/19	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/06/19	<0.5		ug/L	
	RPD [F61517-01]	Dissolved Aluminum (Al)	2007/06/19	3.6		%	25
		Dissolved Antimony (Sb)	2007/06/19	NC		%	25
		Dissolved Arsenic (As)	2007/06/19	0.8		%	25
		Dissolved Barium (Ba)	2007/06/19	2.0		%	25
		Dissolved Beryllium (Be)	2007/06/19	NC		%	25
		Dissolved Bismuth (Bi)	2007/06/19	NC		%	25
		Dissolved Cadmium (Cd)	2007/06/19	NC		%	25
		Dissolved Chromium (Cr)	2007/06/19	NC		%	25
		Dissolved Cobalt (Co)	2007/06/19	NC		%	25
		Dissolved Copper (Cu)	2007/06/19	NC		%	25
		Dissolved Lead (Pb)	2007/06/19	3.6		%	25
		Dissolved Lithium (Li)	2007/06/19	NC		%	25
		Dissolved Manganese (Mn)	2007/06/19	1.5		%	25
		Dissolved Molybdenum (Mo)	2007/06/19	0.1		%	25
		Dissolved Nickel (Ni)	2007/06/19	NC		%	25
		Dissolved Potassium (K)	2007/06/19	2.6		%	25
		Dissolved Selenium (Se)	2007/06/19	NC		%	25
		Dissolved Silver (Ag)	2007/06/19	NC		%	25
		Dissolved Strontium (Sr)	2007/06/19	2.3		%	25
		Dissolved Thallium (Tl)	2007/06/19	NC		%	25
		Dissolved Tin (Sn)	2007/06/19	NC		%	25
		Dissolved Titanium (Ti)	2007/06/19	NC		%	25
		Dissolved Uranium (U)	2007/06/19	0.5		%	25
		Dissolved Vanadium (V)	2007/06/19	NC		%	25
		Dissolved Zinc (Zn)	2007/06/19	NC		%	25
	RPD [F61541-01]	Dissolved Aluminum (Al)	2007/06/19	NC		%	25
		Dissolved Antimony (Sb)	2007/06/19	NC		%	25
		Dissolved Arsenic (As)	2007/06/19	NC		%	25
		Dissolved Barium (Ba)	2007/06/19	NC		%	25
		Dissolved Beryllium (Be)	2007/06/19	NC		%	25
		Dissolved Bismuth (Bi)	2007/06/19	NC		%	25
		Dissolved Cadmium (Cd)	2007/06/19	NC		%	25
		Dissolved Chromium (Cr)	2007/06/19	NC		%	25
		Dissolved Cobalt (Co)	2007/06/19	NC		%	25
		Dissolved Copper (Cu)	2007/06/19	NC		%	25
		Dissolved Lead (Pb)	2007/06/19	NC		%	25
		Dissolved Lithium (Li)	2007/06/19	NC		%	25
		Dissolved Manganese (Mn)	2007/06/19	NC		%	25
		Dissolved Molybdenum (Mo)	2007/06/19	NC		%	25
		Dissolved Nickel (Ni)	2007/06/19	NC		%	25
		Dissolved Potassium (K)	2007/06/19	NC		%	25
		Dissolved Selenium (Se)	2007/06/19	NC		%	25
		Dissolved Silver (Ag)	2007/06/19	NC		%	25
		Dissolved Strontium (Sr)	2007/06/19	NC		%	25
		Dissolved Thallium (Tl)	2007/06/19	NC		%	25
		Dissolved Tin (Sn)	2007/06/19	NC		%	25
		Dissolved Titanium (Ti)	2007/06/19	NC		%	25

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Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA724712

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1682735 AA1	RPD [F61541-01]	Dissolved Uranium (U)	2007/06/19	NC		%	25
		Dissolved Vanadium (V)	2007/06/19	NC		%	25
		Dissolved Zinc (Zn)	2007/06/19	NC		%	25
1682862 AH3	MATRIX SPIKE	Bromide (Br)	2007/06/18		110	%	80 - 120
	SPIKE	Bromide (Br)	2007/06/18		105	%	80 - 120
	BLANK	Bromide (Br)	2007/06/18	<0.1		mg/L	
	RPD	Bromide (Br)	2007/06/18	NC		%	25
1683352 WAY	MATRIX SPIKE	Fluoride (F)	2007/06/19		115	%	80 - 120
	SPIKE	Fluoride (F)	2007/06/19		108	%	80 - 120
	BLANK	Fluoride (F)	2007/06/19	<0.01		mg/L	
	RPD	Fluoride (F)	2007/06/19	0		%	25
1683540 SC2	MATRIX SPIKE	Total Phosphorus (P)	2007/06/20		90	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/06/20		105	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/06/20	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/06/20	NC		%	25
1683546 SC2	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/06/19		106	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/06/19		100	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/06/19	<0.5		mg/L	
	RPD	Dissolved Chloride (Cl)	2007/06/19	0.2		%	20
1683577 SC2	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/06/19		110	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/06/19		91	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/06/19	<0.5		mg/L	
	RPD	Dissolved Sulphate (SO4)	2007/06/19	0.1		%	20
1684412 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/06/19		104	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/06/19		106	%	80 - 120
	BLANK	Total Dissolved Solids	2007/06/19	<10		mg/L	
	RPD	Total Dissolved Solids	2007/06/19	0.4		%	25
1684483 MX	MATRIX SPIKE	Orthophosphate (P)	2007/06/19		94	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/06/19		94	%	80 - 120
	BLANK	Orthophosphate (P)	2007/06/19	<0.001		mg/L	
	RPD	Orthophosphate (P)	2007/06/19	NC		%	20
1685560 FS1	MATRIX SPIKE	Total Suspended Solids	2007/06/19		101	%	N/A
	SPIKE	Total Suspended Solids	2007/06/19		101	%	N/A
	BLANK	Total Suspended Solids	2007/06/19	<4		mg/L	
	RPD	Total Suspended Solids	2007/06/19	0		%	25
1686567 SC2	MATRIX SPIKE	Ammonia (N)	2007/06/20		108	%	80 - 120
	SPIKE	Ammonia (N)	2007/06/20		99	%	80 - 120
	BLANK	Ammonia (N)	2007/06/20	<0.005		mg/L	
	RPD	Ammonia (N)	2007/06/20	NC		%	25
1690790 MX	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/06/21		108	%	80 - 120
	SPIKE	Dissolved Organic Carbon (C)	2007/06/21		103	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/06/21	<0.5		mg/L	
	RPD	Dissolved Organic Carbon (C)	2007/06/21	0.2		%	20

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference

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Your C.O.C. #: 08194554

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/06/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A725184

Received: 2007/06/13, 14:25

Sample Matrix: Water

Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	9	2007/06/15	2007/06/18	ING413 Rev.1.7	Based on SM2320B
Bromide (IC-EC)	9	N/A	2007/06/18	BRN SOP-00002 V1.0	SM 4110 B
Chloride by Automated Colourimetry	9	N/A	2007/06/19	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	9	N/A	2007/06/15	ING211 Rev. 2.4	Based on SM-5310C
Conductance - water	9	N/A	2007/06/18	ING413 REV 1.7	Based on SM-2510B
Fluoride	9	N/A	2007/06/19	ING222 Rev.4.2	Based SM - 4500 F C
Hardness (calculated as CaCO3)	9	N/A	2007/06/18		
Mercury (dissolved; low level)	9	2007/06/15	2007/06/19	BRN SOP-00044 V1.0	Based on EPA 245.1
Elements by ICP-AES (dissolved)	9	2007/06/15	2007/06/15	BRN SOP-00040 V1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) @	9	2007/06/18	2007/06/18	BRN SOP-00042 V1.0	Based on EPA 200.8
Ammonia (N)	9	N/A	2007/06/15	ING232 Rev.3.5	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	9	N/A	2007/06/15	ING233 Rev.4.4	Based on EPA 353.2
Nitrite (N) (low level)	9	N/A	2007/06/15	ING233 Rev.4.4	EPA 353.2
Nitrogen - Nitrate (as N)	9	N/A	2007/06/15		
pH Water	9	N/A	2007/06/16	BRN SOP-00014 V2.0	Based on SM-4500H+B
Orthophosphate by Konelab @	9	N/A	2007/06/19	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	9	N/A	2007/06/19	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	9	N/A	2007/06/16	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	9	N/A	2007/06/18	ING237 Rev.5.0	SM 4500
Total Suspended Solids @	9	N/A	2007/06/19	ING444 Rev.2.3	Based on SM - 2540 D
Turbidity	9	N/A	2007/06/15	BRN SOP-00021 V2.0	SM - 2130B

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

(1) SCC/CAEAL

..12

Your C.O.C. #: 08194554

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/06/20

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

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Page 2 of 16

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F63763	F63770	F63771	F63772		
Sampling Date		2007/06/10	2007/06/10	2007/06/10	2007/06/10		
COC Number		08194554	08194554	08194554	08194554		
	Units	MW 05-1B	MW 05-5B	MW 05-3A	MW 05-3B	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.34	0.28	0.28	0.20	0.01	1683352
Calculated Parameters							
Nitrate (N)	mg/L	0.017	0.006	0.178	0.238	0.002	1677848
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	130	160	140	129	0.5	1677847
Dissolved Organic Carbon (C)	mg/L	<0.5	0.8	0.9	<0.5	0.5	1678764
Alkalinity (Total as CaCO ₃)	mg/L	110	108	97.7	85.8	0.5	1679751
Anions							
Orthophosphate (P)	mg/L	0.045	0.003	0.004	0.003	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	14.6	44.1	33.4	37.0	0.5	1683577
Dissolved Chloride (Cl)	mg/L	1.0	1.5	3.5	3.1	0.5	1683546
Nutrients							
Ammonia (N)	mg/L	0.194	0.017	<0.005	<0.005	0.005	1678793
Nitrate plus Nitrite (N)	mg/L	0.022	0.006	0.178	0.238	0.002	1678985
Nitrite (N)	mg/L	0.005	<0.002	<0.002	<0.002	0.002	1678992
Total Phosphorus (P)	mg/L	0.200	0.006	<0.005	<0.005	0.005	1678360
Physical Properties							
Conductivity	uS/cm	245	302	268	253	1	1679748
pH	pH Units	8.2	8.1	8.1	8.0	0.1	1679724
Physical Properties							
Total Suspended Solids	mg/L	5	<4	<4	<4	4	1683575
Total Dissolved Solids	mg/L	114	156	158	138	10	1680644
Turbidity	NTU	18.8	3.7	3.4	0.2	0.1	1677261
RDL = Reportable Detection Limit							

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F63773	F63774		F63775		
Sampling Date		2007/06/10	2007/06/10		2007/06/10		
COC Number		08194554	08194554		08194554		
	Units	MW 05-1A	MW 05-4A	RDL	MW 06-12S	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	0.1	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.53	0.90	0.01	1.14	0.01	1683352
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1677848
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	136	174	0.5	314	0.5	1677847
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	0.5	1.6	0.5	1678764
Alkalinity (Total as CaCO ₃)	mg/L	101	112	0.5	132	0.5	1679751
Anions							
Orthophosphate (P)	mg/L	0.009	0.003	0.001	0.018	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	29.6	56.8	0.5	273	5	1683577
Dissolved Chloride (Cl)	mg/L	2.5	1.4	0.5	<0.5	0.5	1683546
Nutrients							
Ammonia (N)	mg/L	0.128	0.023	0.005	0.194	0.005	1678793
Nitrate plus Nitrite (N)	mg/L	0.004	0.003	0.002	<0.002	0.002	1678985
Nitrite (N)	mg/L	0.006	0.002	0.002	<0.002	0.002	1678992
Total Phosphorus (P)	mg/L	<0.005	<0.005	0.005	0.022	0.005	1678360
Physical Properties							
Conductivity	uS/cm	263	334	1	801	1	1679748
pH	pH Units	8.1	8.2	0.1	8.2	0.1	1679724
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	4	<4	4	1683575
Total Dissolved Solids	mg/L	146	188	10	494	10	1680644
Turbidity	NTU	7.8	0.4	0.1	0.1	0.1	1677261
RDL = Reportable Detection Limit							

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		F63776	F63777		
Sampling Date		2007/06/10	2007/06/10		
COC Number		08194554	08194554		
	Units	MW 05-4B	MW 06-11S	RDL	QC Batch
Misc. Inorganics					
Bromide (Br)	mg/L	<0.1	<0.1	0.1	1682862
Fluoride (F)	mg/L	0.50	2.17	0.01	1683352
Calculated Parameters					
Nitrate (N)	mg/L	0.003	<0.002	0.002	1677848
Misc. Inorganics					
Dissolved Hardness (CaCO ₃)	mg/L	113	191	0.5	1677847
Dissolved Organic Carbon (C)	mg/L	0.9	<0.5	0.5	1678764
Alkalinity (Total as CaCO ₃)	mg/L	69.4	137	0.5	1679751
Anions					
Orthophosphate (P)	mg/L	0.006	0.016	0.001	1684483
Dissolved Sulphate (SO ₄)	mg/L	47.8	30.4	0.5	1683577
Dissolved Chloride (Cl)	mg/L	0.7	1.8	0.5	1683546
Nutrients					
Ammonia (N)	mg/L	0.032	0.162	0.005	1678793
Nitrate plus Nitrite (N)	mg/L	0.003	<0.002	0.002	1678985
Nitrite (N)	mg/L	<0.002	<0.002	0.002	1678992
Total Phosphorus (P)	mg/L	0.007	0.027	0.005	1678360
Physical Properties					
Conductivity	uS/cm	239	326	1	1679748
pH	pH Units	8.0	8.3	0.1	1679724
Physical Properties					
Total Suspended Solids	mg/L	<4	<4	4	1683575
Total Dissolved Solids	mg/L	132	160	10	1680644
Turbidity	NTU	12.8	0.4	0.1	1677261
RDL = Reportable Detection Limit					

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63763	F63770	F63771	F63772		
Sampling Date		2007/06/10	2007/06/10	2007/06/10	2007/06/10		
COC Number		08194554	08194554	08194554	08194554		
	Units	MW 05-1B	MW 05-5B	MW 05-3A	MW 05-3B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1680303
Dissolved Calcium (Ca)	mg/L	44.0	53.3	47.0	43.4	0.05	1680303
Dissolved Iron (Fe)	mg/L	3.74	0.306	0.393	<0.005	0.005	1680303
Dissolved Magnesium (Mg)	mg/L	4.82	6.68	5.48	5.05	0.05	1680303
Dissolved Phosphorus (P)	mg/L	0.2	<0.1	<0.1	<0.1	0.1	1680303
Dissolved Silicon (Si)	mg/L	5.08	2.99	4.05	4.07	0.05	1680303
Dissolved Sodium (Na)	mg/L	1.67	0.80	1.15	1.15	0.05	1680303
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1680303
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	7.0	4.7	0.5	1.1	0.2	1681481
Dissolved Antimony (Sb)	ug/L	0.07	0.13	0.26	0.13	0.05	1681481
Dissolved Arsenic (As)	ug/L	6.1	1.4	0.5	0.4	0.1	1681481
Dissolved Barium (Ba)	ug/L	212	36.0	55.3	73.2	0.02	1681481
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Cadmium (Cd)	ug/L	0.01	0.03	7.92	13.4	0.01	1681481
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1681481
Dissolved Cobalt (Co)	ug/L	0.11	0.47	0.25	<0.02	0.02	1681481
Dissolved Copper (Cu)	ug/L	0.3	0.2	0.2	3.9	0.1	1681481
Dissolved Lead (Pb)	ug/L	0.04	0.16	0.10	0.28	0.02	1681481
Dissolved Lithium (Li)	ug/L	0.4	0.9	0.7	0.9	0.2	1681481
Dissolved Manganese (Mn)	ug/L	233	439	75.6	2.81	0.02	1681481
Dissolved Molybdenum (Mo)	ug/L	3.28	2.36	1.05	0.65	0.02	1681481
Dissolved Nickel (Ni)	ug/L	0.7	2.9	3.0	2.9	0.5	1681481
Dissolved Potassium (K)	ug/L	1200	710	958	918	50	1681481
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	11.5	13.9	0.5	1681481
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1681481
Dissolved Strontium (Sr)	ug/L	115	103	121	122	0.01	1681481
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Tin (Sn)	ug/L	1.73	0.59	1.22	<0.05	0.05	1681481
Dissolved Titanium (Ti)	ug/L	0.9	<0.5	<0.5	<0.5	0.5	1681481
Dissolved Uranium (U)	ug/L	0.09	3.96	2.69	1.27	0.01	1681481
Dissolved Vanadium (V)	ug/L	0.53	<0.05	<0.05	<0.05	0.05	1681481
RDL = Reportable Detection Limit							

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63763	F63770	F63771	F63772		
Sampling Date		2007/06/10	2007/06/10	2007/06/10	2007/06/10		
COC Number		08194554	08194554	08194554	08194554		
	Units	MW 05-1B	MW 05-5B	MW 05-3A	MW 05-3B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	2.3	29.8	786	1080	0.5	1681481
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63773	F63774	F63775	F63776		
Sampling Date		2007/06/10	2007/06/10	2007/06/10	2007/06/10		
COC Number		08194554	08194554	08194554	08194554		
	Units	MW 05-1A	MW 05-4A	MW 06-12S	MW 05-4B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	0.013	<0.008	0.008	1680303
Dissolved Calcium (Ca)	mg/L	45.1	63.0	95.6	40.2	0.05	1680303
Dissolved Iron (Fe)	mg/L	0.614	0.031	<0.005	1.34	0.005	1680303
Dissolved Magnesium (Mg)	mg/L	5.65	3.99	18.3	3.07	0.05	1680303
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1680303
Dissolved Silicon (Si)	mg/L	4.62	3.57	8.37	6.17	0.05	1680303
Dissolved Sodium (Na)	mg/L	1.74	1.38	58.1	1.14	0.05	1680303
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1680303
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	0.5	2.0	1.2	19.3	0.2	1681481
Dissolved Antimony (Sb)	ug/L	0.09	0.10	1.37	0.11	0.05	1681481
Dissolved Arsenic (As)	ug/L	7.4	0.5	2.8	6.5	0.1	1681481
Dissolved Barium (Ba)	ug/L	23.4	83.8	17.9	53.8	0.02	1681481
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Cadmium (Cd)	ug/L	0.01	0.02	0.01	3.83	0.01	1681481
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1681481
Dissolved Cobalt (Co)	ug/L	<0.02	0.05	0.42	2.76	0.02	1681481
Dissolved Copper (Cu)	ug/L	<0.1	0.2	<0.1	0.7	0.1	1681481
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	<0.02	0.50	0.02	1681481
Dissolved Lithium (Li)	ug/L	0.6	0.4	7.3	0.6	0.2	1681481
Dissolved Manganese (Mn)	ug/L	224	737	197	2930	0.02	1681481
Dissolved Molybdenum (Mo)	ug/L	5.42	5.79	5.77	1.02	0.02	1681481
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	1.0	6.4	0.5	1681481
Dissolved Potassium (K)	ug/L	1210	1990	2500	1690	50	1681481
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	0.5	<0.5	0.5	1681481
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1681481
Dissolved Strontium (Sr)	ug/L	140	182	343	143	0.01	1681481
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1681481
Dissolved Tin (Sn)	ug/L	<0.05	0.14	0.36	0.17	0.05	1681481
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	1.1	0.5	1681481
Dissolved Uranium (U)	ug/L	0.06	0.70	13.8	0.24	0.01	1681481
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	1.36	0.07	0.05	1681481

RDL = Reportable Detection Limit

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63773	F63774	F63775	F63776		
Sampling Date		2007/06/10	2007/06/10	2007/06/10	2007/06/10		
COC Number		08194554	08194554	08194554	08194554		
	Units	MW 05-1A	MW 05-4A	MW 06-12S	MW 05-4B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	5.3	2.7	<0.5	189	0.5	1681481
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63777		
Sampling Date		2007/06/10		
COC Number		08194554		
	Units	MW 06-11S	RDL	QC Batch

Dissolved Metals by ICP				
Dissolved Boron (B)	mg/L	<0.008	0.008	1680303
Dissolved Calcium (Ca)	mg/L	56.9	0.05	1680303
Dissolved Iron (Fe)	mg/L	0.271	0.005	1680303
Dissolved Magnesium (Mg)	mg/L	11.8	0.05	1680303
Dissolved Phosphorus (P)	mg/L	<0.1	0.1	1680303
Dissolved Silicon (Si)	mg/L	4.50	0.05	1680303
Dissolved Sodium (Na)	mg/L	3.15	0.05	1680303
Dissolved Zirconium (Zr)	mg/L	<0.005	0.005	1680303
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	35.0	0.2	1681481
Dissolved Antimony (Sb)	ug/L	0.50	0.05	1681481
Dissolved Arsenic (As)	ug/L	3.6	0.1	1681481
Dissolved Barium (Ba)	ug/L	41.9	0.02	1681481
Dissolved Beryllium (Be)	ug/L	<0.05	0.05	1681481
Dissolved Bismuth (Bi)	ug/L	<0.05	0.05	1681481
Dissolved Cadmium (Cd)	ug/L	0.05	0.01	1681481
Dissolved Chromium (Cr)	ug/L	<0.2	0.2	1681481
Dissolved Cobalt (Co)	ug/L	0.21	0.02	1681481
Dissolved Copper (Cu)	ug/L	<0.1	0.1	1681481
Dissolved Lead (Pb)	ug/L	0.05	0.02	1681481
Dissolved Lithium (Li)	ug/L	2.4	0.2	1681481
Dissolved Manganese (Mn)	ug/L	96.9	0.02	1681481
Dissolved Molybdenum (Mo)	ug/L	21.4	0.02	1681481
Dissolved Nickel (Ni)	ug/L	<0.5	0.5	1681481
Dissolved Potassium (K)	ug/L	1300	50	1681481
Dissolved Selenium (Se)	ug/L	0.5	0.5	1681481
Dissolved Silver (Ag)	ug/L	<0.01	0.01	1681481
Dissolved Strontium (Sr)	ug/L	97.7	0.01	1681481
Dissolved Thallium (Tl)	ug/L	<0.05	0.05	1681481
Dissolved Tin (Sn)	ug/L	0.08	0.05	1681481
Dissolved Titanium (Ti)	ug/L	<0.5	0.5	1681481
Dissolved Uranium (U)	ug/L	4.62	0.01	1681481
Dissolved Vanadium (V)	ug/L	1.71	0.05	1681481
RDL = Reportable Detection Limit				

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		F63777		
Sampling Date		2007/06/10		
COC Number		08194554		
	Units	MW 06-11S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	<0.5	0.5	1681481
Mercury by CVAA				
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	1680240

RDL = Reportable Detection Limit

Maxxam Job #: A725184
Report Date: 2007/06/20

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: JS

General Comments

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA725184

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1677261 CK	SPIKE	Turbidity	2007/06/15		102	%	80 - 120
	BLANK	Turbidity	2007/06/15	<0.1		NTU	
	RPD [F63777-01]	Turbidity	2007/06/15	NC		%	25
1678360 MX	MATRIX SPIKE	Total Phosphorus (P)	2007/06/18		94	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/06/18		100	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/06/18	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/06/18	0.04		%	25
1678764 MX	MATRIX SPIKE						
	[F63777-01]	Dissolved Organic Carbon (C)	2007/06/15		113	%	80 - 120
	SPIKE	Dissolved Organic Carbon (C)	2007/06/15		95	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/06/15	<0.5		mg/L	
	RPD [F63777-01]	Dissolved Organic Carbon (C)	2007/06/15	NC		%	20
1678793 SC2	MATRIX SPIKE	Ammonia (N)	2007/06/15		97	%	80 - 120
	SPIKE	Ammonia (N)	2007/06/15		87	%	80 - 120
	BLANK	Ammonia (N)	2007/06/15	<0.005		mg/L	
	RPD	Ammonia (N)	2007/06/15	NC		%	25
1678985 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/06/15		103	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/06/15		104	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/06/15	<0.002		mg/L	
	RPD	Nitrate plus Nitrite (N)	2007/06/15	5.3		%	25
1678992 BB3	MATRIX SPIKE	Nitrite (N)	2007/06/15		104	%	80 - 120
	SPIKE	Nitrite (N)	2007/06/15		101	%	80 - 120
	BLANK	Nitrite (N)	2007/06/15	<0.002		mg/L	
	RPD	Nitrite (N)	2007/06/15	NC		%	25
1679724 CK	SPIKE	pH	2007/06/16		101	%	96 - 104
	RPD	pH	2007/06/16	0.3		%	25
1679748 CK	SPIKE	Conductivity	2007/06/18		101	%	80 - 120
	BLANK	Conductivity	2007/06/18	<1		uS/cm	
	RPD	Conductivity	2007/06/18	1.2		%	25
1679751 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/06/18		91	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/06/18		97	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/06/18	<0.5		mg/L	
	RPD	Alkalinity (Total as CaCO3)	2007/06/18	0.7		%	25
1680240 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/06/19		109	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/06/19		114	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/06/19		102	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/06/19	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/06/19	NC		%	25
1680303 GS2	BLANK	Dissolved Boron (B)	2007/06/15	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/06/15	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/06/15	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/06/15	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/06/15	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/06/15	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/06/15	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/06/15	<0.005		mg/L	
	RPD	Dissolved Calcium (Ca)	2007/06/15	1.4		%	25
		Dissolved Magnesium (Mg)	2007/06/15	2.2		%	25
1680644 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/06/16		104	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/06/16		104	%	80 - 120
	BLANK	Total Dissolved Solids	2007/06/16	<10		mg/L	
	RPD	Total Dissolved Solids	2007/06/16	1.2		%	25
1681481 AA1	MATRIX SPIKE						
	[F63763-01]	Dissolved Arsenic (As)	2007/06/18		122	%	75 - 125
		Dissolved Cadmium (Cd)	2007/06/18		109	%	75 - 125

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA725184

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1681481 AA1	MATRIX SPIKE [F63763-01]	Dissolved Chromium (Cr)	2007/06/18		111	%	75 - 125
		Dissolved Cobalt (Co)	2007/06/18		111	%	75 - 125
		Dissolved Copper (Cu)	2007/06/18		115	%	75 - 125
		Dissolved Lead (Pb)	2007/06/18		116	%	75 - 125
		Dissolved Selenium (Se)	2007/06/18		123	%	75 - 125
		Dissolved Thallium (Tl)	2007/06/18		109	%	75 - 125
		Dissolved Zinc (Zn)	2007/06/18		123	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/06/18		99	%	75 - 125
		Dissolved Cadmium (Cd)	2007/06/18		96	%	75 - 125
		Dissolved Chromium (Cr)	2007/06/18		110	%	75 - 125
		Dissolved Cobalt (Co)	2007/06/18		108	%	75 - 125
		Dissolved Copper (Cu)	2007/06/18		109	%	75 - 125
		Dissolved Lead (Pb)	2007/06/18		109	%	75 - 125
		Dissolved Selenium (Se)	2007/06/18		100	%	75 - 125
	BLANK	Dissolved Thallium (Tl)	2007/06/18		110	%	75 - 125
		Dissolved Zinc (Zn)	2007/06/18		119	%	75 - 125
		Dissolved Aluminum (Al)	2007/06/18	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/06/18	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/06/18	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/06/18	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/06/18	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/06/18	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/06/18	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/06/18	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/06/18	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/06/18	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/06/18	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/06/18	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/06/18	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/06/18	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/06/18	<0.5		ug/L	
		Dissolved Potassium (K)	2007/06/18	<50		ug/L	
		Dissolved Selenium (Se)	2007/06/18	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/06/18	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/06/18	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/06/18	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/06/18	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/06/18	<0.5		ug/L	
		Dissolved Uranium (U)	2007/06/18	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/06/18	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/06/18	<0.5		ug/L	
	RPD [F63763-01]	Dissolved Aluminum (Al)	2007/06/18	6.4		%	25
		Dissolved Antimony (Sb)	2007/06/18	NC		%	25
		Dissolved Arsenic (As)	2007/06/18	2.4		%	25
		Dissolved Barium (Ba)	2007/06/18	0.5		%	25
		Dissolved Beryllium (Be)	2007/06/18	NC		%	25
		Dissolved Bismuth (Bi)	2007/06/18	NC		%	25
		Dissolved Cadmium (Cd)	2007/06/18	NC		%	25
		Dissolved Chromium (Cr)	2007/06/18	NC		%	25
		Dissolved Cobalt (Co)	2007/06/18	4.5		%	25
		Dissolved Copper (Cu)	2007/06/18	NC		%	25
		Dissolved Lead (Pb)	2007/06/18	NC		%	25
		Dissolved Lithium (Li)	2007/06/18	NC		%	25
		Dissolved Manganese (Mn)	2007/06/18	2.4		%	25

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA725184

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1681481 AA1	RPD [F63763-01]	Dissolved Molybdenum (Mo)	2007/06/18	5.6		%	25
		Dissolved Nickel (Ni)	2007/06/18	NC		%	25
		Dissolved Potassium (K)	2007/06/18	0.5		%	25
		Dissolved Selenium (Se)	2007/06/18	NC		%	25
		Dissolved Silver (Ag)	2007/06/18	NC		%	25
		Dissolved Strontium (Sr)	2007/06/18	0.6		%	25
		Dissolved Thallium (Tl)	2007/06/18	NC		%	25
		Dissolved Tin (Sn)	2007/06/18	0.5		%	25
		Dissolved Titanium (Ti)	2007/06/18	NC		%	25
		Dissolved Uranium (U)	2007/06/18	1.1		%	25
		Dissolved Vanadium (V)	2007/06/18	3.8		%	25
		Dissolved Zinc (Zn)	2007/06/18	NC		%	25
1682862 AH3	MATRIX SPIKE	Bromide (Br)	2007/06/18		110	%	80 - 120
	SPIKE	Bromide (Br)	2007/06/18		105	%	80 - 120
	BLANK	Bromide (Br)	2007/06/18	<0.1		mg/L	
	RPD	Bromide (Br)	2007/06/18	NC		%	25
1683352 WAY	MATRIX SPIKE	Fluoride (F)	2007/06/19		115	%	80 - 120
	[F63775-01]	Fluoride (F)	2007/06/19		108	%	80 - 120
	SPIKE	Fluoride (F)	2007/06/19	<0.01		mg/L	
	BLANK	Fluoride (F)	2007/06/19	0		%	25
	RPD [F63775-01]	Fluoride (F)	2007/06/19			%	25
1683546 SC2	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/06/19		106	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/06/19		100	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/06/19	<0.5		mg/L	
	RPD [F63763-01]	Dissolved Chloride (Cl)	2007/06/19	NC		%	20
1683575 FS1	MATRIX SPIKE	Total Suspended Solids	2007/06/19		101	%	N/A
	SPIKE	Total Suspended Solids	2007/06/19		104	%	N/A
	BLANK	Total Suspended Solids	2007/06/19	<4		mg/L	
	RPD [F63773-01]	Total Suspended Solids	2007/06/19	NC		%	25
1683577 SC2	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/06/19		110	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/06/19		91	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/06/19	<0.5		mg/L	
	RPD [F63763-01]	Dissolved Sulphate (SO4)	2007/06/19	0.6		%	20
1684483 MX	MATRIX SPIKE	Orthophosphate (P)	2007/06/19		94	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/06/19		94	%	80 - 120
	BLANK	Orthophosphate (P)	2007/06/19	<0.001		mg/L	
	RPD [F63774-01]	Orthophosphate (P)	2007/06/19	NC		%	20

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08195073, 08195074

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/07/25

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A731839

Received: 2007/07/18, 09:45

Sample Matrix: Water

Samples Received: 21

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	21	2007/07/19	2007/07/19	BRN SOP-00264 R2.0	Based on SM2320B
Bromide (IC-EC)	21	N/A	2007/07/23	BRN SOP-00251 R1.0	SM 4110 B
Chloride by Automated Colourimetry	21	N/A	2007/07/19	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	21	N/A	2007/07/23	BRN SOP-00224 R3.0	Based on SM-5310C
Conductance - water	21	N/A	2007/07/19	BRN SOP-00264 R2.0	Based on SM-2510B
Fluoride	21	N/A	2007/07/19	BRN SOP-00225 R1.0	Based SM - 4500 F C
Hardness (calculated as CaCO ₃)	21	N/A	2007/07/25		
Mercury (dissolved; low level)	21	2007/07/18	2007/07/19	BRN SOP-00205	Based on EPA 245.1
Elements by ICP-AES (dissolved)	21	2007/07/24	2007/07/24	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) @	21	2007/07/20	2007/07/20	BRN SOP-00204	Based on EPA 200.8
Ammonia (N)	21	N/A	2007/07/24	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	21	N/A	2007/07/18	BRN SOP-00233 R1.0	Based on EPA 353.2
Nitrite (N) (low level)	21	N/A	2007/07/18	BRN SOP-00233 R1.0	EPA 353.2
Nitrogen - Nitrate (as N)	21	N/A	2007/07/19		
pH Water	21	N/A	2007/07/19	BRN SOP-00264 R2.0	Based on SM-4500H+B
Orthophosphate by Konelab @	21	N/A	2007/07/23	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	21	N/A	2007/07/19	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	21	N/A	2007/07/19	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	21	N/A	2007/07/24	BRN SOP-00236 R4.0	SM 4500
Total Suspended Solids @	21	N/A	2007/07/23	BRN SOP-00277 R2.0	Based on SM - 2540 D
Turbidity	21	N/A	2007/07/19	BRN SOP-00265 R3.0	SM - 2130B

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

(1) SCC/CAEAL

..12

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08195073, 08195074

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/07/25

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 27

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09427		G09429		
Sampling Date		2007/07/12		2007/07/12		
COC Number		08195073		08195073		
	Units	MW 05-1A	RDL	MW 05-1B	RDL	QC Batch
Misc. Inorganics						
Bromide (Br)	mg/L	<0.1	0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	0.51	0.01	0.19	0.01	1741119
Calculated Parameters						
Nitrate (N)	mg/L	<0.002	0.002	0.023	0.002	1739452
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	133	0.5	177	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	0.5	0.5	5.7	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	102	0.5	175	0.5	1740766
Anions						
Orthophosphate (P)	mg/L	0.002	0.001	0.008	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	25.0	0.5	1.4	0.5	1741802
Dissolved Chloride (Cl)	mg/L	0.5	0.5	<0.5	0.5	1741751
Nutrients						
Ammonia (N)	mg/L	0.083	0.005	0.067	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	0.002	0.002	0.072	0.002	1739498
Nitrite (N)	mg/L	0.003	0.002	0.049	0.002	1739502
Total Phosphorus (P)	mg/L	0.020	0.005	0.60	0.05	1740956
Physical Properties						
Conductivity	uS/cm	245	1	315	1	1740764
pH	pH Units	8.0	0.1	7.9	0.1	1740760
Physical Properties						
Total Suspended Solids	mg/L	<4	4	13	4	1747095
Total Dissolved Solids	mg/L	160	10	212	10	1742046
Turbidity	NTU	16.1	0.1	33.4	0.1	1739497
RDL = Reportable Detection Limit						

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09430	G09431	G09432	G09433		
Sampling Date		2007/07/12	2007/07/12	2007/07/13	2007/07/13		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-2A	MW 05-2B	MW 05-3A	MW 05-3B	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	0.30	0.08	0.31	0.18	0.01	1741119
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.023	0.085	0.226	0.002	1739452
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	220	132	147	99.9	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	<0.5	0.8	0.6	1.3	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	185	124	111	87.1	0.5	1740766
Anions							
Orthophosphate (P)	mg/L	0.004	0.007	0.004	0.004	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	27.4	6.5	30.9	33.0	0.5	1741802
Dissolved Chloride (Cl)	mg/L	0.9	1.0	<0.5	0.5	0.5	1741751
Nutrients							
Ammonia (N)	mg/L	0.063	0.028	<0.005	0.058	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	<0.002	0.066	0.085	0.226	0.002	1739498
Nitrite (N)	mg/L	<0.002	0.043	<0.002	<0.002	0.002	1739502
Total Phosphorus (P)	mg/L	<0.005	0.233	<0.005	<0.005	0.005	1740956
Physical Properties							
Conductivity	uS/cm	385	246	277	240	1	1740764
pH	pH Units	8.2	8.0	8.0	7.9	0.1	1740760
Physical Properties							
Total Suspended Solids	mg/L	<4	27	<4	<4	4	1747095
Total Dissolved Solids	mg/L	262	160	194	160	10	1742046
Turbidity	NTU	1.6	114	10.4	1.5	0.1	1739497
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09434	G09435	G09436	G09437		
Sampling Date		2007/07/14	2007/07/14	2007/07/13	2007/07/13		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-4A	MW 05-4B	MW 05-5A	MW 05-5B	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	0.93	0.52	2.23	0.27	0.01	1741119
Calculated Parameters							
Nitrate (N)	mg/L	0.023	0.002	<0.002	<0.002	0.002	1739452
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	167	104	280	156	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	0.7	1.0	1.7	<0.5	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	110	66.5	228	108	0.5	1740766
Anions							
Orthophosphate (P)	mg/L	0.004	0.006	0.004	0.004	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	52.0	41.7	33.4	39.6	0.5	1741802
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	0.9	0.7	0.5	1741751
Nutrients							
Ammonia (N)	mg/L	<0.005	0.042	0.081	0.013	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	0.023	0.002	<0.002	<0.002	0.002	1739498
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	1739502
Total Phosphorus (P)	mg/L	<0.005	0.007	0.015	<0.005	0.005	1740956
Physical Properties							
Conductivity	uS/cm	319	221	478	290	1	1740764
pH	pH Units	8.1	7.8	8.2	8.1	0.1	1740760
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	5	<4	4	1747095
Total Dissolved Solids	mg/L	220	142	288	191	10	1742046
Turbidity	NTU	0.4	8.7	13.2	3.0	0.1	1739497
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09440	G09441	G09442	G09443		
Sampling Date		2007/07/12	2007/07/12	2007/07/11	2007/07/11		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 05-7A	MW 05-7B	MW 06-8S	MW 06-8D	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	0.12	0.14	0.17	0.96	0.01	1741119
Calculated Parameters							
Nitrate (N)	mg/L	0.030	0.010	0.047	<0.002	0.002	1739452
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	393	71.5	63.7	262	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	7.3	<0.5	1.2	<0.5	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	213	61.3	54.1	230	0.5	1740766
Anions							
Orthophosphate (P)	mg/L	0.003	0.041	0.006	0.005	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	14.0	13.7	14.9	28.2	0.5	1741802
Dissolved Chloride (Cl)	mg/L	1.1	<0.5	<0.5	0.7	0.5	1741751
Nutrients							
Ammonia (N)	mg/L	0.048	0.038	0.030	0.063	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	0.033	0.010	0.058	<0.002	0.002	1739498
Nitrite (N)	mg/L	0.003	<0.002	0.011	<0.002	0.002	1739502
Total Phosphorus (P)	mg/L	0.007	0.043	0.037	0.008	0.005	1740956
Physical Properties							
Conductivity	uS/cm	695	146	140	450	1	1740764
pH	pH Units	11.5	8.5	7.8	8.3	0.1	1740760
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	<4	<4	4	1747095
Total Dissolved Solids	mg/L	353	96	92	266	10	1742046
Turbidity	NTU	<0.1	<0.1	2.0	2.0	0.1	1739497
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09444	G09445	G09446	G09447		
Sampling Date		2007/07/14	2007/07/14	2007/07/11	2007/07/11		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 06-9S	MW 06-9M	MW 06-10S	MW 06-10M	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	0.56	1.02	0.28	0.78	0.01	1741119
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.003	0.009	<0.002	0.002	1739452
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	133	205	136	262	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	1.1	1.4	1.4	0.9	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	109	171	118	208	0.5	1740766
Anions							
Orthophosphate (P)	mg/L	0.235	0.004	0.022	0.004	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	22.9	30.1	28.4	43.5	0.5	1741802
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	0.9	0.5	1741751
Nutrients							
Ammonia (N)	mg/L	0.018	0.057	0.015	0.043	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	<0.002	0.006	0.009	<0.002	0.002	1739498
Nitrite (N)	mg/L	<0.002	0.003	<0.002	0.006	0.002	1739502
Total Phosphorus (P)	mg/L	0.396	0.057	0.044	0.067	0.005	1740956
Physical Properties							
Conductivity	uS/cm	249	363	275	463	1	1740764
pH	pH Units	8.2	8.2	8.1	8.3	0.1	1740760
Physical Properties							
Total Suspended Solids	mg/L	<4	5	<4	10	4	1747095
Total Dissolved Solids	mg/L	154	238	168	304	10	1742046
Turbidity	NTU	1.1	17.1	0.5	48.5	0.1	1739497
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G09448	G09449		G09450		
Sampling Date		2007/07/11	2007/07/13		2007/07/12		
COC Number		08195074	08195074		08195074		
	Units	MW 06-10D	MW 06-11S	RDL	MW 06-12S	RDL	QC Batch
Misc. Inorganics							
Bromide (Br)	mg/L	<0.1	<0.1	0.1	<0.1	0.1	1747480
Fluoride (F)	mg/L	1.01	2.10	0.01	1.13	0.01	1741119
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	<0.002	0.002	0.002	0.002	1739452
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	266	162	0.5	331	0.5	1739451
Dissolved Organic Carbon (C)	mg/L	<0.5	0.7	0.5	0.6	0.5	1747851
Alkalinity (Total as CaCO ₃)	mg/L	242	133	0.5	141	0.5	1740766
Anions							
Orthophosphate (P)	mg/L	0.003	0.016	0.001	0.027	0.001	1747002
Dissolved Sulphate (SO ₄)	mg/L	15.5	31.3	0.5	263	5	1741802
Dissolved Chloride (Cl)	mg/L	0.9	<0.5	0.5	<0.5	0.5	1741751
Nutrients							
Ammonia (N)	mg/L	0.117	0.088	0.005	0.115	0.005	1749684
Nitrate plus Nitrite (N)	mg/L	0.002	<0.002	0.002	0.002	0.002	1739498
Nitrite (N)	mg/L	0.007	<0.002	0.002	<0.002	0.002	1739502
Total Phosphorus (P)	mg/L	0.019	0.021	0.005	0.037	0.005	1740956
Physical Properties							
Conductivity	uS/cm	460	310	1	777	1	1740764
pH	pH Units	8.3	8.3	0.1	8.3	0.1	1740760
Physical Properties							
Total Suspended Solids	mg/L	11	<4	4	<4	4	1747095
Total Dissolved Solids	mg/L	286	218	10	604	10	1742046
Turbidity	NTU	53.9	0.4	0.1	0.3	0.1	1739497
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09427	G09429	G09430	G09431		
Sampling Date		2007/07/12	2007/07/12	2007/07/12	2007/07/12		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1751853
Dissolved Calcium (Ca)	mg/L	44.0	61.7	57.8	41.0	0.05	1751853
Dissolved Iron (Fe)	mg/L	3.79	14.5	0.559	10.3	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	5.55	5.47	18.3	7.14	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	0.7	<0.1	0.2	0.1	1751853
Dissolved Silicon (Si)	mg/L	2.07	5.47	3.77	4.75	0.05	1751853
Dissolved Sodium (Na)	mg/L	1.80	1.08	0.58	1.18	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1751853
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	1.9	36.4	2.8	1.3	0.2	1745540
Dissolved Antimony (Sb)	ug/L	0.39	0.08	<0.05	<0.05	0.05	1745540
Dissolved Arsenic (As)	ug/L	1.8	12.8	0.5	36.0	0.1	1745540
Dissolved Barium (Ba)	ug/L	31.1	441	48.2	243	0.02	1745540
Dissolved Beryllium (Be)	ug/L	0.06	0.09	<0.05	0.06	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	0.14	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Chromium (Cr)	ug/L	0.3	<0.2	<0.2	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	0.02	0.34	0.05	0.44	0.02	1745540
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1745540
Dissolved Lead (Pb)	ug/L	0.03	<0.02	<0.02	<0.02	0.02	1745540
Dissolved Lithium (Li)	ug/L	0.5	1.3	2.2	0.4	0.2	1745540
Dissolved Manganese (Mn)	ug/L	268	746	181	1510	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	7.91	0.92	2.30	1.37	0.02	1745540
Dissolved Nickel (Ni)	ug/L	1.6	0.7	<0.5	<0.5	0.5	1745540
Dissolved Potassium (K)	ug/L	1160	1050	1970	512	50	1745540
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	139	163	158	81.1	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	<0.05	0.07	0.10	<0.05	0.05	1745540
Dissolved Titanium (Ti)	ug/L	<0.5	1.4	<0.5	<0.5	0.5	1745540
Dissolved Uranium (U)	ug/L	<0.01	0.11	7.46	0.26	0.01	1745540
Dissolved Vanadium (V)	ug/L	<0.05	1.74	<0.05	0.07	0.05	1745540
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09427	G09429	G09430	G09431		
Sampling Date		2007/07/12	2007/07/12	2007/07/12	2007/07/12		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	3.5	0.6	<0.5	<0.5	0.5	1745540
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1739364

RDL = Reportable Detection Limit

Maxxam Job #: A731839
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09432	G09433	G09434	G09435		
Sampling Date		2007/07/13	2007/07/13	2007/07/14	2007/07/14		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1751853
Dissolved Calcium (Ca)	mg/L	49.3	32.3	60.7	36.9	0.05	1751853
Dissolved Iron (Fe)	mg/L	0.696	0.317	0.045	1.26	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	5.74	4.66	3.82	2.84	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1751853
Dissolved Silicon (Si)	mg/L	4.09	4.12	3.43	6.16	0.05	1751853
Dissolved Sodium (Na)	mg/L	1.32	11.4	1.37	1.15	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1751853
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	0.2	1.0	1.5	1.0	0.2	1745540
Dissolved Antimony (Sb)	ug/L	0.21	0.18	0.09	0.07	0.05	1745540
Dissolved Arsenic (As)	ug/L	0.5	0.6	0.3	7.0	0.1	1745540
Dissolved Barium (Ba)	ug/L	54.4	123	81.9	48.3	0.02	1745540
Dissolved Beryllium (Be)	ug/L	<0.05	0.08	0.08	0.08	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	6.55	7.21	0.03	3.21	0.01	1745540
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	0.42	0.99	0.06	2.55	0.02	1745540
Dissolved Copper (Cu)	ug/L	0.2	1.6	0.3	0.2	0.1	1745540
Dissolved Lead (Pb)	ug/L	0.11	0.23	<0.02	0.08	0.02	1745540
Dissolved Lithium (Li)	ug/L	0.8	3.0	0.7	0.8	0.2	1745540
Dissolved Manganese (Mn)	ug/L	126	113	760	2920	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	0.97	0.74	5.20	1.08	0.02	1745540
Dissolved Nickel (Ni)	ug/L	3.9	4.0	<0.5	5.6	0.5	1745540
Dissolved Potassium (K)	ug/L	1050	1150	2120	1750	50	1745540
Dissolved Selenium (Se)	ug/L	7.1	12.2	<0.5	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	135	181	191	142	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	0.13	<0.05	0.05	1745540
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Uranium (U)	ug/L	3.04	1.10	0.70	0.21	0.01	1745540
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09432	G09433	G09434	G09435		
Sampling Date		2007/07/13	2007/07/13	2007/07/14	2007/07/14		
COC Number		08195073	08195073	08195073	08195073		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	797	649	3.0	180	0.5	1745540
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1739364

RDL = Reportable Detection Limit

Maxxam Job #: A731839
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09436	G09437	G09440	G09441		
Sampling Date		2007/07/13	2007/07/13	2007/07/12	2007/07/12		
COC Number		08195073	08195073	08195074	08195074		
	Units	MW 05-5A	MW 05-5B	MW 05-7A	MW 05-7B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1751853
Dissolved Calcium (Ca)	mg/L	74.5	51.6	157	25.1	0.05	1751853
Dissolved Iron (Fe)	mg/L	1.49	0.478	<0.005	<0.005	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	22.9	6.50	<0.05	2.13	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1751853
Dissolved Silicon (Si)	mg/L	3.97	3.24	2.96	3.97	0.05	1751853
Dissolved Sodium (Na)	mg/L	0.86	0.80	3.15	1.63	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1751853
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	2.2	0.8	134	6.6	0.2	1745540
Dissolved Antimony (Sb)	ug/L	3.78	<0.05	0.58	0.12	0.05	1745540
Dissolved Arsenic (As)	ug/L	3.2	1.3	0.7	1.2	0.1	1745540
Dissolved Barium (Ba)	ug/L	63.6	35.8	521	36.1	0.02	1745540
Dissolved Beryllium (Be)	ug/L	0.07	0.10	0.06	0.07	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	0.01	0.02	0.01	1745540
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	1.5	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	0.37	0.45	<0.02	0.09	0.02	1745540
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	3.3	0.2	0.1	1745540
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.32	0.09	0.02	1745540
Dissolved Lithium (Li)	ug/L	3.3	1.2	9.4	<0.2	0.2	1745540
Dissolved Manganese (Mn)	ug/L	176	517	0.25	109	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	8.54	2.04	6.83	9.24	0.02	1745540
Dissolved Nickel (Ni)	ug/L	<0.5	2.2	<0.5	<0.5	0.5	1745540
Dissolved Potassium (K)	ug/L	1800	797	5010	811	50	1745540
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	0.8	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	128	104	377	47.2	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	0.07	<0.05	0.51	<0.05	0.05	1745540
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Uranium (U)	ug/L	20.5	3.10	<0.01	0.13	0.01	1745540
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	2.82	1.37	0.05	1745540
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09436	G09437	G09440	G09441		
Sampling Date		2007/07/13	2007/07/13	2007/07/12	2007/07/12		
COC Number		08195073	08195073	08195074	08195074		
	Units	MW 05-5A	MW 05-5B	MW 05-7A	MW 05-7B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	1.9	29.8	4.7	1.5	0.5	1745540
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1739364
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09442	G09443	G09444	G09445		
Sampling Date		2007/07/11	2007/07/11	2007/07/14	2007/07/14		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 06-8S	MW 06-8D	MW 06-9S	MW 06-9M	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1751853
Dissolved Calcium (Ca)	mg/L	21.1	60.5	45.8	62.5	0.05	1751853
Dissolved Iron (Fe)	mg/L	1.34	0.177	0.620	1.99	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	2.69	27.0	4.65	11.8	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	0.4	<0.1	0.1	1751853
Dissolved Silicon (Si)	mg/L	5.46	4.71	4.29	3.67	0.05	1751853
Dissolved Sodium (Na)	mg/L	3.30	0.59	1.90	0.52	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1751853
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	4.6	8.5	3.8	1.8	0.2	1745540
Dissolved Antimony (Sb)	ug/L	25.0	0.09	<0.05	0.08	0.05	1745540
Dissolved Arsenic (As)	ug/L	1.3	4.4	9.5	1.1	0.1	1745540
Dissolved Barium (Ba)	ug/L	55.0	46.5	49.4	133	0.02	1745540
Dissolved Beryllium (Be)	ug/L	0.10	0.10	0.07	0.05	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	0.01	<0.01	0.02	0.03	0.01	1745540
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	2.43	0.36	0.03	0.06	0.02	1745540
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1745540
Dissolved Lead (Pb)	ug/L	0.04	<0.02	<0.02	0.06	0.02	1745540
Dissolved Lithium (Li)	ug/L	0.7	2.5	1.1	2.5	0.2	1745540
Dissolved Manganese (Mn)	ug/L	757	67.8	158	114	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	3.49	1.44	6.98	4.66	0.02	1745540
Dissolved Nickel (Ni)	ug/L	4.7	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Potassium (K)	ug/L	1170	1860	1270	1870	50	1745540
Dissolved Selenium (Se)	ug/L	0.8	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	62.7	166	176	78.8	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	0.05	<0.05	<0.05	0.18	0.05	1745540
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Uranium (U)	ug/L	0.03	10.9	0.39	1.39	0.01	1745540
Dissolved Vanadium (V)	ug/L	0.28	0.12	0.09	<0.05	0.05	1745540
RDL = Reportable Detection Limit							

Maxxam Job #: A731839
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09442	G09443	G09444	G09445		
Sampling Date		2007/07/11	2007/07/11	2007/07/14	2007/07/14		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 06-8S	MW 06-8D	MW 06-9S	MW 06-9M	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	3.6	1.1	1.1	4.1	0.5	1745540
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1739364

RDL = Reportable Detection Limit

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09446	G09447	G09448	G09449		
Sampling Date		2007/07/11	2007/07/11	2007/07/11	2007/07/13		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 06-10S	MW 06-10M	MW 06-10D	MW 06-11S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1751853
Dissolved Calcium (Ca)	mg/L	47.6	83.9	73.1	46.0	0.05	1751853
Dissolved Iron (Fe)	mg/L	0.182	4.41	4.55	0.183	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	4.10	12.7	20.3	11.5	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1751853
Dissolved Silicon (Si)	mg/L	4.14	3.96	3.62	4.57	0.05	1751853
Dissolved Sodium (Na)	mg/L	7.16	2.76	1.09	3.83	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1751853
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	5.5	3.8	3.1	18.1	0.2	1745540
Dissolved Antimony (Sb)	ug/L	0.34	<0.05	0.38	2.08	0.05	1745540
Dissolved Arsenic (As)	ug/L	5.0	0.3	0.3	3.1	0.1	1745540
Dissolved Barium (Ba)	ug/L	23.6	43.2	78.4	41.1	0.02	1745540
Dissolved Beryllium (Be)	ug/L	0.06	0.10	0.10	0.05	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	<0.01	<0.01	<0.01	0.05	0.01	1745540
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	0.14	0.05	<0.02	0.05	0.02	1745540
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1745540
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	<0.02	0.10	0.02	1745540
Dissolved Lithium (Li)	ug/L	0.8	2.0	4.0	19.7	0.2	1745540
Dissolved Manganese (Mn)	ug/L	91.6	259	112	62.5	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	1.84	2.02	3.24	30.3	0.02	1745540
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Potassium (K)	ug/L	1200	1790	2390	2030	50	1745540
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	168	139	168	97.8	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	0.07	<0.05	0.10	0.32	0.05	1745540
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1745540
Dissolved Uranium (U)	ug/L	8.25	4.52	1.00	4.53	0.01	1745540
Dissolved Vanadium (V)	ug/L	0.10	<0.05	<0.05	0.93	0.05	1745540

RDL = Reportable Detection Limit

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09446	G09447	G09448	G09449		
Sampling Date		2007/07/11	2007/07/11	2007/07/11	2007/07/13		
COC Number		08195074	08195074	08195074	08195074		
	Units	MW 06-10S	MW 06-10M	MW 06-10D	MW 06-11S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	1.3	0.7	0.8	0.7	0.5	1745540
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1739364

RDL = Reportable Detection Limit

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09450		
Sampling Date		2007/07/12		
COC Number		08195074		
	Units	MW 06-12S	RDL	QC Batch

Dissolved Metals by ICP				
Dissolved Boron (B)	mg/L	0.013	0.008	1751853
Dissolved Calcium (Ca)	mg/L	102	0.05	1751853
Dissolved Iron (Fe)	mg/L	0.095	0.005	1751853
Dissolved Magnesium (Mg)	mg/L	18.3	0.05	1751853
Dissolved Phosphorus (P)	mg/L	<0.1	0.1	1751853
Dissolved Silicon (Si)	mg/L	8.06	0.05	1751853
Dissolved Sodium (Na)	mg/L	45.7	0.05	1751853
Dissolved Zirconium (Zr)	mg/L	<0.005	0.005	1751853
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	1.6	0.2	1745540
Dissolved Antimony (Sb)	ug/L	1.08	0.05	1745540
Dissolved Arsenic (As)	ug/L	2.9	0.1	1745540
Dissolved Barium (Ba)	ug/L	22.2	0.02	1745540
Dissolved Beryllium (Be)	ug/L	<0.05	0.05	1745540
Dissolved Bismuth (Bi)	ug/L	<0.05	0.05	1745540
Dissolved Cadmium (Cd)	ug/L	<0.01	0.01	1745540
Dissolved Chromium (Cr)	ug/L	<0.2	0.2	1745540
Dissolved Cobalt (Co)	ug/L	0.45	0.02	1745540
Dissolved Copper (Cu)	ug/L	<0.1	0.1	1745540
Dissolved Lead (Pb)	ug/L	<0.02	0.02	1745540
Dissolved Lithium (Li)	ug/L	8.3	0.2	1745540
Dissolved Manganese (Mn)	ug/L	284	0.02	1745540
Dissolved Molybdenum (Mo)	ug/L	4.96	0.02	1745540
Dissolved Nickel (Ni)	ug/L	<0.5	0.5	1745540
Dissolved Potassium (K)	ug/L	2780	50	1745540
Dissolved Selenium (Se)	ug/L	<0.5	0.5	1745540
Dissolved Silver (Ag)	ug/L	<0.01	0.01	1745540
Dissolved Strontium (Sr)	ug/L	361	0.01	1745540
Dissolved Thallium (Tl)	ug/L	<0.05	0.05	1745540
Dissolved Tin (Sn)	ug/L	0.14	0.05	1745540
Dissolved Titanium (Ti)	ug/L	1.2	0.5	1745540
Dissolved Uranium (U)	ug/L	13.4	0.01	1745540
Dissolved Vanadium (V)	ug/L	0.73	0.05	1745540
RDL = Reportable Detection Limit				

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G09450		
Sampling Date		2007/07/12		
COC Number		08195074		
	Units	MW 06-12S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	0.7	0.5	1745540
Mercury by CVAA				
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	1739364

RDL = Reportable Detection Limit

Maxxam Job #: A731839
Report Date: 2007/07/25

Yukon Zinc Corporation
Client Project #:
Site Reference:
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RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample G09440-01 pH Water: pH result greater than the highest calibration standard of pH 10.

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA731839

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1739364 JT3	MATRIX SPIKE						
	[G09427-01]	Dissolved Mercury (Hg)	2007/07/19		100	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/07/19		101	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/07/19		86	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/07/19	<0.01		ug/L	
	RPD [G09427-01]	Dissolved Mercury (Hg)	2007/07/19	NC		%	25
	RPD [G09430-01]	Dissolved Mercury (Hg)	2007/07/19	NC		%	25
1739497 CK	SPIKE	Turbidity	2007/07/19		102	%	80 - 120
	BLANK	Turbidity	2007/07/19	<0.1		NTU	
	RPD [G09448-01]	Turbidity	2007/07/19	0.4		%	25
1739498 BB3	MATRIX SPIKE						
	[G09436-01]	Nitrate plus Nitrite (N)	2007/07/18		100	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/07/18		104	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/07/18	<0.002		mg/L	
	RPD [G09436-01]	Nitrate plus Nitrite (N)	2007/07/18	NC		%	25
1739502 BB3	MATRIX SPIKE						
	[G09436-01]	Nitrite (N)	2007/07/18		99	%	80 - 120
	SPIKE	Nitrite (N)	2007/07/18		102	%	80 - 120
	BLANK	Nitrite (N)	2007/07/18	<0.002		mg/L	
	RPD [G09436-01]	Nitrite (N)	2007/07/18	NC		%	25
1740760 CK	SPIKE	pH	2007/07/19		102	%	96 - 104
	RPD [G09446-01]	pH	2007/07/19	0.4		%	25
1740764 CK	SPIKE	Conductivity	2007/07/19		101	%	80 - 120
	BLANK	Conductivity	2007/07/19	<1		uS/cm	
	RPD [G09446-01]	Conductivity	2007/07/19	0.7		%	25
1740766 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/07/19		93	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/07/19		100	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/07/19	<0.5		mg/L	
	RPD [G09446-01]	Alkalinity (Total as CaCO3)	2007/07/19	1.2		%	25
1740956 YS	MATRIX SPIKE						
	[G09431-01]	Total Phosphorus (P)	2007/07/24		112	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/07/24		100	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/07/24	<0.005		mg/L	
	RPD [G09431-01]	Total Phosphorus (P)	2007/07/24	0.4		%	25
1741119 WAY	MATRIX SPIKE	Fluoride (F)	2007/07/19		106	%	80 - 120
	SPIKE	Fluoride (F)	2007/07/19		106	%	80 - 120
	BLANK	Fluoride (F)	2007/07/19	<0.01		mg/L	
	RPD [G09436-01]	Fluoride (F)	2007/07/19	2.8		%	25
1741751 NN	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/07/19		94	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/07/19		107	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/07/19	<0.5		mg/L	
	RPD [G09437-01]	Dissolved Chloride (Cl)	2007/07/19	NC		%	20
1741802 NN	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/07/19		112	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/07/19		95	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/07/19	0.8, RDL=0.5		mg/L	
	RPD [G09437-01]	Dissolved Sulphate (SO4)	2007/07/19	0.7		%	20
1742046 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/07/19		104	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/07/19		104	%	80 - 120
	BLANK	Total Dissolved Solids	2007/07/19	<10		mg/L	
	RPD	Total Dissolved Solids	2007/07/19	1		%	25
1745540 AA1	MATRIX SPIKE						
	[G09427-01]	Dissolved Arsenic (As)	2007/07/20		110	%	75 - 125
		Dissolved Cadmium (Cd)	2007/07/20		111	%	75 - 125
		Dissolved Chromium (Cr)	2007/07/20		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/07/20		108	%	75 - 125

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Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA731839

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1745540 AA1	MATRIX SPIKE [G09427-01]	Dissolved Copper (Cu)	2007/07/20		108	%	75 - 125
		Dissolved Lead (Pb)	2007/07/20		108	%	75 - 125
		Dissolved Selenium (Se)	2007/07/20		107	%	75 - 125
		Dissolved Thallium (Tl)	2007/07/20		107	%	75 - 125
		Dissolved Zinc (Zn)	2007/07/20		106	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/07/20		92	%	75 - 125
		Dissolved Cadmium (Cd)	2007/07/20		101	%	75 - 125
		Dissolved Chromium (Cr)	2007/07/20		112	%	75 - 125
		Dissolved Cobalt (Co)	2007/07/20		113	%	75 - 125
		Dissolved Copper (Cu)	2007/07/20		113	%	75 - 125
		Dissolved Lead (Pb)	2007/07/20		106	%	75 - 125
		Dissolved Selenium (Se)	2007/07/20		99	%	75 - 125
		Dissolved Thallium (Tl)	2007/07/20		107	%	75 - 125
		Dissolved Zinc (Zn)	2007/07/20		105	%	75 - 125
		Dissolved Aluminum (Al)	2007/07/20	0.3, RDL=0.2		ug/L	
	BLANK	Dissolved Antimony (Sb)	2007/07/20	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/07/20	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/07/20	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/07/20	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/07/20	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/07/20	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/07/20	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/07/20	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/07/20	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/07/20	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/07/20	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/07/20	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/07/20	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/07/20	<0.5		ug/L	
		Dissolved Potassium (K)	2007/07/20	<50		ug/L	
		Dissolved Selenium (Se)	2007/07/20	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/07/20	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/07/20	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/07/20	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/07/20	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/07/20	<0.5		ug/L	
		Dissolved Uranium (U)	2007/07/20	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/07/20	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/07/20	<0.5		ug/L	
	RPD [G09427-01]	Dissolved Aluminum (Al)	2007/07/20	2.5		%	25
		Dissolved Antimony (Sb)	2007/07/20	3.1		%	25
		Dissolved Arsenic (As)	2007/07/20	0.4		%	25
		Dissolved Barium (Ba)	2007/07/20	1.5		%	25
		Dissolved Beryllium (Be)	2007/07/20	NC		%	25
		Dissolved Bismuth (Bi)	2007/07/20	NC		%	25
		Dissolved Cadmium (Cd)	2007/07/20	0		%	25
		Dissolved Chromium (Cr)	2007/07/20	NC		%	25
		Dissolved Cobalt (Co)	2007/07/20	NC		%	25
		Dissolved Copper (Cu)	2007/07/20	NC		%	25
		Dissolved Lead (Pb)	2007/07/20	NC		%	25
		Dissolved Lithium (Li)	2007/07/20	NC		%	25
		Dissolved Manganese (Mn)	2007/07/20	3.1		%	25
		Dissolved Molybdenum (Mo)	2007/07/20	0.5		%	25
		Dissolved Nickel (Ni)	2007/07/20	NC		%	25

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Attention: PAMELA LADYMAN
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Quality Assurance Report (Continued)

Maxxam Job Number: VA731839

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1745540 AA1	RPD [G09427-01]	Dissolved Potassium (K)	2007/07/20	4.1		%	25
		Dissolved Selenium (Se)	2007/07/20	NC		%	25
		Dissolved Silver (Ag)	2007/07/20	NC		%	25
		Dissolved Strontium (Sr)	2007/07/20	4.2		%	25
		Dissolved Thallium (Tl)	2007/07/20	NC		%	25
		Dissolved Tin (Sn)	2007/07/20	NC		%	25
		Dissolved Titanium (Ti)	2007/07/20	NC		%	25
		Dissolved Uranium (U)	2007/07/20	NC		%	25
		Dissolved Vanadium (V)	2007/07/20	NC		%	25
		Dissolved Zinc (Zn)	2007/07/20	4.3		%	25
	RPD [G09446-01]	Dissolved Aluminum (Al)	2007/07/20	0.07		%	25
		Dissolved Antimony (Sb)	2007/07/20	1.2		%	25
		Dissolved Arsenic (As)	2007/07/20	0.8		%	25
		Dissolved Barium (Ba)	2007/07/20	2.1		%	25
		Dissolved Beryllium (Be)	2007/07/20	NC		%	25
		Dissolved Bismuth (Bi)	2007/07/20	NC		%	25
		Dissolved Cadmium (Cd)	2007/07/20	NC		%	25
		Dissolved Chromium (Cr)	2007/07/20	NC		%	25
		Dissolved Cobalt (Co)	2007/07/20	3.4		%	25
		Dissolved Copper (Cu)	2007/07/20	NC		%	25
		Dissolved Lead (Pb)	2007/07/20	NC		%	25
		Dissolved Lithium (Li)	2007/07/20	NC		%	25
		Dissolved Manganese (Mn)	2007/07/20	1.4		%	25
		Dissolved Molybdenum (Mo)	2007/07/20	1.8		%	25
		Dissolved Nickel (Ni)	2007/07/20	NC		%	25
		Dissolved Potassium (K)	2007/07/20	1.2		%	25
		Dissolved Selenium (Se)	2007/07/20	NC		%	25
		Dissolved Silver (Ag)	2007/07/20	NC		%	25
		Dissolved Strontium (Sr)	2007/07/20	0.4		%	25
		Dissolved Thallium (Tl)	2007/07/20	NC		%	25
		Dissolved Tin (Sn)	2007/07/20	NC		%	25
		Dissolved Titanium (Ti)	2007/07/20	NC		%	25
		Dissolved Uranium (U)	2007/07/20	0.01		%	25
		Dissolved Vanadium (V)	2007/07/20	NC		%	25
		Dissolved Zinc (Zn)	2007/07/20	NC		%	25
1747002 YS	MATRIX SPIKE	Orthophosphate (P)	2007/07/23		96	%	80 - 120
		Orthophosphate (P)	2007/07/23		102	%	80 - 120
	BLANK	Orthophosphate (P)	2007/07/23	<0.001		mg/L	
	RPD [G09427-01]	Orthophosphate (P)	2007/07/23	NC		%	20
	RPD [G09450-01]	Orthophosphate (P)	2007/07/23	1.1		%	20
1747095 FS1	MATRIX SPIKE	Total Suspended Solids	2007/07/23		106	%	N/A
		Total Suspended Solids	2007/07/23		103	%	N/A
	BLANK	Total Suspended Solids	2007/07/23	<4		mg/L	
	RPD [G09445-01]	Total Suspended Solids	2007/07/23	NC		%	25
1747480 AH3	MATRIX SPIKE	Bromide (Br)	2007/07/23		113	%	80 - 120
		Bromide (Br)	2007/07/23		105	%	80 - 120
	BLANK	Bromide (Br)	2007/07/23	<0.1		mg/L	
	RPD	Bromide (Br)	2007/07/23	NC		%	25
1747851 MX	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/07/23		111	%	80 - 120
		Dissolved Organic Carbon (C)	2007/07/23		106	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/07/23	<0.5		mg/L	
	RPD [G09433-01]	Dissolved Organic Carbon (C)	2007/07/23	NC		%	20
1749684 NN	MATRIX SPIKE	Ammonia (N)	2007/07/24		95	%	80 - 120
		Ammonia (N)	2007/07/24		98	%	80 - 120

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Client Project #:
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Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA731839

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1749684 NN	BLANK	Ammonia (N)	2007/07/24	<0.005		mg/L	
	RPD [G09432-01]	Ammonia (N)	2007/07/24	NC		%	25
1751853 GS2	BLANK	Dissolved Boron (B)	2007/07/24	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/07/24	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/07/24	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/07/24	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/07/24	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/07/24	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/07/24	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/07/24	<0.005		mg/L	
	RPD [G09448-01]	Dissolved Boron (B)	2007/07/24	NC		%	25
		Dissolved Calcium (Ca)	2007/07/24	0.8		%	25
		Dissolved Iron (Fe)	2007/07/24	0.7		%	25
		Dissolved Magnesium (Mg)	2007/07/24	0.8		%	25
		Dissolved Phosphorus (P)	2007/07/24	NC		%	25
		Dissolved Silicon (Si)	2007/07/24	0.4		%	25
		Dissolved Sodium (Na)	2007/07/24	7.4		%	25
		Dissolved Zirconium (Zr)	2007/07/24	NC		%	25
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference							

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Your C.O.C. #: 08196685, 08196686

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/09/13

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A741295

Received: 2007/09/05, 14:45

Sample Matrix: Water

Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	24	2007/09/06	2007/09/06	BRN SOP-00264 R2.0	Based on SM2320B
Bromide by IC Ø	14	N/A	2007/09/10	CAL SOP-00041	IC
Bromide by IC Ø	10	N/A	2007/09/11	CAL SOP-00041	IC
Chloride by Automated Colourimetry	24	N/A	2007/09/11	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	24	N/A	2007/09/10	BRN SOP-00224 R3.0	Based on SM-5310C
Conductance - water	24	N/A	2007/09/06	BRN SOP-00264 R2.0	Based on SM-2510B
Fluoride	24	N/A	2007/09/07	BRN SOP-00225 R1.0	Based SM - 4500 F C
Hardness (calculated as CaCO ₃)	24	N/A	2007/09/12		
Mercury (dissolved; low level)	24	2007/09/07	2007/09/10	BRN SOP-00205	Based on EPA 245.1
Mercury - Total (CVAA,LL)	24	2007/09/07	2007/09/10	BRN SOP-00205	Based on EPA 245.1
Elements by ICP-AES (dissolved)	24	2007/09/11	2007/09/11	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) Ø	24	2007/09/10	2007/09/11	BRN SOP-00204	Based on EPA 200.8
Elements by ICPMS (as rec; low level) Ø	24	2007/09/10	2007/09/10	BRN SOP-00204	Based on EPA 200.8
Elements by ICPMS (total) Ø	24	N/A	2007/09/12	BRN SOP-00204	Based on EPA 200.8
Elements by ICP-AES (total)	24	N/A	2007/09/10	BRN SOP-00201 R1.0	Based on EPA 6010B
Ammonia (N)	24	N/A	2007/09/12	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	24	N/A	2007/09/10	BRN SOP-00233 R1.0	Based on EPA 353.2
Nitrite (N) (low level)	24	N/A	2007/09/10	BRN SOP-00233 R1.0	EPA 353.2
Nitrogen - Nitrate (as N)	24	N/A	2007/09/11		
pH Water	24	N/A	2007/09/06	BRN SOP-00264 R2.0	Based on SM-4500H+B
Orthophosphate by Konelab Ø	24	N/A	2007/09/10	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	24	N/A	2007/09/11	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	24	N/A	2007/09/07	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	24	N/A	2007/09/12	BRN SOP-00236 R4.0	SM 4500
Total Suspended Solids Ø	24	N/A	2007/09/12	BRN SOP-00277 R2.0	Based on SM - 2540 D
Turbidity	24	N/A	2007/09/06	BRN SOP-00265 R3.0	SM - 2130B

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

- (1) This test was performed by Maxxam Calgary
- (2) SCC/CAEAL

../2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08196685, 08196686

Attention: PAMELA LADYMAN

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/09/13

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 36

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81592	G81593	G81594	G81595		
Sampling Date		2007/09/02	2007/09/02	2007/09/01	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.49	0.13	0.28	0.08	0.01	1833861
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.027	<0.002	<0.002	0.002	1830801
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	138	191	228	140	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	<0.5	4.9	<0.5	0.8	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	97.7	172	179	124	0.5	1831744
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	<0.01	0.01	1836721
Orthophosphate (P)	mg/L	0.045	0.010	0.004	0.215	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	37.6	<0.5	33.9	9.1	0.5	1838888
Dissolved Chloride (Cl)	mg/L	1.0	<0.5	<0.5	<0.5	0.5	1838884
Leachable Metals							
Total Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1836311
Nutrients							
Ammonia (N)	mg/L	0.132	0.081	0.090	0.072	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	<0.002	0.070	<0.002	<0.002	0.002	1836734
Nitrite (N)	mg/L	<0.002	0.043	<0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.045	0.270	<0.005	0.226	0.005	1838312
Physical Properties							
Conductivity	uS/cm	258	327	400	255	1	1831742
pH	pH Units	8.0	7.3	8.0	7.8	0.1	1831740
Physical Properties							
Total Suspended Solids	mg/L	<4	31	<4	21	4	1838425
Total Dissolved Solids	mg/L	166	222	242	160	10	1835207
Turbidity	NTU	0.8	32.6	5.8	97.0	0.1	1827894
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81596	G81597	G81598	G81599		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/02		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.40	0.19	0.97	0.55	0.01	1833861
Calculated Parameters							
Nitrate (N)	mg/L	0.030	0.316	0.030	0.002	0.002	1830801
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	175	119	172	109	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	0.6	0.9	0.9	0.8	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	130	86.2	110	67.3	0.5	1831744
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	<0.01	0.01	1836721
Orthophosphate (P)	mg/L	0.019	0.006	0.003	0.014	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	35.6	34.6	49.1	39.8	0.5	1838888
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	1838884
Leachable Metals							
Total Selenium (Se)	ug/L	2.7	11.0	<0.5	<0.5	0.5	1836311
Nutrients							
Ammonia (N)	mg/L	0.017	0.015	<0.005	0.037	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.030	0.316	0.030	0.002	0.002	1836734
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.008	<0.005	<0.005	<0.005	0.005	1838312
Physical Properties							
Conductivity	uS/cm	324	246	321	224	1	1831742
pH	pH Units	7.8	7.6	8.1	7.6	0.1	1831740
Physical Properties							
Total Suspended Solids	mg/L	4	<4	<4	<4	4	1838425
Total Dissolved Solids	mg/L	208	168	206	152	10	1835207
Turbidity	NTU	16.4	0.3	0.2	3.5	0.1	1827894
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81600	G81601		G81602		
Sampling Date		2007/09/02	2007/09/02		2007/09/02		
COC Number		08196685	08196685		08196685		
	Units	MW 05-5A	MW 05-5B	RDL	MW 05-6A	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	2.30	0.28	0.01	0.18	0.01	1833861
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.006	0.002	0.002	0.002	1830801
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	291	159	0.5	88.1	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	0.5	0.5	0.5	0.9	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	232	109	0.5	70.3	0.5	1831744
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	0.01	<0.01	0.01	1836721
Orthophosphate (P)	mg/L	0.019	0.006	0.001	0.56	0.01	1836533
Dissolved Sulphate (SO ₄)	mg/L	33.8	42.0	0.5	16.3	0.5	1838888
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	0.5	<0.5	0.5	1838884
Leachable Metals							
Total Selenium (Se)	ug/L	<0.5	<0.5	0.5	<0.5	0.5	1836311
Nutrients							
Ammonia (N)	mg/L	0.061	0.014	0.005	0.006	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.003	0.006	0.002	0.002	0.002	1836734
Nitrite (N)	mg/L	0.005	<0.002	0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.012	<0.005	0.005	0.776	0.005	1838312
Physical Properties							
Conductivity	uS/cm	497	299	1	180	1	1831742
pH	pH Units	8.0	7.9	0.1	7.8	0.1	1831740
Physical Properties							
Total Suspended Solids	mg/L	5	<4	4	<4	4	1838425
Total Dissolved Solids	mg/L	318	194	10	118	10	1835207
Turbidity	NTU	18.6	5.3	0.1	4.8	0.1	1827894
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81603		G81617		
Sampling Date		2007/09/01		2007/09/01		
COC Number		08196685		08196686		
	Units	MW 05-6B	RDL	MW 05-7A	RDL	QC Batch
Misc. Inorganics						
Fluoride (F)	mg/L	0.04	0.01	0.07	0.01	1833861
Calculated Parameters						
Nitrate (N)	mg/L	0.209	0.002	0.025	0.002	1830801
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	101	0.5	2160	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	1.0	0.5	1.3	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	83.4	0.5	2100	1	1831744
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	0.01	<0.01	0.01	1836721
Orthophosphate (P)	mg/L	0.017	0.001	0.006	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	7.3	0.5	<0.5	0.5	1838888
Dissolved Chloride (Cl)	mg/L	<0.5	0.5	2.5	0.5	1838884
Leachable Metals						
Total Selenium (Se)	ug/L	0.9	0.5	0.7	0.5	1836311
Nutrients						
Ammonia (N)	mg/L	<0.005	0.005	0.068	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.213	0.002	0.025	0.002	1836734
Nitrite (N)	mg/L	0.004	0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	<0.005	0.005	<0.005	0.005	1838312
Physical Properties						
Conductivity	uS/cm	183	1	8120	1	1831742
pH	pH Units	8.0	0.1	12.5	0.1	1831740
Physical Properties						
Total Suspended Solids	mg/L	<4	4	<4	4	1838425
Total Dissolved Solids	mg/L	102	10	1840	10	1835207
Turbidity	NTU	0.2	0.1	0.8	0.1	1827894
RDL = Reportable Detection Limit						

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81618		G81619	G81620		
Sampling Date		2007/09/01		2007/09/02	2007/08/31		
COC Number		08196686		08196686	08196686		
	Units	MW 05-7B	QC Batch	MW 05-7B-98	MW 06-8S	RDL	QC Batch

Misc. Inorganics							
Fluoride (F)	mg/L	0.13	1833861	0.13	0.17	0.01	1833861
Calculated Parameters							
Nitrate (N)	mg/L	0.019	1830801	0.022	0.018	0.002	1830801
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	75.2	1830799	74.7	74.0	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	0.8	1836780	0.7	0.9	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	66.5	1831744	61.3	54.6	0.5	1831744
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	1836721	<0.01	<0.01	0.01	1838483
Orthophosphate (P)	mg/L	0.045	1836533	0.045	0.023	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	12.4	1838888	12.2	24.9	0.5	1838888
Dissolved Chloride (Cl)	mg/L	<0.5	1838884	<0.5	<0.5	0.5	1838884
Leachable Metals							
Total Selenium (Se)	ug/L	<0.5	1836311	<0.5	<0.5	0.5	1836311
Nutrients							
Ammonia (N)	mg/L	0.007	1841342	<0.005	0.027	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.019	1836734	0.022	0.021	0.002	1836734
Nitrite (N)	mg/L	<0.002	1836737	<0.002	0.003	0.002	1836737
Total Phosphorus (P)	mg/L	0.047	1838312	0.043	0.031	0.005	1838312
Physical Properties							
Conductivity	uS/cm	153	1831742	150	168	1	1831742
pH	pH Units	9.0	1831740	8.4	7.6	0.1	1831740
Physical Properties							
Total Suspended Solids	mg/L	<4	1838425	<4	<4	4	1838425
Total Dissolved Solids	mg/L	112	1835207	98	112	10	1835207
Turbidity	NTU	0.2	1827894	1.7	0.2	0.1	1827894

RDL = Reportable Detection Limit

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81621	G81622	G81623	G81624		
Sampling Date		2007/09/01	2007/09/02	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-8D	MW 06-9S	MW 06-9M	MW 06-10S	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.95	0.41	0.97	0.22	0.01	1833861
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1830801
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	270	143	213	115	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	222	113	168	111	0.5	1831744
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	<0.01	0.01	1838483
Orthophosphate (P)	mg/L	0.007	0.406	0.042	0.040	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	28.8	21.6	30.2	29.4	0.5	1838888
Dissolved Chloride (Cl)	mg/L	3.7	<0.5	<0.5	<0.5	0.5	1838884
Leachable Metals							
Total Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1836311
Nutrients							
Ammonia (N)	mg/L	0.069	0.019	0.064	0.010	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1836734
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.006	0.416	0.066	0.045	0.005	1838312
Physical Properties							
Conductivity	uS/cm	468	263	378	274	1	1831742
pH	pH Units	8.2	8.3	8.2	8.3	0.1	1831740
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	<4	<4	4	1838425
Total Dissolved Solids	mg/L	294	170	250	184	10	1835207
Turbidity	NTU	1.6	2.2	13.5	0.4	0.1	1827894
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81625	G81626	G81627		
Sampling Date		2007/08/31	2007/08/31	2007/09/03		
COC Number		08196686	08196686	08196686		
	Units	MW 06-10M	MW 06-10D	MW 06-11S	RDL	QC Batch
Misc. Inorganics						
Fluoride (F)	mg/L	0.79	0.98	2.15	0.01	1833861
Calculated Parameters						
Nitrate (N)	mg/L	0.002	<0.002	0.002	0.002	1830801
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	271	274	169	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	0.8	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	207	236	134	0.5	1831744
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	0.01	1838483
Orthophosphate (P)	mg/L	0.020	0.015	0.027	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	38.7	19.2	33.6	0.5	1838888
Dissolved Chloride (Cl)	mg/L	2.8	2.4	<0.5	0.5	1838884
Leachable Metals						
Total Selenium (Se)	ug/L	<0.5	<0.5	<0.5	0.5	1836311
Nutrients						
Ammonia (N)	mg/L	0.059	0.059	0.133	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.002	<0.002	0.002	0.002	1836734
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.027	0.022	0.025	0.005	1838312
Physical Properties						
Conductivity	uS/cm	479	475	326	1	1831742
pH	pH Units	8.2	8.2	8.4	0.1	1831740
Physical Properties						
Total Suspended Solids	mg/L	7	7	<4	4	1838425
Total Dissolved Solids	mg/L	256	288	194	10	1835207
Turbidity	NTU	49.9	57.1	0.5	0.1	1827894
RDL = Reportable Detection Limit						

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		G81628		
Sampling Date		2007/09/02		
COC Number		08196686		
	Units	MW 06-12S	RDL	QC Batch

Misc. Inorganics				
Fluoride (F)	mg/L	1.09	0.01	1833861
Calculated Parameters				
Nitrate (N)	mg/L	<0.002	0.002	1830801
Misc. Inorganics				
Dissolved Hardness (CaCO ₃)	mg/L	358	0.5	1830799
Dissolved Organic Carbon (C)	mg/L	0.8	0.5	1836780
Alkalinity (Total as CaCO ₃)	mg/L	143	0.5	1831744
Anions				
Dissolved Bromide (Br)	mg/L	0.05	0.01	1838483
Orthophosphate (P)	mg/L	0.028	0.001	1836533
Dissolved Sulphate (SO ₄)	mg/L	274	5	1838888
Dissolved Chloride (Cl)	mg/L	<0.5	0.5	1838884
Leachable Metals				
Total Selenium (Se)	ug/L	<0.5	0.5	1836311
Nutrients				
Ammonia (N)	mg/L	0.143	0.005	1841342
Nitrate plus Nitrite (N)	mg/L	0.003	0.002	1836734
Nitrite (N)	mg/L	0.002	0.002	1836737
Total Phosphorus (P)	mg/L	0.019	0.005	1838312
Physical Properties				
Conductivity	uS/cm	799	1	1831742
pH	pH Units	8.3	0.1	1831740
Physical Properties				
Total Suspended Solids	mg/L	<4	4	1838425
Total Dissolved Solids	mg/L	578	10	1835207
Turbidity	NTU	0.7	0.1	1827894
RDL = Reportable Detection Limit				

Maxxam Job #: A741295
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81592	G81593	G81594	G81595		
Sampling Date		2007/09/02	2007/09/02	2007/09/01	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1839659
Dissolved Calcium (Ca)	mg/L	45.9	67.8	60.7	42.5	0.05	1839659
Dissolved Iron (Fe)	mg/L	0.166	23.4	1.05	8.63	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	5.59	5.28	18.6	8.24	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	0.3	<0.1	0.2	0.1	1839659
Dissolved Silicon (Si)	mg/L	4.91	4.91	3.66	4.43	0.05	1839659
Dissolved Sodium (Na)	mg/L	1.75	0.90	0.57	1.08	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	1.3	36.2	1.4	1.0	0.2	1837543
Dissolved Antimony (Sb)	ug/L	<0.05	0.06	<0.05	<0.05	0.05	1837543
Dissolved Arsenic (As)	ug/L	17.4	4.8	0.7	36.2	0.1	1837543
Dissolved Barium (Ba)	ug/L	22.9	558	52.1	253	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Chromium (Cr)	ug/L	<0.2	0.9	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	<0.02	0.15	0.04	0.19	0.02	1837543
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1837543
Dissolved Lead (Pb)	ug/L	0.02	<0.02	<0.02	<0.02	0.02	1837543
Dissolved Lithium (Li)	ug/L	0.2	0.8	2.5	<0.2	0.2	1837543
Dissolved Manganese (Mn)	ug/L	209	768	170	914	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	5.19	0.52	2.90	1.43	0.02	1837543
Dissolved Nickel (Ni)	ug/L	0.6	1.1	0.7	<0.5	0.5	1837543
Dissolved Potassium (K)	ug/L	1620	989	2680	818	50	1837543
Dissolved Selenium (Se)	ug/L	<0.5	0.8	<0.5	<0.5	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	140	141	153	82.6	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Titanium (Ti)	ug/L	<0.5	1.5	<0.5	<0.5	0.5	1837543
Dissolved Uranium (U)	ug/L	0.13	0.03	8.22	0.30	0.01	1837543
Dissolved Vanadium (V)	ug/L	<0.05	0.83	<0.05	<0.05	0.05	1837543
RDL = Reportable Detection Limit							

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81592	G81593	G81594	G81595		
Sampling Date		2007/09/02	2007/09/02	2007/09/01	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	1.1	<0.5	<0.5	<0.5	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1837752
Total Calcium (Ca)	mg/L	43.2	60.3	56.3	39.0	0.05	1837752
Total Iron (Fe)	mg/L	0.135	11.0	0.446	7.25	0.005	1837752
Total Magnesium (Mg)	mg/L	5.15	4.76	17.4	7.57	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	0.1	<0.1	0.2	0.1	1837752
Total Silicon (Si)	mg/L	4.63	4.44	3.41	4.08	0.05	1837752
Total Sodium (Na)	mg/L	1.61	0.78	0.53	0.97	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	3.3	17.5	2.6	2.8	0.2	1837295
Total Antimony (Sb)	ug/L	<0.05	0.06	<0.05	<0.05	0.05	1837295
Total Arsenic (As)	ug/L	15.7	2.1	0.6	31.1	0.1	1837295
Total Barium (Ba)	ug/L	22.6	473	47.0	235	0.02	1837295
Total Beryllium (Be)	ug/L	<0.05	<0.05	0.08	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	0.02	<0.01	<0.01	<0.01	0.01	1837295
Total Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837295
Total Cobalt (Co)	ug/L	<0.02	0.13	0.04	0.20	0.02	1837295
Total Copper (Cu)	ug/L	<0.1	0.1	<0.1	0.1	0.1	1837295
Total Lead (Pb)	ug/L	0.02	<0.02	<0.02	<0.02	0.02	1837295
Total Lithium (Li)	ug/L	0.5	1.5	2.5	0.3	0.2	1837295
Total Manganese (Mn)	ug/L	215	792	186	974	0.02	1837295
Total Molybdenum (Mo)	ug/L	5.61	0.41	3.07	1.48	0.02	1837295
Total Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837295
Total Potassium (K)	ug/L	1280	806	1930	638	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	143	145	157	87.7	0.01	1837295
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	0.05	0.12	0.05	<0.05	0.05	1837295
RDL = Reportable Detection Limit							

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81592	G81593	G81594	G81595		
Sampling Date		2007/09/02	2007/09/02	2007/09/01	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-1A	MW 05-1B	MW 05-2A	MW 05-2B	RDL	QC Batch

Total Titanium (Ti)	ug/L	<0.5	0.6	<0.5	<0.5	0.5	1837295
Total Uranium (U)	ug/L	0.11	0.02	7.62	0.27	0.01	1837295
Total Vanadium (V)	ug/L	<0.05	0.35	<0.05	0.07	0.05	1837295
Total Zinc (Zn)	ug/L	1.8	0.9	0.8	1.1	0.5	1837295

RDL = Reportable Detection Limit

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Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81596	G81597	G81598	G81599		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/02		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1839659
Dissolved Calcium (Ca)	mg/L	59.3	39.7	62.5	38.5	0.05	1839659
Dissolved Iron (Fe)	mg/L	1.25	0.130	0.023	0.676	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	6.60	4.82	3.79	3.06	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1839659
Dissolved Silicon (Si)	mg/L	3.91	4.05	3.13	6.01	0.05	1839659
Dissolved Sodium (Na)	mg/L	1.46	4.93	1.34	1.09	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	0.4	<0.2	1.3	0.7	0.2	1837543
Dissolved Antimony (Sb)	ug/L	0.25	0.13	0.11	0.09	0.05	1837543
Dissolved Arsenic (As)	ug/L	0.4	0.7	0.2	5.7	0.1	1837543
Dissolved Barium (Ba)	ug/L	59.4	100	81.0	49.1	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	4.52	10.6	0.06	2.45	0.01	1837543
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	0.50	0.32	0.03	2.40	0.02	1837543
Dissolved Copper (Cu)	ug/L	<0.1	0.5	0.3	0.1	0.1	1837543
Dissolved Lead (Pb)	ug/L	0.14	0.19	<0.02	<0.02	0.02	1837543
Dissolved Lithium (Li)	ug/L	0.3	1.7	0.2	0.4	0.2	1837543
Dissolved Manganese (Mn)	ug/L	166	30.0	572	2750	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	0.91	0.75	5.76	1.23	0.02	1837543
Dissolved Nickel (Ni)	ug/L	5.3	3.3	<0.5	5.7	0.5	1837543
Dissolved Potassium (K)	ug/L	1540	1430	2910	2180	50	1837543
Dissolved Selenium (Se)	ug/L	3.5	12.8	<0.5	<0.5	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	147	133	174	133	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	0.11	<0.05	0.05	1837543
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Uranium (U)	ug/L	3.82	1.21	0.59	0.23	0.01	1837543
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
RDL = Reportable Detection Limit							

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Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81596	G81597	G81598	G81599		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/02		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	857	895	2.0	147	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1837752
Total Calcium (Ca)	mg/L	54.6	39.1	58.2	35.8	0.05	1837752
Total Iron (Fe)	mg/L	1.07	0.063	0.012	0.665	0.005	1837752
Total Magnesium (Mg)	mg/L	6.17	4.62	3.53	2.85	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1837752
Total Silicon (Si)	mg/L	3.64	3.91	2.95	5.69	0.05	1837752
Total Sodium (Na)	mg/L	1.29	3.22	1.21	0.98	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	2.1	2.2	2.9	2.7	0.2	1837295
Total Antimony (Sb)	ug/L	0.28	0.14	0.11	0.10	0.05	1837295
Total Arsenic (As)	ug/L	0.7	<0.1	0.2	4.9	0.1	1837295
Total Barium (Ba)	ug/L	56.1	87.6	75.5	47.2	0.02	1837295
Total Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	4.44	12.1	0.07	2.49	0.01	1837295
Total Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837295
Total Cobalt (Co)	ug/L	0.52	0.22	0.03	2.59	0.02	1837295
Total Copper (Cu)	ug/L	0.2	2.1	0.5	0.2	0.1	1837295
Total Lead (Pb)	ug/L	0.11	0.11	0.02	0.03	0.02	1837295
Total Lithium (Li)	ug/L	1.1	1.5	0.9	0.8	0.2	1837295
Total Manganese (Mn)	ug/L	177	18.9	586	2850	0.02	1837295
Total Molybdenum (Mo)	ug/L	1.01	0.77	6.25	1.27	0.02	1837295
Total Nickel (Ni)	ug/L	4.5	3.0	<0.5	5.5	0.5	1837295
Total Potassium (K)	ug/L	1230	1110	2190	1640	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	149	140	181	135	0.01	1837295
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	<0.05	<0.05	0.16	0.08	0.05	1837295
RDL = Reportable Detection Limit							

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Maxxam ID		G81596	G81597	G81598	G81599		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/02		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-3A	MW 05-3B	MW 05-4A	MW 05-4B	RDL	QC Batch

Total Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837295
Total Uranium (U)	ug/L	3.70	1.24	0.58	0.22	0.01	1837295
Total Vanadium (V)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Zinc (Zn)	ug/L	815	976	3.6	141	0.5	1837295

RDL = Reportable Detection Limit

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Yukon Zinc Corporation
Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81600	G81601	G81602	G81603		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-5A	MW 05-5B	MW 05-6A	MW 05-6B	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1839659
Dissolved Calcium (Ca)	mg/L	77.8	53.1	29.9	35.8	0.05	1839659
Dissolved Iron (Fe)	mg/L	1.62	0.498	0.947	<0.005	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	23.6	6.50	3.29	2.87	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	0.8	<0.1	0.1	1839659
Dissolved Silicon (Si)	mg/L	3.80	3.31	6.76	4.16	0.05	1839659
Dissolved Sodium (Na)	mg/L	0.46	0.87	2.78	1.39	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	1.9	1.1	1.0	7.4	0.2	1837543
Dissolved Antimony (Sb)	ug/L	4.38	<0.05	0.33	0.06	0.05	1837543
Dissolved Arsenic (As)	ug/L	4.0	1.5	6.1	0.3	0.1	1837543
Dissolved Barium (Ba)	ug/L	63.2	40.5	49.4	149	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	0.02	0.02	0.01	0.01	0.01	1837543
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	0.34	0.47	0.49	0.39	0.02	1837543
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	0.6	0.1	1837543
Dissolved Lead (Pb)	ug/L	<0.02	0.07	<0.02	<0.02	0.02	1837543
Dissolved Lithium (Li)	ug/L	2.8	0.7	<0.2	<0.2	0.2	1837543
Dissolved Manganese (Mn)	ug/L	167	489	295	171	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	7.71	2.17	3.92	1.15	0.02	1837543
Dissolved Nickel (Ni)	ug/L	0.9	3.0	1.4	4.8	0.5	1837543
Dissolved Potassium (K)	ug/L	2080	1210	1540	1140	50	1837543
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	0.9	0.9	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	123	106	28.8	47.0	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	<0.05	0.12	0.15	<0.05	0.05	1837543
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Uranium (U)	ug/L	20.5	2.95	0.28	0.18	0.01	1837543
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81600	G81601	G81602	G81603		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-5A	MW 05-5B	MW 05-6A	MW 05-6B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	2.2	29.9	0.6	<0.5	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1837752
Total Calcium (Ca)	mg/L	72.8	50.0	28.2	31.9	0.05	1837752
Total Iron (Fe)	mg/L	1.14	0.419	0.803	<0.005	0.005	1837752
Total Magnesium (Mg)	mg/L	22.1	6.08	3.08	2.53	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	<0.1	0.7	<0.1	0.1	1837752
Total Silicon (Si)	mg/L	3.58	3.12	6.42	4.04	0.05	1837752
Total Sodium (Na)	mg/L	0.41	0.80	2.74	1.33	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	3.1	3.0	3.6	11.1	0.2	1837295
Total Antimony (Sb)	ug/L	4.50	0.12	0.37	0.07	0.05	1837295
Total Arsenic (As)	ug/L	3.0	1.3	5.4	0.3	0.1	1837295
Total Barium (Ba)	ug/L	57.7	37.6	47.5	132	0.02	1837295
Total Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	0.02	0.01	0.01	0.02	0.01	1837295
Total Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	1.0	0.2	1837295
Total Cobalt (Co)	ug/L	0.35	0.49	0.48	0.35	0.02	1837295
Total Copper (Cu)	ug/L	<0.1	<0.1	<0.1	1.0	0.1	1837295
Total Lead (Pb)	ug/L	<0.02	<0.02	<0.02	0.04	0.02	1837295
Total Lithium (Li)	ug/L	3.1	1.3	<0.2	0.6	0.2	1837295
Total Manganese (Mn)	ug/L	163	515	315	145	0.02	1837295
Total Molybdenum (Mo)	ug/L	8.26	2.20	4.34	1.45	0.02	1837295
Total Nickel (Ni)	ug/L	<0.5	2.4	0.8	4.2	0.5	1837295
Total Potassium (K)	ug/L	1560	930	1220	987	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	126	110	31.2	49.9	0.01	1837295
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	0.09	0.06	0.31	0.12	0.05	1837295
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81600	G81601	G81602	G81603		
Sampling Date		2007/09/02	2007/09/02	2007/09/02	2007/09/01		
COC Number		08196685	08196685	08196685	08196685		
	Units	MW 05-5A	MW 05-5B	MW 05-6A	MW 05-6B	RDL	QC Batch

Total Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837295
Total Uranium (U)	ug/L	21.7	2.85	0.27	0.17	0.01	1837295
Total Vanadium (V)	ug/L	<0.05	<0.05	<0.05	0.18	0.05	1837295
Total Zinc (Zn)	ug/L	4.1	29.1	2.7	1.7	0.5	1837295

RDL = Reportable Detection Limit

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81617	G81618	G81619	G81620		
Sampling Date		2007/09/01	2007/09/01	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 05-7A	MW 05-7B	MW 05-7B-98	MW 06-8S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1839659
Dissolved Calcium (Ca)	mg/L	866	26.6	26.4	24.6	0.05	1839659
Dissolved Iron (Fe)	mg/L	<0.005	0.005	<0.005	1.24	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	<0.05	2.15	2.14	3.05	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1839659
Dissolved Silicon (Si)	mg/L	0.16	4.05	4.03	5.43	0.05	1839659
Dissolved Sodium (Na)	mg/L	3.28	1.79	1.77	3.51	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	26.2	5.3	5.9	5.5	0.2	1837543
Dissolved Antimony (Sb)	ug/L	0.06	0.12	0.13	13.9	0.05	1837543
Dissolved Arsenic (As)	ug/L	0.1	1.1	1.1	1.2	0.1	1837543
Dissolved Barium (Ba)	ug/L	1300	40.2	38.0	52.0	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	<0.01	0.03	0.02	0.02	0.01	1837543
Dissolved Chromium (Cr)	ug/L	8.1	<0.2	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	0.24	0.05	0.06	3.42	0.02	1837543
Dissolved Copper (Cu)	ug/L	1.7	<0.1	<0.1	0.2	0.1	1837543
Dissolved Lead (Pb)	ug/L	1.85	<0.02	<0.02	0.07	0.02	1837543
Dissolved Lithium (Li)	ug/L	36.6	<0.2	<0.2	0.5	0.2	1837543
Dissolved Manganese (Mn)	ug/L	0.03	79.3	86.7	722	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	1.97	9.69	10.7	3.35	0.02	1837543
Dissolved Nickel (Ni)	ug/L	12.4	<0.5	<0.5	7.5	0.5	1837543
Dissolved Potassium (K)	ug/L	3400	960	837	1340	50	1837543
Dissolved Selenium (Se)	ug/L	0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	687	44.5	46.4	73.4	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	0.30	<0.05	<0.05	0.12	0.05	1837543
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Uranium (U)	ug/L	<0.01	0.17	0.17	0.04	0.01	1837543

RDL = Reportable Detection Limit

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81617	G81618	G81619	G81620		
Sampling Date		2007/09/01	2007/09/01	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 05-7A	MW 05-7B	MW 05-7B-98	MW 06-8S	RDL	QC Batch
Dissolved Vanadium (V)	ug/L	0.08	1.03	1.12	<0.05	0.05	1837543
Dissolved Zinc (Zn)	ug/L	47.5	<0.5	<0.5	8.1	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1837752
Total Calcium (Ca)	mg/L	836	25.0	25.3	23.9	0.05	1837752
Total Iron (Fe)	mg/L	<0.005	0.006	0.006	1.23	0.005	1837752
Total Magnesium (Mg)	mg/L	<0.05	1.98	2.03	2.91	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1837752
Total Silicon (Si)	mg/L	0.15	3.83	3.89	5.18	0.05	1837752
Total Sodium (Na)	mg/L	2.83	1.63	1.64	3.26	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	40.1	8.1	8.1	5.4	0.2	1837295
Total Antimony (Sb)	ug/L	0.08	0.14	0.17	13.2	0.05	1837295
Total Arsenic (As)	ug/L	0.5	1.2	1.3	1.3	0.1	1837295
Total Barium (Ba)	ug/L	939	36.4	38.0	50.2	0.02	1837295
Total Beryllium (Be)	ug/L	<0.05	0.07	<0.05	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	0.01	0.04	0.03	0.02	0.01	1837295
Total Chromium (Cr)	ug/L	9.9	<0.2	<0.2	<0.2	0.2	1837295
Total Cobalt (Co)	ug/L	0.16	0.06	0.06	3.92	0.02	1837295
Total Copper (Cu)	ug/L	9.6	0.2	1.0	<0.1	0.1	1837295
Total Lead (Pb)	ug/L	2.44	<0.02	<0.02	0.03	0.02	1837295
Total Lithium (Li)	ug/L	31.8	0.3	<0.2	0.5	0.2	1837295
Total Manganese (Mn)	ug/L	0.09	92.3	94.5	796	0.02	1837295
Total Molybdenum (Mo)	ug/L	2.00	10.8	10.6	3.33	0.02	1837295
Total Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	8.0	0.5	1837295
Total Potassium (K)	ug/L	2350	791	827	1280	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	589	46.3	48.8	79.3	0.01	1837295
RDL = Reportable Detection Limit							

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81617	G81618	G81619	G81620		
Sampling Date		2007/09/01	2007/09/01	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 05-7A	MW 05-7B	MW 05-7B-98	MW 06-8S	RDL	QC Batch

Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	0.56	0.08	0.07	0.11	0.05	1837295
Total Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837295
Total Uranium (U)	ug/L	<0.01	0.17	0.18	0.03	0.01	1837295
Total Vanadium (V)	ug/L	0.25	1.27	1.38	0.10	0.05	1837295
Total Zinc (Zn)	ug/L	70.1	1.8	1.9	8.1	0.5	1837295

RDL = Reportable Detection Limit

Maxxam Job #: A741295
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Yukon Zinc Corporation
Client Project #:
Site Reference:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81621	G81622	G81623	G81624		
Sampling Date		2007/09/01	2007/09/02	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-8D	MW 06-9S	MW 06-9M	MW 06-10S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1839659
Dissolved Calcium (Ca)	mg/L	63.2	49.5	65.9	40.6	0.05	1839659
Dissolved Iron (Fe)	mg/L	0.246	0.782	1.62	0.041	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	27.2	4.64	11.9	3.27	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	0.4	<0.1	<0.1	0.1	1839659
Dissolved Silicon (Si)	mg/L	4.56	4.22	3.54	5.41	0.05	1839659
Dissolved Sodium (Na)	mg/L	0.59	1.44	0.59	14.4	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	5.3	4.4	2.2	6.9	0.2	1837543
Dissolved Antimony (Sb)	ug/L	0.17	<0.05	<0.05	0.33	0.05	1837543
Dissolved Arsenic (As)	ug/L	5.2	12.2	1.4	4.4	0.1	1837543
Dissolved Barium (Ba)	ug/L	48.8	53.6	115	20.4	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	<0.01	0.02	0.01	<0.01	0.01	1837543
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	0.34	0.06	0.04	0.11	0.02	1837543
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1837543
Dissolved Lead (Pb)	ug/L	0.02	<0.02	<0.02	0.03	0.02	1837543
Dissolved Lithium (Li)	ug/L	2.6	0.5	2.2	1.5	0.2	1837543
Dissolved Manganese (Mn)	ug/L	52.8	183	61.2	48.7	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	1.41	7.16	4.85	2.32	0.02	1837543
Dissolved Nickel (Ni)	ug/L	1.1	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Potassium (K)	ug/L	1960	998	2060	1910	50	1837543
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	152	182	77.0	145	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	<0.05	0.15	0.05	1837543
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Uranium (U)	ug/L	12.7	0.42	1.86	5.76	0.01	1837543
Dissolved Vanadium (V)	ug/L	<0.05	0.09	<0.05	0.19	0.05	1837543
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
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Yukon Zinc Corporation
Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81621	G81622	G81623	G81624		
Sampling Date		2007/09/01	2007/09/02	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-8D	MW 06-9S	MW 06-9M	MW 06-10S	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	<0.5	<0.5	<0.5	1.4	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1837752
Total Calcium (Ca)	mg/L	59.5	46.2	62.2	43.4	0.05	1837752
Total Iron (Fe)	mg/L	0.214	0.748	1.48	0.112	0.005	1837752
Total Magnesium (Mg)	mg/L	25.2	4.27	11.1	3.47	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	0.4	<0.1	<0.1	0.1	1837752
Total Silicon (Si)	mg/L	4.30	3.99	3.37	4.44	0.05	1837752
Total Sodium (Na)	mg/L	0.52	1.35	0.53	8.84	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	9.8	5.6	3.9	7.0	0.2	1837295
Total Antimony (Sb)	ug/L	0.20	0.05	<0.05	0.36	0.05	1837295
Total Arsenic (As)	ug/L	4.7	11.7	1.4	4.9	0.1	1837295
Total Barium (Ba)	ug/L	46.2	50.0	107	21.7	0.02	1837295
Total Beryllium (Be)	ug/L	0.06	<0.05	<0.05	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	0.01	0.02	0.01	<0.01	0.01	1837295
Total Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837295
Total Cobalt (Co)	ug/L	0.35	0.07	0.03	0.14	0.02	1837295
Total Copper (Cu)	ug/L	0.3	0.3	<0.1	<0.1	0.1	1837295
Total Lead (Pb)	ug/L	0.09	<0.02	<0.02	0.02	0.02	1837295
Total Lithium (Li)	ug/L	2.7	0.6	2.4	1.1	0.2	1837295
Total Manganese (Mn)	ug/L	52.6	189	63.0	74.9	0.02	1837295
Total Molybdenum (Mo)	ug/L	1.40	7.21	4.97	1.90	0.02	1837295
Total Nickel (Ni)	ug/L	0.8	<0.5	<0.5	<0.5	0.5	1837295
Total Potassium (K)	ug/L	1830	968	1900	1520	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	159	191	79.7	167	0.01	1837295
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	0.08	0.09	0.07	0.13	0.05	1837295
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81621	G81622	G81623	G81624		
Sampling Date		2007/09/01	2007/09/02	2007/09/02	2007/08/31		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-8D	MW 06-9S	MW 06-9M	MW 06-10S	RDL	QC Batch

Total Titanium (Ti)	ug/L	<0.5	<0.5	0.5	<0.5	0.5	1837295
Total Uranium (U)	ug/L	12.3	0.40	1.86	6.80	0.01	1837295
Total Vanadium (V)	ug/L	0.08	0.10	<0.05	0.11	0.05	1837295
Total Zinc (Zn)	ug/L	2.8	1.6	0.9	2.1	0.5	1837295

RDL = Reportable Detection Limit

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81625	G81626	G81627	G81628		
Sampling Date		2007/08/31	2007/08/31	2007/09/03	2007/09/02		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-10M	MW 06-10D	MW 06-11S	MW 06-12S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	0.012	0.008	1839659
Dissolved Calcium (Ca)	mg/L	86.8	75.9	48.6	112	0.05	1839659
Dissolved Iron (Fe)	mg/L	4.17	4.64	0.181	0.262	0.005	1839659
Dissolved Magnesium (Mg)	mg/L	13.2	20.6	11.4	19.2	0.05	1839659
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1839659
Dissolved Silicon (Si)	mg/L	3.85	3.68	4.63	7.70	0.05	1839659
Dissolved Sodium (Na)	mg/L	2.84	1.18	4.42	42.2	0.05	1839659
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1839659
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	10.7	7.6	14.5	1.1	0.2	1837543
Dissolved Antimony (Sb)	ug/L	<0.05	0.64	1.15	0.71	0.05	1837543
Dissolved Arsenic (As)	ug/L	0.4	0.3	4.2	3.1	0.1	1837543
Dissolved Barium (Ba)	ug/L	47.5	84.2	43.5	23.3	0.02	1837543
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Cadmium (Cd)	ug/L	0.01	<0.01	0.07	0.01	0.01	1837543
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1837543
Dissolved Cobalt (Co)	ug/L	0.05	<0.02	0.04	0.55	0.02	1837543
Dissolved Copper (Cu)	ug/L	0.3	<0.1	<0.1	<0.1	0.1	1837543
Dissolved Lead (Pb)	ug/L	0.08	0.08	0.03	<0.02	0.02	1837543
Dissolved Lithium (Li)	ug/L	2.0	3.7	28.1	8.8	0.2	1837543
Dissolved Manganese (Mn)	ug/L	250	99.5	43.5	331	0.02	1837543
Dissolved Molybdenum (Mo)	ug/L	2.16	4.23	35.6	4.73	0.02	1837543
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837543
Dissolved Potassium (K)	ug/L	2060	2630	2590	3190	50	1837543
Dissolved Selenium (Se)	ug/L	<0.5	0.5	0.6	<0.5	0.5	1837543
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837543
Dissolved Strontium (Sr)	ug/L	133	163	98.7	349	0.01	1837543
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837543
Dissolved Tin (Sn)	ug/L	0.08	0.21	0.41	0.17	0.05	1837543
Dissolved Titanium (Ti)	ug/L	0.8	0.6	<0.5	1.0	0.5	1837543
Dissolved Uranium (U)	ug/L	3.23	2.22	4.45	14.2	0.01	1837543
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	0.74	0.35	0.05	1837543
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
Report Date: 2007/09/13

Yukon Zinc Corporation
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81625	G81626	G81627	G81628		
Sampling Date		2007/08/31	2007/08/31	2007/09/03	2007/09/02		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-10M	MW 06-10D	MW 06-11S	MW 06-12S	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	3.4	<0.5	0.7	<0.5	0.5	1837543
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835312
Total Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1835313
Total Metals by ICP							
Total Boron (B)	mg/L	<0.008	<0.008	<0.008	0.010	0.008	1837752
Total Calcium (Ca)	mg/L	82.6	69.6	47.6	104	0.05	1837752
Total Iron (Fe)	mg/L	4.21	4.32	0.182	0.222	0.005	1837752
Total Magnesium (Mg)	mg/L	12.1	19.2	10.8	18.0	0.05	1837752
Total Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1837752
Total Silicon (Si)	mg/L	3.64	3.48	4.46	7.24	0.05	1837752
Total Sodium (Na)	mg/L	2.54	1.09	4.11	38.5	0.05	1837752
Total Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1837752
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	6.8	11.7	18.3	7.3	0.2	1837295
Total Antimony (Sb)	ug/L	<0.05	0.87	0.98	0.75	0.05	1837295
Total Arsenic (As)	ug/L	0.5	0.4	4.1	3.0	0.1	1837295
Total Barium (Ba)	ug/L	43.7	74.8	41.8	22.5	0.02	1837295
Total Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Cadmium (Cd)	ug/L	0.01	0.02	0.08	<0.01	0.01	1837295
Total Chromium (Cr)	ug/L	<0.2	<0.2	0.6	<0.2	0.2	1837295
Total Cobalt (Co)	ug/L	0.06	0.03	0.06	0.58	0.02	1837295
Total Copper (Cu)	ug/L	0.1	0.2	<0.1	<0.1	0.1	1837295
Total Lead (Pb)	ug/L	0.05	0.05	0.03	0.05	0.02	1837295
Total Lithium (Li)	ug/L	1.7	3.4	16.9	7.9	0.2	1837295
Total Manganese (Mn)	ug/L	262	95.5	65.3	341	0.02	1837295
Total Molybdenum (Mo)	ug/L	2.23	4.23	30.0	4.49	0.02	1837295
Total Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1837295
Total Potassium (K)	ug/L	1940	2420	2000	2960	50	1837295
Total Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1837295
Total Strontium (Sr)	ug/L	144	163	103	353	0.01	1837295
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1837295
Total Tin (Sn)	ug/L	0.13	0.37	0.37	0.23	0.05	1837295
RDL = Reportable Detection Limit							

Maxxam Job #: A741295
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		G81625	G81626	G81627	G81628		
Sampling Date		2007/08/31	2007/08/31	2007/09/03	2007/09/02		
COC Number		08196686	08196686	08196686	08196686		
	Units	MW 06-10M	MW 06-10D	MW 06-11S	MW 06-12S	RDL	QC Batch

Total Titanium (Ti)	ug/L	0.7	0.6	<0.5	1.8	0.5	1837295
Total Uranium (U)	ug/L	3.60	2.44	4.05	13.8	0.01	1837295
Total Vanadium (V)	ug/L	<0.05	<0.05	0.97	0.32	0.05	1837295
Total Zinc (Zn)	ug/L	3.2	3.0	1.1	1.4	0.5	1837295

RDL = Reportable Detection Limit

Maxxam Job #: A741295
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General Comments

Some metals dissolved > total in this job, reanalyzed & confirmed. Possible field-filtered contamination on dissolved metal bottle or there is a discrepancy between samples taken.

RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample G81617-01 pH Water: pH result greater than the highest calibration standard of pH 10.

Sample G81617-01 Total Dissolved Solids (Filt. Residue): pH result greater than the highest calibration standard of pH 10. Possible matrix interference.

Results relate only to the items tested.

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report
Maxxam Job Number: VA741295

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1827894 CK	SPIKE	Turbidity	2007/09/06		99	%	N/A
	BLANK	Turbidity	2007/09/06	<0.1		NTU	
	RPD [G81601-01]	Turbidity	2007/09/06	1.1		%	25
	RPD [G81628-01]	Turbidity	2007/09/06	0.7		%	25
1831740 CK	SPIKE	pH	2007/09/06		101	%	96 - 104
	RPD [G81601-01]	pH	2007/09/06	0.9		%	25
1831742 CK	SPIKE	Conductivity	2007/09/06		101	%	80 - 120
	BLANK	Conductivity	2007/09/06	<1		uS/cm	
	RPD [G81601-01]	Conductivity	2007/09/06	0.3		%	25
1831744 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/09/06		98	%	N/A
	SPIKE	Alkalinity (Total as CaCO3)	2007/09/06		94	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/09/06	<0.5		mg/L	
	RPD [G81601-01]	Alkalinity (Total as CaCO3)	2007/09/06	1.3		%	25
1833861 WAY	MATRIX SPIKE	Fluoride (F)	2007/09/07		110	%	80 - 120
	SPIKE	Fluoride (F)	2007/09/07		103	%	80 - 120
	BLANK	Fluoride (F)	2007/09/07	<0.01		mg/L	
	RPD [G81601-01]	Fluoride (F)	2007/09/07	2.2		%	25
1835207 FS1	MATRIX SPIKE						
	[G81628-01]	Total Dissolved Solids	2007/09/07		96	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/09/07		104	%	80 - 120
	BLANK	Total Dissolved Solids	2007/09/07	<10		mg/L	
	RPD [G81628-01]	Total Dissolved Solids	2007/09/07	2.1		%	25
1835312 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/09/10		107	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/09/10		118	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/09/10		98	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/09/10	<0.01		ug/L	
	RPD [G81617-01]	Dissolved Mercury (Hg)	2007/09/10	NC		%	25
1835313 JT3	MATRIX SPIKE	Total Mercury (Hg)	2007/09/10		108	%	70 - 130
	QC STANDARD	Total Mercury (Hg)	2007/09/10		116	%	80 - 120
	SPIKE	Total Mercury (Hg)	2007/09/10		95	%	80 - 120
	BLANK	Total Mercury (Hg)	2007/09/10	<0.01		ug/L	
	RPD [G81617-01]	Total Mercury (Hg)	2007/09/10	NC		%	25
1836311 AA1	MATRIX SPIKE	Total Selenium (Se)	2007/09/10		112	%	75 - 125
	SPIKE	Total Selenium (Se)	2007/09/10		98	%	75 - 125
	BLANK	Total Selenium (Se)	2007/09/10	<0.5		ug/L	
	RPD [G81628-01]	Total Selenium (Se)	2007/09/10	NC		%	25
1836533 TS1	MATRIX SPIKE	Orthophosphate (P)	2007/09/10		87	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/09/10		102	%	80 - 120
	BLANK	Orthophosphate (P)	2007/09/10	<0.001		mg/L	
	RPD [G81628-01]	Orthophosphate (P)	2007/09/10	1.4		%	20
1836721 JD1	Calibration Check	Dissolved Bromide (Br)	2007/09/10		114	%	83 - 117
	MATRIX SPIKE	Dissolved Bromide (Br)	2007/09/10		113	%	80 - 120
	BLANK	Dissolved Bromide (Br)	2007/09/10	<0.01		mg/L	
	RPD	Dissolved Bromide (Br)	2007/09/10	NC		%	20
1836734 BB3	MATRIX SPIKE						
	[G81622-01]	Nitrate plus Nitrite (N)	2007/09/10		118	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/09/10		107	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/09/10	<0.002		mg/L	
	RPD [G81622-01]	Nitrate plus Nitrite (N)	2007/09/10	NC		%	25
1836737 BB3	MATRIX SPIKE						
	[G81622-01]	Nitrite (N)	2007/09/10		105	%	80 - 120
	SPIKE	Nitrite (N)	2007/09/10		99	%	80 - 120
	BLANK	Nitrite (N)	2007/09/10	<0.002		mg/L	
	RPD [G81622-01]	Nitrite (N)	2007/09/10	NC		%	25
1836780 MX	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/09/10		107	%	80 - 120

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Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA741295

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1836780 MX	SPIKE	Dissolved Organic Carbon (C)	2007/09/10		106	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/09/10	<0.5		mg/L	
	RPD [G81623-01]	Dissolved Organic Carbon (C)	2007/09/10	NC		%	20
1837295 AA1	MATRIX SPIKE	Total Arsenic (As)	2007/09/12		107	%	75 - 125
		Total Cadmium (Cd)	2007/09/12		110	%	75 - 125
		Total Chromium (Cr)	2007/09/12		110	%	75 - 125
		Total Cobalt (Co)	2007/09/12		113	%	75 - 125
		Total Copper (Cu)	2007/09/12		116	%	75 - 125
		Total Lead (Pb)	2007/09/12		117	%	75 - 125
		Total Thallium (Tl)	2007/09/12		116	%	75 - 125
		Total Zinc (Zn)	2007/09/12		115	%	75 - 125
	SPIKE	Total Arsenic (As)	2007/09/12		103	%	75 - 125
		Total Cadmium (Cd)	2007/09/12		100	%	75 - 125
		Total Chromium (Cr)	2007/09/12		107	%	75 - 125
		Total Cobalt (Co)	2007/09/12		110	%	75 - 125
		Total Copper (Cu)	2007/09/12		114	%	75 - 125
		Total Lead (Pb)	2007/09/12		112	%	75 - 125
		Total Thallium (Tl)	2007/09/12		109	%	75 - 125
		Total Zinc (Zn)	2007/09/12		109	%	75 - 125
	BLANK	Total Aluminum (Al)	2007/09/12	0.3, RDL=0.2		ug/L	
		Total Antimony (Sb)	2007/09/12	<0.05		ug/L	
		Total Arsenic (As)	2007/09/12	<0.1		ug/L	
		Total Barium (Ba)	2007/09/12	<0.02		ug/L	
		Total Beryllium (Be)	2007/09/12	0.07, RDL=0.05		ug/L	
		Total Bismuth (Bi)	2007/09/12	<0.05		ug/L	
		Total Cadmium (Cd)	2007/09/12	<0.01		ug/L	
		Total Chromium (Cr)	2007/09/12	<0.2		ug/L	
		Total Cobalt (Co)	2007/09/12	<0.02		ug/L	
		Total Copper (Cu)	2007/09/12	<0.1		ug/L	
		Total Lead (Pb)	2007/09/12	<0.02		ug/L	
		Total Lithium (Li)	2007/09/12	<0.2		ug/L	
		Total Manganese (Mn)	2007/09/12	<0.02		ug/L	
		Total Molybdenum (Mo)	2007/09/12	<0.02		ug/L	
		Total Nickel (Ni)	2007/09/12	<0.5		ug/L	
		Total Potassium (K)	2007/09/12	<50		ug/L	
		Total Silver (Ag)	2007/09/12	<0.01		ug/L	
		Total Strontium (Sr)	2007/09/12	<0.01		ug/L	
		Total Thallium (Tl)	2007/09/12	<0.05		ug/L	
		Total Tin (Sn)	2007/09/12	<0.05		ug/L	
		Total Titanium (Ti)	2007/09/12	<0.5		ug/L	
		Total Uranium (U)	2007/09/12	<0.01		ug/L	
		Total Vanadium (V)	2007/09/12	<0.05		ug/L	
		Total Zinc (Zn)	2007/09/12	<0.5		ug/L	
	RPD	Total Aluminum (Al)	2007/09/12	1.1		%	25
		Total Antimony (Sb)	2007/09/12	NC		%	25
		Total Arsenic (As)	2007/09/12	NC		%	25
		Total Barium (Ba)	2007/09/12	2.8		%	25
		Total Beryllium (Be)	2007/09/12	NC		%	25
		Total Bismuth (Bi)	2007/09/12	NC		%	25
		Total Cadmium (Cd)	2007/09/12	NC		%	25
		Total Chromium (Cr)	2007/09/12	NC		%	25
		Total Cobalt (Co)	2007/09/12	NC		%	25
		Total Copper (Cu)	2007/09/12	6.0		%	25
		Total Lead (Pb)	2007/09/12	NC		%	25
		Total Manganese (Mn)	2007/09/12	1.6		%	25

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Quality Assurance Report (Continued)

Maxxam Job Number: VA741295

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1837295 AA1	RPD	Total Molybdenum (Mo)	2007/09/12	7.4		%	25
		Total Nickel (Ni)	2007/09/12	NC		%	25
		Total Potassium (K)	2007/09/12	3.8		%	25
		Total Silver (Ag)	2007/09/12	NC		%	25
		Total Strontium (Sr)	2007/09/12	0.2		%	25
		Total Thallium (Tl)	2007/09/12	NC		%	25
		Total Tin (Sn)	2007/09/12	NC		%	25
		Total Titanium (Ti)	2007/09/12	NC		%	25
		Total Uranium (U)	2007/09/12	8.1		%	25
		Total Vanadium (V)	2007/09/12	NC		%	25
1837543 AA1	MATRIX SPIKE	Total Zinc (Zn)	2007/09/12	NC		%	25
		Dissolved Arsenic (As)	2007/09/11		113	%	75 - 125
		Dissolved Cadmium (Cd)	2007/09/11		107	%	75 - 125
		Dissolved Chromium (Cr)	2007/09/11		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/09/11		105	%	75 - 125
		Dissolved Copper (Cu)	2007/09/11		111	%	75 - 125
		Dissolved Lead (Pb)	2007/09/11		113	%	75 - 125
		Dissolved Selenium (Se)	2007/09/11		113	%	75 - 125
		Dissolved Thallium (Tl)	2007/09/11		107	%	75 - 125
		Dissolved Zinc (Zn)	2007/09/11		115	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/09/11		103	%	75 - 125
		Dissolved Cadmium (Cd)	2007/09/11		95	%	75 - 125
		Dissolved Chromium (Cr)	2007/09/11		110	%	75 - 125
		Dissolved Cobalt (Co)	2007/09/11		106	%	75 - 125
		Dissolved Copper (Cu)	2007/09/11		105	%	75 - 125
		Dissolved Lead (Pb)	2007/09/11		106	%	75 - 125
		Dissolved Selenium (Se)	2007/09/11		96	%	75 - 125
		Dissolved Thallium (Tl)	2007/09/11		104	%	75 - 125
		Dissolved Zinc (Zn)	2007/09/11		98	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/09/11	0.3, RDL=0.2		ug/L	
		Dissolved Antimony (Sb)	2007/09/11	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/09/11	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/09/11	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/09/11	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/09/11	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/09/11	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/09/11	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/09/11	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/09/11	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/09/11	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/09/11	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/09/11	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/09/11	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/09/11	<0.5		ug/L	
		Dissolved Potassium (K)	2007/09/11	<50		ug/L	
		Dissolved Selenium (Se)	2007/09/11	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/09/11	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/09/11	0.01, RDL=0.01		ug/L	
		Dissolved Thallium (Tl)	2007/09/11	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/09/11	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/09/11	<0.5		ug/L	
		Dissolved Uranium (U)	2007/09/11	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/09/11	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/09/11	0.7, RDL=0.5		ug/L	
		RPD [G81620-01] Dissolved Aluminum (Al)	2007/09/11	5.6		%	25

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA741295

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1837543 AA1	RPD [G81620-01]	Dissolved Antimony (Sb)	2007/09/11	1.5		%	25
		Dissolved Arsenic (As)	2007/09/11	2.0		%	25
		Dissolved Barium (Ba)	2007/09/11	0.5		%	25
		Dissolved Beryllium (Be)	2007/09/11	NC		%	25
		Dissolved Bismuth (Bi)	2007/09/11	NC		%	25
		Dissolved Cadmium (Cd)	2007/09/11	NC		%	25
		Dissolved Chromium (Cr)	2007/09/11	NC		%	25
		Dissolved Cobalt (Co)	2007/09/11	0.8		%	25
		Dissolved Copper (Cu)	2007/09/11	NC		%	25
		Dissolved Lead (Pb)	2007/09/11	NC		%	25
		Dissolved Lithium (Li)	2007/09/11	NC		%	25
		Dissolved Manganese (Mn)	2007/09/11	2.1		%	25
		Dissolved Molybdenum (Mo)	2007/09/11	1.1		%	25
		Dissolved Nickel (Ni)	2007/09/11	2.6		%	25
		Dissolved Potassium (K)	2007/09/11	0.6		%	25
		Dissolved Selenium (Se)	2007/09/11	NC		%	25
		Dissolved Silver (Ag)	2007/09/11	NC		%	25
		Dissolved Strontium (Sr)	2007/09/11	1.7		%	25
		Dissolved Thallium (Tl)	2007/09/11	NC		%	25
		Dissolved Tin (Sn)	2007/09/11	NC		%	25
		Dissolved Titanium (Ti)	2007/09/11	NC		%	25
		Dissolved Uranium (U)	2007/09/11	NC		%	25
		Dissolved Vanadium (V)	2007/09/11	NC		%	25
		Dissolved Zinc (Zn)	2007/09/11	5.3		%	25
1837752 GS2	BLANK	Total Boron (B)	2007/09/10	<0.008		mg/L	
		Total Calcium (Ca)	2007/09/10	<0.05		mg/L	
		Total Iron (Fe)	2007/09/10	<0.005		mg/L	
		Total Magnesium (Mg)	2007/09/10	<0.05		mg/L	
		Total Phosphorus (P)	2007/09/10	<0.1		mg/L	
		Total Silicon (Si)	2007/09/10	<0.05		mg/L	
		Total Sodium (Na)	2007/09/10	<0.05		mg/L	
		Total Zirconium (Zr)	2007/09/10	<0.005		mg/L	
	RPD	Total Boron (B)	2007/09/10	NC		%	25
		Total Calcium (Ca)	2007/09/10	3.1		%	25
		Total Iron (Fe)	2007/09/10	12.3		%	25
		Total Magnesium (Mg)	2007/09/10	0.9		%	25
		Total Sodium (Na)	2007/09/10	2.2		%	25
		Total Zirconium (Zr)	2007/09/10	NC		%	25
1838312 MX	MATRIX SPIKE	Total Phosphorus (P)	2007/09/12		95	%	80 - 120
		Total Phosphorus (P)	2007/09/12		89	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/09/12	<0.005		mg/L	
	RPD [G81618-01]	Total Phosphorus (P)	2007/09/12	2.1		%	25
1838425 FS1	MATRIX SPIKE	Total Suspended Solids	2007/09/12		107	%	N/A
		Total Suspended Solids	2007/09/12		102	%	N/A
	BLANK	Total Suspended Solids	2007/09/12	<4		mg/L	
	RPD [G81595-01]	Total Suspended Solids	2007/09/12	3.4		%	25
	RPD [G81626-01]	Total Suspended Solids	2007/09/12	NC		%	25
1838483 JD1	Calibration Check	Dissolved Bromide (Br)	2007/09/11		108	%	83 - 117
	MATRIX SPIKE						
	[G81625-01]	Dissolved Bromide (Br)	2007/09/11		107	%	80 - 120
	BLANK	Dissolved Bromide (Br)	2007/09/11	<0.01		mg/L	
1838884 NN	RPD [G81625-01]	Dissolved Bromide (Br)	2007/09/11	NC		%	20
	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/09/11		105	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/09/11		105	%	80 - 120

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Yukon Zinc Corporation
Attention: PAMELA LADYMAN
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA741295

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1838884 NN	BLANK	Dissolved Chloride (Cl)	2007/09/11	<0.5		mg/L	
	RPD [G81594-01]	Dissolved Chloride (Cl)	2007/09/11	NC		%	20
	RPD [G81627-01]	Dissolved Chloride (Cl)	2007/09/11	NC		%	20
1838888 NN	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/09/11		98	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/09/11		102	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/09/11	<0.5		mg/L	
	RPD [G81594-01]	Dissolved Sulphate (SO4)	2007/09/11	0.4		%	20
	RPD [G81627-01]	Dissolved Sulphate (SO4)	2007/09/11	1		%	20
1839659 GS2	BLANK	Dissolved Boron (B)	2007/09/11	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/09/11	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/09/11	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/09/11	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/09/11	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/09/11	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/09/11	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/09/11	<0.005		mg/L	
1841342 NN	MATRIX SPIKE	Ammonia (N)	2007/09/12		96	%	80 - 120
	SPIKE	Ammonia (N)	2007/09/12		94	%	80 - 120
	BLANK	Ammonia (N)	2007/09/12	<0.005		mg/L	
	RPD [G81618-01]	Ammonia (N)	2007/09/12	NC		%	25
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference							

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08198148, 08198150

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/10/11

This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A745736

Received: 2007/09/26, 14:05

Sample Matrix: Water

Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	15	2007/09/29	2007/10/01	BRN SOP-00264 R2.0	Based on SM2320B
Alkalinity - Water	1	2007/10/02	2007/10/03	BRN SOP-00264 R2.0	Based on SM2320B
Bromide by IC Ø	16	N/A	2007/10/04	CAL SOP-00041	IC
Chloride by Automated Colourimetry	16	N/A	2007/10/04	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	16	N/A	2007/10/02	BRN SOP-00224 R3.0	Based on SM-5310C
Conductance - water	15	N/A	2007/10/01	BRN SOP-00264 R2.0	Based on SM-2510B
Conductance - water	1	N/A	2007/10/03	BRN SOP-00264 R2.0	Based on SM-2510B
Fluoride	16	N/A	2007/10/02	BRN SOP-00225 R1.0	Based SM - 4500 F C
Hardness (calculated as CaCO3)	15	N/A	2007/10/01		
Hardness (calculated as CaCO3)	1	N/A	2007/10/03		
Mercury (dissolved; low level)	15	2007/09/28	2007/10/01	BRN SOP-00205	Based on EPA 245.1
Mercury (dissolved; low level)	1	2007/10/04	2007/10/05	BRN SOP-00205	Based on EPA 245.1
Elements by ICP-AES (dissolved)	15	2007/09/30	2007/09/30	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICP-AES (dissolved)	1	2007/10/02	2007/10/02	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) Ø	15	2007/10/01	2007/10/01	BRN SOP-00204	Based on EPA 200.8
Elements by ICPMS (dissolved) Ø	1	2007/10/02	2007/10/03	BRN SOP-00204	Based on EPA 200.8
Ammonia (N)	15	N/A	2007/10/01	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Ammonia (N)	1	N/A	2007/10/03	BRN SOP-00231 R3.0	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	15	N/A	2007/10/01	BRN SOP-00233 R1.0	Based on EPA 353.2
Nitrate+Nitrite (N) (low level)	1	N/A	2007/10/03	BRN SOP-00233 R1.0	Based on EPA 353.2
Nitrite (N) (low level)	15	N/A	2007/10/01	BRN SOP-00233 R1.0	EPA 353.2
Nitrite (N) (low level)	1	N/A	2007/10/03	BRN SOP-00233 R1.0	EPA 353.2
Nitrogen - Nitrate (as N)	15	N/A	2007/10/02		
Nitrogen - Nitrate (as N)	1	N/A	2007/10/04		
pH Water	15	N/A	2007/10/01	BRN SOP-00264 R2.0	Based on SM-4500H+B
pH Water	1	N/A	2007/10/03	BRN SOP-00264 R2.0	Based on SM-4500H+B
Orthophosphate by Konelab Ø	15	N/A	2007/10/01	BRN SOP-00235 R3.0	SM 4500 PF
Orthophosphate by Konelab Ø	1	N/A	2007/10/09	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	16	N/A	2007/10/04	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	5	N/A	2007/10/04	ING443 Rev.5.1	APHA 2540C
Total Dissolved Solids (Filt. Residue)	11	N/A	2007/10/05	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	16	N/A	2007/10/05	BRN SOP-00236 R4.0	SM 4500
Total Suspended Solids Ø	15	N/A	2007/10/02	BRN SOP-00277 R2.0	Based on SM - 2540 D
Total Suspended Solids Ø	1	N/A	2007/10/04	BRN SOP-00277 R2.0	Based on SM - 2540 D
Turbidity	15	N/A	2007/09/29	BRN SOP-00265 R3.0	SM - 2130B
Turbidity	1	N/A	2007/10/01	BRN SOP-00265 R3.0	SM - 2130B

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Your C.O.C. #: 08198148, 08198150

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/10/11

CERTIFICATE OF ANALYSIS

-2-

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

- (1) This test was performed by Maxxam Calgary
- (2) SCC/CAEAL

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====

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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H19272		H19275	H19276		
Sampling Date		2007/09/21		2007/09/21	2007/09/21		
COC Number		08198148		08198148	08198148		
	Units	MW 05-1B	QC Batch	MW 05-2A	MW 05-2B	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.12	1879545	0.28	0.08	0.01	1879545
Calculated Parameters							
Nitrate (N)	mg/L	0.002	1877204	<0.002	0.028	0.002	1876242
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	171	1878798	215	132	0.5	1876082
Dissolved Organic Carbon (C)	mg/L	9.0	1880256	1.0	1.6	0.5	1880256
Alkalinity (Total as CaCO ₃)	mg/L	158	1879674	177	125	0.5	1876193
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	1886324	<0.01	<0.01	0.01	1886324
Orthophosphate (P)	mg/L	0.013	1885958	0.007	0.008	0.001	1877438
Dissolved Sulphate (SO ₄)	mg/L	0.5	1886098	33.4	7.3	0.5	1886098
Dissolved Chloride (Cl)	mg/L	2.5	1886078	3.5	<0.5	0.5	1886078
Nutrients							
Ammonia (N)	mg/L	0.096	1882954	0.122	0.045	0.005	1876239
Nitrate plus Nitrite (N)	mg/L	0.004	1883474	0.003	0.096	0.002	1878082
Nitrite (N)	mg/L	0.002	1883523	0.004	0.068	0.002	1878084
Total Phosphorus (P)	mg/L	0.285	1884857	<0.005	0.226	0.005	1884857
Physical Properties							
Conductivity	uS/cm	296	1879669	410	253	1	1876192
pH	pH Units	7.9	1879617	8.1	7.9	0.1	1876191
Physical Properties							
Total Suspended Solids	mg/L	39	1884782	5	20	4	1878944
Total Dissolved Solids	mg/L	182	1888023	240	148	10	1888023
Turbidity	NTU	86.7	1877779	16.1	82.5	0.1	1875939
RDL = Reportable Detection Limit							

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H19277		H19278		
Sampling Date		2007/09/23		2007/09/21		
COC Number		08198148		08198148		
	Units	MW 05-5A	RDL	MW 05-6A	RDL	QC Batch
Misc. Inorganics						
Fluoride (F)	mg/L	2.40	0.01	0.17	0.01	1879545
Calculated Parameters						
Nitrate (N)	mg/L	<0.002	0.002	<0.002	0.002	1876242
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	278	0.5	86.6	0.5	1876082
Dissolved Organic Carbon (C)	mg/L	0.8	0.5	1.1	0.5	1880256
Alkalinity (Total as CaCO ₃)	mg/L	231	0.5	79.1	0.5	1876193
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	0.01	<0.01	0.01	1886324
Orthophosphate (P)	mg/L	0.014	0.001	0.57	0.01	1877438
Dissolved Sulphate (SO ₄)	mg/L	38.4	0.5	12.5	0.5	1886098
Dissolved Chloride (Cl)	mg/L	<0.5	0.5	1.0	0.5	1886078
Nutrients						
Ammonia (N)	mg/L	0.068	0.005	<0.005	0.005	1876239
Nitrate plus Nitrite (N)	mg/L	0.003	0.002	<0.002	0.002	1878082
Nitrite (N)	mg/L	0.003	0.002	<0.002	0.002	1878084
Total Phosphorus (P)	mg/L	0.019	0.005	0.54	0.05	1884857
Physical Properties						
Conductivity	uS/cm	494	1	184	1	1876192
pH	pH Units	8.0	0.1	7.9	0.1	1876191
Physical Properties						
Total Suspended Solids	mg/L	<4	4	<4	4	1878944
Total Dissolved Solids	mg/L	288	10	100	10	1888023
Turbidity	NTU	18.0	0.1	6.3	0.1	1875939
RDL = Reportable Detection Limit						

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H19279	H19280	H19281	H19282		
Sampling Date		2007/09/21	2007/09/21	2007/09/21	2007/09/22		
COC Number		08198148	08198148	08198148	08198148		
	Units	MW 05-6B	MW 05-7A	MW 05-7B	MW 06-8S	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.04	0.08	0.13	0.20	0.01	1879545
Calculated Parameters							
Nitrate (N)	mg/L	0.184	0.027	0.007	0.022	0.002	1876242
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	101	1470	78.6	81.2	0.5	1876082
Dissolved Organic Carbon (C)	mg/L	<0.5	3.0	0.6	0.6	0.5	1880256
Alkalinity (Total as CaCO ₃)	mg/L	92.1	1410	67.3	50.2	0.5	1876193
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	<0.01	0.01	1886324
Orthophosphate (P)	mg/L	0.009	0.005	0.052	0.009	0.001	1877438
Dissolved Sulphate (SO ₄)	mg/L	8.0	4.7	14.8	30.9	0.5	1886098
Dissolved Chloride (Cl)	mg/L	<0.5	2.1	<0.5	2.4	0.5	1886078
Nutrients							
Ammonia (N)	mg/L	<0.005	0.092	0.017	0.021	0.005	1876239
Nitrate plus Nitrite (N)	mg/L	0.184	0.030	0.007	0.022	0.002	1878082
Nitrite (N)	mg/L	<0.002	0.003	<0.002	<0.002	0.002	1878084
Total Phosphorus (P)	mg/L	0.006	<0.005	0.051	<0.005	0.005	1884857
Physical Properties							
Conductivity	uS/cm	197	5710	157	173	1	1876192
pH	pH Units	8.1	12.4	8.9	7.7	0.1	1876191
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	<4	<4	4	1878944
Total Dissolved Solids	mg/L	130	1380	112	148	10	1889387
Turbidity	NTU	<0.1	0.3	<0.1	0.8	0.1	1875939
RDL = Reportable Detection Limit							

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H19283	H19284	H19285	H19286		
Sampling Date		2007/09/22	2007/09/23	2007/09/22	2007/09/22		
COC Number		08198148	08198150	08198150	08198150		
	Units	MW 06-8D	MW 06-9S	MW 06-10S	MW 06-10M	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.97	0.40	0.24	0.79	0.01	1879545
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	1876242
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	275	144	144	267	0.5	1876082
Dissolved Organic Carbon (C)	mg/L	0.7	1.5	1.4	0.6	0.5	1880256
Alkalinity (Total as CaCO ₃)	mg/L	224	111	115	205	0.5	1876193
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	<0.01	0.01	1886324
Orthophosphate (P)	mg/L	0.009	0.205	0.020	0.006	0.001	1877438
Dissolved Sulphate (SO ₄)	mg/L	30.4	22.3	29.7	44.6	0.5	1886098
Dissolved Chloride (Cl)	mg/L	0.5	2.4	1.1	3.0	0.5	1886078
Nutrients							
Ammonia (N)	mg/L	0.079	0.025	0.025	0.045	0.005	1876239
Nitrate plus Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.006	0.002	1878082
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.007	0.002	1878084
Total Phosphorus (P)	mg/L	0.006	0.209	0.020	0.007	0.005	1884857
Physical Properties							
Conductivity	uS/cm	456	259	278	473	1	1876192
pH	pH Units	8.2	8.2	8.2	8.1	0.1	1876191
Physical Properties							
Total Suspended Solids	mg/L	<4	<4	<4	14	4	1878944
Total Dissolved Solids	mg/L	340	192	194	290	10	1889387
Turbidity	NTU	1.0	0.2	0.3	19.7	0.1	1875939
RDL = Reportable Detection Limit							

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H19287	H19288		H19289		
Sampling Date		2007/09/22	2007/09/23		2007/09/21		
COC Number		08198150	08198150		08198150		
	Units	MW 06-10D	MW 06-11S	RDL	MW 06-12S	RDL	QC Batch
Misc. Inorganics							
Fluoride (F)	mg/L	0.95	2.27	0.01	1.12	0.01	1879545
Calculated Parameters							
Nitrate (N)	mg/L	<0.002	0.002	0.002	<0.002	0.002	1876242
Misc. Inorganics							
Dissolved Hardness (CaCO ₃)	mg/L	276	180	0.5	373	0.5	1876082
Dissolved Organic Carbon (C)	mg/L	0.6	1.3	0.5	1.9	0.5	1880256
Alkalinity (Total as CaCO ₃)	mg/L	239	138	0.5	146	0.5	1876193
Anions							
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	0.01	0.05	0.01	1886324
Orthophosphate (P)	mg/L	0.010	0.025	0.001	0.046	0.001	1877438
Dissolved Sulphate (SO ₄)	mg/L	16.4	35.8	0.5	277	5	1886098
Dissolved Chloride (Cl)	mg/L	1.6	2.6	0.5	<0.5	0.5	1886078
Nutrients							
Ammonia (N)	mg/L	0.066	0.146	0.005	0.190	0.005	1876239
Nitrate plus Nitrite (N)	mg/L	<0.002	0.002	0.002	<0.002	0.002	1878082
Nitrite (N)	mg/L	<0.002	<0.002	0.002	<0.002	0.002	1878084
Total Phosphorus (P)	mg/L	0.005	0.028	0.005	0.051	0.005	1884857
Physical Properties							
Conductivity	uS/cm	473	337	1	780	1	1876192
pH	pH Units	8.2	8.3	0.1	8.3	0.1	1876191
Physical Properties							
Total Suspended Solids	mg/L	7	<4	4	<4	4	1878944
Total Dissolved Solids	mg/L	308	244	10	606	10	1889387
Turbidity	NTU	24.3	0.3	0.1	1.7	0.1	1875939
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19272		H19275	H19276		
Sampling Date		2007/09/21		2007/09/21	2007/09/21		
COC Number		08198148		08198148	08198148		
	Units	MW 05-1B	QC Batch	MW 05-2A	MW 05-2B	RDL	QC Batch
Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	1880059	<0.008	<0.008	0.008	1876535
Dissolved Calcium (Ca)	mg/L	60.9	1880059	56.9	40.0	0.05	1876535
Dissolved Iron (Fe)	mg/L	24.6	1880059	1.14	8.21	0.005	1876535
Dissolved Magnesium (Mg)	mg/L	4.71	1880059	17.6	7.84	0.05	1876535
Dissolved Phosphorus (P)	mg/L	0.3	1880059	<0.1	0.2	0.1	1876535
Dissolved Silicon (Si)	mg/L	4.66	1880059	3.41	3.96	0.05	1876535
Dissolved Sodium (Na)	mg/L	0.95	1880059	0.65	1.05	0.05	1876535
Dissolved Zirconium (Zr)	mg/L	<0.005	1880059	<0.005	<0.005	0.005	1876535
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	31.9	1881704	1.4	1.2	0.2	1878224
Dissolved Antimony (Sb)	ug/L	<0.05	1881704	0.08	<0.05	0.05	1878224
Dissolved Arsenic (As)	ug/L	3.0	1881704	1.1	27.8	0.1	1878224
Dissolved Barium (Ba)	ug/L	477	1881704	46.7	288	0.02	1878224
Dissolved Beryllium (Be)	ug/L	<0.05	1881704	<0.05	<0.05	0.05	1878224
Dissolved Bismuth (Bi)	ug/L	<0.05	1881704	<0.05	<0.05	0.05	1878224
Dissolved Cadmium (Cd)	ug/L	<0.01	1881704	0.01	<0.01	0.01	1878224
Dissolved Chromium (Cr)	ug/L	0.7	1881704	0.3	0.5	0.2	1878224
Dissolved Cobalt (Co)	ug/L	0.10	1881704	0.13	0.11	0.02	1878224
Dissolved Copper (Cu)	ug/L	<0.1	1881704	<0.1	<0.1	0.1	1878224
Dissolved Lead (Pb)	ug/L	<0.02	1881704	<0.02	<0.02	0.02	1878224
Dissolved Lithium (Li)	ug/L	1.1	1881704	2.6	0.4	0.2	1878224
Dissolved Manganese (Mn)	ug/L	694	1881704	180	941	0.02	1878224
Dissolved Molybdenum (Mo)	ug/L	0.48	1881704	3.13	3.11	0.02	1878224
Dissolved Nickel (Ni)	ug/L	<0.5	1881704	<0.5	<0.5	0.5	1878224
Dissolved Potassium (K)	ug/L	769	1881704	2030	674	50	1878224
Dissolved Selenium (Se)	ug/L	<0.5	1881704	<0.5	<0.5	0.5	1878224
Dissolved Silver (Ag)	ug/L	<0.01	1881704	<0.01	<0.01	0.01	1878224
Dissolved Strontium (Sr)	ug/L	130	1881704	158	87.1	0.01	1878224
Dissolved Thallium (Tl)	ug/L	<0.05	1881704	<0.05	<0.05	0.05	1878224
Dissolved Tin (Sn)	ug/L	<0.05	1881704	<0.05	<0.05	0.05	1878224
Dissolved Titanium (Ti)	ug/L	1.3	1881704	<0.5	<0.5	0.5	1878224
Dissolved Uranium (U)	ug/L	0.02	1881704	8.58	0.23	0.01	1878224
Dissolved Vanadium (V)	ug/L	0.85	1881704	<0.05	<0.05	0.05	1878224
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19272		H19275	H19276		
Sampling Date		2007/09/21		2007/09/21	2007/09/21		
COC Number		08198148		08198148	08198148		
	Units	MW 05-1B	QC Batch	MW 05-2A	MW 05-2B	RDL	QC Batch
Dissolved Zinc (Zn)	ug/L	<0.5	1881704	<0.5	0.5	0.5	1878224
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	1885974	<0.01	<0.01	0.01	1873918
RDL = Reportable Detection Limit							

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19277	H19278	H19279	H19280		
Sampling Date		2007/09/23	2007/09/21	2007/09/21	2007/09/21		
COC Number		08198148	08198148	08198148	08198148		
	Units	MW 05-5A	MW 05-6A	MW 05-6B	MW 05-7A	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1876535
Dissolved Calcium (Ca)	mg/L	74.4	29.5	36.1	589	0.05	1876535
Dissolved Iron (Fe)	mg/L	1.27	0.390	<0.005	<0.005	0.005	1876535
Dissolved Magnesium (Mg)	mg/L	22.4	3.13	2.74	<0.05	0.05	1876535
Dissolved Phosphorus (P)	mg/L	<0.1	0.6	<0.1	<0.1	0.1	1876535
Dissolved Silicon (Si)	mg/L	3.57	6.31	3.91	0.44	0.05	1876535
Dissolved Sodium (Na)	mg/L	0.32	3.86	1.37	4.71	0.05	1876535
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1876535
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	1.3	2.6	13.3	36.9	0.2	1878224
Dissolved Antimony (Sb)	ug/L	6.05	0.47	<0.05	0.19	0.05	1878224
Dissolved Arsenic (As)	ug/L	4.4	4.5	<0.1	0.2	0.1	1878224
Dissolved Barium (Ba)	ug/L	44.6	49.3	146	1730	0.02	1878224
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	<0.01	0.01	0.01	1878224
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	0.3	4.3	0.2	1878224
Dissolved Cobalt (Co)	ug/L	0.32	0.29	0.17	<0.02	0.02	1878224
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	0.6	5.1	0.1	1878224
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	<0.02	0.90	0.02	1878224
Dissolved Lithium (Li)	ug/L	2.7	<0.2	<0.2	49.2	0.2	1878224
Dissolved Manganese (Mn)	ug/L	81.5	341	62.4	0.06	0.02	1878224
Dissolved Molybdenum (Mo)	ug/L	7.40	3.61	0.80	4.45	0.02	1878224
Dissolved Nickel (Ni)	ug/L	1.1	0.7	3.7	5.0	0.5	1878224
Dissolved Potassium (K)	ug/L	1520	1200	870	8120	50	1878224
Dissolved Selenium (Se)	ug/L	<0.5	0.6	0.9	0.7	0.5	1878224
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1878224
Dissolved Strontium (Sr)	ug/L	125	36.2	49.2	1080	0.01	1878224
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Tin (Sn)	ug/L	<0.05	1.03	<0.05	0.49	0.05	1878224
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1878224
Dissolved Uranium (U)	ug/L	25.8	0.33	0.23	<0.01	0.01	1878224
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	<0.05	0.62	0.05	1878224
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19277	H19278	H19279	H19280		
Sampling Date		2007/09/23	2007/09/21	2007/09/21	2007/09/21		
COC Number		08198148	08198148	08198148	08198148		
	Units	MW 05-5A	MW 05-6A	MW 05-6B	MW 05-7A	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	4.0	<0.5	<0.5	19.0	0.5	1878224
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1873918

RDL = Reportable Detection Limit

Maxxam Job #: A745736
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19281	H19282	H19283	H19284		
Sampling Date		2007/09/21	2007/09/22	2007/09/22	2007/09/23		
COC Number		08198148	08198148	08198148	08198150		
	Units	MW 05-7B	MW 06-8S	MW 06-8D	MW 06-9S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1876535
Dissolved Calcium (Ca)	mg/L	27.6	27.1	63.8	49.8	0.05	1876535
Dissolved Iron (Fe)	mg/L	0.005	0.949	0.185	0.044	0.005	1876535
Dissolved Magnesium (Mg)	mg/L	2.37	3.29	28.0	4.69	0.05	1876535
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	0.2	0.1	1876535
Dissolved Silicon (Si)	mg/L	4.04	5.60	4.59	4.19	0.05	1876535
Dissolved Sodium (Na)	mg/L	1.76	3.59	0.53	1.40	0.05	1876535
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1876535
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	4.9	1.8	3.3	4.7	0.2	1878224
Dissolved Antimony (Sb)	ug/L	0.09	6.10	0.20	0.07	0.05	1878224
Dissolved Arsenic (As)	ug/L	0.5	1.0	5.0	11.5	0.1	1878224
Dissolved Barium (Ba)	ug/L	40.0	52.9	48.0	43.5	0.02	1878224
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	<0.01	0.02	0.01	1878224
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	0.3	0.2	1878224
Dissolved Cobalt (Co)	ug/L	0.06	5.12	0.29	0.05	0.02	1878224
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1878224
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.02	0.04	0.02	1878224
Dissolved Lithium (Li)	ug/L	<0.2	0.8	3.1	0.7	0.2	1878224
Dissolved Manganese (Mn)	ug/L	96.4	693	47.1	170	0.02	1878224
Dissolved Molybdenum (Mo)	ug/L	9.85	3.04	1.35	6.92	0.02	1878224
Dissolved Nickel (Ni)	ug/L	<0.5	14.2	1.1	<0.5	0.5	1878224
Dissolved Potassium (K)	ug/L	882	1380	1900	910	50	1878224
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1878224
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1878224
Dissolved Strontium (Sr)	ug/L	49.7	86.6	166	192	0.01	1878224
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Tin (Sn)	ug/L	<0.05	0.07	<0.05	<0.05	0.05	1878224
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1878224
Dissolved Uranium (U)	ug/L	0.10	0.03	13.1	0.49	0.01	1878224
Dissolved Vanadium (V)	ug/L	0.28	<0.05	<0.05	0.06	0.05	1878224
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19281	H19282	H19283	H19284		
Sampling Date		2007/09/21	2007/09/22	2007/09/22	2007/09/23		
COC Number		08198148	08198148	08198148	08198150		
	Units	MW 05-7B	MW 06-8S	MW 06-8D	MW 06-9S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	<0.5	67.0	<0.5	1.1	0.5	1878224
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1873918

RDL = Reportable Detection Limit

Maxxam Job #: A745736
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Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19285	H19286	H19287	H19288		
Sampling Date		2007/09/22	2007/09/22	2007/09/22	2007/09/23		
COC Number		08198150	08198150	08198150	08198150		
	Units	MW 06-10S	MW 06-10M	MW 06-10D	MW 06-11S	RDL	QC Batch

Dissolved Metals by ICP							
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	<0.008	0.008	1876535
Dissolved Calcium (Ca)	mg/L	50.6	85.4	76.9	52.0	0.05	1876535
Dissolved Iron (Fe)	mg/L	0.051	3.40	2.64	0.007	0.005	1876535
Dissolved Magnesium (Mg)	mg/L	4.31	13.0	20.4	12.1	0.05	1876535
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	1876535
Dissolved Silicon (Si)	mg/L	3.88	3.75	3.43	4.55	0.05	1876535
Dissolved Sodium (Na)	mg/L	5.04	2.79	1.17	5.13	0.05	1876535
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	1876535
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	3.6	2.6	3.3	12.1	0.2	1878224
Dissolved Antimony (Sb)	ug/L	0.45	<0.05	0.39	0.92	0.05	1878224
Dissolved Arsenic (As)	ug/L	5.2	0.3	0.2	4.5	0.1	1878224
Dissolved Barium (Ba)	ug/L	23.9	40.0	67.7	42.7	0.02	1878224
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Cadmium (Cd)	ug/L	<0.01	<0.01	0.01	0.06	0.01	1878224
Dissolved Chromium (Cr)	ug/L	0.3	0.7	0.6	0.5	0.2	1878224
Dissolved Cobalt (Co)	ug/L	0.22	0.04	<0.02	0.11	0.02	1878224
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1878224
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.02	<0.02	0.02	1878224
Dissolved Lithium (Li)	ug/L	1.2	2.2	4.5	18.9	0.2	1878224
Dissolved Manganese (Mn)	ug/L	87.9	234	87.1	70.5	0.02	1878224
Dissolved Molybdenum (Mo)	ug/L	1.59	1.98	3.46	28.5	0.02	1878224
Dissolved Nickel (Ni)	ug/L	1.5	0.6	<0.5	0.6	0.5	1878224
Dissolved Potassium (K)	ug/L	1330	1930	2390	2270	50	1878224
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1878224
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1878224
Dissolved Strontium (Sr)	ug/L	179	146	173	112	0.01	1878224
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	1878224
Dissolved Tin (Sn)	ug/L	0.05	<0.05	0.07	0.19	0.05	1878224
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1878224
Dissolved Uranium (U)	ug/L	8.63	3.69	1.82	4.80	0.01	1878224
Dissolved Vanadium (V)	ug/L	0.07	<0.05	0.10	0.65	0.05	1878224
RDL = Reportable Detection Limit							

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Yukon Zinc Corporation
Client Project #:
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19285	H19286	H19287	H19288		
Sampling Date		2007/09/22	2007/09/22	2007/09/22	2007/09/23		
COC Number		08198150	08198150	08198150	08198150		
	Units	MW 06-10S	MW 06-10M	MW 06-10D	MW 06-11S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	1.1	0.8	<0.5	<0.5	0.5	1878224
Mercury by CVAA							
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	1873918

RDL = Reportable Detection Limit

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19289		
Sampling Date		2007/09/21		
COC Number		08198150		
	Units	MW 06-12S	RDL	QC Batch

Dissolved Metals by ICP				
Dissolved Boron (B)	mg/L	0.010	0.008	1876535
Dissolved Calcium (Ca)	mg/L	117	0.05	1876535
Dissolved Iron (Fe)	mg/L	0.536	0.005	1876535
Dissolved Magnesium (Mg)	mg/L	19.9	0.05	1876535
Dissolved Phosphorus (P)	mg/L	<0.1	0.1	1876535
Dissolved Silicon (Si)	mg/L	7.37	0.05	1876535
Dissolved Sodium (Na)	mg/L	38.6	0.05	1876535
Dissolved Zirconium (Zr)	mg/L	<0.005	0.005	1876535
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	0.4	0.2	1878224
Dissolved Antimony (Sb)	ug/L	1.07	0.05	1878224
Dissolved Arsenic (As)	ug/L	3.6	0.1	1878224
Dissolved Barium (Ba)	ug/L	23.9	0.02	1878224
Dissolved Beryllium (Be)	ug/L	<0.05	0.05	1878224
Dissolved Bismuth (Bi)	ug/L	<0.05	0.05	1878224
Dissolved Cadmium (Cd)	ug/L	<0.01	0.01	1878224
Dissolved Chromium (Cr)	ug/L	<0.2	0.2	1878224
Dissolved Cobalt (Co)	ug/L	0.71	0.02	1878224
Dissolved Copper (Cu)	ug/L	<0.1	0.1	1878224
Dissolved Lead (Pb)	ug/L	<0.02	0.02	1878224
Dissolved Lithium (Li)	ug/L	8.3	0.2	1878224
Dissolved Manganese (Mn)	ug/L	339	0.02	1878224
Dissolved Molybdenum (Mo)	ug/L	3.95	0.02	1878224
Dissolved Nickel (Ni)	ug/L	0.9	0.5	1878224
Dissolved Potassium (K)	ug/L	2960	50	1878224
Dissolved Selenium (Se)	ug/L	<0.5	0.5	1878224
Dissolved Silver (Ag)	ug/L	<0.01	0.01	1878224
Dissolved Strontium (Sr)	ug/L	383	0.01	1878224
Dissolved Thallium (Tl)	ug/L	<0.05	0.05	1878224
Dissolved Tin (Sn)	ug/L	0.09	0.05	1878224
Dissolved Titanium (Ti)	ug/L	<0.5	0.5	1878224
Dissolved Uranium (U)	ug/L	14.6	0.01	1878224
Dissolved Vanadium (V)	ug/L	0.52	0.05	1878224
RDL = Reportable Detection Limit				

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
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Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H19289		
Sampling Date		2007/09/21		
COC Number		08198150		
	Units	MW 06-12S	RDL	QC Batch

Dissolved Zinc (Zn)	ug/L	<0.5	0.5	1878224
Mercury by CVAA				
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	1873918

RDL = Reportable Detection Limit

Maxxam Job #: A745736
Report Date: 2007/10/11

Yukon Zinc Corporation
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RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample H19280-01 pH Water: pH result is greater than the highest calibration standard of pH 10

Results relate only to the items tested.

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Quality Assurance Report
Maxxam Job Number: VA745736

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1873918 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/10/01		111	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/10/01		110	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/10/01		118	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/10/01	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/10/01	NC		%	25
1875939 CK	SPIKE	Turbidity	2007/09/29		101	%	80 - 120
	BLANK	Turbidity	2007/09/29	<0.1		NTU	
	RPD [H19275-01]	Turbidity	2007/09/29	3.7		%	25
1876191 CK	SPIKE	pH	2007/10/01		99	%	96 - 104
	RPD [H19289-01]	pH	2007/10/01	0		%	25
1876192 CK	SPIKE	Conductivity	2007/10/01		97	%	80 - 120
	BLANK	Conductivity	2007/10/01	<1		uS/cm	
	RPD [H19289-01]	Conductivity	2007/10/01	0.9		%	25
1876193 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/10/01		94	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/10/01		95	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/10/01	<0.5		mg/L	
	RPD [H19289-01]	Alkalinity (Total as CaCO3)	2007/10/01	1.3		%	25
1876239 NN	MATRIX SPIKE	Ammonia (N)	2007/10/01		96	%	80 - 120
	SPIKE	Ammonia (N)	2007/10/01		97	%	80 - 120
	BLANK	Ammonia (N)	2007/10/01	<0.005		mg/L	
	RPD [H19275-01]	Ammonia (N)	2007/10/01	7.4		%	25
1876535 GS2	BLANK	Dissolved Boron (B)	2007/09/30	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/09/30	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/09/30	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/09/30	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/09/30	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/09/30	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/09/30	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/09/30	<0.005		mg/L	
	RPD	Dissolved Boron (B)	2007/09/30	0.6		%	25
		Dissolved Calcium (Ca)	2007/09/30	0.1		%	25
		Dissolved Iron (Fe)	2007/09/30	NC		%	25
		Dissolved Magnesium (Mg)	2007/09/30	0.1		%	25
		Dissolved Phosphorus (P)	2007/09/30	NC		%	25
		Dissolved Silicon (Si)	2007/09/30	0.2		%	25
		Dissolved Sodium (Na)	2007/09/30	0.2		%	25
		Dissolved Zirconium (Zr)	2007/09/30	NC		%	25
1877438 CC3	MATRIX SPIKE						
	[H19285-01]	Orthophosphate (P)	2007/10/01		97	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/10/01		99	%	80 - 120
	BLANK	Orthophosphate (P)	2007/10/01	<0.001		mg/L	
	RPD [H19285-01]	Orthophosphate (P)	2007/10/01	5.0		%	20
	RPD [H19289-01]	Orthophosphate (P)	2007/10/01	7.4		%	20
1877779 CK	SPIKE	Turbidity	2007/10/01		100	%	80 - 120
	BLANK	Turbidity	2007/10/01	<0.1		NTU	
	RPD	Turbidity	2007/10/01	NC		%	25
1878082 BB3	SPIKE	Nitrate plus Nitrite (N)	2007/10/01		87	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/10/01	<0.002		mg/L	
1878084 BB3	SPIKE	Nitrite (N)	2007/10/01		98	%	80 - 120
	BLANK	Nitrite (N)	2007/10/01	<0.002		mg/L	
1878224 AA1	MATRIX SPIKE						
	[H19275-01]	Dissolved Arsenic (As)	2007/10/01		113	%	75 - 125
		Dissolved Cadmium (Cd)	2007/10/01		110	%	75 - 125
		Dissolved Chromium (Cr)	2007/10/01		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/01		104	%	75 - 125

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Quality Assurance Report (Continued)

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QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1878224 AA1	MATRIX SPIKE [H19275-01]	Dissolved Copper (Cu)	2007/10/01		109	%	75 - 125
		Dissolved Lead (Pb)	2007/10/01		104	%	75 - 125
		Dissolved Selenium (Se)	2007/10/01		118	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/01		104	%	75 - 125
		Dissolved Zinc (Zn)	2007/10/01		112	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/10/01		93	%	75 - 125
		Dissolved Cadmium (Cd)	2007/10/01		91	%	75 - 125
		Dissolved Chromium (Cr)	2007/10/01		110	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/01		109	%	75 - 125
		Dissolved Copper (Cu)	2007/10/01		103	%	75 - 125
		Dissolved Lead (Pb)	2007/10/01		101	%	75 - 125
		Dissolved Selenium (Se)	2007/10/01		91	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/01		97	%	75 - 125
		Dissolved Zinc (Zn)	2007/10/01		99	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/10/01	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/10/01	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/10/01	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/10/01	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/10/01	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/10/01	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/10/01	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/10/01	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/10/01	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/10/01	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/10/01	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/10/01	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/10/01	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/10/01	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/10/01	<0.5		ug/L	
		Dissolved Potassium (K)	2007/10/01	<50		ug/L	
		Dissolved Selenium (Se)	2007/10/01	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/10/01	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/10/01	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/10/01	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/10/01	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/10/01	<0.5		ug/L	
		Dissolved Uranium (U)	2007/10/01	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/10/01	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/10/01	<0.5		ug/L	
	RPD [H19275-01]	Dissolved Aluminum (Al)	2007/10/01	10.6		%	25
		Dissolved Antimony (Sb)	2007/10/01	NC		%	25
		Dissolved Arsenic (As)	2007/10/01	1.9		%	25
		Dissolved Barium (Ba)	2007/10/01	1.8		%	25
		Dissolved Beryllium (Be)	2007/10/01	NC		%	25
		Dissolved Bismuth (Bi)	2007/10/01	NC		%	25
		Dissolved Cadmium (Cd)	2007/10/01	NC		%	25
		Dissolved Chromium (Cr)	2007/10/01	NC		%	25
		Dissolved Cobalt (Co)	2007/10/01	3.2		%	25
		Dissolved Copper (Cu)	2007/10/01	NC		%	25
		Dissolved Lead (Pb)	2007/10/01	NC		%	25
		Dissolved Lithium (Li)	2007/10/01	0.5		%	25
		Dissolved Manganese (Mn)	2007/10/01	3.3		%	25
		Dissolved Molybdenum (Mo)	2007/10/01	1.8		%	25
		Dissolved Nickel (Ni)	2007/10/01	NC		%	25

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QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1878224 AA1	RPD [H19275-01]	Dissolved Potassium (K)	2007/10/01	3.0		%	25
		Dissolved Selenium (Se)	2007/10/01	NC		%	25
		Dissolved Silver (Ag)	2007/10/01	NC		%	25
		Dissolved Strontium (Sr)	2007/10/01	4.1		%	25
		Dissolved Thallium (Tl)	2007/10/01	NC		%	25
		Dissolved Tin (Sn)	2007/10/01	NC		%	25
		Dissolved Titanium (Ti)	2007/10/01	NC		%	25
		Dissolved Uranium (U)	2007/10/01	2.5		%	25
		Dissolved Vanadium (V)	2007/10/01	NC		%	25
		Dissolved Zinc (Zn)	2007/10/01	NC		%	25
1878944 FS1	MATRIX SPIKE	Total Suspended Solids	2007/10/02		106	%	N/A
		Total Suspended Solids	2007/10/02		102	%	N/A
		BLANK	2007/10/02	<4		mg/L	
		RPD [H19276-01]	2007/10/02	NC		%	25
1879545 WAY	MATRIX SPIKE	Fluoride (F)	2007/10/02		102	%	80 - 120
		Fluoride (F)	2007/10/02		103	%	80 - 120
		BLANK	2007/10/02	<0.01		mg/L	
		RPD [H19283-01]	2007/10/02	3.5		%	25
1879617 CK	SPIKE	pH	2007/10/03		99	%	96 - 104
1879669 CK	SPIKE	Conductivity	2007/10/03		94	%	80 - 120
		Conductivity	2007/10/03	<1		uS/cm	
1879674 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/10/03		92	%	80 - 120
		Alkalinity (Total as CaCO3)	2007/10/03		95	%	80 - 120
		BLANK	2007/10/03	<0.5		mg/L	
1880059 GS2	BLANK	Dissolved Boron (B)	2007/10/02	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/10/02	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/10/02	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/10/02	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/10/02	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/10/02	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/10/02	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/10/02	<0.005		mg/L	
		Dissolved Boron (B)	2007/10/02	NC		%	25
		Dissolved Calcium (Ca)	2007/10/02	1.1		%	25
		Dissolved Iron (Fe)	2007/10/02	NC		%	25
		Dissolved Magnesium (Mg)	2007/10/02	NC		%	25
		Dissolved Phosphorus (P)	2007/10/02	NC		%	25
		Dissolved Silicon (Si)	2007/10/02	0.7		%	25
		Dissolved Sodium (Na)	2007/10/02	3.0		%	25
		Dissolved Zirconium (Zr)	2007/10/02	NC		%	25
	RPD	Dissolved Organic Carbon (C)	2007/10/02		97	%	80 - 120
		Dissolved Organic Carbon (C)	2007/10/02		100	%	80 - 120
		BLANK	2007/10/02	<0.5		mg/L	
		RPD [H19279-01]	2007/10/02	NC		%	20
1881704 AA1	MATRIX SPIKE	Dissolved Arsenic (As)	2007/10/03		115	%	75 - 125
		Dissolved Cadmium (Cd)	2007/10/03		114	%	75 - 125
		Dissolved Chromium (Cr)	2007/10/03		101	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/03		111	%	75 - 125
		Dissolved Copper (Cu)	2007/10/03		123	%	75 - 125
		Dissolved Lead (Pb)	2007/10/03		105	%	75 - 125
		Dissolved Selenium (Se)	2007/10/03		121	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/03		105	%	75 - 125
		Dissolved Zinc (Zn)	2007/10/03		118	%	75 - 125
		SPIKE	2007/10/03		97	%	75 - 125
		Dissolved Arsenic (As)	2007/10/03			%	75 - 125
		Dissolved Cadmium (Cd)	2007/10/03		105	%	75 - 125

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Quality Assurance Report (Continued)

Maxxam Job Number: VA745736

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1881704 AA1	SPIKE	Dissolved Chromium (Cr)	2007/10/03		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/03		107	%	75 - 125
		Dissolved Copper (Cu)	2007/10/03		114	%	75 - 125
		Dissolved Lead (Pb)	2007/10/03		109	%	75 - 125
		Dissolved Selenium (Se)	2007/10/03		99	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/03		108	%	75 - 125
	BLANK	Dissolved Zinc (Zn)	2007/10/03		109	%	75 - 125
		Dissolved Aluminum (Al)	2007/10/03	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/10/03	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/10/03	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/10/03	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/10/03	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/10/03	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/10/03	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/10/03	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/10/03	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/10/03	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/10/03	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/10/03	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/10/03	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/10/03	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/10/03	<0.5		ug/L	
		Dissolved Potassium (K)	2007/10/03	<50		ug/L	
		Dissolved Selenium (Se)	2007/10/03	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/10/03	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/10/03	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/10/03	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/10/03	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/10/03	<0.5		ug/L	
		Dissolved Uranium (U)	2007/10/03	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/10/03	0.05, RDL=0.05		ug/L	
	RPD	Dissolved Zinc (Zn)	2007/10/03	<0.5		ug/L	
		Dissolved Aluminum (Al)	2007/10/03	0.8		%	25
		Dissolved Antimony (Sb)	2007/10/03	2.1		%	25
		Dissolved Arsenic (As)	2007/10/03	0.1		%	25
		Dissolved Barium (Ba)	2007/10/03	1.6		%	25
		Dissolved Beryllium (Be)	2007/10/03	NC		%	25
		Dissolved Bismuth (Bi)	2007/10/03	NC		%	25
		Dissolved Cadmium (Cd)	2007/10/03	NC		%	25
		Dissolved Chromium (Cr)	2007/10/03	NC		%	25
		Dissolved Cobalt (Co)	2007/10/03	NC		%	25
		Dissolved Copper (Cu)	2007/10/03	1.2		%	25
		Dissolved Lead (Pb)	2007/10/03	NC		%	25
		Dissolved Lithium (Li)	2007/10/03	NC		%	25
		Dissolved Manganese (Mn)	2007/10/03	2.3		%	25
		Dissolved Molybdenum (Mo)	2007/10/03	4.1		%	25
		Dissolved Nickel (Ni)	2007/10/03	NC		%	25
		Dissolved Potassium (K)	2007/10/03	1.5		%	25
		Dissolved Selenium (Se)	2007/10/03	NC		%	25
		Dissolved Silver (Ag)	2007/10/03	NC		%	25
		Dissolved Strontium (Sr)	2007/10/03	4.3		%	25
		Dissolved Thallium (Tl)	2007/10/03	NC		%	25
		Dissolved Tin (Sn)	2007/10/03	NC		%	25
		Dissolved Titanium (Ti)	2007/10/03	NC		%	25
		Dissolved Uranium (U)	2007/10/03	NC		%	25

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Maxxam Job Number: VA745736

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1881704 AA1	RPD	Dissolved Vanadium (V)	2007/10/03	NC		%	25
		Dissolved Zinc (Zn)	2007/10/03	NC		%	25
1882954 NN	MATRIX SPIKE	Ammonia (N)	2007/10/03		97	%	80 - 120
	SPIKE	Ammonia (N)	2007/10/03		91	%	80 - 120
	BLANK	Ammonia (N)	2007/10/03	<0.005		mg/L	
	RPD	Ammonia (N)	2007/10/03	NC		%	25
1883474 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/10/03		109	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/10/03		106	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/10/03	<0.002		mg/L	
	RPD	Nitrate plus Nitrite (N)	2007/10/03	NC		%	25
1883523 BB3	MATRIX SPIKE	Nitrite (N)	2007/10/03		110	%	80 - 120
	SPIKE	Nitrite (N)	2007/10/03		101	%	80 - 120
	BLANK	Nitrite (N)	2007/10/03	<0.002		mg/L	
	RPD	Nitrite (N)	2007/10/03	NC		%	25
1884782 HD5	MATRIX SPIKE	Total Suspended Solids	2007/10/04		102	%	N/A
	SPIKE	Total Suspended Solids	2007/10/04		100	%	N/A
	BLANK	Total Suspended Solids	2007/10/04	<4		mg/L	
	RPD [H19272-01]	Total Suspended Solids	2007/10/04	5.0		%	25
1884857 BB3	MATRIX SPIKE	Total Phosphorus (P)	2007/10/05		89	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/10/05		111	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/10/05	<0.005		mg/L	
	RPD	Total Phosphorus (P)	2007/10/05	NC		%	25
1885958 CC3	MATRIX SPIKE	Orthophosphate (P)	2007/10/09		102	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/10/09		97	%	80 - 120
	BLANK	Orthophosphate (P)	2007/10/09	<0.001		mg/L	
	RPD	Orthophosphate (P)	2007/10/09	0.9		%	20
1885974 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/10/05		102	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/10/05		98	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/10/05		87	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/10/05	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/10/05	NC		%	25
1886078 NN	MATRIX SPIKE						
	[H19282-01]	Dissolved Chloride (Cl)	2007/10/04		94	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/10/04		109	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/10/04	<0.5		mg/L	
	RPD [H19282-01]	Dissolved Chloride (Cl)	2007/10/04	NC		%	20
1886098 NN	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/10/04		84	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/10/04		98	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/10/04	<0.5		mg/L	
	RPD [H19282-01]	Dissolved Sulphate (SO4)	2007/10/04	1.1		%	20
1886324 JD1	Calibration Check	Dissolved Bromide (Br)	2007/10/04		97	%	83 - 117
	MATRIX SPIKE						
	[H19281-01]	Dissolved Bromide (Br)	2007/10/04		94	%	80 - 120
	BLANK	Dissolved Bromide (Br)	2007/10/04	<0.01		mg/L	
	RPD [H19281-01]	Dissolved Bromide (Br)	2007/10/04	NC		%	20
1888023 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/10/04		98	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/10/04		94	%	80 - 120
	BLANK	Total Dissolved Solids	2007/10/04	<10		mg/L	
	RPD	Total Dissolved Solids	2007/10/04	0		%	25
1889387 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/10/05		106	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/10/05		116	%	80 - 120
	BLANK	Total Dissolved Solids	2007/10/05	16, RDL=10		mg/L	
	RPD	Total Dissolved Solids	2007/10/05	0.7		%	25

N/A = Not Applicable
NC = Non-calculable

Yukon Zinc Corporation
Attention: Pamela Ladyman
Client Project #:
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: VA745736

RPD = Relative Percent Difference

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08198361, 08198362

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/10/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A748794

Received: 2007/10/10, 15:25

Sample Matrix: Water

Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	14	2007/10/12	2007/10/12	BRN SOP-00264 R2.0	Based on SM2320B
Bromide by IC Ø	14	N/A	2007/10/22	CAL SOP-00041	IC
Chloride by Automated Colourimetry	14	N/A	2007/10/12	BRN-SOP 00234 R1.0	Based on EPA 325.2
Carbon (DOC)	14	N/A	2007/10/12	BRN SOP-00224 R3.0	Based on SM-5310C
Conductance - water	14	N/A	2007/10/12	BRN SOP-00264 R2.0	Based on SM-2510B
Fluoride	15	N/A	2007/10/12	BRN SOP-00225 R1.0	Based SM - 4500 F C
Hardness (calculated as CaCO ₃)	13	N/A	2007/10/12		
Hardness (calculated as CaCO ₃)	1	N/A	2007/10/15		
Mercury (dissolved; low level)	14	2007/10/15	2007/10/17	BRN SOP-00205	Based on EPA 245.1
Mercury - Total (CVAA,LL)	1	2007/10/15	2007/10/17	BRN SOP-00205	Based on EPA 245.1
Elements by ICP-AES (dissolved)	13	2007/10/11	2007/10/11	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICP-AES (dissolved)	1	2007/10/12	2007/10/12	BRN SOP-00201 R1.0	Based on EPA 6010B
Elements by ICPMS (dissolved) Ø	14	2007/10/15	2007/10/15	BRN SOP-00204	Based on EPA 200.8
Elements by ICPMS (as rec; low level) Ø	1	2007/10/15	2007/10/15	BRN SOP-00204	Based on EPA 200.8
Elements by ICPMS (total) Ø	1	N/A	2007/10/12	BRN SOP-00204	Based on EPA 200.8
Elements by ICP-AES (total)	1	N/A	2007/10/12	BRN SOP-00201 R1.0	Based on EPA 6010B
Ammonia (N)	15	N/A	2007/10/15	BRN SOP-00221 R3.0	Based on SM-4500MH3G
Nitrate+Nitrite (N) (low level)	15	N/A	2007/10/12	BRN SOP-00233 R1.0	Based on EPA 353.2
Nitrite (N) (low level)	15	N/A	2007/10/12	BRN SOP-00233 R1.0	EPA 353.2
Nitrogen - Nitrate (as N)	15	N/A	2007/10/12		
pH Water	14	N/A	2007/10/12	BRN SOP-00264 R2.0	Based on SM-4500H+B
Orthophosphate by Konelab Ø	15	N/A	2007/10/15	BRN SOP-00235 R3.0	SM 4500 PF
Sulphate by Automated Colourimetry	14	N/A	2007/10/12	BRN-SOP 00243 R1.0	Based on EPA 375.4
Total Dissolved Solids (Filt. Residue)	14	N/A	2007/10/15	ING443 Rev.5.1	APHA 2540C
Total Phosphorus	15	N/A	2007/10/14	BRN SOP-00236 R4.0	SM 4500
Total Suspended Solids Ø	14	N/A	2007/10/16	BRN SOP-00277 R2.0	Based on SM - 2540 D
Turbidity	14	N/A	2007/10/10	BRN SOP-00265 R3.0	SM - 2130B

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

(1) This test was performed by Maxxam Calgary

(2) SCC/CAEAL

../2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Your C.O.C. #: 08198361, 08198362

Attention: Pamela Ladyman

Yukon Zinc Corporation
VANCOUVER
701-475 Howe Street
Vancouver, BC
CANADA V6C 2B3

Report Date: 2007/10/24

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ELKA DADMAND,
Email: edadmand@maxxamanalytics.com
Phone# (604) 444-4808 Ext:230

=====
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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Page 2 of 29

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38134	H38135	H38136		
Sampling Date		2007/10/06 12:00	2007/10/04 17:45	2007/10/06 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-1B	MW05-2B	MW05-3B	RDL	QC Batch
Misc. Inorganics						
Fluoride (F)	mg/L	0.09	0.06	0.16	0.01	1899991
Calculated Parameters						
Nitrate (N)	mg/L	<0.002	<0.002	0.318	0.002	1897353
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	164	144	129	0.5	1897351
Dissolved Organic Carbon (C)	mg/L	3.5	1.2	<0.5	0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	149	130	84.9	0.5	1899075
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	0.01	1916583
Orthophosphate (P)	mg/L	0.021	0.016	0.006	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	2.3	3.9	34.9	0.5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	0.5	1899448
Nutrients						
Ammonia (N)	mg/L	0.108	0.026	<0.005	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	0.005	0.002	0.318	0.002	1899313
Nitrite (N)	mg/L	0.010	0.005	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.196	0.169	<0.005	0.005	1899300
Physical Properties						
Conductivity	uS/cm	291	250	235	1	1899074
pH	pH Units	7.5	7.6	7.6	0.1	1899072
Physical Properties						
Total Suspended Solids	mg/L	43	18	<4	4	1905636
Total Dissolved Solids	mg/L	167	142	167	10	1903113
Turbidity	NTU	95.8	43.7	0.5	0.1	1895225
RDL = Reportable Detection Limit						

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38137	H38138		
Sampling Date		2007/10/04 12:30	2007/10/06 14:30		
COC Number		08198361	08198361		
	Units	MW05-5A	MW05-5B	RDL	QC Batch

Misc. Inorganics					
Fluoride (F)	mg/L	2.07	0.23	0.01	1899991
Calculated Parameters					
Nitrate (N)	mg/L	<0.002	<0.002	0.002	1897353
Misc. Inorganics					
Dissolved Hardness (CaCO ₃)	mg/L	300	165	0.5	1897351
Dissolved Organic Carbon (C)	mg/L	<0.5	0.6	0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	225	107	0.5	1899075
Anions					
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	0.01	1916583
Orthophosphate (P)	mg/L	0.007	0.008	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	34.0	42.9	0.5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	0.5	1899448
Nutrients					
Ammonia (N)	mg/L	0.071	0.011	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	<0.002	<0.002	0.002	1899313
Nitrite (N)	mg/L	<0.002	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.012	0.006	0.005	1899300
Physical Properties					
Conductivity	uS/cm	477	295	1	1899074
pH	pH Units	7.9	7.9	0.1	1899072
Physical Properties					
Total Suspended Solids	mg/L	<4	<4	4	1905636
Total Dissolved Solids	mg/L	280	182	10	1903113
Turbidity	NTU	19.1	7.9	0.1	1895225

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38139		H38140		
Sampling Date		2007/10/05 15:30		2007/10/04 17:00		
COC Number		08198361		08198361		
	Units	MW05-6A	RDL	MW05-7B	RDL	QC Batch
Misc. Inorganics						
Fluoride (F)	mg/L	0.17	0.01	0.14	0.01	1899991
Calculated Parameters						
Nitrate (N)	mg/L	<0.002	0.002	0.008	0.002	1897353
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	84.8	0.5	78.1	0.5	1897351
Dissolved Organic Carbon (C)	mg/L	<0.5	0.5	<0.5	0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	78.6	0.5	60.6	0.5	1899075
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	0.01	<0.01	0.01	1916583
Orthophosphate (P)	mg/L	0.59	0.01	0.050	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	12.9	0.5	13.9	0.5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5	0.5	<0.5	0.5	1899448
Nutrients						
Ammonia (N)	mg/L	<0.005	0.005	0.016	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	<0.002	0.002	0.008	0.002	1899313
Nitrite (N)	mg/L	<0.002	0.002	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.56	0.05	0.040	0.005	1899300
Physical Properties						
Conductivity	uS/cm	189	1	153	1	1899074
pH	pH Units	7.9	0.1	8.1	0.1	1899072
Physical Properties						
Total Suspended Solids	mg/L	<4	4	<4	4	1905636
Total Dissolved Solids	mg/L	114	10	93	10	1903113
Turbidity	NTU	4.1	0.1	0.3	0.1	1895225
RDL = Reportable Detection Limit						

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38141	H38142	H38143		
Sampling Date		2007/10/08 12:00	2007/10/08 12:00	2007/10/04 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-8S	MW05-8S-98	MW06-9S	RDL	QC Batch

Misc. Inorganics						
Fluoride (F)	mg/L	0.22	0.20	0.41	0.01	1899991
Calculated Parameters						
Nitrate (N)	mg/L	<0.002	<0.002	<0.002	0.002	1897353
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	82.8	83.9	146	0.5	1897351
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	<0.5	0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	49.7	51.2	112	0.5	1899075
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	0.01	1916583
Orthophosphate (P)	mg/L	0.019	0.019	0.201	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	32.0	31.4	22.3	0.5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	0.5	1899448
Nutrients						
Ammonia (N)	mg/L	0.014	0.015	0.020	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.002	1899313
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.022	0.022	0.397	0.005	1899300
Physical Properties						
Conductivity	uS/cm	170	171	256	1	1899074
pH	pH Units	7.5	7.5	8.1	0.1	1899072
Physical Properties						
Total Suspended Solids	mg/L	<4	<4	<4	4	1905636
Total Dissolved Solids	mg/L	114	110	162	10	1903113
Turbidity	NTU	0.9	1.1	1.8	0.1	1895225

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38144	H38145	H38146		
Sampling Date		2007/10/08	2007/10/08 16:30	2007/10/08 15:45		
COC Number		08198362	08198362	08198362		
	Units	MW06-10S	MW06-10M	MW06-11S	RDL	QC Batch

Misc. Inorganics						
Fluoride (F)	mg/L	0.23	0.74	2.08	0.01	1899991
Calculated Parameters						
Nitrate (N)	mg/L	0.003	0.002	<0.002	0.002	1897353
Misc. Inorganics						
Dissolved Hardness (CaCO ₃)	mg/L	138	271	185	0.5	1897351
Dissolved Organic Carbon (C)	mg/L	<0.5	<0.5	<0.5	0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	112	204	139	0.5	1899075
Anions						
Dissolved Bromide (Br)	mg/L	<0.01	<0.01	<0.01	0.01	1916583
Orthophosphate (P)	mg/L	0.029	0.006	0.029	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	29.7	48.9	35.4	0.5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	0.5	1899448
Nutrients						
Ammonia (N)	mg/L	0.020	0.062	0.164	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	0.003	0.002	<0.002	0.002	1899313
Nitrite (N)	mg/L	<0.002	<0.002	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.025	<0.005	0.032	0.005	1899300
Physical Properties						
Conductivity	uS/cm	273	470	336	1	1899074
pH	pH Units	8.1	8.1	8.2	0.1	1899072
Physical Properties						
Total Suspended Solids	mg/L	<4	<4	<4	4	1905636
Total Dissolved Solids	mg/L	166	296	208	10	1903113
Turbidity	NTU	0.5	3.8	0.5	0.1	1895225

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		H38147	H38148		
Sampling Date		2007/10/08 12:00	2007/10/10		
COC Number		08198362	08198362		
	Units	MW06-12S	TRAVEL BLANK	RDL	QC Batch

Misc. Inorganics					
Fluoride (F)	mg/L	1.05	0.01	0.01	1899991
Calculated Parameters					
Nitrate (N)	mg/L	0.005	<0.002	0.002	1897353
Misc. Inorganics					
Dissolved Hardness (CaCO ₃)	mg/L	382		0.5	1897351
Dissolved Organic Carbon (C)	mg/L	0.5		0.5	1899247
Alkalinity (Total as CaCO ₃)	mg/L	146		0.5	1899075
Anions					
Dissolved Bromide (Br)	mg/L	0.06		0.01	1916583
Orthophosphate (P)	mg/L	0.024	<0.001	0.001	1903404
Dissolved Sulphate (SO ₄)	mg/L	271		5	1899441
Dissolved Chloride (Cl)	mg/L	<0.5		0.5	1899448
Leachable Metals					
Total Selenium (Se)	ug/L		<0.5	0.5	1903662
Nutrients					
Ammonia (N)	mg/L	0.128	<0.005	0.005	1902625
Nitrate plus Nitrite (N)	mg/L	0.005	<0.002	0.002	1899313
Nitrite (N)	mg/L	<0.002	<0.002	0.002	1899355
Total Phosphorus (P)	mg/L	0.015	<0.005	0.005	1899300
Physical Properties					
Conductivity	uS/cm	791		1	1899074
pH	pH Units	8.2		0.1	1899072
Physical Properties					
Total Suspended Solids	mg/L	<4		4	1905636
Total Dissolved Solids	mg/L	570		10	1903113
Turbidity	NTU	0.3		0.1	1895225

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38134	H38135	H38136		
Sampling Date		2007/10/06 12:00	2007/10/04 17:45	2007/10/06 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-1B	MW05-2B	MW05-3B	RDL	QC Batch

Dissolved Metals by ICP						
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	0.008	1898462
Dissolved Calcium (Ca)	mg/L	58.0	44.6	43.3	0.05	1898462
Dissolved Iron (Fe)	mg/L	24.9	8.70	<0.005	0.005	1898462
Dissolved Magnesium (Mg)	mg/L	4.59	7.92	5.03	0.05	1898462
Dissolved Phosphorus (P)	mg/L	0.2	0.2	<0.1	0.1	1898462
Dissolved Silicon (Si)	mg/L	4.82	4.78	4.16	0.05	1898462
Dissolved Sodium (Na)	mg/L	1.27	1.50	1.73	0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	0.005	1898462
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	25.4	3.9	0.6	0.2	1903584
Dissolved Antimony (Sb)	ug/L	<0.05	<0.05	0.11	0.05	1903584
Dissolved Arsenic (As)	ug/L	2.2	13.6	0.4	0.1	1903584
Dissolved Barium (Ba)	ug/L	465	267	74.4	0.02	1903584
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Cadmium (Cd)	ug/L	<0.01	<0.01	13.0	0.01	1903584
Dissolved Chromium (Cr)	ug/L	0.6	0.4	<0.2	0.2	1903584
Dissolved Cobalt (Co)	ug/L	0.09	0.07	<0.02	0.02	1903584
Dissolved Copper (Cu)	ug/L	0.1	<0.1	3.4	0.1	1903584
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.03	0.02	1903584
Dissolved Lithium (Li)	ug/L	1.3	0.7	1.5	0.2	1903584
Dissolved Manganese (Mn)	ug/L	668	814	2.53	0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	0.51	1.77	0.68	0.02	1903584
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	2.6	0.5	1903584
Dissolved Potassium (K)	ug/L	778	582	1090	50	1903584
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	12.9	0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	0.01	1903584
Dissolved Strontium (Sr)	ug/L	123	87.2	123	0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Titanium (Ti)	ug/L	0.8	<0.5	<0.5	0.5	1903584
Dissolved Uranium (U)	ug/L	0.02	0.11	1.34	0.01	1903584

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38134	H38135	H38136		
Sampling Date		2007/10/06 12:00	2007/10/04 17:45	2007/10/06 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-1B	MW05-2B	MW05-3B	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	0.66	0.10	<0.05	0.05	1903584
Dissolved Zinc (Zn)	ug/L	<0.5	<0.5	1050	0.5	1903584
Mercury by CVAA						
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	0.01	1902161

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38137	H38138		
Sampling Date		2007/10/04 12:30	2007/10/06 14:30		
COC Number		08198361	08198361		
	Units	MW05-5A	MW05-5B	RDL	QC Batch

Dissolved Metals by ICP					
Dissolved Boron (B)	mg/L	<0.008	<0.008	0.008	1898462
Dissolved Calcium (Ca)	mg/L	80.0	55.0	0.05	1898462
Dissolved Iron (Fe)	mg/L	1.40	0.602	0.005	1898462
Dissolved Magnesium (Mg)	mg/L	24.4	6.85	0.05	1898462
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	0.1	1898462
Dissolved Silicon (Si)	mg/L	3.92	3.41	0.05	1898462
Dissolved Sodium (Na)	mg/L	0.59	0.96	0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	0.005	1898462
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	ug/L	1.5	1.2	0.2	1903584
Dissolved Antimony (Sb)	ug/L	6.10	<0.05	0.05	1903584
Dissolved Arsenic (As)	ug/L	4.5	1.6	0.1	1903584
Dissolved Barium (Ba)	ug/L	47.9	39.4	0.02	1903584
Dissolved Beryllium (Be)	ug/L	0.06	<0.05	0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	0.05	1903584
Dissolved Cadmium (Cd)	ug/L	0.02	<0.01	0.01	1903584
Dissolved Chromium (Cr)	ug/L	0.3	<0.2	0.2	1903584
Dissolved Cobalt (Co)	ug/L	0.28	0.54	0.02	1903584
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	0.1	1903584
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.02	1903584
Dissolved Lithium (Li)	ug/L	3.5	1.3	0.2	1903584
Dissolved Manganese (Mn)	ug/L	92.5	512	0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	7.61	2.13	0.02	1903584
Dissolved Nickel (Ni)	ug/L	<0.5	2.3	0.5	1903584
Dissolved Potassium (K)	ug/L	1700	919	50	1903584
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	0.01	1903584
Dissolved Strontium (Sr)	ug/L	132	104	0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	0.05	1903584
Dissolved Tin (Sn)	ug/L	<0.05	<0.05	0.05	1903584
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	0.5	1903584
Dissolved Uranium (U)	ug/L	25.0	3.11	0.01	1903584

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38137	H38138		
Sampling Date		2007/10/04 12:30	2007/10/06 14:30		
COC Number		08198361	08198361		
	Units	MW05-5A	MW05-5B	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	<0.05	<0.05	0.05	1903584
Dissolved Zinc (Zn)	ug/L	4.2	30.7	0.5	1903584
Mercury by CVAA					
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	0.01	1902161

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38139		H38140		
Sampling Date		2007/10/05 15:30		2007/10/04 17:00		
COC Number		08198361		08198361		
	Units	MW05-6A	QC Batch	MW05-7B	RDL	QC Batch

Dissolved Metals by ICP						
Dissolved Boron (B)	mg/L	<0.008	1901224	0.009	0.008	1898462
Dissolved Calcium (Ca)	mg/L	28.8	1901224	27.4	0.05	1898462
Dissolved Iron (Fe)	mg/L	0.595	1901224	0.011	0.005	1898462
Dissolved Magnesium (Mg)	mg/L	3.15	1901224	2.35	0.05	1898462
Dissolved Phosphorus (P)	mg/L	0.7	1901224	<0.1	0.1	1898462
Dissolved Silicon (Si)	mg/L	6.27	1901224	4.06	0.05	1898462
Dissolved Sodium (Na)	mg/L	3.50	1901224	1.89	0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005	1901224	<0.005	0.005	1898462
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	1.7	1903584	6.1	0.2	1903584
Dissolved Antimony (Sb)	ug/L	0.16	1903584	0.10	0.05	1903584
Dissolved Arsenic (As)	ug/L	4.4	1903584	0.9	0.1	1903584
Dissolved Barium (Ba)	ug/L	54.1	1903584	40.1	0.02	1903584
Dissolved Beryllium (Be)	ug/L	<0.05	1903584	<0.05	0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05	1903584	<0.05	0.05	1903584
Dissolved Cadmium (Cd)	ug/L	<0.01	1903584	0.03	0.01	1903584
Dissolved Chromium (Cr)	ug/L	<0.2	1903584	<0.2	0.2	1903584
Dissolved Cobalt (Co)	ug/L	0.37	1903584	0.06	0.02	1903584
Dissolved Copper (Cu)	ug/L	<0.1	1903584	<0.1	0.1	1903584
Dissolved Lead (Pb)	ug/L	<0.02	1903584	<0.02	0.02	1903584
Dissolved Lithium (Li)	ug/L	0.9	1903584	0.5	0.2	1903584
Dissolved Manganese (Mn)	ug/L	352	1903584	98.6	0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	3.24	1903584	10.7	0.02	1903584
Dissolved Nickel (Ni)	ug/L	<0.5	1903584	<0.5	0.5	1903584
Dissolved Potassium (K)	ug/L	1310	1903584	903	50	1903584
Dissolved Selenium (Se)	ug/L	1.4	1903584	<0.5	0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01	1903584	<0.01	0.01	1903584
Dissolved Strontium (Sr)	ug/L	35.1	1903584	48.5	0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05	1903584	<0.05	0.05	1903584
Dissolved Tin (Sn)	ug/L	0.48	1903584	<0.05	0.05	1903584
Dissolved Titanium (Ti)	ug/L	<0.5	1903584	<0.5	0.5	1903584
Dissolved Uranium (U)	ug/L	0.24	1903584	0.16	0.01	1903584

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38139		H38140		
Sampling Date		2007/10/05 15:30		2007/10/04 17:00		
COC Number		08198361		08198361		
	Units	MW05-6A	QC Batch	MW05-7B	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	<0.05	1903584	0.66	0.05	1903584
Dissolved Zinc (Zn)	ug/L	<0.5	1903584	<0.5	0.5	1903584
Mercury by CVAA						
Dissolved Mercury (Hg)	ug/L	<0.01	1902161	<0.01	0.01	1902161

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38141	H38142	H38143		
Sampling Date		2007/10/08 12:00	2007/10/08 12:00	2007/10/04 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-8S	MW05-8S-98	MW06-9S	RDL	QC Batch

Dissolved Metals by ICP						
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	0.008	1898462
Dissolved Calcium (Ca)	mg/L	27.7	28.1	50.6	0.05	1898462
Dissolved Iron (Fe)	mg/L	1.39	1.39	0.845	0.005	1898462
Dissolved Magnesium (Mg)	mg/L	3.31	3.33	4.85	0.05	1898462
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	0.4	0.1	1898462
Dissolved Silicon (Si)	mg/L	5.91	5.91	4.34	0.05	1898462
Dissolved Sodium (Na)	mg/L	3.66	3.72	1.46	0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	0.005	1898462
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	3.4	3.6	2.9	0.2	1903584
Dissolved Antimony (Sb)	ug/L	6.14	5.49	<0.05	0.05	1903584
Dissolved Arsenic (As)	ug/L	1.3	1.4	11.1	0.1	1903584
Dissolved Barium (Ba)	ug/L	51.8	52.5	54.2	0.02	1903584
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Cadmium (Cd)	ug/L	0.02	0.02	0.01	0.01	1903584
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	<0.2	0.2	1903584
Dissolved Cobalt (Co)	ug/L	6.86	6.52	0.04	0.02	1903584
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	0.1	1903584
Dissolved Lead (Pb)	ug/L	0.04	0.03	<0.02	0.02	1903584
Dissolved Lithium (Li)	ug/L	1.1	1.3	1.0	0.2	1903584
Dissolved Manganese (Mn)	ug/L	679	633	178	0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	3.01	3.14	7.02	0.02	1903584
Dissolved Nickel (Ni)	ug/L	20.9	19.3	<0.5	0.5	1903584
Dissolved Potassium (K)	ug/L	1390	959	699	50	1903584
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	0.01	1903584
Dissolved Strontium (Sr)	ug/L	84.8	84.7	196	0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Tin (Sn)	ug/L	0.07	0.07	<0.05	0.05	1903584
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	0.5	1903584
Dissolved Uranium (U)	ug/L	0.02	0.02	0.47	0.01	1903584

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38141	H38142	H38143		
Sampling Date		2007/10/08 12:00	2007/10/08 12:00	2007/10/04 11:00		
COC Number		08198361	08198361	08198361		
	Units	MW05-8S	MW05-8S-98	MW06-9S	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	0.08	0.06	<0.05	0.05	1903584
Dissolved Zinc (Zn)	ug/L	97.6	94.3	<0.5	0.5	1903584
Mercury by CVAA						
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	0.01	1902161

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38144	H38145	H38146		
Sampling Date		2007/10/08	2007/10/08 16:30	2007/10/08 15:45		
COC Number		08198362	08198362	08198362		
	Units	MW06-10S	MW06-10M	MW06-11S	RDL	QC Batch

Dissolved Metals by ICP						
Dissolved Boron (B)	mg/L	<0.008	<0.008	<0.008	0.008	1898462
Dissolved Calcium (Ca)	mg/L	48.6	86.9	54.1	0.05	1898462
Dissolved Iron (Fe)	mg/L	0.117	0.552	0.212	0.005	1898462
Dissolved Magnesium (Mg)	mg/L	4.15	13.1	12.2	0.05	1898462
Dissolved Phosphorus (P)	mg/L	<0.1	<0.1	<0.1	0.1	1898462
Dissolved Silicon (Si)	mg/L	4.39	3.69	4.85	0.05	1898462
Dissolved Sodium (Na)	mg/L	7.56	2.87	4.89	0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005	<0.005	<0.005	0.005	1898462
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	3.9	0.7	10.9	0.2	1903584
Dissolved Antimony (Sb)	ug/L	0.28	<0.05	1.14	0.05	1903584
Dissolved Arsenic (As)	ug/L	4.6	0.2	4.2	0.1	1903584
Dissolved Barium (Ba)	ug/L	24.7	36.9	43.2	0.02	1903584
Dissolved Beryllium (Be)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Cadmium (Cd)	ug/L	<0.01	<0.01	0.05	0.01	1903584
Dissolved Chromium (Cr)	ug/L	<0.2	<0.2	0.3	0.2	1903584
Dissolved Cobalt (Co)	ug/L	0.19	0.03	0.17	0.02	1903584
Dissolved Copper (Cu)	ug/L	<0.1	<0.1	<0.1	0.1	1903584
Dissolved Lead (Pb)	ug/L	<0.02	<0.02	0.02	0.02	1903584
Dissolved Lithium (Li)	ug/L	1.5	2.1	14.3	0.2	1903584
Dissolved Manganese (Mn)	ug/L	84.5	233	72.1	0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	1.84	2.02	30.0	0.02	1903584
Dissolved Nickel (Ni)	ug/L	<0.5	<0.5	<0.5	0.5	1903584
Dissolved Potassium (K)	ug/L	1180	1430	1680	50	1903584
Dissolved Selenium (Se)	ug/L	<0.5	<0.5	<0.5	0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01	<0.01	<0.01	0.01	1903584
Dissolved Strontium (Sr)	ug/L	175	140	105	0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	1903584
Dissolved Tin (Sn)	ug/L	0.06	<0.05	0.18	0.05	1903584
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	0.5	1903584
Dissolved Uranium (U)	ug/L	8.10	4.76	5.55	0.01	1903584

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38144	H38145	H38146		
Sampling Date		2007/10/08	2007/10/08 16:30	2007/10/08 15:45		
COC Number		08198362	08198362	08198362		
	Units	MW06-10S	MW06-10M	MW06-11S	RDL	QC Batch
Dissolved Vanadium (V)	ug/L	<0.05	<0.05	0.87	0.05	1903584
Dissolved Zinc (Zn)	ug/L	1.9	0.6	<0.5	0.5	1903584
Mercury by CVAA						
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	<0.01	0.01	1902161
RDL = Reportable Detection Limit						

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38147	H38148		
Sampling Date		2007/10/08 12:00	2007/10/10		
COC Number		08198362	08198362		
	Units	MW06-12S	TRAVEL BLANK	RDL	QC Batch

Dissolved Metals by ICP					
Dissolved Boron (B)	mg/L	0.013		0.008	1898462
Dissolved Calcium (Ca)	mg/L	119		0.05	1898462
Dissolved Iron (Fe)	mg/L	0.009		0.005	1898462
Dissolved Magnesium (Mg)	mg/L	20.7		0.05	1898462
Dissolved Phosphorus (P)	mg/L	<0.1		0.1	1898462
Dissolved Silicon (Si)	mg/L	7.44		0.05	1898462
Dissolved Sodium (Na)	mg/L	36.4		0.05	1898462
Dissolved Zirconium (Zr)	mg/L	<0.005		0.005	1898462
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	ug/L	1.2		0.2	1903584
Dissolved Antimony (Sb)	ug/L	1.15		0.05	1903584
Dissolved Arsenic (As)	ug/L	1.8		0.1	1903584
Dissolved Barium (Ba)	ug/L	23.2		0.02	1903584
Dissolved Beryllium (Be)	ug/L	<0.05		0.05	1903584
Dissolved Bismuth (Bi)	ug/L	<0.05		0.05	1903584
Dissolved Cadmium (Cd)	ug/L	<0.01		0.01	1903584
Dissolved Chromium (Cr)	ug/L	<0.2		0.2	1903584
Dissolved Cobalt (Co)	ug/L	0.78		0.02	1903584
Dissolved Copper (Cu)	ug/L	<0.1		0.1	1903584
Dissolved Lead (Pb)	ug/L	0.02		0.02	1903584
Dissolved Lithium (Li)	ug/L	7.5		0.2	1903584
Dissolved Manganese (Mn)	ug/L	325		0.02	1903584
Dissolved Molybdenum (Mo)	ug/L	3.50		0.02	1903584
Dissolved Nickel (Ni)	ug/L	<0.5		0.5	1903584
Dissolved Potassium (K)	ug/L	2190		50	1903584
Dissolved Selenium (Se)	ug/L	<0.5		0.5	1903584
Dissolved Silver (Ag)	ug/L	<0.01		0.01	1903584
Dissolved Strontium (Sr)	ug/L	393		0.01	1903584
Dissolved Thallium (Tl)	ug/L	<0.05		0.05	1903584
Dissolved Tin (Sn)	ug/L	0.09		0.05	1903584
Dissolved Titanium (Ti)	ug/L	1.0		0.5	1903584
Dissolved Uranium (U)	ug/L	16.0		0.01	1903584
RDL = Reportable Detection Limit					

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38147	H38148		
Sampling Date		2007/10/08 12:00	2007/10/10		
COC Number		08198362	08198362		
	Units	MW06-12S	TRAVEL BLANK	RDL	QC Batch

Dissolved Vanadium (V)	ug/L	0.60		0.05	1903584
Dissolved Zinc (Zn)	ug/L	0.9		0.5	1903584
Mercury by CVA					
Dissolved Mercury (Hg)	ug/L	<0.01		0.01	1902161
Total Mercury (Hg)	ug/L		<0.01	0.01	1902162
Total Metals by ICP					
Total Boron (B)	mg/L		<0.008	0.008	1900967
Total Calcium (Ca)	mg/L		<0.05	0.05	1900967
Total Iron (Fe)	mg/L		<0.005	0.005	1900967
Total Magnesium (Mg)	mg/L		<0.05	0.05	1900967
Total Phosphorus (P)	mg/L		<0.1	0.1	1900967
Total Silicon (Si)	mg/L		<0.05	0.05	1900967
Total Sodium (Na)	mg/L		<0.05	0.05	1900967
Total Zirconium (Zr)	mg/L		<0.005	0.005	1900967
Total Metals by ICPMS					
Total Aluminum (Al)	ug/L		2.8	0.2	1900976
Total Antimony (Sb)	ug/L		<0.05	0.05	1900976
Total Arsenic (As)	ug/L		<0.1	0.1	1900976
Total Barium (Ba)	ug/L		0.02	0.02	1900976
Total Beryllium (Be)	ug/L		<0.05	0.05	1900976
Total Bismuth (Bi)	ug/L		<0.05	0.05	1900976
Total Cadmium (Cd)	ug/L		<0.01	0.01	1900976
Total Chromium (Cr)	ug/L		<0.2	0.2	1900976
Total Cobalt (Co)	ug/L		<0.02	0.02	1900976
Total Copper (Cu)	ug/L		0.2	0.1	1900976
Total Lead (Pb)	ug/L		0.03	0.02	1900976
Total Lithium (Li)	ug/L		<0.2	0.2	1900976
Total Manganese (Mn)	ug/L		0.08	0.02	1900976
Total Molybdenum (Mo)	ug/L		<0.02	0.02	1900976
Total Nickel (Ni)	ug/L		<0.5	0.5	1900976
Total Potassium (K)	ug/L		<50	50	1900976
Total Silver (Ag)	ug/L		<0.01	0.01	1900976
Total Strontium (Sr)	ug/L		0.02	0.01	1900976

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		H38147	H38148		
Sampling Date		2007/10/08 12:00	2007/10/10		
COC Number		08198362	08198362		
	Units	MW06-12S	TRAVEL BLANK	RDL	QC Batch

Total Thallium (Tl)	ug/L		<0.05	0.05	1900976
Total Tin (Sn)	ug/L		<0.05	0.05	1900976
Total Titanium (Ti)	ug/L		<0.5	0.5	1900976
Total Uranium (U)	ug/L		<0.01	0.01	1900976
Total Vanadium (V)	ug/L		<0.05	0.05	1900976
Total Zinc (Zn)	ug/L		1.6	0.5	1900976

RDL = Reportable Detection Limit

Maxxam Job #: A748794
Report Date: 2007/10/24

Yukon Zinc Corporation
Client Project #:
Site Reference:
Sampler Initials: MM

General Comments

Results relate only to the items tested.

Yukon Zinc Corporation
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Quality Assurance Report
Maxxam Job Number: VA748794

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1895225 CK	SPIKE	Turbidity	2007/10/10		102	%	80 - 120
	BLANK	Turbidity	2007/10/10	<0.1		NTU	
	RPD [H38140-01]	Turbidity	2007/10/10	NC		%	25
	RPD [H38147-01]	Turbidity	2007/10/10	NC		%	25
1898462 GS2	BLANK	Dissolved Boron (B)	2007/10/11	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/10/11	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/10/11	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/10/11	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/10/11	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/10/11	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/10/11	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/10/11	<0.005		mg/L	
	RPD	Dissolved Calcium (Ca)	2007/10/11	0.2		%	25
		Dissolved Magnesium (Mg)	2007/10/11	0.2		%	25
1899072 CK	SPIKE	pH	2007/10/12		100	%	96 - 104
	RPD [H38137-01]	pH	2007/10/12	0.1		%	5
1899074 CK	SPIKE	Conductivity	2007/10/12		101	%	80 - 120
	BLANK	Conductivity	2007/10/12	<1		uS/cm	
	RPD [H38137-01]	Conductivity	2007/10/12	0.6		%	25
1899075 CK	MATRIX SPIKE	Alkalinity (Total as CaCO3)	2007/10/12		96	%	80 - 120
	SPIKE	Alkalinity (Total as CaCO3)	2007/10/12		94	%	80 - 120
	BLANK	Alkalinity (Total as CaCO3)	2007/10/12	<0.5		mg/L	
	RPD [H38137-01]	Alkalinity (Total as CaCO3)	2007/10/12	0.6		%	25
1899247 TS1	MATRIX SPIKE	Dissolved Organic Carbon (C)	2007/10/12		96	%	80 - 120
	SPIKE	Dissolved Organic Carbon (C)	2007/10/12		111	%	80 - 120
	BLANK	Dissolved Organic Carbon (C)	2007/10/12	<0.5		mg/L	
	RPD	Dissolved Organic Carbon (C)	2007/10/12	NC		%	20
1899300 YS	MATRIX SPIKE						
	[H38143-01]	Total Phosphorus (P)	2007/10/14		92	%	80 - 120
	SPIKE	Total Phosphorus (P)	2007/10/14		94	%	80 - 120
	BLANK	Total Phosphorus (P)	2007/10/14	<0.005		mg/L	
	RPD [H38143-01]	Total Phosphorus (P)	2007/10/14	0.4		%	25
1899313 BB3	MATRIX SPIKE	Nitrate plus Nitrite (N)	2007/10/12		103	%	80 - 120
	SPIKE	Nitrate plus Nitrite (N)	2007/10/12		100	%	80 - 120
	BLANK	Nitrate plus Nitrite (N)	2007/10/12	<0.002		mg/L	
	RPD [H38135-01]	Nitrate plus Nitrite (N)	2007/10/12	NC		%	25
1899355 BB3	MATRIX SPIKE	Nitrite (N)	2007/10/12		105	%	80 - 120
	SPIKE	Nitrite (N)	2007/10/12		99	%	80 - 120
	BLANK	Nitrite (N)	2007/10/12	<0.002		mg/L	
	RPD [H38135-01]	Nitrite (N)	2007/10/12	NC		%	25
1899441 SC2	MATRIX SPIKE	Dissolved Sulphate (SO4)	2007/10/12		101	%	75 - 125
	SPIKE	Dissolved Sulphate (SO4)	2007/10/12		102	%	80 - 120
	BLANK	Dissolved Sulphate (SO4)	2007/10/12	0.6, RDL=0.5		mg/L	
	RPD [H38141-01]	Dissolved Sulphate (SO4)	2007/10/12	0.2		%	20
1899448 SC2	MATRIX SPIKE	Dissolved Chloride (Cl)	2007/10/12		100	%	80 - 120
	SPIKE	Dissolved Chloride (Cl)	2007/10/12		104	%	80 - 120
	BLANK	Dissolved Chloride (Cl)	2007/10/12	<0.5		mg/L	
	RPD [H38141-01]	Dissolved Chloride (Cl)	2007/10/12	NC		%	20
1899991 WAY	MATRIX SPIKE						
	[H38139-01]	Fluoride (F)	2007/10/12		104	%	80 - 120
	SPIKE	Fluoride (F)	2007/10/12		106	%	80 - 120
	BLANK	Fluoride (F)	2007/10/12	<0.01		mg/L	
	RPD [H38139-01]	Fluoride (F)	2007/10/12	1.8		%	25
1900967 GS2	BLANK	Total Boron (B)	2007/10/12	<0.008		mg/L	
		Total Calcium (Ca)	2007/10/12	<0.05		mg/L	

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Quality Assurance Report (Continued)

Maxxam Job Number: VA748794

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1900967 GS2	BLANK	Total Iron (Fe)	2007/10/12	<0.005		mg/L	
		Total Magnesium (Mg)	2007/10/12	<0.05		mg/L	
		Total Phosphorus (P)	2007/10/12	<0.1		mg/L	
		Total Silicon (Si)	2007/10/12	<0.05		mg/L	
		Total Sodium (Na)	2007/10/12	<0.05		mg/L	
		Total Zirconium (Zr)	2007/10/12	<0.005		mg/L	
1900976 AA1	MATRIX SPIKE	Total Arsenic (As)	2007/10/12		364 (1)	%	75 - 125
		Total Cadmium (Cd)	2007/10/12		104	%	75 - 125
		Total Chromium (Cr)	2007/10/12		102	%	75 - 125
		Total Cobalt (Co)	2007/10/12		111	%	75 - 125
		Total Copper (Cu)	2007/10/12		105	%	75 - 125
		Total Lead (Pb)	2007/10/12		109	%	75 - 125
		Total Thallium (Tl)	2007/10/12		103	%	75 - 125
		Total Zinc (Zn)	2007/10/12		102	%	75 - 125
	SPIKE	Total Arsenic (As)	2007/10/12		98	%	75 - 125
		Total Cadmium (Cd)	2007/10/12		100	%	75 - 125
		Total Chromium (Cr)	2007/10/12		104	%	75 - 125
		Total Cobalt (Co)	2007/10/12		113	%	75 - 125
		Total Copper (Cu)	2007/10/12		110	%	75 - 125
		Total Lead (Pb)	2007/10/12		114	%	75 - 125
		Total Thallium (Tl)	2007/10/12		107	%	75 - 125
		Total Zinc (Zn)	2007/10/12		108	%	75 - 125
	BLANK	Total Aluminum (Al)	2007/10/12	<0.2		ug/L	
		Total Antimony (Sb)	2007/10/12	<0.05		ug/L	
		Total Arsenic (As)	2007/10/12	<0.1		ug/L	
		Total Barium (Ba)	2007/10/12	<0.02		ug/L	
		Total Beryllium (Be)	2007/10/12	<0.05		ug/L	
		Total Bismuth (Bi)	2007/10/12	<0.05		ug/L	
		Total Cadmium (Cd)	2007/10/12	<0.01		ug/L	
		Total Chromium (Cr)	2007/10/12	<0.2		ug/L	
		Total Cobalt (Co)	2007/10/12	<0.02		ug/L	
		Total Copper (Cu)	2007/10/12	<0.1		ug/L	
		Total Lead (Pb)	2007/10/12	<0.02		ug/L	
		Total Lithium (Li)	2007/10/12	<0.2		ug/L	
		Total Manganese (Mn)	2007/10/12	<0.02		ug/L	
		Total Molybdenum (Mo)	2007/10/12	<0.02		ug/L	
		Total Nickel (Ni)	2007/10/12	<0.5		ug/L	
		Total Potassium (K)	2007/10/12	<50		ug/L	
		Total Silver (Ag)	2007/10/12	<0.01		ug/L	
		Total Strontium (Sr)	2007/10/12	<0.01		ug/L	
		Total Thallium (Tl)	2007/10/12	<0.05		ug/L	
		Total Tin (Sn)	2007/10/12	<0.05		ug/L	
		Total Titanium (Ti)	2007/10/12	<0.5		ug/L	
		Total Uranium (U)	2007/10/12	<0.01		ug/L	
		Total Vanadium (V)	2007/10/12	<0.05		ug/L	
		Total Zinc (Zn)	2007/10/12	<0.5		ug/L	
	RPD	Total Aluminum (Al)	2007/10/12	5.5		%	25
		Total Antimony (Sb)	2007/10/12	3.8		%	25
		Total Arsenic (As)	2007/10/12	1.5		%	25
		Total Barium (Ba)	2007/10/12	0.1		%	25
		Total Beryllium (Be)	2007/10/12	NC		%	25
		Total Bismuth (Bi)	2007/10/12	NC		%	25
		Total Cadmium (Cd)	2007/10/12	NC		%	25
		Total Chromium (Cr)	2007/10/12	NC		%	25
		Total Cobalt (Co)	2007/10/12	NC		%	25

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Quality Assurance Report (Continued)

Maxxam Job Number: VA748794

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1900976 AA1	RPD	Total Copper (Cu)	2007/10/12	NC		%	25
		Total Lead (Pb)	2007/10/12	2.5		%	25
		Total Lithium (Li)	2007/10/12	5.4		%	25
		Total Manganese (Mn)	2007/10/12	0.08		%	25
		Total Molybdenum (Mo)	2007/10/12	0.6		%	25
		Total Nickel (Ni)	2007/10/12	NC		%	25
		Total Potassium (K)	2007/10/12	1.3		%	25
		Total Silver (Ag)	2007/10/12	NC		%	25
		Total Strontium (Sr)	2007/10/12	2.6		%	25
		Total Thallium (Tl)	2007/10/12	NC		%	25
		Total Tin (Sn)	2007/10/12	NC		%	25
		Total Titanium (Ti)	2007/10/12	NC		%	25
		Total Uranium (U)	2007/10/12	0		%	25
		Total Vanadium (V)	2007/10/12	12.6		%	25
		Total Zinc (Zn)	2007/10/12	NC		%	25
1901224 GS2	BLANK	Dissolved Boron (B)	2007/10/12	<0.008		mg/L	
		Dissolved Calcium (Ca)	2007/10/12	<0.05		mg/L	
		Dissolved Iron (Fe)	2007/10/12	<0.005		mg/L	
		Dissolved Magnesium (Mg)	2007/10/12	<0.05		mg/L	
		Dissolved Phosphorus (P)	2007/10/12	<0.1		mg/L	
		Dissolved Silicon (Si)	2007/10/12	<0.05		mg/L	
		Dissolved Sodium (Na)	2007/10/12	<0.05		mg/L	
		Dissolved Zirconium (Zr)	2007/10/12	<0.005		mg/L	
	RPD	Dissolved Calcium (Ca)	2007/10/12	0.03		%	25
		Dissolved Magnesium (Mg)	2007/10/12	0.06		%	25
1902161 JT3	MATRIX SPIKE	Dissolved Mercury (Hg)	2007/10/17		113	%	70 - 130
	QC STANDARD	Dissolved Mercury (Hg)	2007/10/17		100	%	80 - 120
	SPIKE	Dissolved Mercury (Hg)	2007/10/17		94	%	80 - 120
	BLANK	Dissolved Mercury (Hg)	2007/10/17	<0.01		ug/L	
	RPD	Dissolved Mercury (Hg)	2007/10/17	NC		%	25
1902162 JT3	MATRIX SPIKE	Total Mercury (Hg)	2007/10/17		108	%	70 - 130
	[H38148-01]	Total Mercury (Hg)	2007/10/17		96	%	80 - 120
	QC STANDARD	Total Mercury (Hg)	2007/10/17		94	%	80 - 120
	SPIKE	Total Mercury (Hg)	2007/10/17	<0.01		ug/L	
	BLANK	Total Mercury (Hg)	2007/10/17	<0.01		ug/L	
	RPD [H38148-01]	Total Mercury (Hg)	2007/10/17	NC		%	25
1902625 NN	MATRIX SPIKE	Ammonia (N)	2007/10/15		96	%	80 - 120
	SPIKE	Ammonia (N)	2007/10/15		95	%	80 - 120
	BLANK	Ammonia (N)	2007/10/15	<0.005		mg/L	
	RPD [H38142-01]	Ammonia (N)	2007/10/15	NC		%	25
1903113 FS1	MATRIX SPIKE	Total Dissolved Solids	2007/10/15		102	%	80 - 120
	SPIKE	Total Dissolved Solids	2007/10/15		106	%	80 - 120
	BLANK	Total Dissolved Solids	2007/10/15	12, RDL=10		mg/L	
	RPD	Total Dissolved Solids	2007/10/15	1.7		%	25
1903404 CC3	MATRIX SPIKE	Orthophosphate (P)	2007/10/15		99	%	80 - 120
	SPIKE	Orthophosphate (P)	2007/10/15		94	%	80 - 120
	BLANK	Orthophosphate (P)	2007/10/15	<0.001		mg/L	
	RPD [H38135-01]	Orthophosphate (P)	2007/10/15	13.6		%	20
1903584 AA1	MATRIX SPIKE	Dissolved Arsenic (As)	2007/10/15		113	%	75 - 125
	[H38134-01]	Dissolved Cadmium (Cd)	2007/10/15		108	%	75 - 125
		Dissolved Chromium (Cr)	2007/10/15		109	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/15		116	%	75 - 125
		Dissolved Copper (Cu)	2007/10/15		113	%	75 - 125
		Dissolved Lead (Pb)	2007/10/15		114	%	75 - 125

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Quality Assurance Report (Continued)

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QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1903584 AA1	MATRIX SPIKE [H38134-01]	Dissolved Selenium (Se)	2007/10/15		113	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/15		105	%	75 - 125
		Dissolved Zinc (Zn)	2007/10/15		116	%	75 - 125
	SPIKE	Dissolved Arsenic (As)	2007/10/15		99	%	75 - 125
		Dissolved Cadmium (Cd)	2007/10/15		99	%	75 - 125
		Dissolved Chromium (Cr)	2007/10/15		108	%	75 - 125
		Dissolved Cobalt (Co)	2007/10/15		115	%	75 - 125
		Dissolved Copper (Cu)	2007/10/15		111	%	75 - 125
		Dissolved Lead (Pb)	2007/10/15		115	%	75 - 125
		Dissolved Selenium (Se)	2007/10/15		98	%	75 - 125
		Dissolved Thallium (Tl)	2007/10/15		110	%	75 - 125
		Dissolved Zinc (Zn)	2007/10/15		111	%	75 - 125
	BLANK	Dissolved Aluminum (Al)	2007/10/15	<0.2		ug/L	
		Dissolved Antimony (Sb)	2007/10/15	<0.05		ug/L	
		Dissolved Arsenic (As)	2007/10/15	<0.1		ug/L	
		Dissolved Barium (Ba)	2007/10/15	<0.02		ug/L	
		Dissolved Beryllium (Be)	2007/10/15	<0.05		ug/L	
		Dissolved Bismuth (Bi)	2007/10/15	<0.05		ug/L	
		Dissolved Cadmium (Cd)	2007/10/15	<0.01		ug/L	
		Dissolved Chromium (Cr)	2007/10/15	<0.2		ug/L	
		Dissolved Cobalt (Co)	2007/10/15	<0.02		ug/L	
		Dissolved Copper (Cu)	2007/10/15	<0.1		ug/L	
		Dissolved Lead (Pb)	2007/10/15	<0.02		ug/L	
		Dissolved Lithium (Li)	2007/10/15	<0.2		ug/L	
		Dissolved Manganese (Mn)	2007/10/15	<0.02		ug/L	
		Dissolved Molybdenum (Mo)	2007/10/15	<0.02		ug/L	
		Dissolved Nickel (Ni)	2007/10/15	<0.5		ug/L	
		Dissolved Potassium (K)	2007/10/15	<50		ug/L	
		Dissolved Selenium (Se)	2007/10/15	<0.5		ug/L	
		Dissolved Silver (Ag)	2007/10/15	<0.01		ug/L	
		Dissolved Strontium (Sr)	2007/10/15	<0.01		ug/L	
		Dissolved Thallium (Tl)	2007/10/15	<0.05		ug/L	
		Dissolved Tin (Sn)	2007/10/15	<0.05		ug/L	
		Dissolved Titanium (Ti)	2007/10/15	<0.5		ug/L	
		Dissolved Uranium (U)	2007/10/15	<0.01		ug/L	
		Dissolved Vanadium (V)	2007/10/15	<0.05		ug/L	
		Dissolved Zinc (Zn)	2007/10/15	<0.5		ug/L	
	RPD [H38134-01]	Dissolved Aluminum (Al)	2007/10/15	2.3		%	25
		Dissolved Antimony (Sb)	2007/10/15	NC		%	25
		Dissolved Arsenic (As)	2007/10/15	7.0		%	25
		Dissolved Barium (Ba)	2007/10/15	0.05		%	25
		Dissolved Beryllium (Be)	2007/10/15	NC		%	25
		Dissolved Bismuth (Bi)	2007/10/15	NC		%	25
		Dissolved Cadmium (Cd)	2007/10/15	NC		%	25
		Dissolved Chromium (Cr)	2007/10/15	NC		%	25
		Dissolved Cobalt (Co)	2007/10/15	NC		%	25
		Dissolved Copper (Cu)	2007/10/15	NC		%	25
		Dissolved Lead (Pb)	2007/10/15	NC		%	25
		Dissolved Lithium (Li)	2007/10/15	13.5		%	25
		Dissolved Manganese (Mn)	2007/10/15	5.4		%	25
		Dissolved Molybdenum (Mo)	2007/10/15	0.2		%	25
		Dissolved Nickel (Ni)	2007/10/15	NC		%	25
		Dissolved Potassium (K)	2007/10/15	5.6		%	25
		Dissolved Selenium (Se)	2007/10/15	NC		%	25

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Quality Assurance Report (Continued)

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QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1903584 AA1	RPD [H38134-01]	Dissolved Silver (Ag)	2007/10/15	NC		%	25
		Dissolved Strontium (Sr)	2007/10/15	1.1		%	25
		Dissolved Thallium (Tl)	2007/10/15	NC		%	25
		Dissolved Tin (Sn)	2007/10/15	NC		%	25
		Dissolved Titanium (Ti)	2007/10/15	NC		%	25
		Dissolved Uranium (U)	2007/10/15	NC		%	25
		Dissolved Vanadium (V)	2007/10/15	8.4		%	25
		Dissolved Zinc (Zn)	2007/10/15	NC		%	25
1903662 AA1	MATRIX SPIKE	Total Selenium (Se)	2007/10/15		106	%	75 - 125
	[H38148-01]	Total Selenium (Se)	2007/10/15		91	%	75 - 125
	SPIKE	Total Selenium (Se)	2007/10/15	<0.5		ug/L	
	BLANK	Total Selenium (Se)	2007/10/15	NC		%	25
1905636 FS1	RPD [H38148-01]	Total Selenium (Se)	2007/10/15			%	25
	MATRIX SPIKE	Total Suspended Solids	2007/10/16		102	%	N/A
	SPIKE	Total Suspended Solids	2007/10/16		102	%	N/A
	BLANK	Total Suspended Solids	2007/10/16	<4		mg/L	
	RPD	Total Suspended Solids	2007/10/16	NC		%	25
1916583 JD1	Calibration Check	Dissolved Bromide (Br)	2007/10/22		105	%	83 - 117
	MATRIX SPIKE	Dissolved Bromide (Br)	2007/10/22		108	%	80 - 120
	BLANK	Dissolved Bromide (Br)	2007/10/22	<0.01		mg/L	
	RPD	Dissolved Bromide (Br)	2007/10/22	NC		%	20
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference (1) Spike invalid due to high sample concentration.							

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

Appendix D Humidity Cell Update Reports (AMEC and MEA)

November 20, 2007

Yukon Zinc Corporation
701-475 Howe St.
Vancouver BC V6C 2B3

Dear Pamela Ladyman

Re: Wolverine Project Waste Rock, Ore and Backfill Humidity Cell Release Rates Update

This letter report summarizes the most recent humidity cell release rates for Wolverine mine rock. Release rates from the humidity cells were last reported in January 2007 as part of AMEC Earth & Environmental's (AMEC) water quality estimate for the flooded underground workings. This included humidity cell data up until December 2006. Yukon Zinc Corporation (YZC) has requested that data collected following the January 2007 report be analysed to determine if any significant changes in the calculated release rates have occurred since that time.

Nineteen mine rock humidity cells are currently in operation; eight were initiated in December 2005, five in January 2006 and three each in February and March 2006. The duration of each humidity cell, as of October 4, 2007, is summarized below:

Humidity Cell	HC1 to HC8	HC9 to HC13	HC14 to HC16	HC17 to HC19	HC20 to HC22	T1 and T2
Start Date	22-Dec-05	12-Jan-06	16-Feb-06	21-Feb-06	23-May-06	23-May-06
No. Weeks	89	86	81	79	66	66

Figures 1 to 13 present calculated loadings for waste rock, ore, and backfill humidity cells. Visual inspection of the humidity cell loadings indicates that all parameters show a near-constant rate of release or slight decrease since the last report. The pH values and sulphate loads have remained near-constant during this time. Since start up, three cells have begun to produce consistently acidic (pH<5) leachates. These consist of two NP-depleted cells (HC20 and 22) and one rhyolite cell (HC3). Cell HC3 is composed of high sulphide (7.6%) low NP (7 kgCaCO₃/tonne) rock which is not considered to represent the bulk of the rhyolite rock in the deposit.

Exceptions to the general trend of constant or decreasing loads are as follows:

- Aluminium, copper, and iron loads in two NP-depleted ore cells (HC20 and 22) and one rhyolite cell (HC3) have increased;

- Cadmium and copper loads are variable to slightly increasing in all three ore cells (HC14, 15 and 16);
- Arsenic loads for two rhyolite cells (HC3 and 4) appear to be constant after week 67, though these loads are slightly higher than in previously reported data;
- Cadmium loads in one iron formation cell (HC2) have increased constantly and gradually since week 16;
- Lead loads for rhyolite cell HC3 had increased up to week 40, after which the load has been decreasing consistently; and,
- Silver loads tended to increase in NP-depleted ore cells to approximately week 56, after which silver loads in these cells have begun to decrease.

Release rates for all cells were calculated for steady-state conditions that exclude the first 20 weeks of data. Rates were calculated for the period ending December 2006, and for the period ending October 2007. These results are presented in Table 1 (attached) and are summarized by rock or material type. The relative percent difference (RPD) between rates reported for the two periods are also presented in Table 1. Although some increases in rates are observed for ore and NP-depleted ore cells (such as aluminium copper, iron and silver), in general the majority of the release rates for most of the material types have decreased since the last reporting period.

The revised release rates were incorporated into the underground water quality model to evaluate the potential impacts due to rate changes. A comparison of the expected mine water concentration as calculated in January is compared to the expected mine water concentration as calculated with the revised release rates and summarized in Table 2. In general, the estimated concentrations of the regulated parameters in the model have to decreased slightly. The iron concentration increased as a result of increased metal loads from one rhyolite humidity cell (HC3). This rhyolite sample is not representative of the bulk of the rhyolite in the underground workings, and as such, final concentrations are expected to be lower. Also, this water quality model does not take into account mineral solubility constraints and saturation conditions, which may result in lower iron concentrations than the model predicts.

The revised release rates for the humidity cells do not appear to be notably different from those reported in January 2007. The recalculated mass balance concentration of the underground mine water at closure suggests that the new rates will have relatively little effect.

Table 2: Comparison of mass balance water quality model results

Parameter	Mass balance concentration (mg/L)	
	Jan-07	Nov-07
Sulphate	282	238
Aluminum	0.50	0.64
Antimony	0.08	0.07
Arsenic	0.06	0.06
Cadmium	0.24	0.24
Copper	0.035	0.033
Iron	0.49	1.16
Lead	0.14	0.12
Molybdenum	0.009	0.009
Nickel	0.016	0.016
Selenium	0.50	0.38
Silver	0.002	0.088
Zinc	8.0	7.7

We trust this meets your needs at this time. Should you have any questions, please do not hesitate to contact the undersigned.



Jennifer Kavalench, B.Sc.
Environmental Geoscientist



Steve Sibbick, M.Sc., P.Geo.
Associate Geochemist
Senior Review

Table 1: Mine Rock Release Rates

Mine Rock Release Rates (mg/m²/wk)*

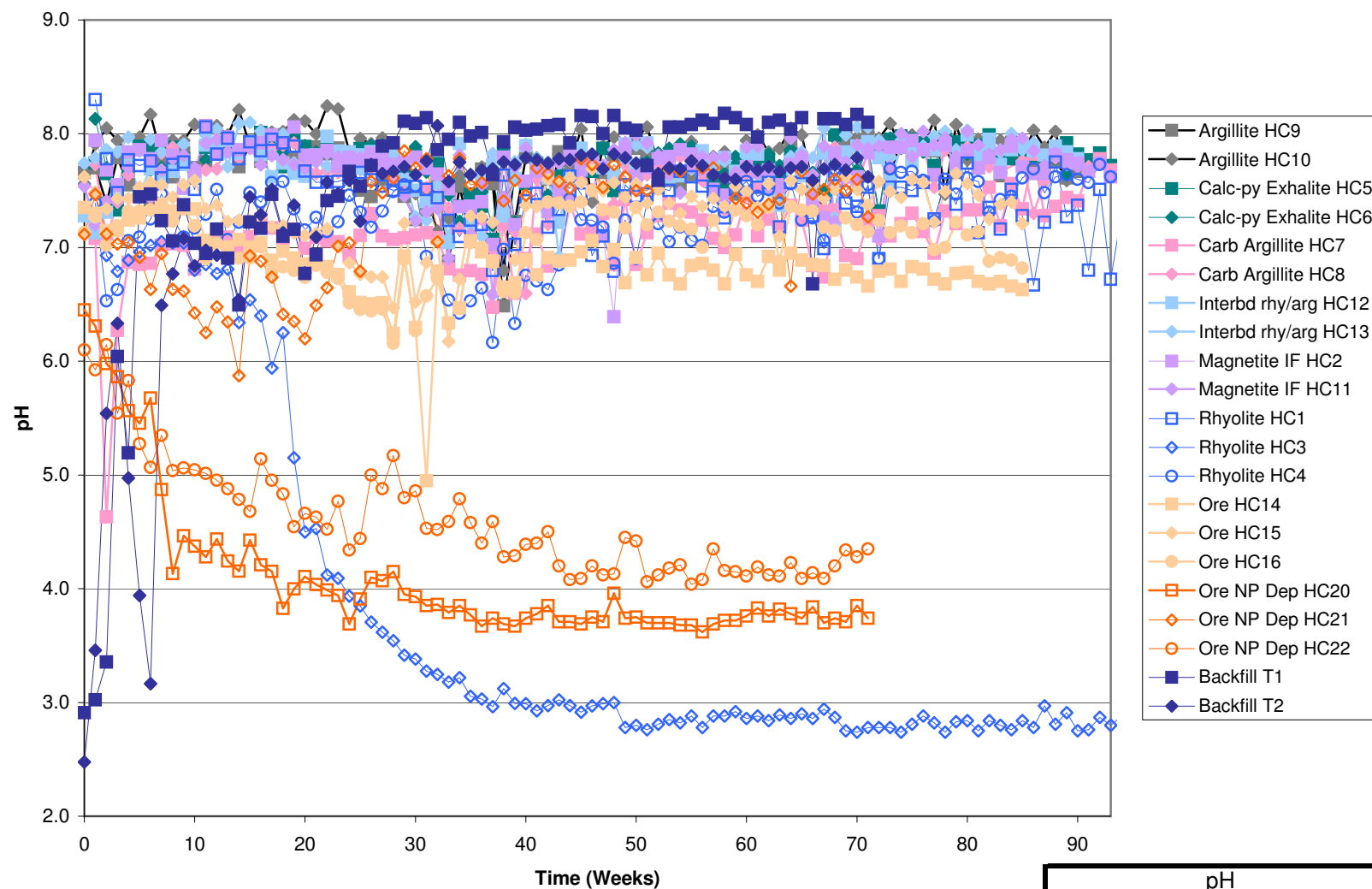
Reported: January 2007		Release Rates (mg/m ² /wk)											
Material Type	Rock Type	Sulphate	Al	As	Cd	Cu	Fe	Pb	Mo	Ni	Se	Ag	Zn
Non-Carbonaceous Argillites	1	0.43	0.00092	0.000013	0.000001	0.000025	0.00021	0.000005	0.00004	0.000009	0.00003	0.000001	0.000054
Carbonaceous Argillites	2	1.75	0.00242	0.000019	0.000014	0.000056	0.00075	0.000017	0.00004	0.000104	0.00020	0.000004	0.002251
Calcite-Pyrite Exhalite	3	4.85	0.00168	0.000012	0.000002	0.000055	0.00071	0.000017	0.00002	0.000013	0.00011	0.000003	0.000121
Iron Formation	4	0.94	0.00165	0.000025	0.000006	0.000032	0.00042	0.000019	0.00003	0.000018	0.00060	0.000002	0.000187
Rhyolite/Argillite	5	0.89	0.00085	0.000012	0.000001	0.000024	0.00026	0.000009	0.00007	0.000009	0.00007	0.000001	0.000051
Rhyolite/Rhyolite Fragmental	6	7.07	0.27050	0.000057	0.000567	0.017435	0.18776	0.005853	0.00001	0.000759	0.00127	0.000004	0.055579
NP Depleted Ore		46.3	0.03295	0.007243	0.052376	0.144006	0.04242	0.003949	0.00003	0.019059	0.15594	0.000016	9.879771
Backfill (T1, T2 Hcell Data)		14.4	0.00047	0.000051	0.000051	0.000235	0.00165	0.000171	0.00038	0.000030	0.01270	0.000134	0.003373
Ore		13.6	0.00014	0.001275	0.017791	0.000325	0.00110	0.008856	0.00013	0.000264	0.03402	0.000005	0.601462

November 2007 (Current)		Release Rates (mg/m ² /wk)											
Material Type	Rock Type	Sulphate	Al	As	Cd	Cu	Fe	Pb	Mo	Ni	Se	Ag	Zn
Non-Carbonaceous Argillites	1	0.38	0.00075	0.000011	0.000001	0.000022	0.00021	0.000004	0.00003	0.000008	0.00003	0.000001	0.00006
Carbonaceous Argillites	2	1.61	0.00225	0.000018	0.000014	0.000060	0.00086	0.000015	0.00003	0.000100	0.00015	0.000003	0.00208
Calcite-Pyrite Exhalite	3	4.57	0.00128	0.000012	0.000002	0.000050	0.00072	0.000014	0.00002	0.000013	0.00008	0.000003	0.00015
Iron Formation	4	0.82	0.00130	0.000026	0.000010	0.000030	0.00042	0.000017	0.00004	0.000013	0.00047	0.000002	0.00026
Rhyolite/Argillite	5	0.69	0.00073	0.000011	0.000001	0.000020	0.00029	0.000007	0.00009	0.000008	0.00005	0.000001	0.00007
Rhyolite/Rhyolite Fragmental	6	7.30	0.36155	0.000066	0.000313	0.014907	0.62341	0.005628	0.00001	0.000504	0.00097	0.000003	0.03153
NP Depleted Ore		35.5	0.10473	0.006289	0.059309	0.368860	0.15551	0.002281	0.00002	0.012421	0.10434	0.000022	10.8186
Backfill (T1, T2 Hcell Data)		12.0	0.00024	0.000448	0.000057	0.000127	0.00088	0.000070	0.00025	0.000033	0.00816	0.000057	0.00346
Ore		10.4	0.00028	0.001159	0.017950	0.000508	0.00103	0.007856	0.00012	0.000256	0.02536	0.006557	0.57981

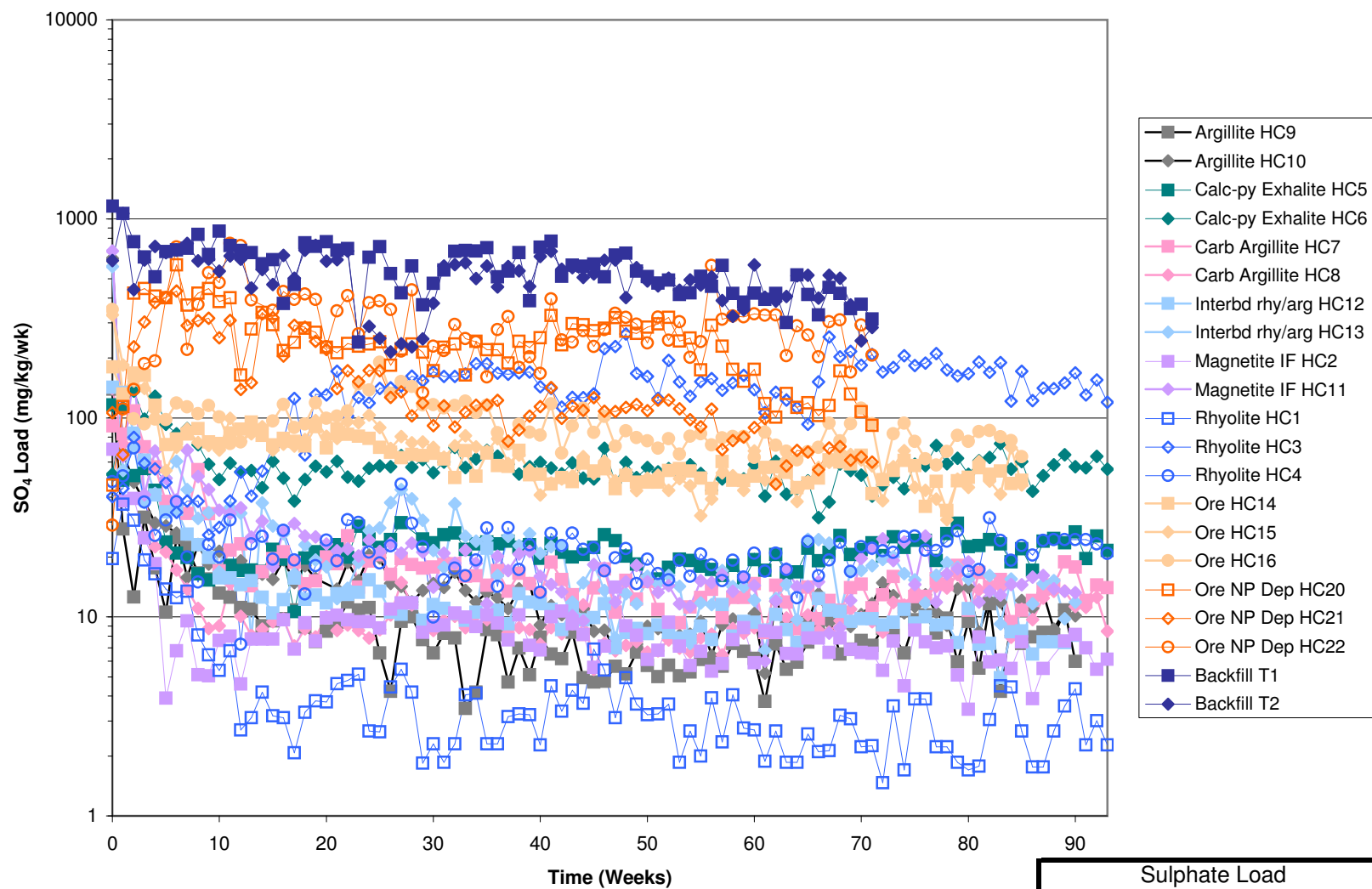
Relative Percent Difference (%)

		Release Rates (mg/m ² /wk)											
Material Type	Rock Type	Sulphate	Al	As	Cd	Cu	Fe	Pb	Mo	Ni	Se	Ag	Zn
Non-Carbonaceous Argillites	1	-12.6	-20.8	-19.6	20.3	-12.5	-3.10	-7.54	-17.7	-13.0	-18.5	3.32	2.74
Carbonaceous Argillites	2	-8.73	-7.29	-5.75	1.08	6.67	14.4	-9.10	-17.6	-4.24	-27.9	-3.86	-8.04
Calcite-Pyrite Exhalite	3	-5.94	-26.8	-1.21	-0.40	-10.8	1.94	-20.6	-12.1	-2.17	-35.9	1.93	22.0
Iron Formation	4	-12.7	-23.5	4.07	47.9	-8.89	-0.73	-11.5	10.1	-28.8	-22.6	7.73	30.9
Rhyolite/Argillite	5	-25.4	-15.4	-9.79	-0.25	-18.6	9.20	-24.2	27.5	-13.0	-25.8	6.33	35.9
Rhyolite/Rhyolite Fragmental	6	3.12	28.8	13.9	-57.6	-15.6	107	-3.92	20.2	-40.3	-26.7	-9.59	-55.2
NP Depleted Ore		-26.5	104	-14.1	12.4	87.7	114	-53.5	-7.16	-42.2	-39.7	31.1	9.07
Backfill (T1, T2 Hcell Data)		-17.7	-65.5	-40.6	11.7	-59.7	-61.4	-84.0	-38.8	7.76	-43.6	-81.2	2.50
Ore		-26.3	68.8	-9.50	0.89	44.1	-6.66	-12.0	-12.9	-2.92	-29.2	200	-3.67

*Calculated release rates exclude first 20 weeks of data

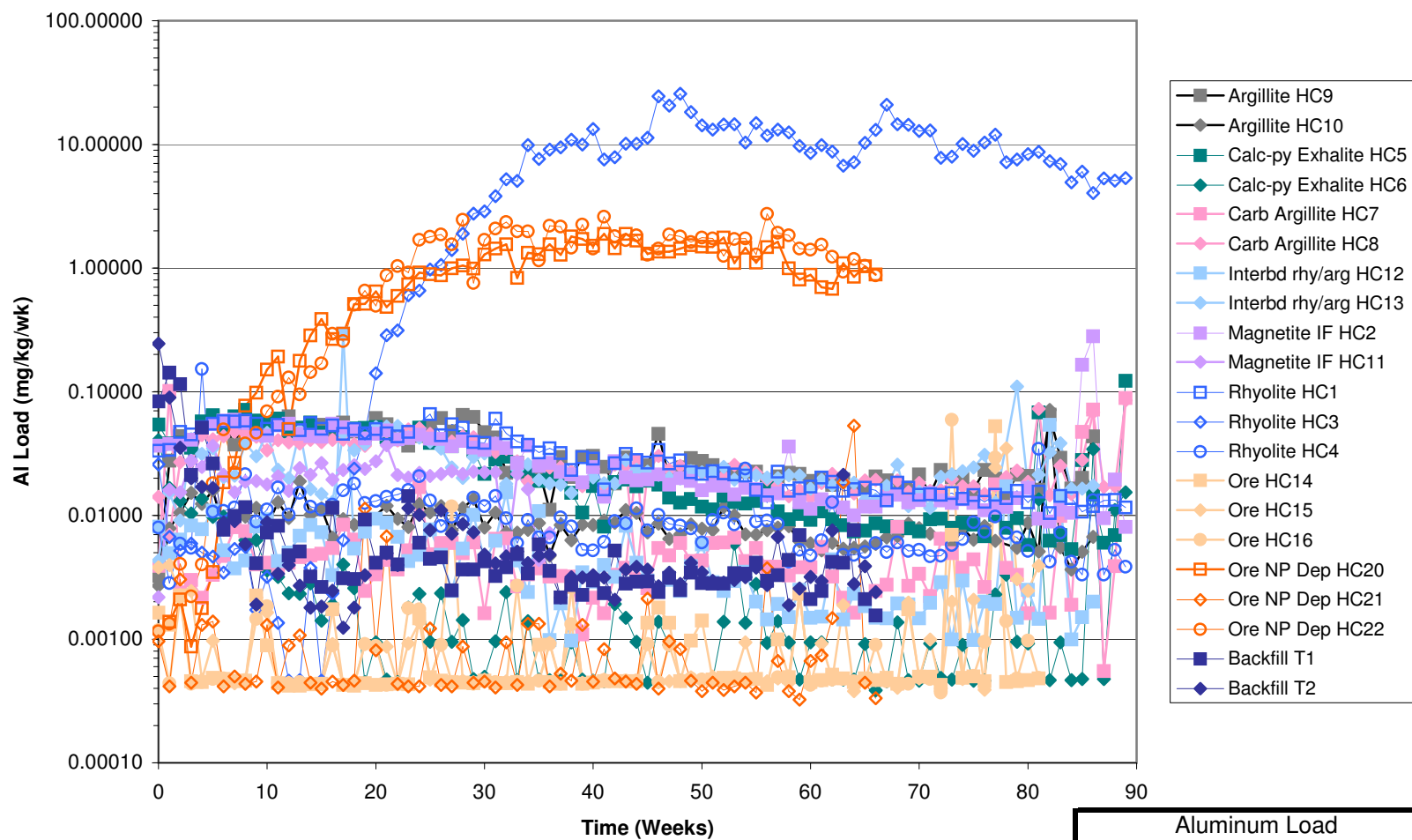


pH	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 1

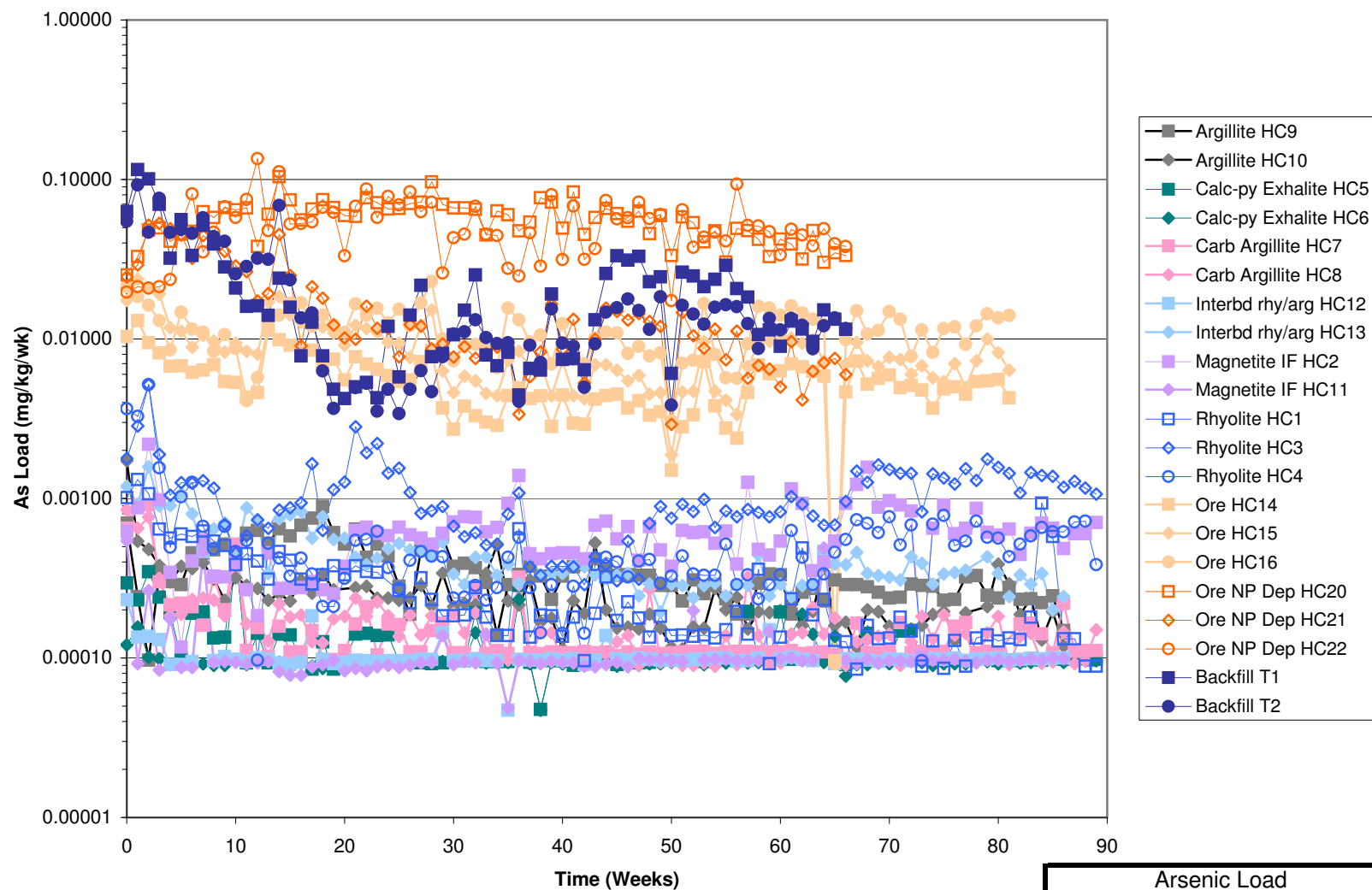


Sulphate Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 2

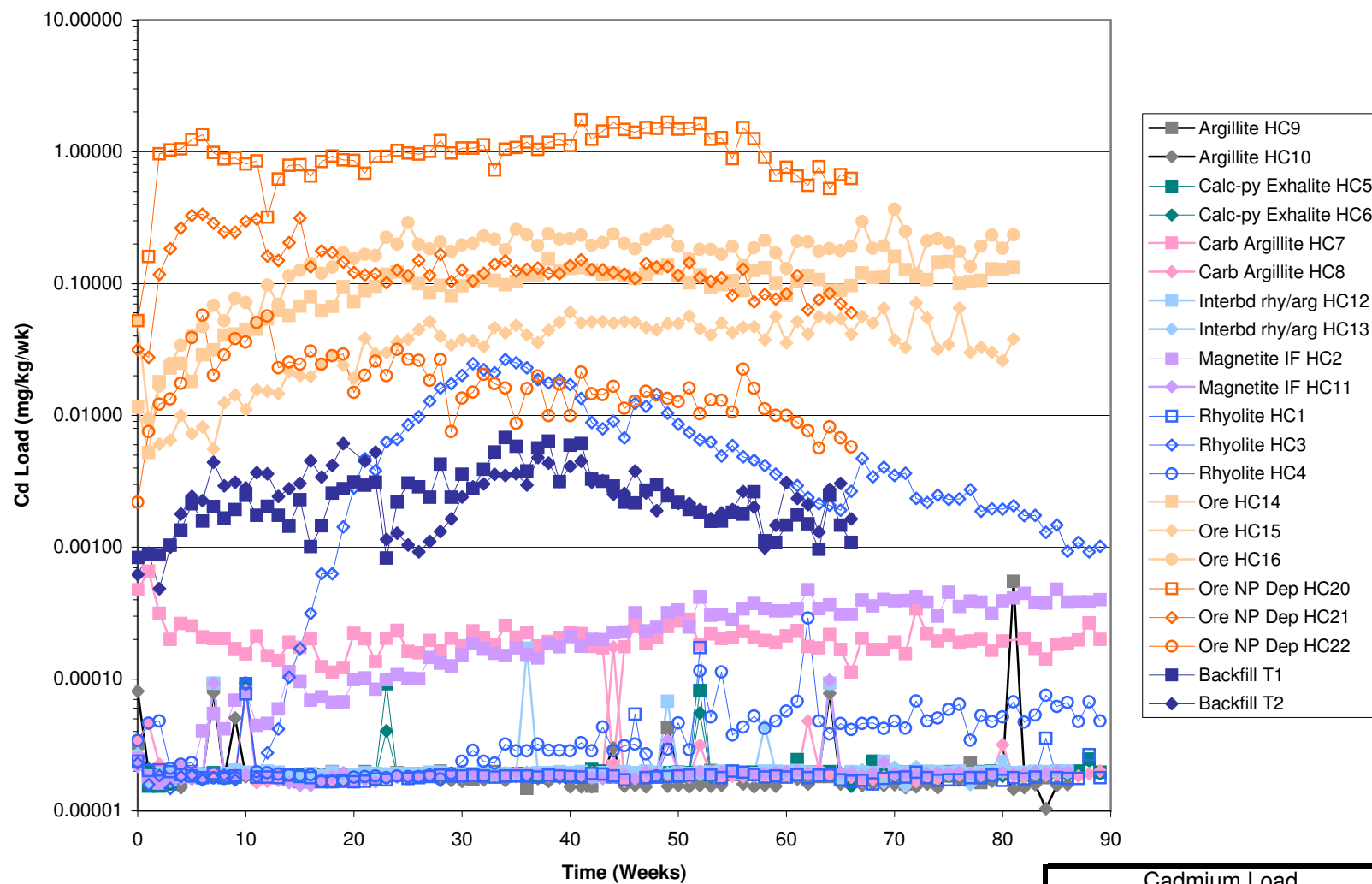
Wolverine Humidity Cell November 2007 Update



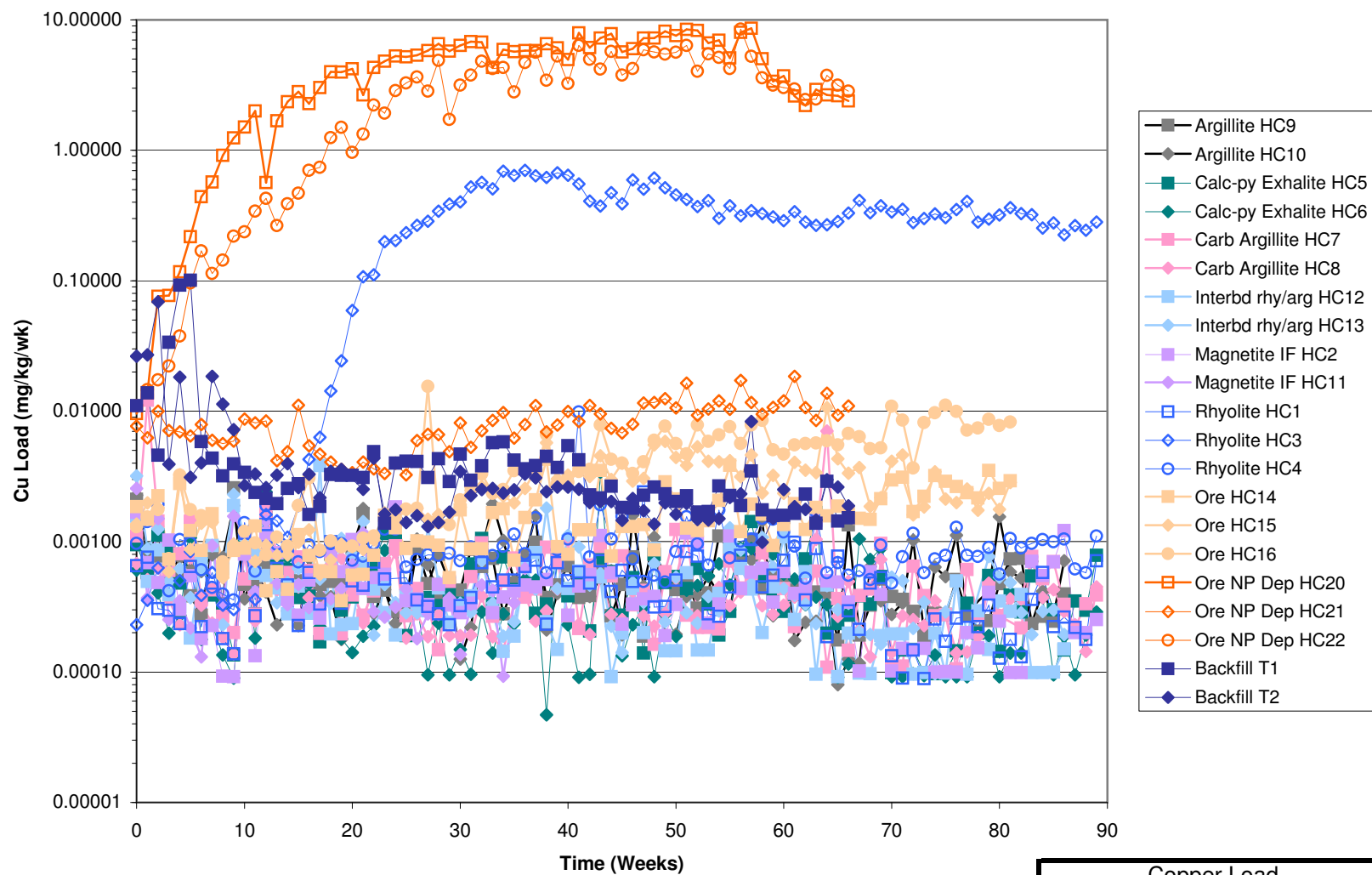
Aluminum Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 3



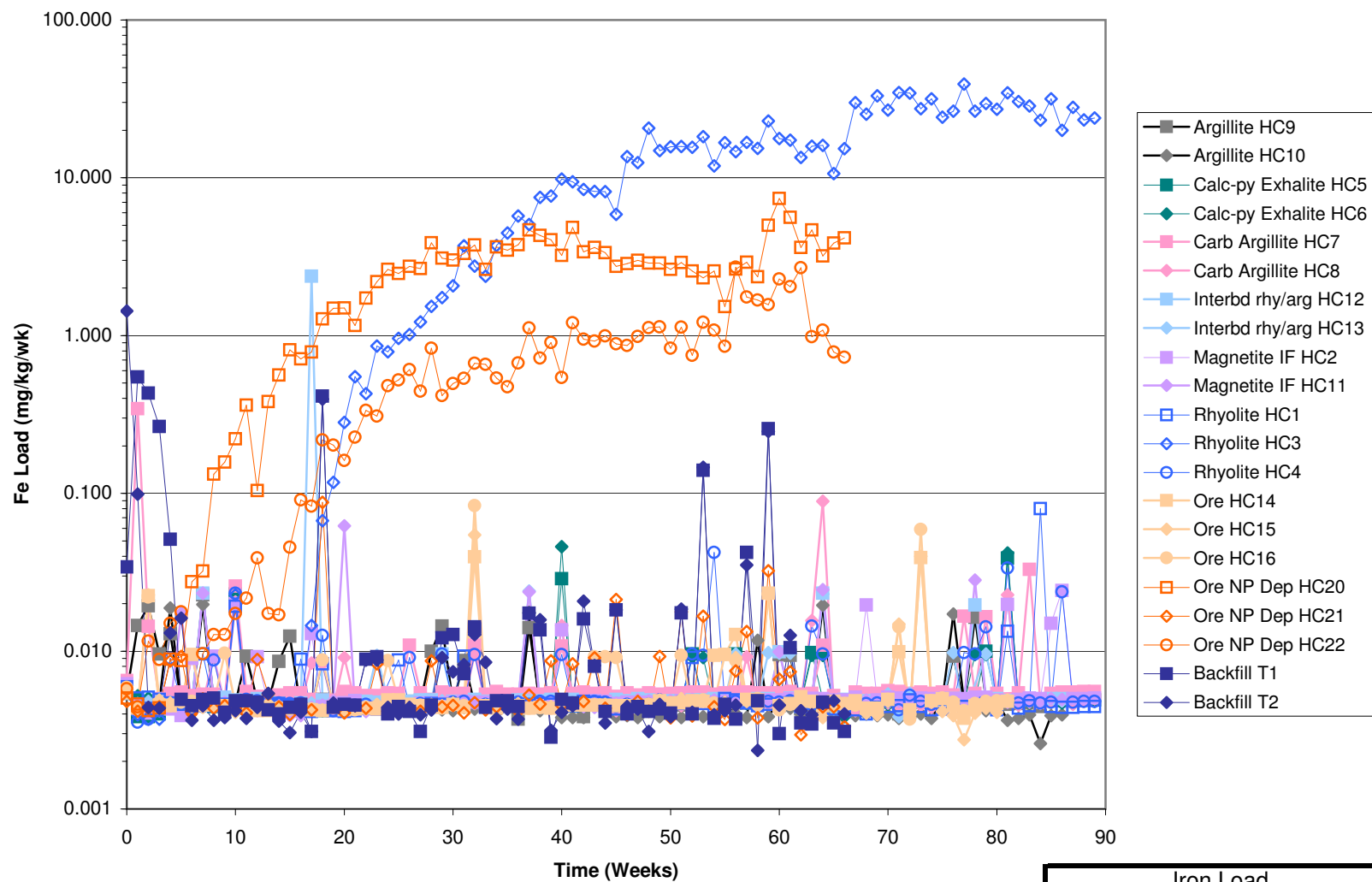
Arsenic Load
November 2007
Wolverine Mine, YK
Yukon Zinc Corporation
November 2007 | FIGURE 4



Cadmium Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 5

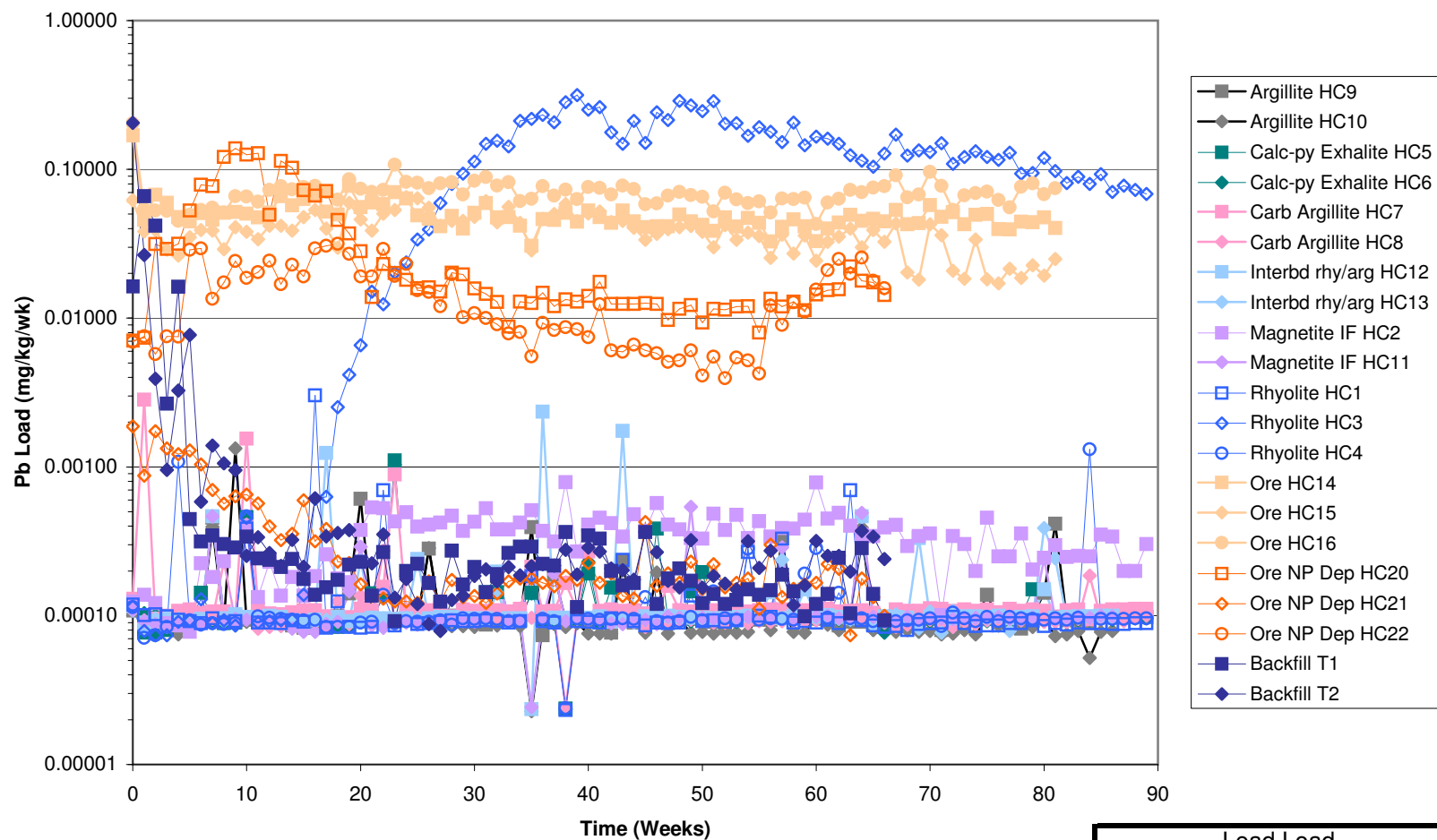


Copper Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 6

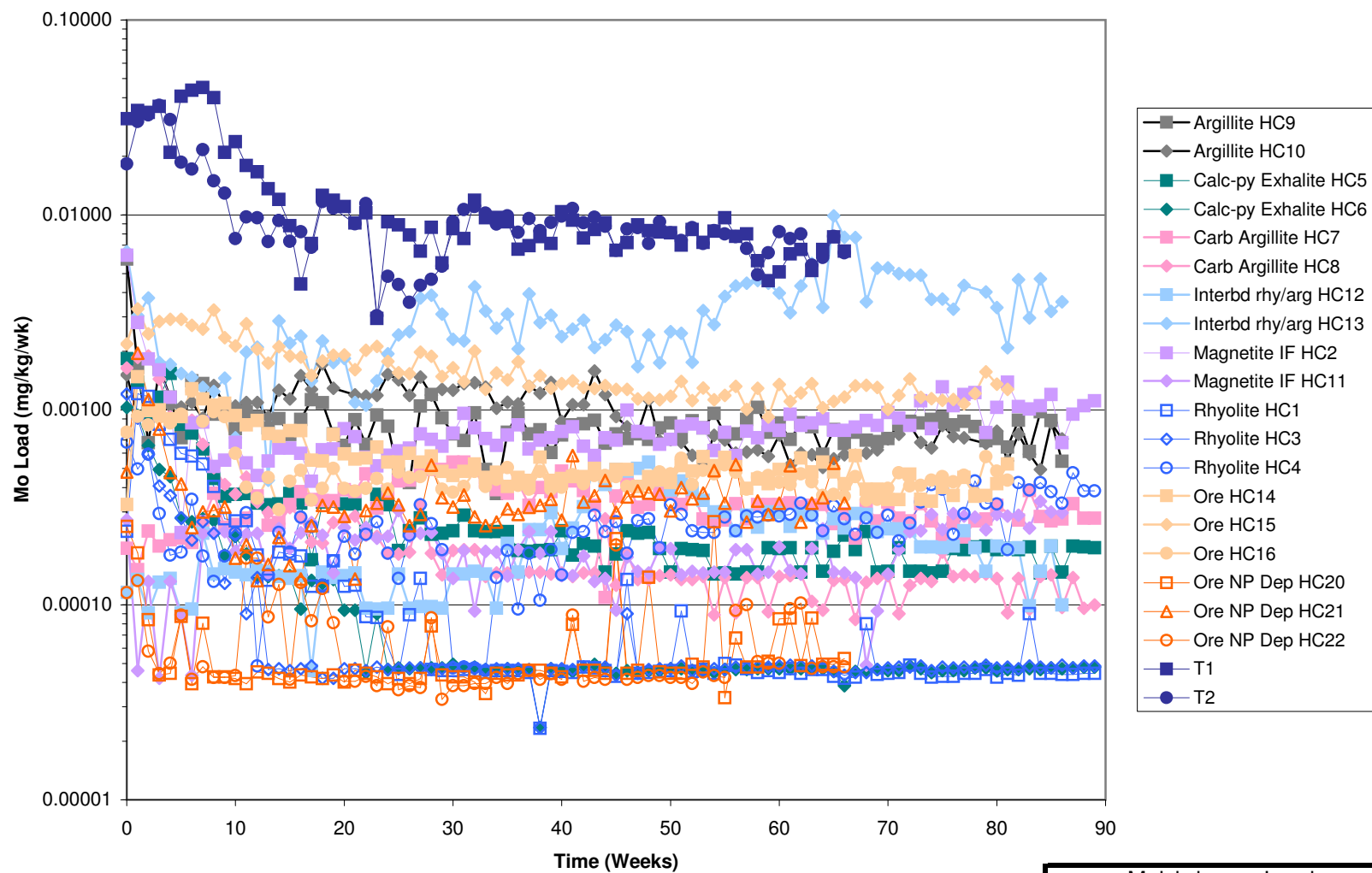


Iron Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 7

Wolverine Humidity Cell November 2007 Update



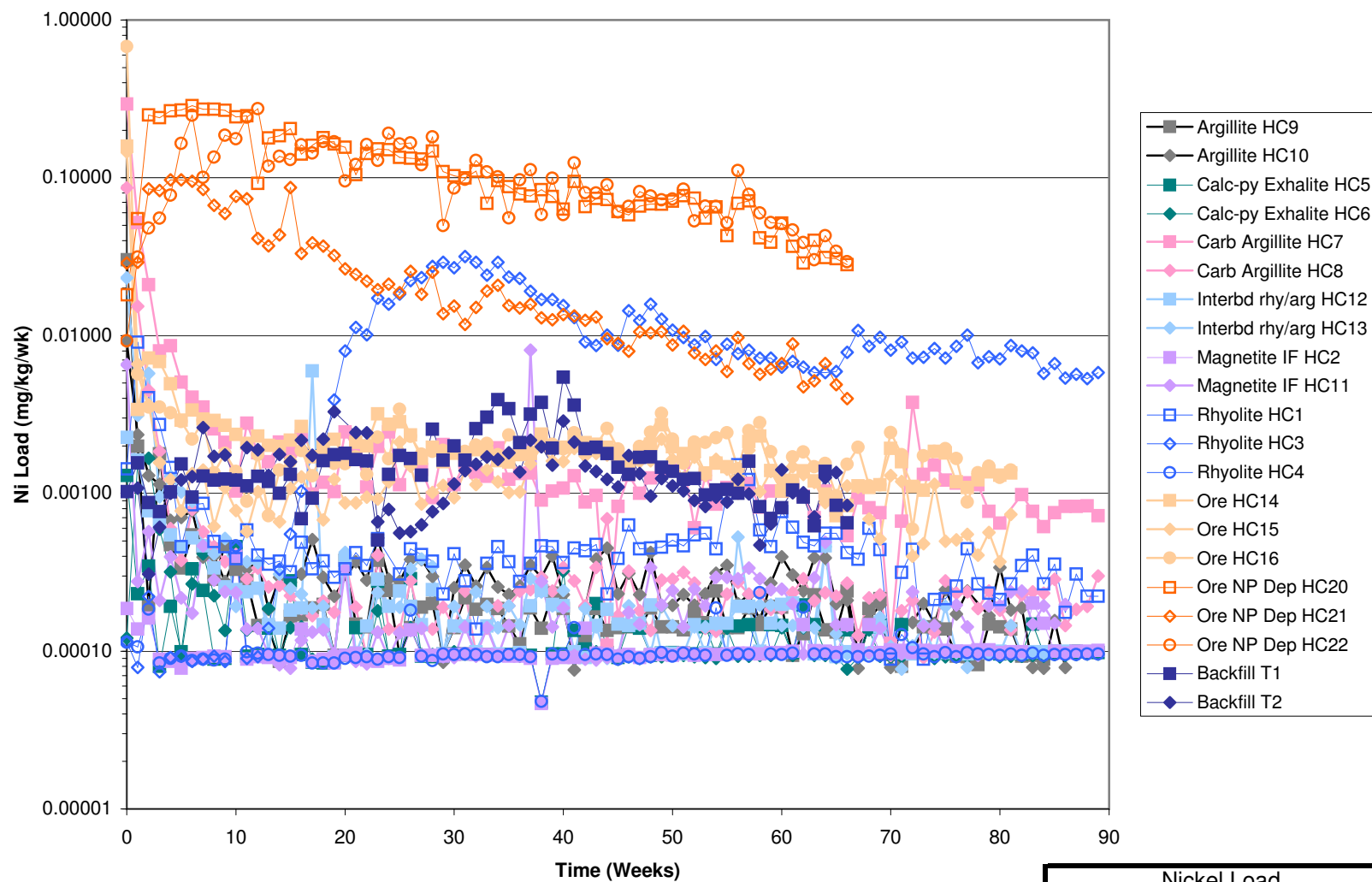
Lead Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 8



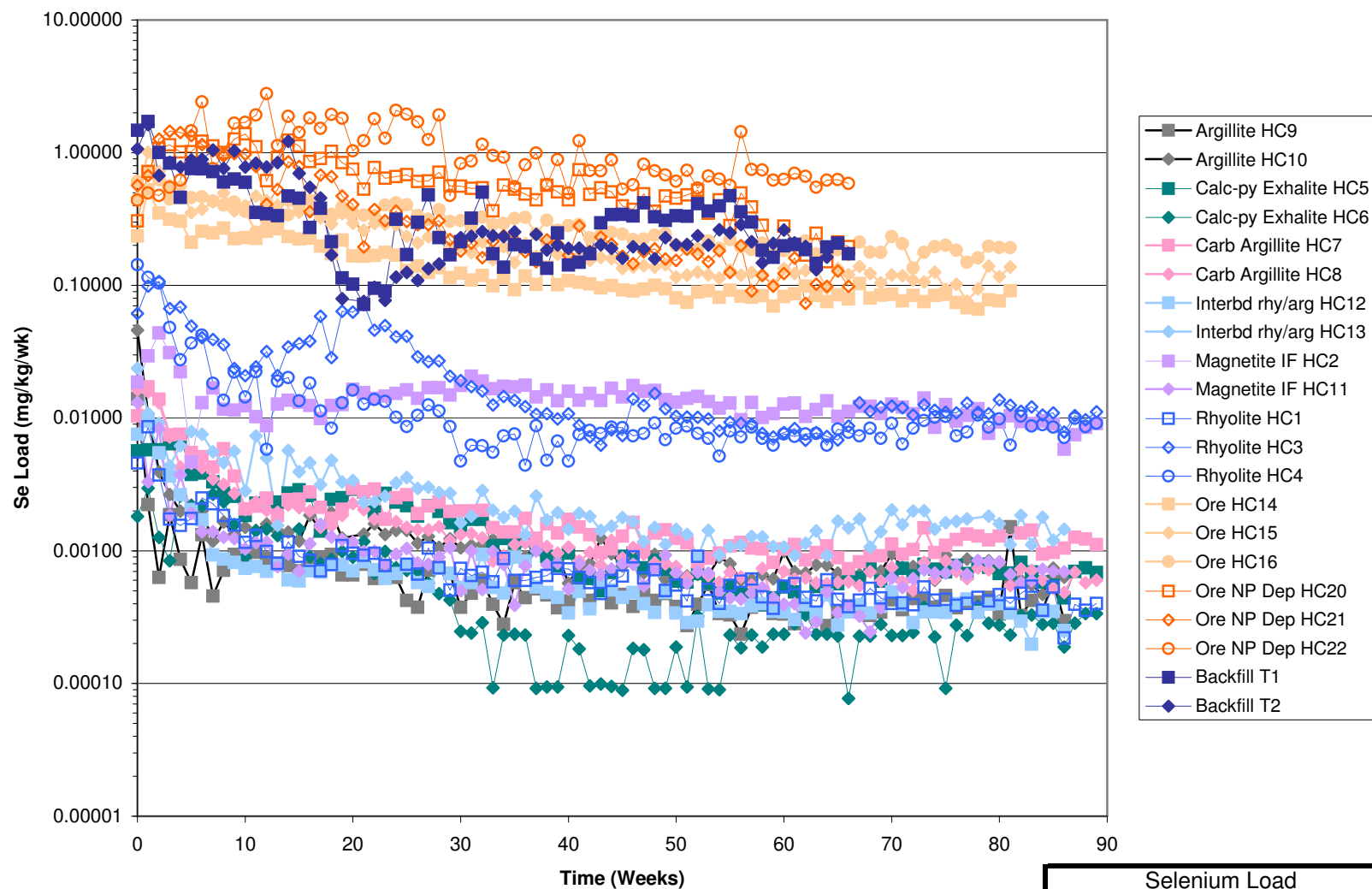
Molybdenum Load
November 2007
Wolverine Mine, YK

Yukon Zinc Corporation
November 2007

FIGURE 9

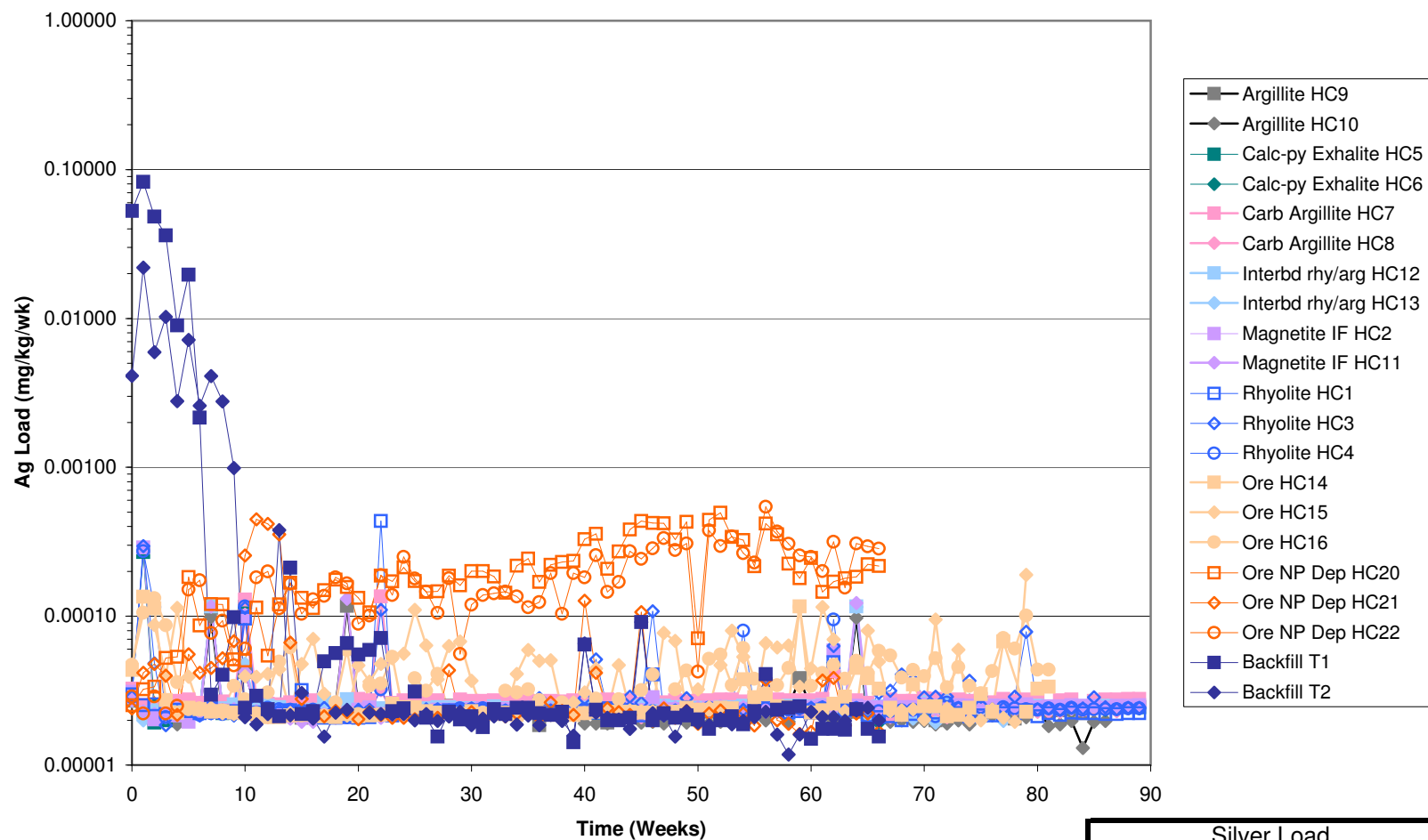


Nickel Load
November 2007
Wolverine Mine, YK
Yukon Zinc Corporation
November 2007 | FIGURE 10

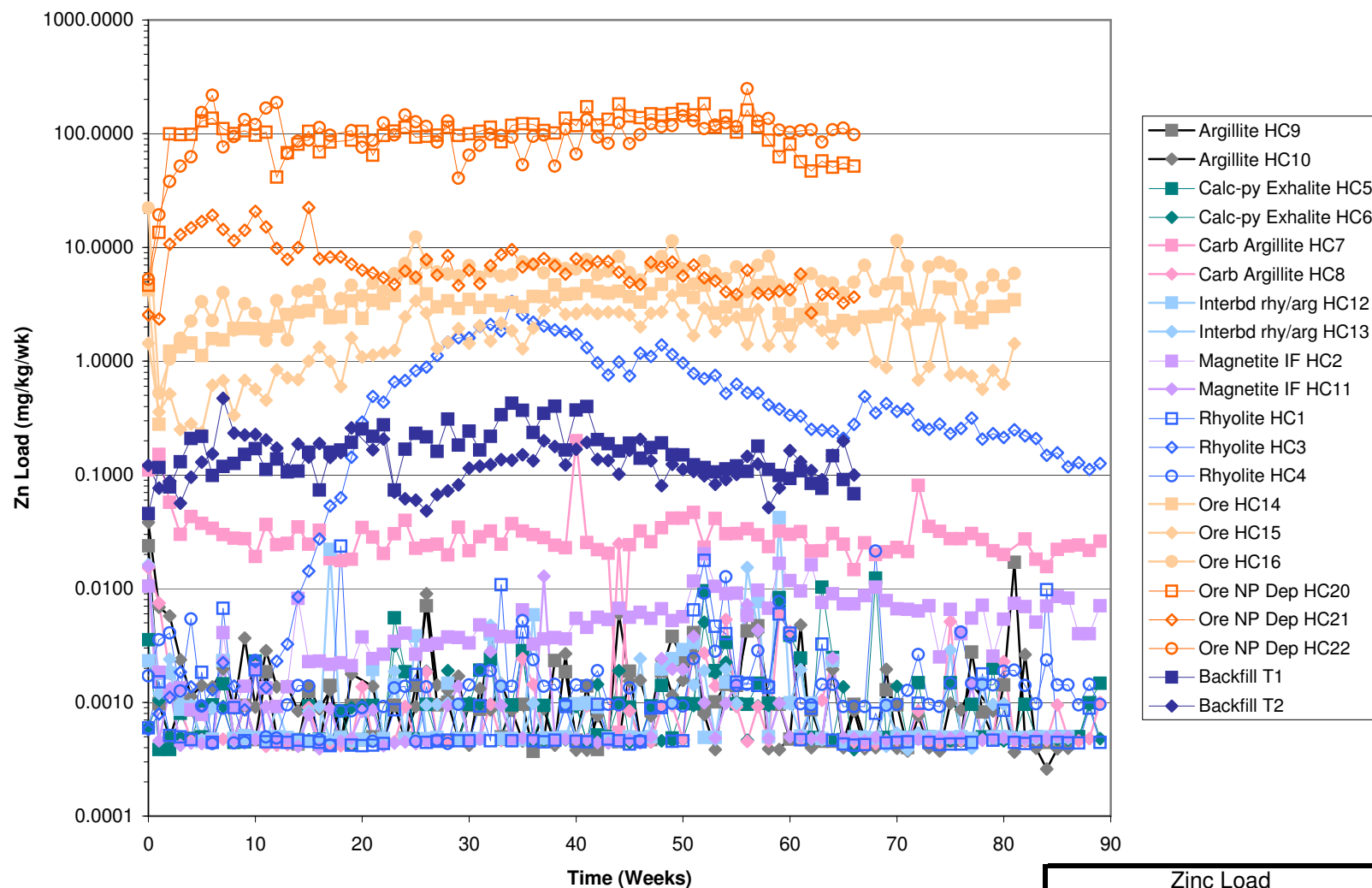


Selenium Load
November 2007
Wolverine Mine, YK
Yukon Zinc Corporation
November 2007 | FIGURE 11

Wolverine Humidity Cell November 2007 Update



Silver Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 12



Zinc Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 13

November 20, 2007

Yukon Zinc Corporation
701-475 Howe St.
Vancouver BC V6C 2B3

Dear Pamela Ladyman

Re: Wolverine Project Dense Media Separation (DMS) Humidity Cell Release Rates Update

This letter report summarizes the most recent humidity cell release rates for three Wolverine DMS float humidity cells that have been in operation for 84 weeks. Release rates from the humidity cells were last reported in January 2007 as part of AMEC Earth & Environmental's (AMEC) water quality estimate for the flooded underground workings. This included humidity cell data up until December 2006. Yukon Zinc Corporation (YZC) has requested that data collected following the January 2007 report be analysed to determine if any significant changes in the calculated release rates have occurred since that time.

Figures 1 to 13 present calculated loadings for DMS float humidity cells. Visual inspection of the humidity cell loadings indicates that all parameters showed a generally decreasing rate of release up to week 71. After week 71, release rates have slightly increased. The pH values have remained near-constant and circum-neutral during this time.

Exceptions to the general trend of decreasing rates to week 71 followed by slightly increasing rates are as follows:

- Aluminium loads tend to fluctuate between 0.001 and 0.01 mg/kg/wk with few exceptions and no distinct trend;
- Arsenic loads are generally constant at approximately 0.0015 mg/kg/wk.
- Iron is consistently below or at the detection limit, yielding release rates between 0.004 and 0.02 mg/kg/wk, depending on the laboratory detection limit.
- Molybdenum loads increased slightly to week 58, and have been decreasing since that time.
- Silver loads are generally below detection throughout testing, except for in HC19, which has had low levels of detectable silver since week 70.

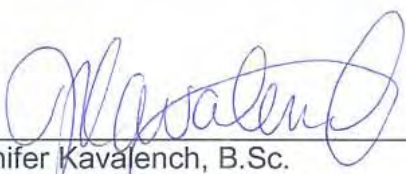
Release rates for all cells were calculated for steady-state conditions that exclude the first 20 weeks of data. Rates were calculated for the period ending December 2006, and for the period ending October 2007. These results are presented in Table 1. The relative percent difference (RPD) between rates reported for the two periods are also presented in Table 1. In general, release rates for DMS cells have increased, with the exception of sulphate.

Table 1: Comparison of release rates for DMS cells (mg/m²/wk)

	January 2007	November 2007	RPD (%)
Sulphate	2.34	2.33	-0.38
Al	0.00063	0.00070	10.7
As	0.00014	0.00015	5.25
Cd	0.00010	0.00012	14.8
Cu	0.000093	0.000133	35.4
Fe	0.00080	0.00085	5.51
Pb	0.000048	0.000060	23.3
Mo	0.00029	0.00033	14.2
Ni	0.00016	0.00029	55.7
Se	0.0019	0.0016	-13.8
Ag	0.000004	0.000005	25.7
Zn	0.0023	0.0037	45.9

DMS release rates are not included in the underground water quality model, as the DMS solids will be encapsulated in backfill and therefore will not contribute loads to the underground water quality. As such, the increased release rates from DMS float cells are not expected to have an affect on underground water quality, and will therefore not affect Wolverine's current closure plan.

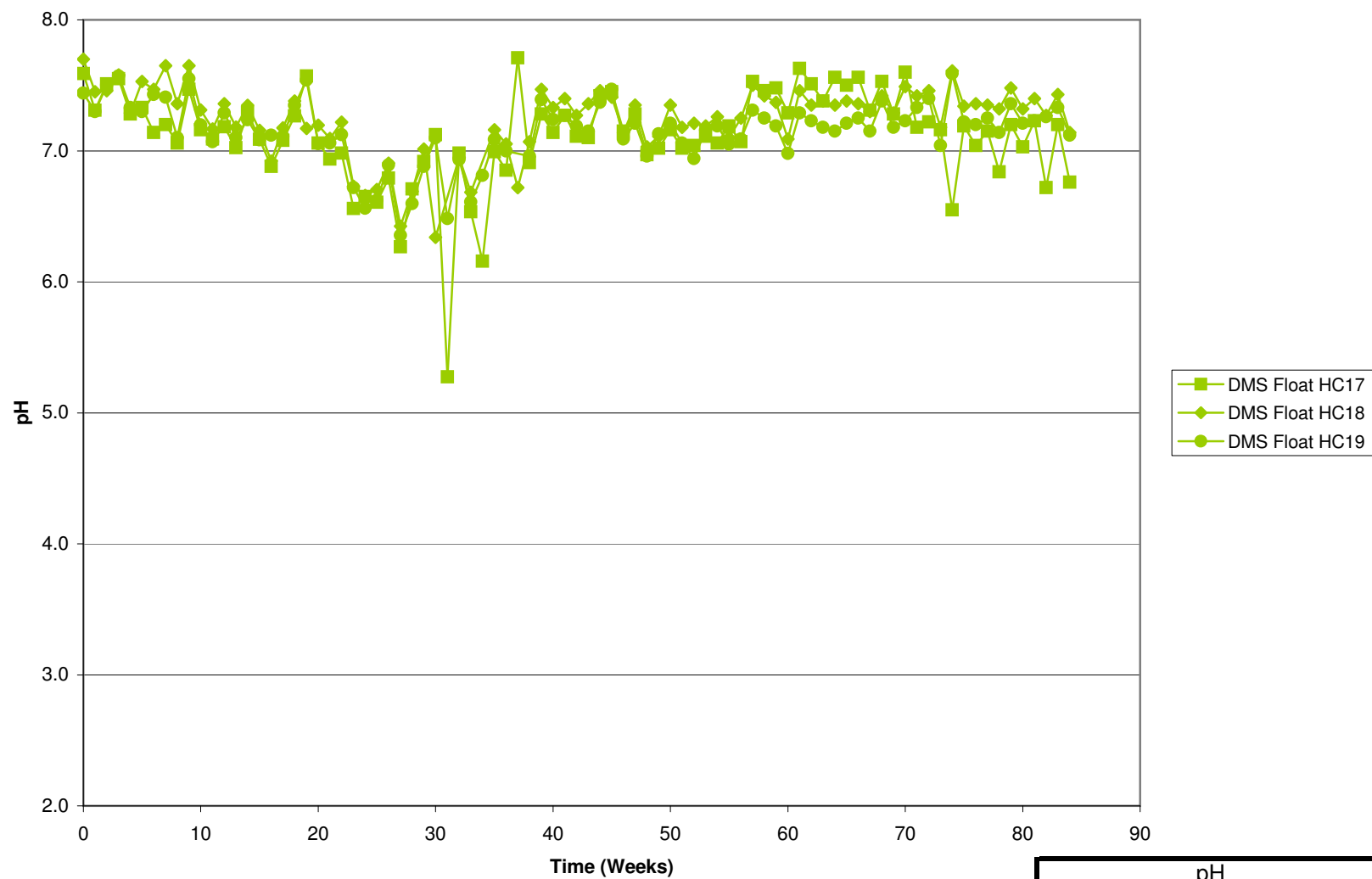
We trust this meets your needs at this time. Should you have any questions, please do not hesitate to contact the undersigned.



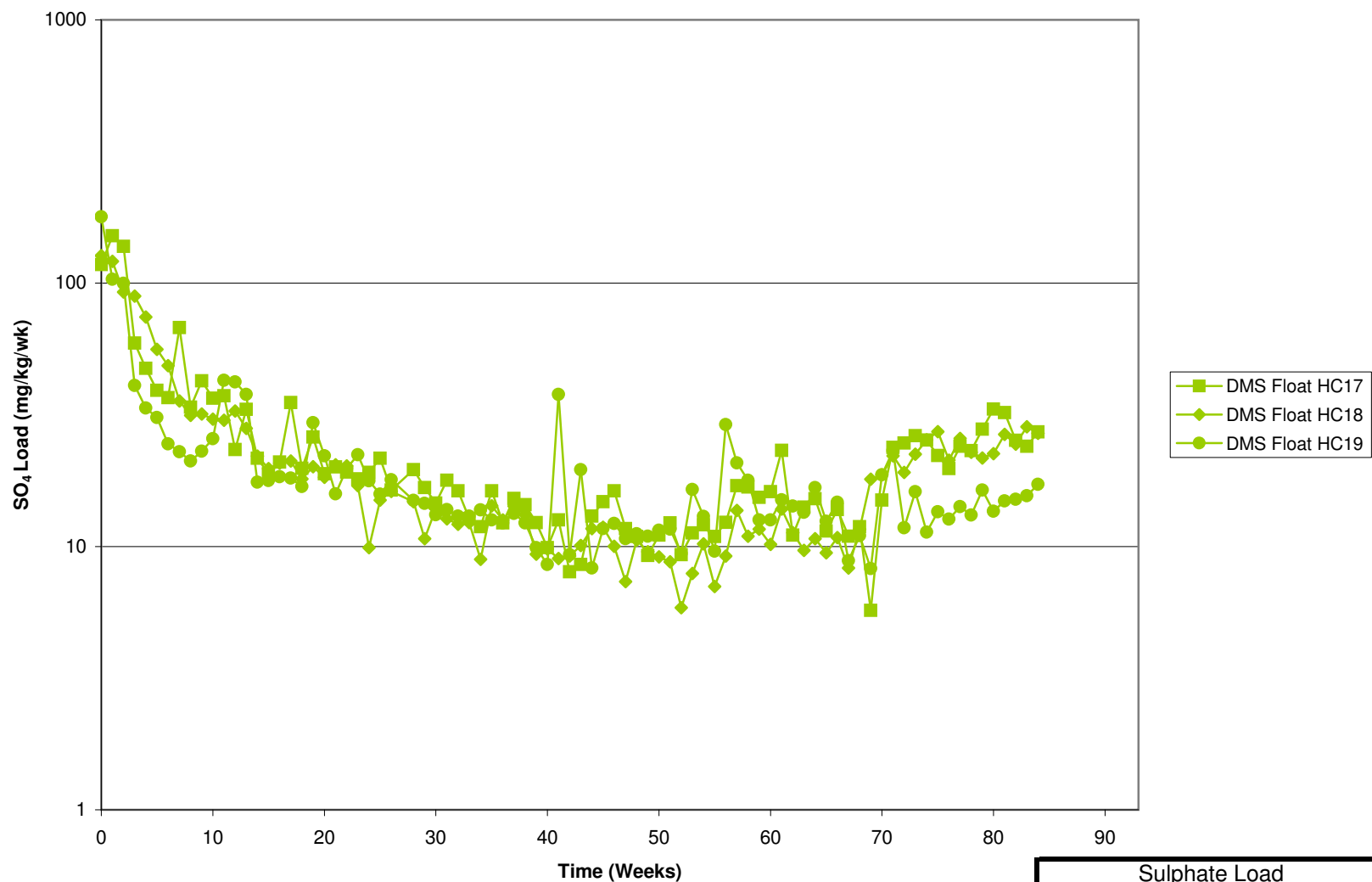
Jennifer Kavalench, B.Sc.
Environmental Geoscientist



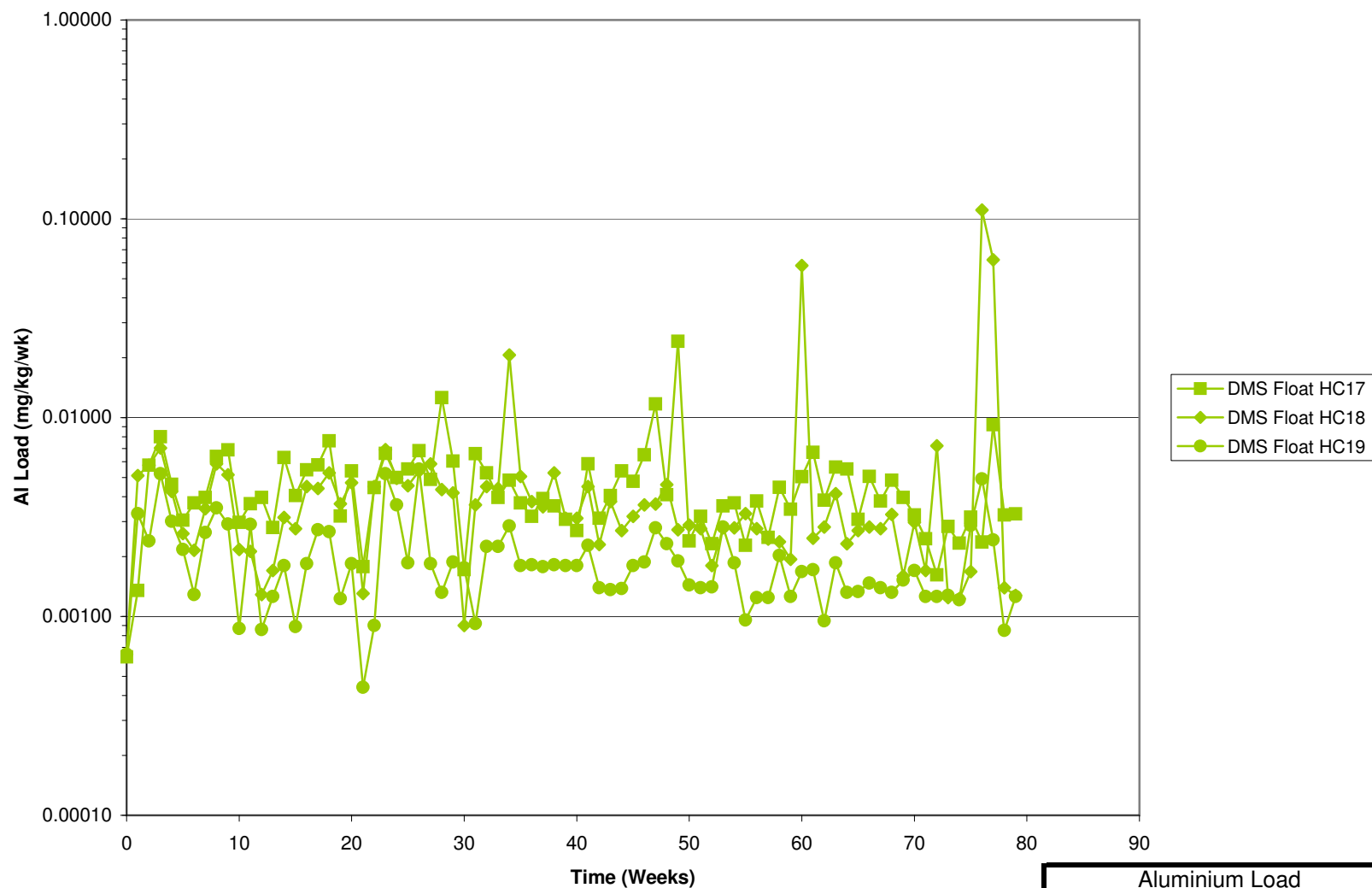
Steve Sibbick, M.Sc., P.Geo.
Associate Geochemist
Senior Review



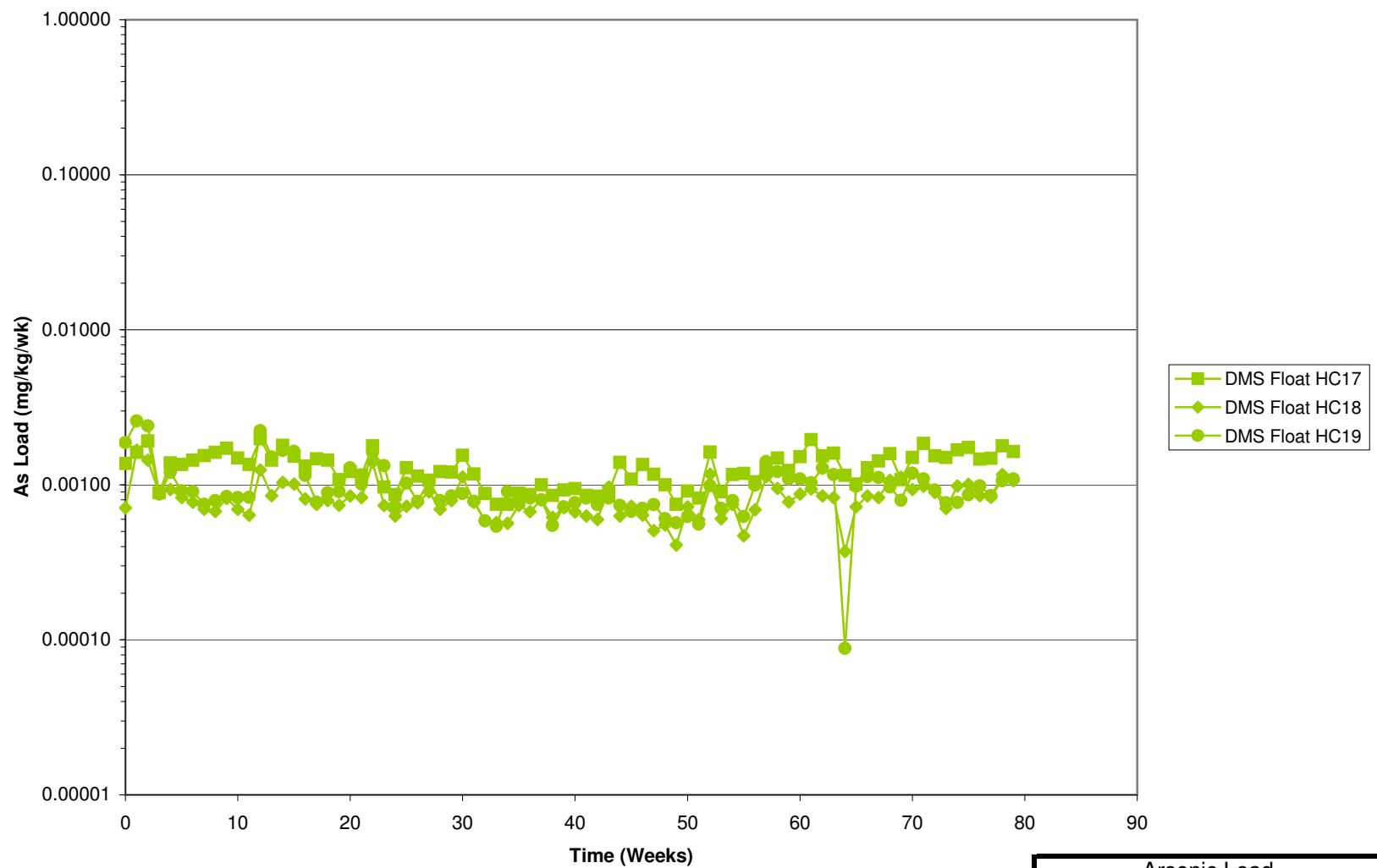
pH	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 1



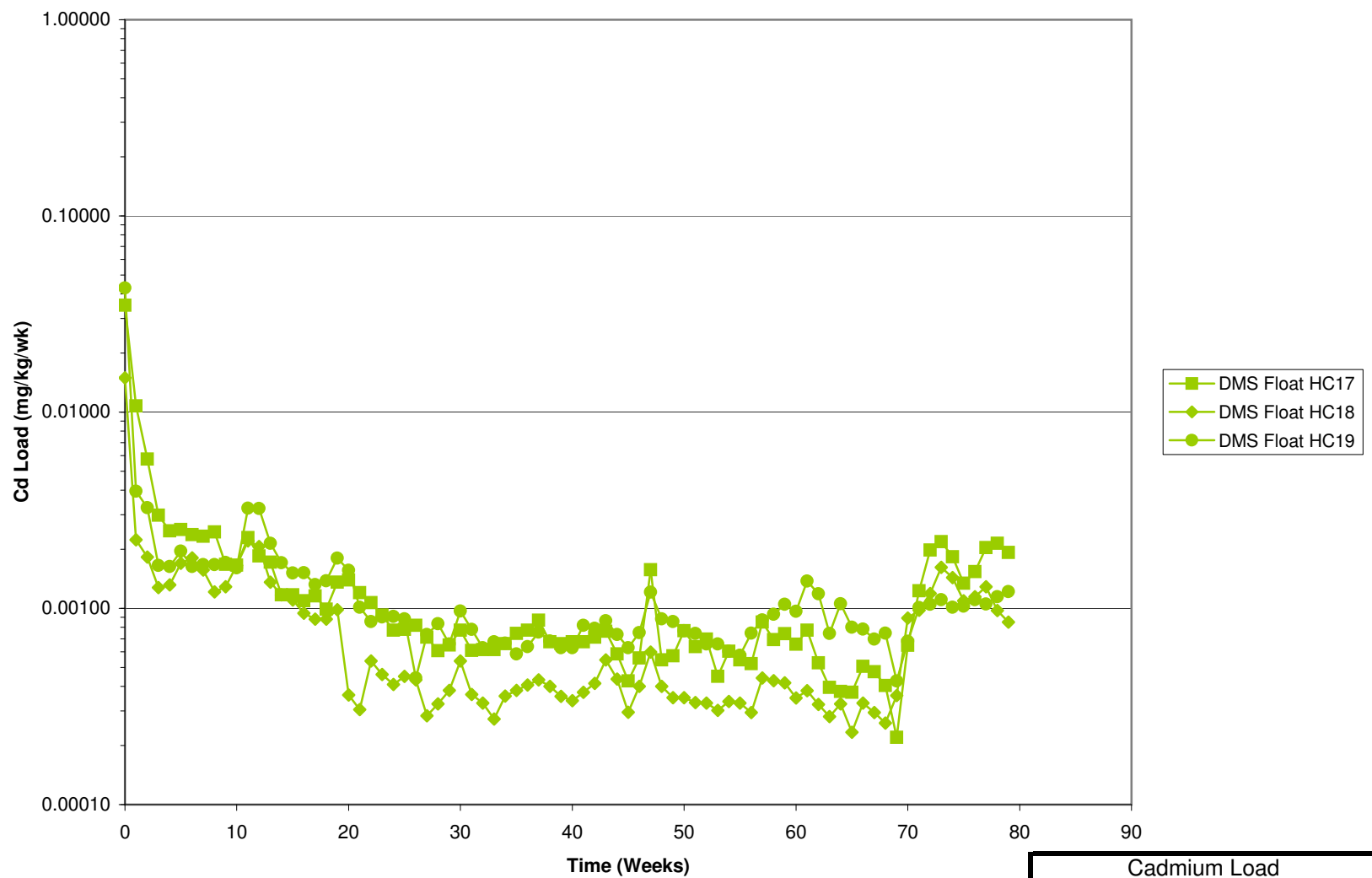
Sulphate Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 2



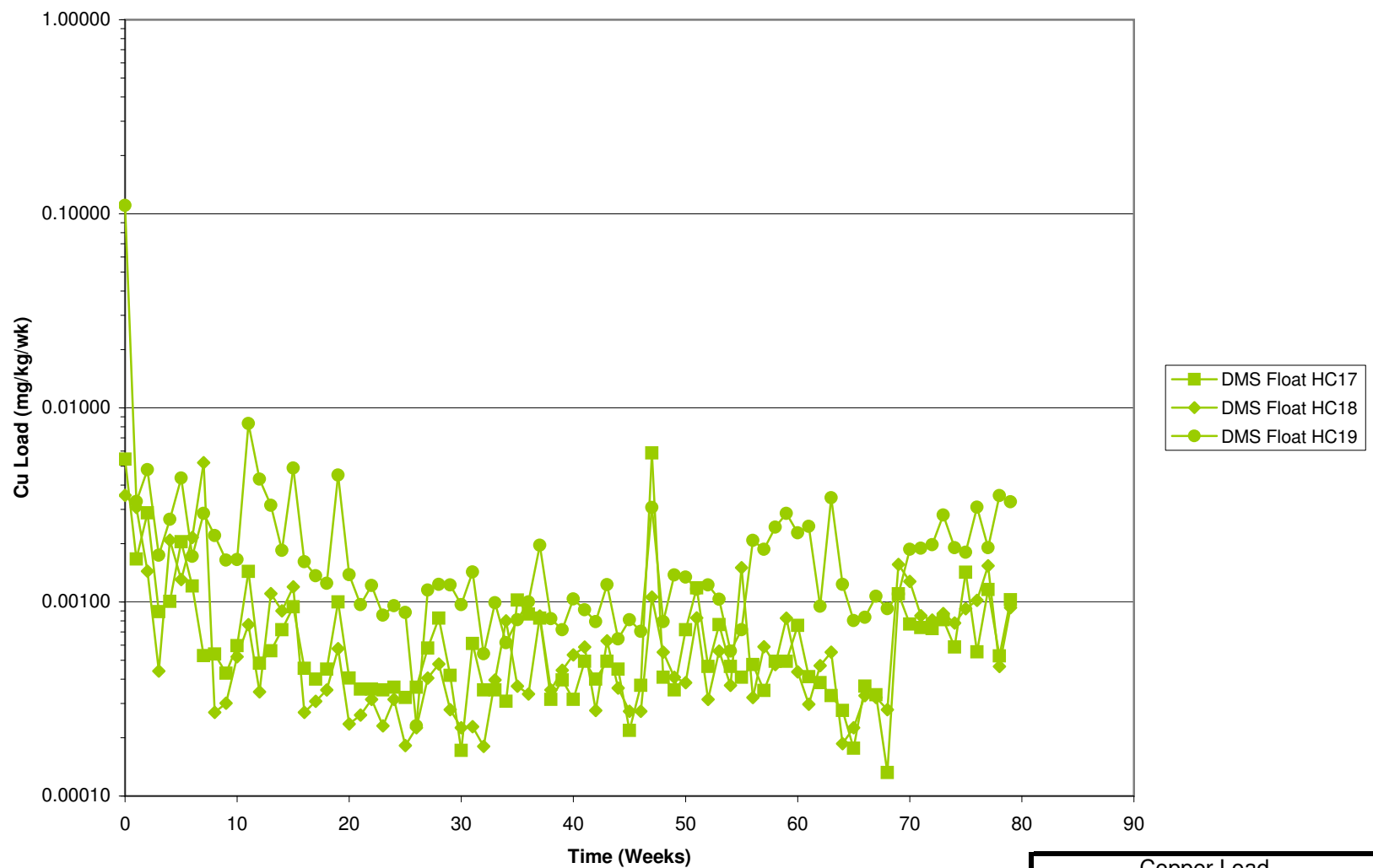
Aluminium Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 3



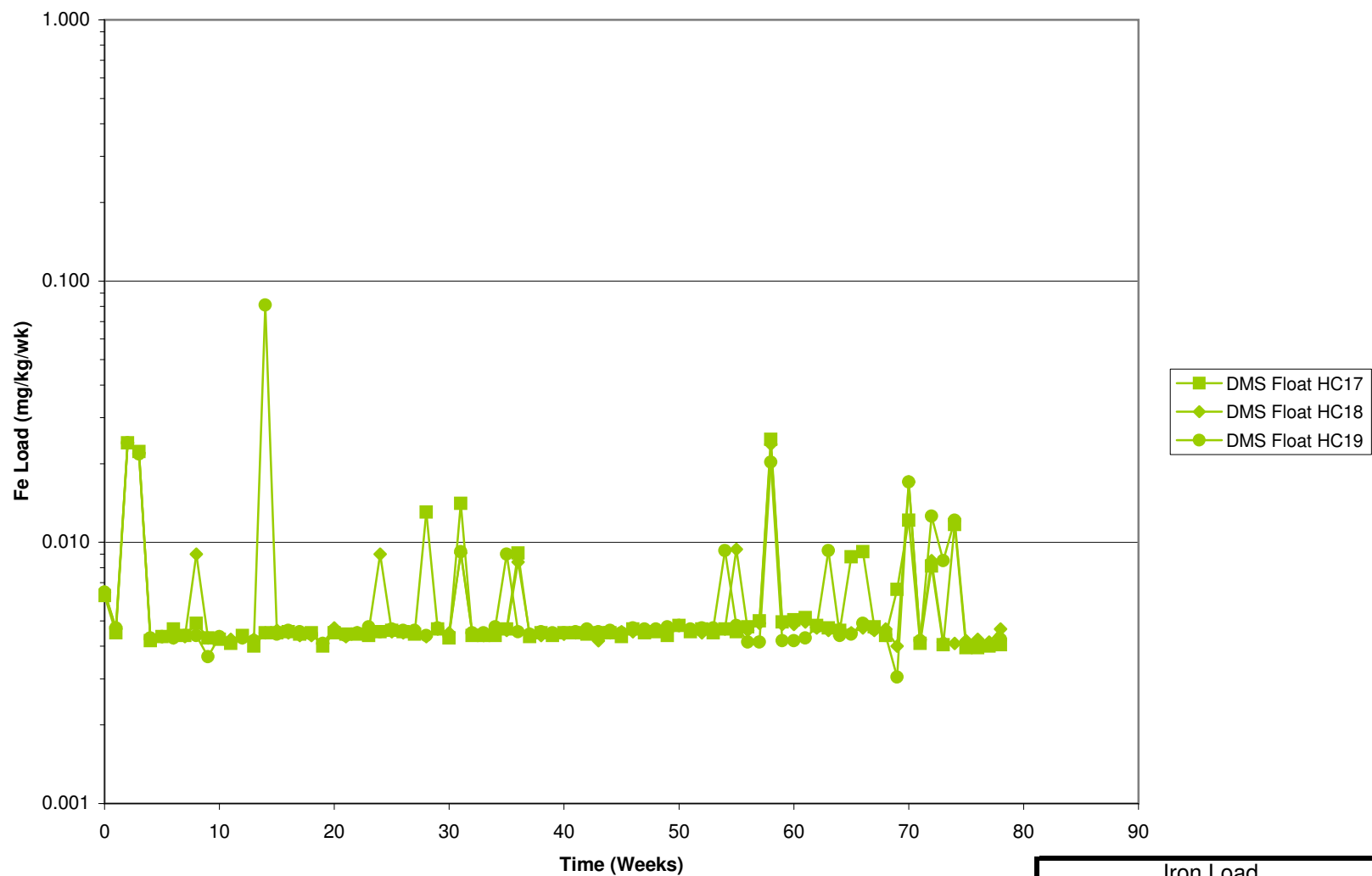
Arsenic Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 4



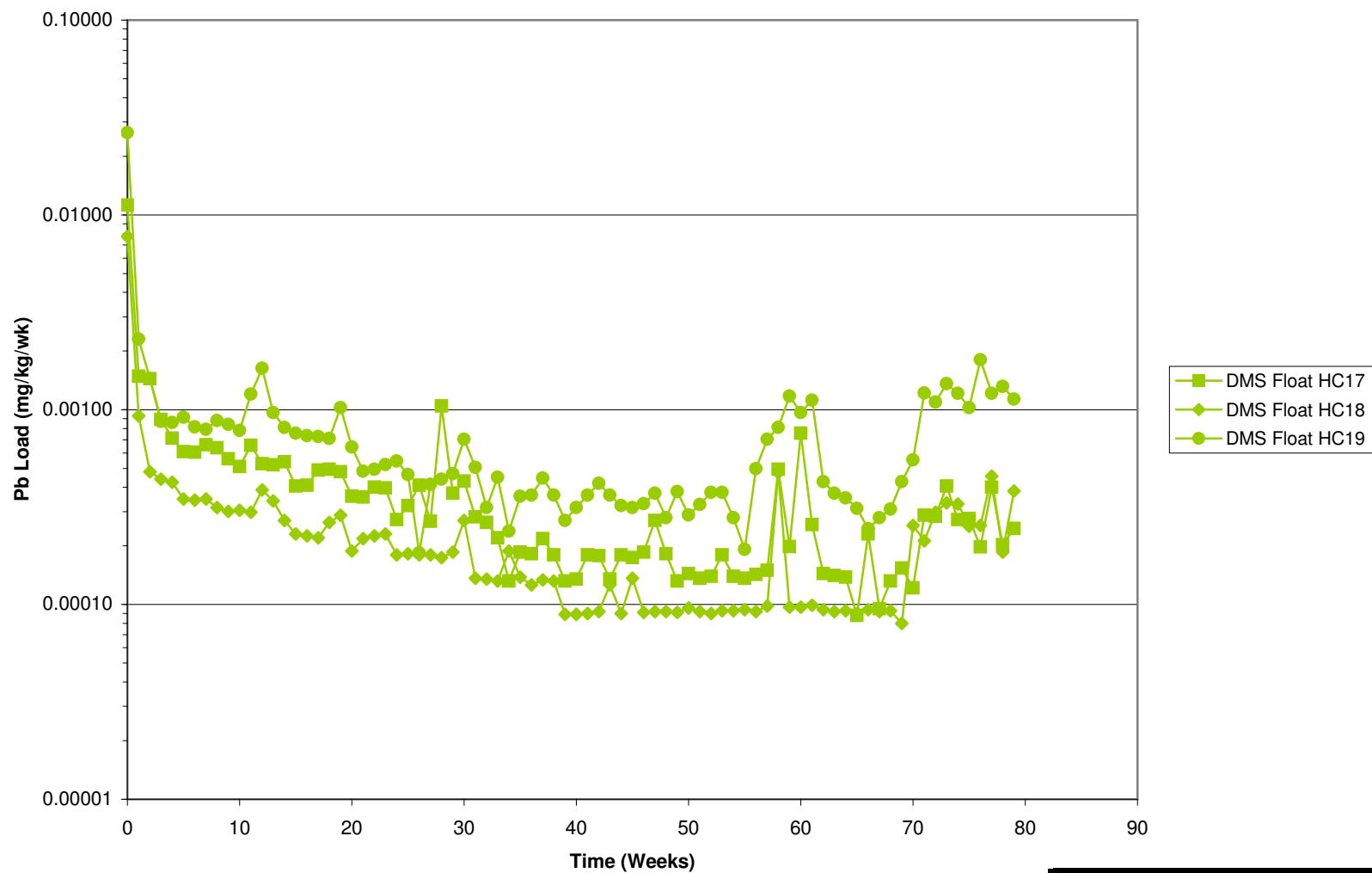
Cadmium Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 5



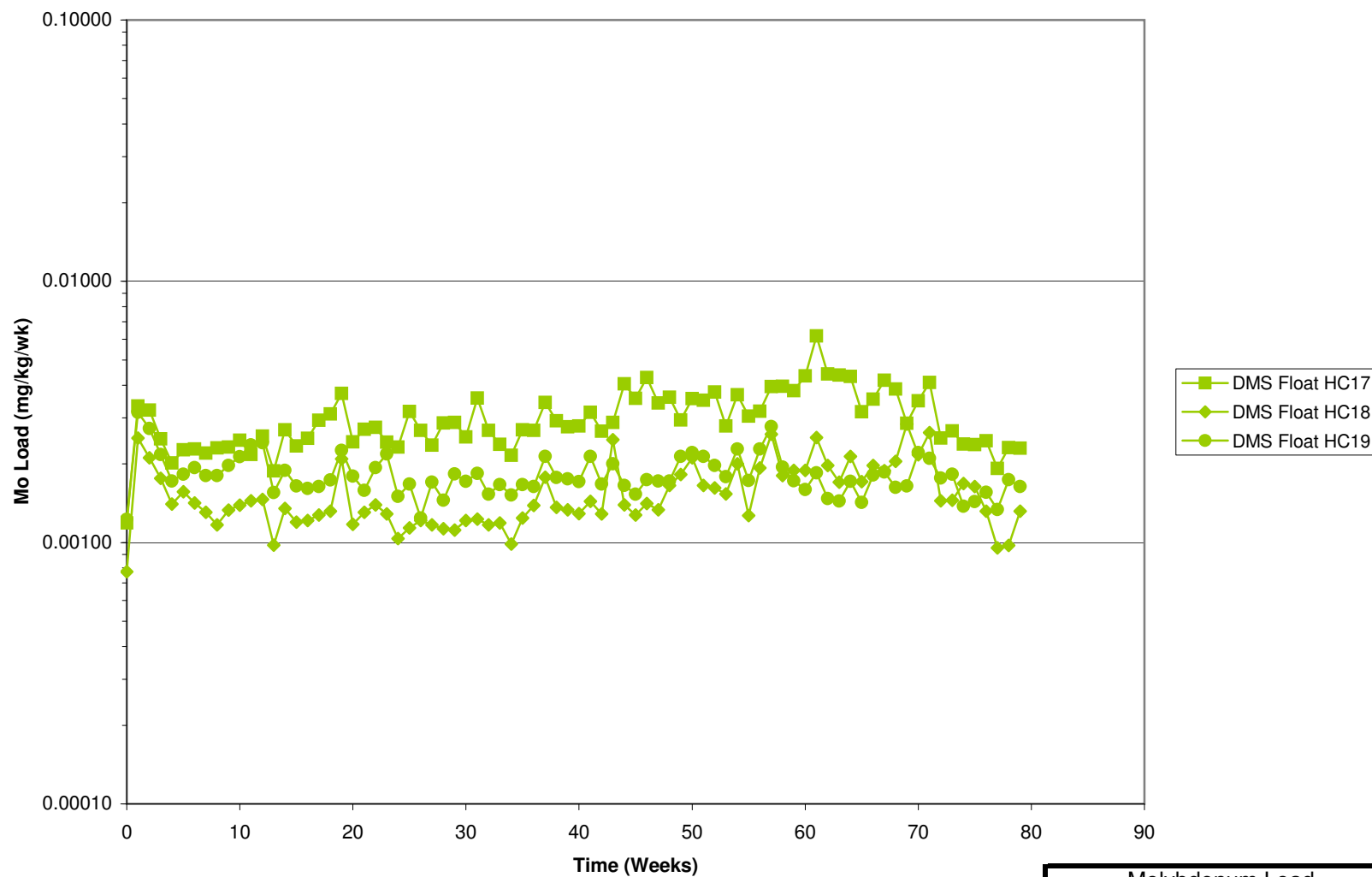
Copper Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 6



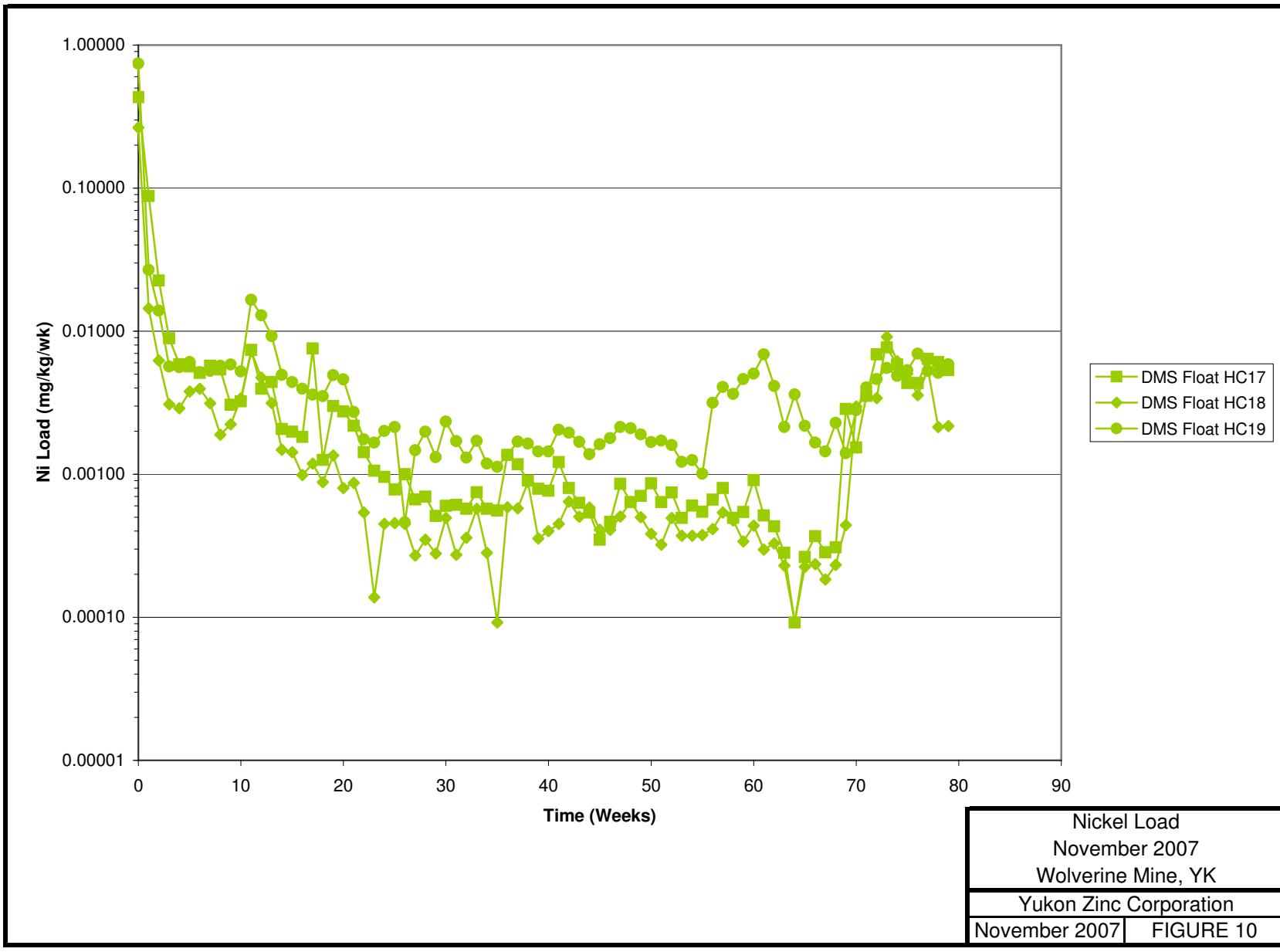
Iron Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 7

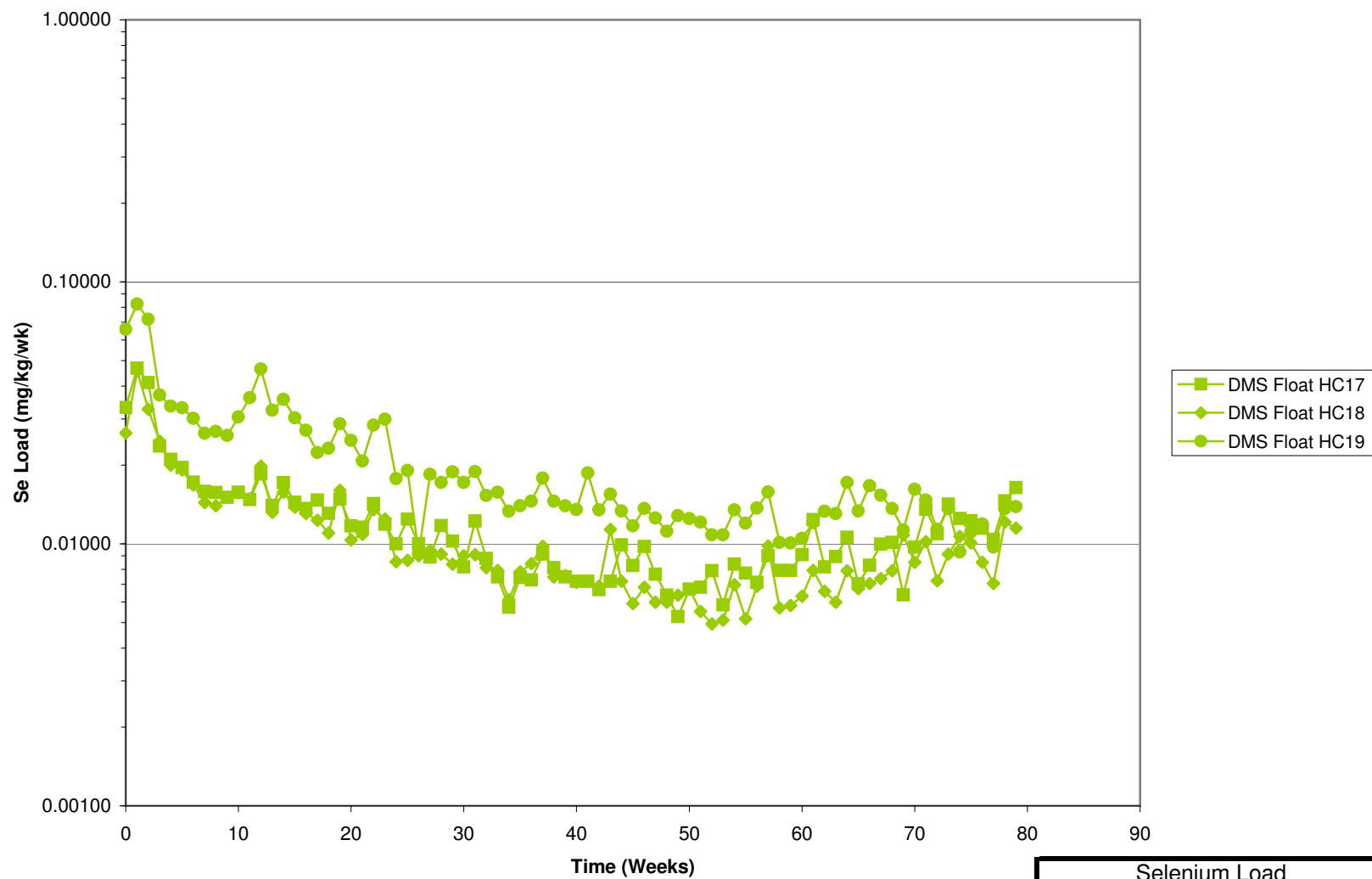


Lead Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 8

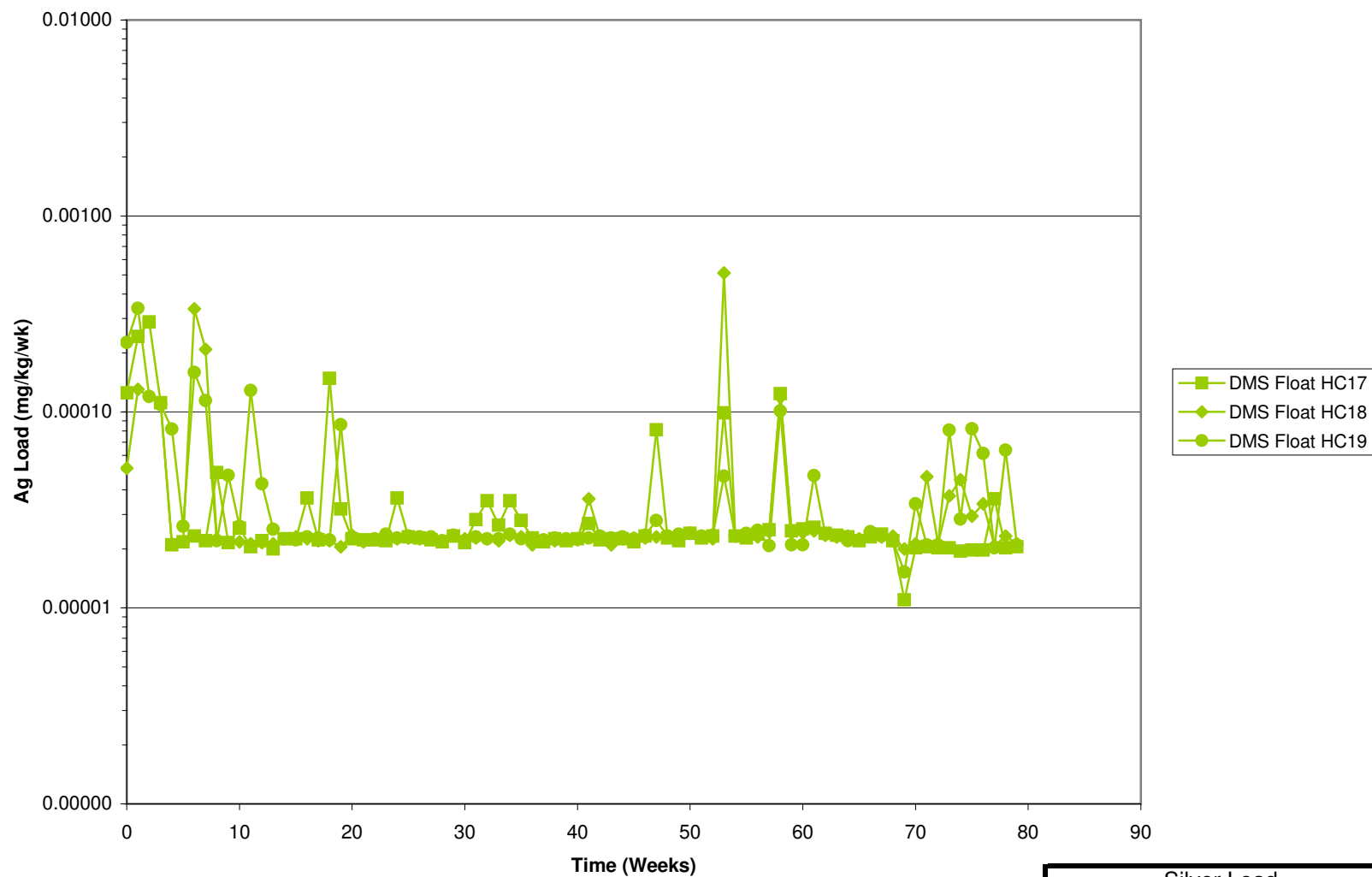


Molybdenum Load November 2007 Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 9

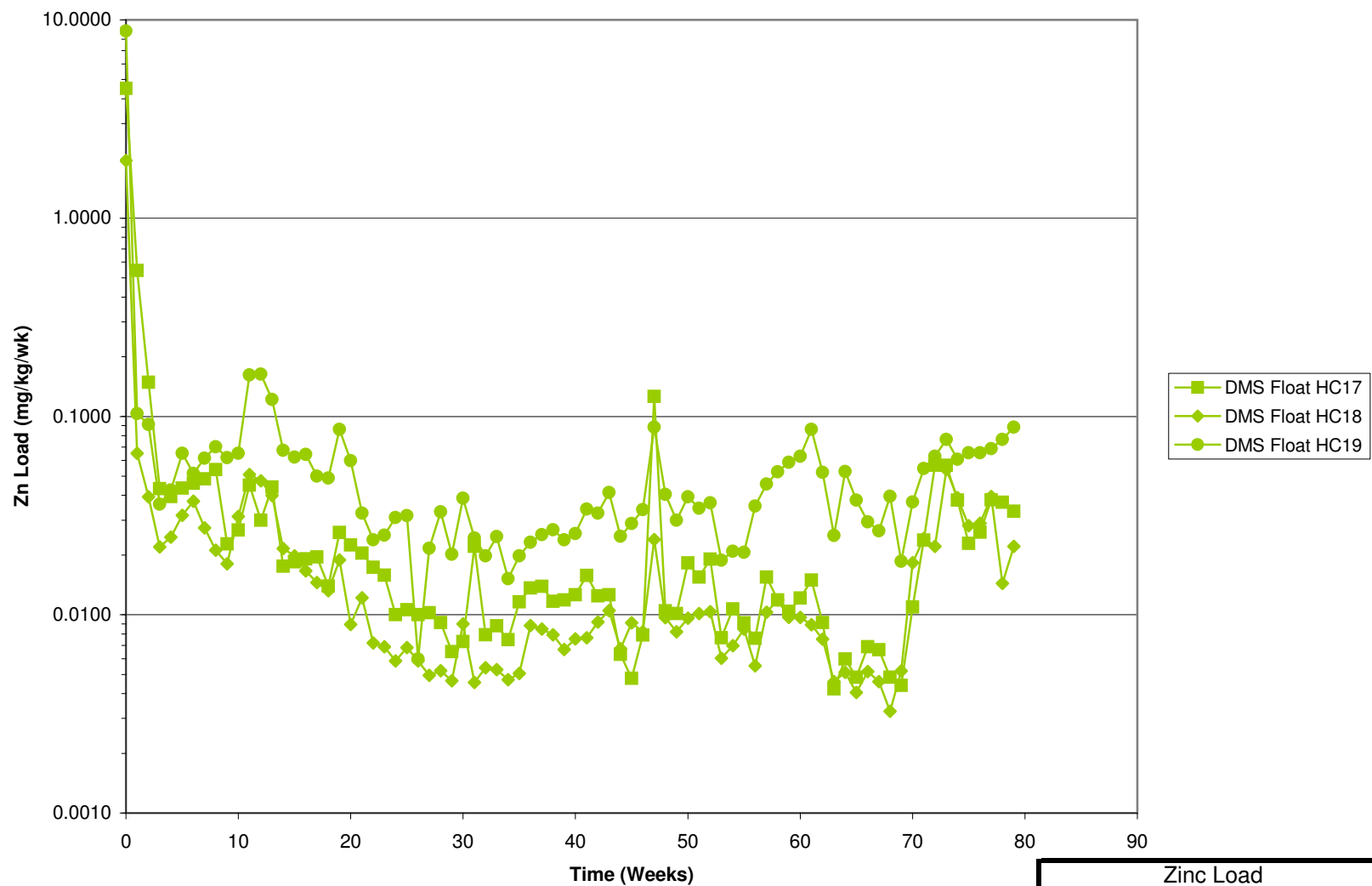




Selenium Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 11



Silver Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 12



Zinc Load	
November 2007	
Wolverine Mine, YK	
Yukon Zinc Corporation	
November 2007	FIGURE 13

December 14, 2007

Yukon Zinc Corp.
#701, 475 Howe St.,
Vancouver, BC, V6C 2B3

Ms. Pamela Ladyman, R.P. Bio.
Manager. Environment and Community Affairs

Dear Ms. Ladyman:

Wolverine Tailings Humidity Cells Update

The following provides a summary of the Wolverine tailings humidity cells to November 27, 2007. The Lynx Zone Diluted Ore Composite and the Wolverine Zone Diluted Ore Composite humidity cells were decommissioned in October 2006 at Week 63 and post-decommissioning testwork was completed over the winter. The Overall Ore Composite (OC) and Overall Diluted ore composite (OD) tailings humidity cells continue to run and have reached weeks 129 and 123, respectively.

1. SUMMARY OF HUMIDITY CELL RESULTS

The pH of all cells has remained relatively constant generally between pH 6.5 and pH 7.0 (see Figure 1.1). All the Diluted Ore tailings cells experienced a temporary pH depression within the first 20 weeks, before rebounding. The Overall Ore Composite tailings did not experience this. It is surmised that the amount of thiosalt in solution (400 mg/L) did not exceed the rapid neutralization capacity of the tailings for the OC sample, whereas higher amounts of thiosalt (600-1200 mg/L) in the other cells clearly did. Once the initial flush of thiosalts was over (i.e., thiosalts dropped below 400 mg/L), the pH has been unaffected by these comparatively low concentrations.

There have been a few other instances when the pH dropped below pH 6.0 with the lowest pH in Cell OC at pH 4.7 at week 124. It should be noted that coincident with the low pH value at week 124, the sulphate production was measured at 28 mg/kg/wk well below the 5-week average. The low sulphate value is reflected in the lower conductivity. The lower pH is also reflected in the lower alkalinity and higher acidity values than previous and following cycles. In general, there appears to be some additional variability in the data fluctuations since week 109. These fluctuations do not appear to be occurring simultaneously in both Cell OD and OC, which suggests that the fluctuations are related to variability in reaction rates within the humidity cell and not artifacts of the laboratory testing. However, no trend in median pH is notable.

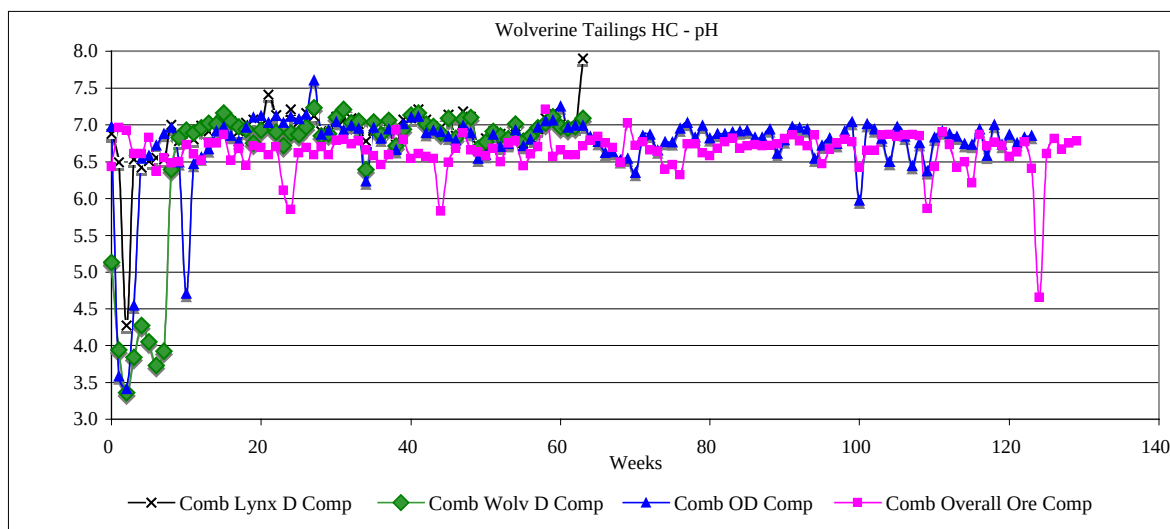


Figure 1.1 Wolverine Tailings Humidity Cells - pH

Acidity and alkalinity production rates remain low in both cells, consistent with the near-neutral pH and limited by calcite solubility.

Sulphate production rates remain constant with recent 5-week average production rates of 84 mg/kg/wk and 190 mg/kg/wk for Cells OC and OD, respectively.

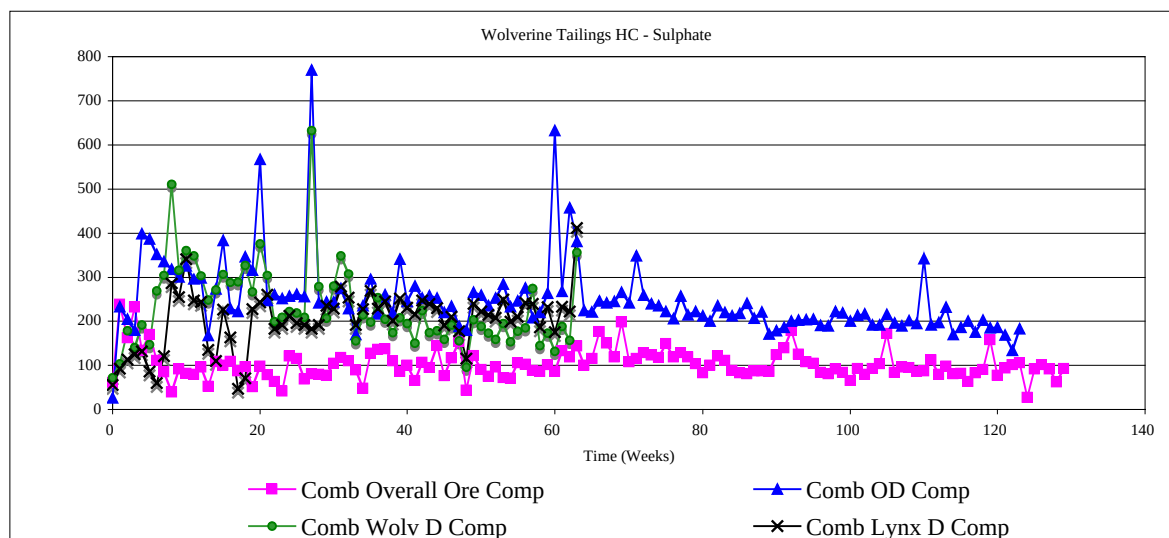


Figure 1.3 Wolverine Tailings Humidity Cells - Sulphate

Both cells show an abundance of total sulphur (mostly as sulphide) remaining (98.5% and 96.2% for cells OC and OD, respectively).

Table 1.1 summarizes the range in loading rates for Se and Zn from recent weeks until the current sampling on November 27, 2007.

Table 1.1 Range in Leachate Elemental Loading Rate over past 20 weeks

ELEMENT	CELL OC LOADING RATE (mg/kg/wk)	CELL OD LOADING RATE (mg/kg/wk)
Se	0.049 – 0.062	0.066 – 0.087
Zn	1.4 – 1.9	0.68 – 0.92

Current Zn loadings in both Cell OC and OD are well below the initial flush values and also below their long term averages (see **Figure 1.4**).

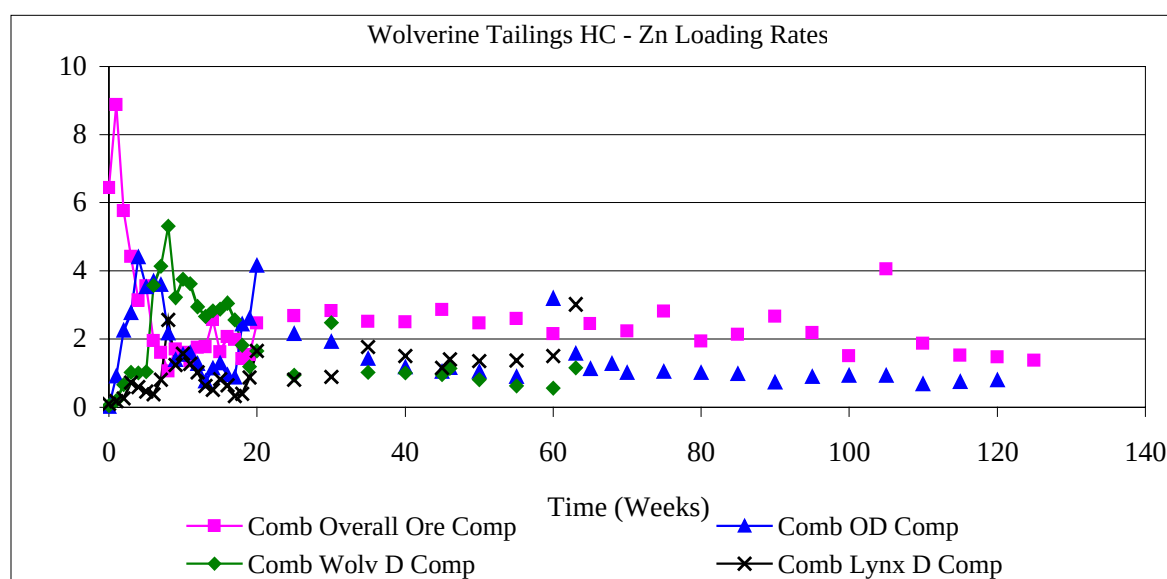


Figure 1.4 Wolverine Tailings Humidity Cells - Zn Loading Rates

Se loadings have remained relatively constant over the testing period for both cells since the initial flush (see **Figure 1.5**). This is likely due to the relatively constant and neutral pH, but shows that soluble minerals still remain even after 2 years of leaching.

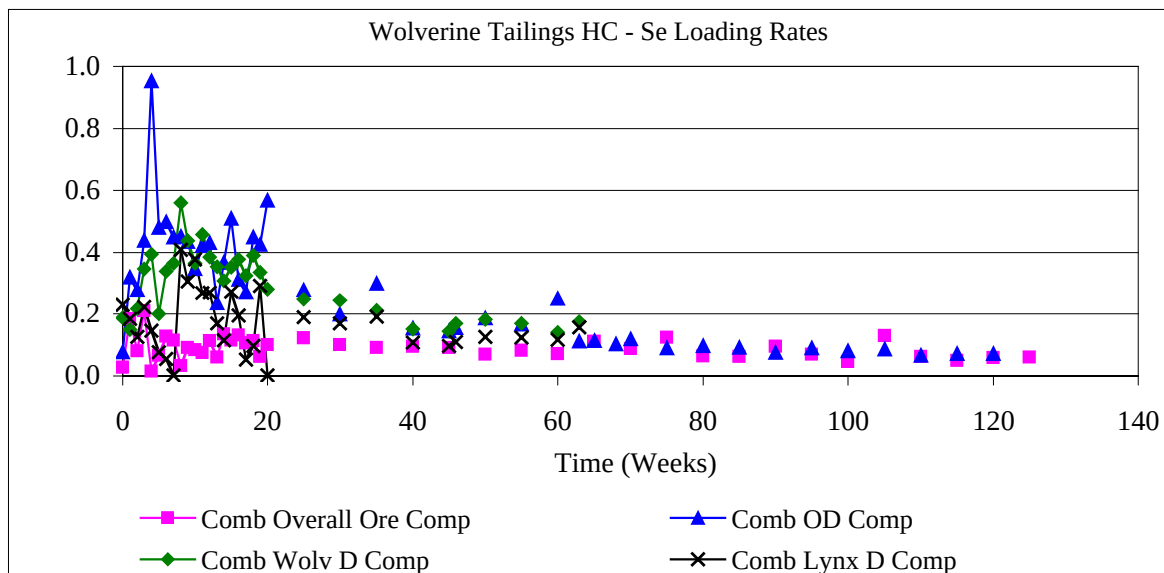


Figure 1.5 Wolverine Tailings Humidity Cells - Se Loading Rates

2. TIME TO ONSET OF ARD

In humidity cell testing, it is commonly assumed that sulphide oxidation is not taking place at a significant rate until flushing of all of the original sulphate measured during the pre-test ABA characterization is complete. Cells OC and OD are showing measurable sulphate in the leachate collected weekly. However, it is likely that a majority of the sulphate measured is due to flushing of the original sulphate within the sample with some sulphate produced due to sulphide oxidation. It is difficult to assess, however, what portion of the sulphate produced is due to sulphide oxidation, therefore the assumption is made that all sulphate is from flushing as explained above.

The time to sulphate sulphur depletion has been estimated to be 14 and 3 years for Cells OC and OD, respectively. Almost 50% of the initial sulphate has been removed from the OD cell, however less than 20% has been removed from the OC cell. As mentioned, this assumes that all the sulphate measured in the solution is due to flushing of the original sulphate. It is expected that eventually the sulphide oxidation rate would begin to increase with NP depletion and the onset of acidic conditions.

The time to Neutralization Potential (NP) depletion is required to estimate the time to onset of ARD within a laboratory humidity cell. However, the initial sulphate is still flushing from the cells, so it is not possible to ascertain what portion of the sulphate released is from sulphide oxidation. This renders the Carbonate Molar Ratio calculations invalid and precludes an accurate calculation of the time for NP depletion. Once the initial sulphate is believed to have flushed, NP depletion rates can be defined more explicitly. Even if all the

current sulphate production from the past 20 weeks (the beginning of the recent instability in pH) were to be from sulphide oxidation, it would still take another 14 years in the laboratory humidity cell for all the Sobek-NP in Cell OC to become depleted. Without that assumption (or assuming only small a portion of the sulphate production is from sulphide oxidation), the time to NP depletion in the laboratory is currently estimated to be 1,600 and 1,100 years for cells OC and OD, respectively.

Based on these estimates, acid generation would not occur in the Wolverine tailings for many years. Nevertheless, elevated concentrations of selenium and zinc can be expected in any water contacting the tailings solids.

3. RECOMMENDATIONS FOR DECOMMISSIONING

Based on the conclusions reached in Section 2 above, it is recommended that one cell be decommissioned. It is not expected that acidic drainage will occur within these cells for a considerable period (>3 years) after which time the magnitude of associated elemental leaching rates could be used in further modeling and mitigation planning at the Wolverine site. Since the OD cell appears more likely to flush the initial sulphate sooner and thus more likely to achieve NP depletion sooner, it is suggested that the OC cell be decommissioned.

Although little has changed over the past 2 years, it is nevertheless recommended that decommissioning procedures and testwork follow the protocols laid out last year for the Wolverine and Lynx ore tailings cells, to provide confirmation of the similarities in geochemical behaviour. The test program repeats the pre-test characterization following the draft BC Guidelines for the Prediction of Metal Leaching and ARD. The leachate from the final week of humidity cell maintenance is subject to the full suite of analyses including: Cl, F, Hg, CN(T), CNO, CNS, NO₃, NH₃ and NH₄ in addition to the usual pH, acidity, alkalinity, sulphate and metals. Photos are taken of the tailings materials to document any visible evidence of oxidation. A Shake Flask Extraction is conducted to assess the degree of accumulation of oxidation products. The static testing includes expanded ABA, an ICP scan, and mineralogical evaluation (petrographics, XRD with Reitveld).

Yours truly,
Marsland Environmental Associates Ltd.



Rob Marsland, P.Eng.
Senior Environmental Engineer

Appendix E Inotec report: Treatability and Bench-Scale Bioreactor Testing of Water for Selenium Removal

TREATABILITY AND BENCH- SCALE BIOREACTOR TESTING OF WATERS FOR SELENIUM REMOVAL - FINAL REPORT

January 31, 2008

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EXECUTIVE SUMMARY

This report summarizes data presented in *Phase 1* and *2 reports* and presents new data gathered for Phases 3 and 4 that addresses bench-scale testing of three potential process waters and provides a cost breakdown for an on-site pilot-scale test. Good microbial growth and selenium reduction was obtained using a defined media and a molasses, yeast, phosphate media (MYP nutrient) at 3.75 gm/L molasses, 1.5 gm/L yeast extract, and 2.0 mg/L phosphate in waters containing ~4.3 mg/L selenium. DGGE profiling of the selected SF036, Z0, SF056, and Lorax-1 (L-1) microbial population and individual isolated microbial constituents was conducted and on-line database sequence comparisons yielded no matches with sequenced microorganisms. These microorganisms are unknowns at the genus and species level. Microbial stock cultures have been made and are available for pilot-scale testing.

Reactor testing was conducted in two new reactor types 1) a biochemical-enhanced material reactor (BEMR) and 2) an electro-biochemical reactor (EBR). Both had void volumes of ~700 mL and used mostly modified pumice as a microbial growth surface. *Phase 3* testing used water spiked with selenium to ~9 mg/L and nine buckets of visibly different waters, received as one process run. Two tests were made with these waters, one at ~4.3 mg/L selenium and one at ~15 mg/L selenium. The first tests used two BEMR in series with feed waters containing ~9 mg/L (spiked) selenium and nutrient addition to only the first bioreactor and produced effluents that averaged ~0.58 mg/L selenium using a total retention time of forty-four hours. In Test 2 the bioreactor configuration was changed to include a pretreatment step and used the feed waters containing ~9 mg/L selenium, with microbes and nutrient, to simulate a holding or equilibration pond, and removed an average of ~2.9 mg/L selenium. Test waters were again supplemented with 100 mL nutrient before entering reactor 1 as described for Test 1; no nutrients were added to the bottom of BEMR-2 during this test except what carried over from BEMR-1. A bioreactor retention time of forty-four hours produced a final effluent averaging ~0.029 mg/L selenium.

In Test 3 the bioreactor configuration was changed to eliminate the pretreatment step and waters containing ~4.3 mg/L selenium were introduced into BEMR-1 and BEMR-2 as in Test 1. In this test 100 mL of 3.75 gm/L MYP nutrient was added to the bottom of both BEMR-1 and BEMR-2 for a total of 200 mL nutrient once daily; the effluent was sampled at the top of BEMR-2. A total retention time of forty-four hours produced a final effluent averaging ~0.031 mg/L selenium. During Test 3, the EBR was started and operated in the same manner as the BEMRs. A retention time of twenty-two hours produced a final effluent averaging ~0.030 mg/L selenium. In Test 4 the bioreactor configuration was again changed to connect the BEMRs and EBR in series using new test waters containing ~15 mg/L selenium and a total retention time of sixty-six hours. Limited data gathered showed an effluent averaging ~0.47 mg/L selenium from the two stage BEMRs and a final effluent from the EBR averaging ~0.072 mg/L selenium. A number of additional metals identified as potential permitting criteria were also removed to a large extent by the bioreactors.

Testing and site conditions indicate that both pre and post treatment steps will be required and sizing is given for both a 1/10 and a 1/50 pilot-scale system. Treatment costing assumptions and items are provided for a 1/10 pilot-scale test running three months with a cost estimate just under \$163,000.00.

TREATABILITY AND BENCH-SCALE BIOREACTOR TESTING OF WATERS FOR SELENIUM REMOVAL - FINAL REPORT

INTRODUCTION

This report summarizes data presented in earlier reports, *Phases 1 and 2*, addressing selenium treatability and initial testing of several different potential process and waste waters for a new mine at the Wolverine Project, YK. *Phases 3 and 4* address bench-scale testing of several different process water samples and provides a cost breakdown for an on-site pilot-scale test. Limiting conditions with respect to treatability at this site are temperature and high selenium concentrations; up to 14 mg/L selenium. It is planned to run the selenium biotreatment system seasonally; six months of the year - spring through fall. Water samples were obtained from tailings pilot plant runs that simulated actual full-scale tailings plant waters; samples were received from *Lorax Environmental Services Ltd.*, 2289 Burrard Street, Vancouver, BC V6J 3H9. The waters received were examined using different methods to assess potential selenium treatability, including two newly developed selenium removal technologies demonstrated to enhance biofilm growth and metal removal.

Data Summary

Phase 1 Goals

- o Evaluation of pilot plant process water chemistry for microbial toxicity and required nutrient supplementation
- o Qualitative assessment of biotreatability effectiveness at temperatures of 20° C and 4° C using site and repository microbes
- o Qualitative assessment of biotreatability effectiveness of several microbial mixtures

Phase 1 testing produced the following conclusions:

- o Microbial screening successfully demonstrated that site microbes and two microbial populations were capable of good selenium reduction in site waters at ~20° C and to a lesser degree at 4° C
- o Overall, the tests were very positive and provided a strong demonstration that biological selenium reduction was achievable in the waters tested
- o If effluents containing higher levels of selenium, e.g., <50 ppb can be considered, they would be possible with considerable less development and capital investment

Phase 1 Recommendations:

- o Continue testing the microbial populations and site isolates in *Phase 2*
- o Continue investigation of microbial adaptation for lower temperature selenium reduction
- o Perform preliminary assessment of selenium removal using selected nutrient combinations

Phase 2 Goals

- o Select an optimal microbial population for selenium removal in process test waters received
- o Continue to qualitatively assess selenium removal at 20° C and 4° C
- o Perform preliminary assessment of selenium removal using selected nutrient combinations
- o Evaluate microbial selenium removal characteristics

Phase 2 testing produced the following conclusions:

- o Several microbial isolates and microbial populations were capable of selenium reduction in site waters at ~24° C using an economical nutrient and a 72 hour retention time
 - A microbial population – SF036, Z0, SF056, and Lorax-1 (L-1) will be used in bioreactor tests
 - Following mixed culture co-adaptation, site microbes volatilized selenium to a high degree
- o pH was not an issue, but the waters provided for the *Phase 2* tests did affect selenium reduction

- Cyanide or another contaminant removed with hydrogen peroxide made a significant difference in the selenium removal obtained
 - Selenium concentration will require at least two treatment stages to remove selenium to <50 ppb
- o Nutrient component levels formulated for *Phase 3* tests included sugars, protein (carbon), nitrogen, iron, magnesium, and phosphate
 - Nutrients were provided in test solutions containing molasses/soy (3.75 to 0.75 gm/L), yeast (1.5 to 0.75 gm/L), and phosphate (0.05 to 2 gm/L)
 - The best performing defined media contained 3.75 gm/L molasses/soy, 1.5 gm/L yeast, and .5 to 2.0 gm/L phosphate – MYP media
 - Growth rates in the MYP media were slower than in a rich commercially available trypticase soy microbial media
 - Microbial selenium reduction at ~4° C in the waters provided for the *Phase 2* tests was not acceptable

Phase 2 Recommendations:

- o Testing and evaluation should proceed to the next level of bench-scale reactor testing at 24° C
- o Testing can be conducted in two new, but tested, biotreatment system designs
 - Electro-biochemical reactor (EBR)
 - Biochemical-enhanced materials reactor (BEMR)
- o Profile microbial population using Denaturing Gradient Gel Electrophoresis (DGGE)
- o Continue to track selected microbial adaptation and selenium volatilization

BACKGROUND - BIOREACTOR TESTING

Phases 3 and 4

Phases 3 and 4 have not been covered in a formal report and are reported here. This document reports on the bench-scale process tests using three different waters, evaluates bioreactor testing for an on-site pilot-scale test, and provides a rough cost estimate for this test. The objectives include:

- o Evaluate the new process waters received for microbial toxicity and required nutrient supplements
- o Re-evaluate the selected microbial population in the process waters for relative selenium reduction
- o Fingerprint the microbes identified as important for selenium reduction in site waters using DGGE
- o Evaluate selenium reduction in two new bioreactor types – a bio-electrochemical (BEC) reactor and a biochemical-enhanced microbial support materials (BEMS) reactor
- o Use the developed nutrient containing 3.75 gm/L molasses/soy, 1.5 gm/L yeast, and 1.0 gm/L phosphate – (continued *Phase 2* testing indicated a lower phosphate concentration could be used)
- o Target a bioreactor effluent with selenium concentrations below 20 µg/L (ppb)
- o Assess technologies for pilot-scale and provide a rough cost estimate for on-site tests

Water Samples

Water Chemistry Analysis

Selenium and other metal concentrations in samples analyzed were obtained by direct ICP MS analysis of the sample or through a dilution of the sample by a factor of 10:1 or 100:1. Samples and sample dilutions were run against calibration curves constructed using response measurements on known calibration standards. For example, for the lower selenium concentrations, the following 0, 40, 80, 120, and 240 ng Se/L calibration standards were used. When required the selenium or other metal concentrations in the calibration standards were revised, for example to 0, 25, 250 and 2500 ng/L. In addition, dilution factors were calculated so that the selenium and other metal concentrations in the resulting dilutions approximated one-half the Se concentration in the new high calibration standard. The new dilutions were then prepared and run on the ICP MS against the calibration standards at the revised concentration levels; detection limits were 2 ppb for selenium. Results presented are corrected for dilution.

Water Samples Received

Phase 3 testing was initiated with five buckets of waters initially received for Phase 3 that did not contain any significant selenium or other contaminants. These pH ~7 waters did not have any visible precipitates, were initially thought to contain selenium, and be from a process run. Water samples received were re-analyzed three times with the same result, no selenium present. However, analysis of another water sample from the same run, held by *Lorax Environmental Services Ltd.*, was shown to contain selenium, but not enough to conduct the tests required. The five buckets of pH ~7 water were spiked to ~9 mg/L selenium and used to start reactor conditioning and initial reactor tests.

A second water sample received for Phase 3 tests consisted of nine buckets of water, provided as one process run with the water chemistry listed under the Bulk Tailings analysis in *Attachment 1*. This set of water samples was reported to have a pH of ~10 and a selenium concentration of ~2.5 mg/L. The pH in all buckets was ~10; however, the selenium concentration varied considerably, from ~4.3 mg/L to ~15 mg/L selenium, as did the appearance of the waters, *Figure 1*. The clear solution, five buckets total, containing ~4.3 mg/L selenium was used along with the spiked solution described above for the bulk of the bioreactor testing.

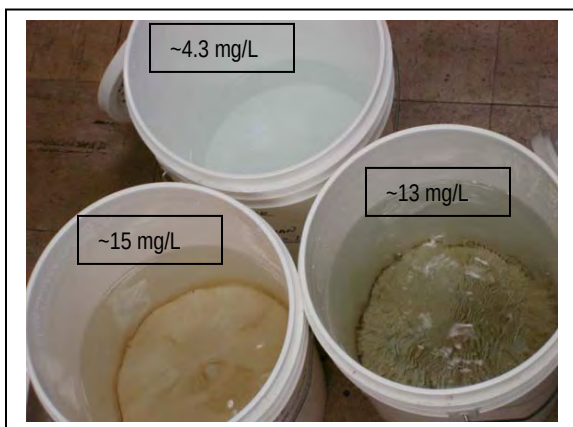


Figure 1. Three different buckets of the nine buckets of test solution received for Phase 3 testing. These buckets have a selenium concentration of between ~4.3 to 15 mg/L. This photo shows the difference in the solutions received for testing. The clear solution, five buckets total, was assayed at average value of ~4.3 mg/L selenium. The colored solutions contain the higher selenium amounts – there were two buckets each of the red and brown colored solutions. The red colored solutions contained ~15 mg Se/L and the brown colored solutions contain ~13 mg/L selenium; this analysis represents a 0.22 μm filtered sample analysis. Observation: The amount of precipitate in the buckets increased two- to three-fold with time, over approximately two months, and was not a function of settling. Buckets were held at pH ~10, as received, until used in bioreactor or other testing.

METHODS AND RESULTS

Standard and modified methods were used for all microbial analyses conducted. Standard and modified methods were used in all procedural protocols and modified or 'special' analysis methods were used for qualitative microbial selenium evaluations. Data presented represents summary, combined, and average data from individual tests and the screening conducted.

Re-evaluation of test microbes in new waters

In this step, the new process waters received were evaluated for microbial toxicity and nutrient supplements required for good microbial growth and selenium reduction. Evaluation media was made with new test waters containing 4.3 mg/L selenium and various concentrations of nutrient components in a test matrix. Individual microbes were screened in this test procedure for relative growth and selenium reduction. *Figures 2, 3, and 4* depict good microbial growth and selenium reduction using a defined media and a molasses/soy, yeast, phosphate media (MYP nutrient) in waters

containing ~4.3 mg/L selenium. Growth tests were conducted in static test flasks held at ~24° C (Laboratory temperature); absorbance shown in *Figures 3 and 4* is correlated in a direct manner with microbial growth.

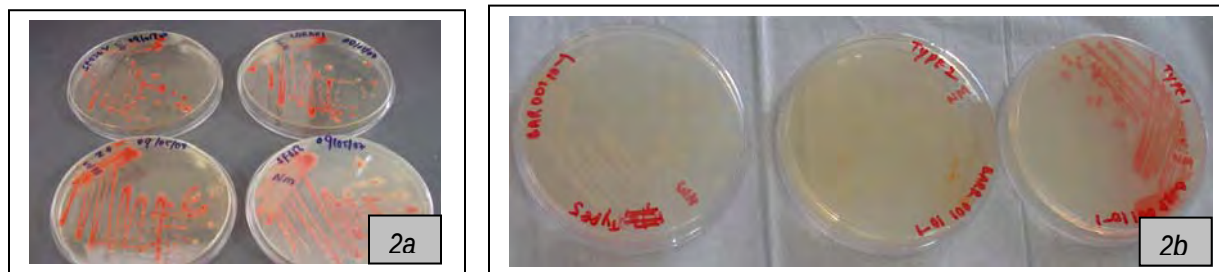


Figure 2a and 2b. 2a shows SF036, Z0, SF056, and Lorax-1 (L-1), the individual bioreactor test microbes, with good microbial growth and selenium reduction using a defined media. 2b shows a screen for selenium reduction using three different media containing different amounts of selected media components. The best growth and selenium reduction is on the plate on the right side of *Figure 2b*.

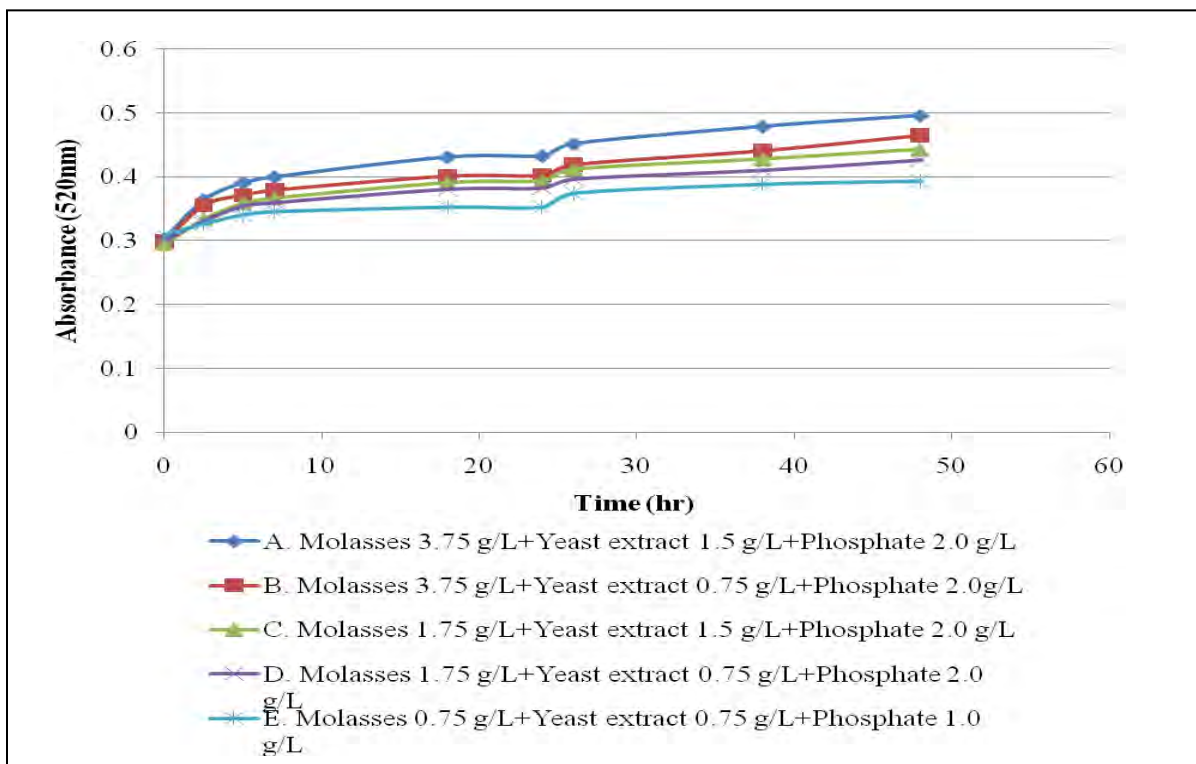


Figure 3. Sample growth curves of the selected microbial population in various media component concentrations.

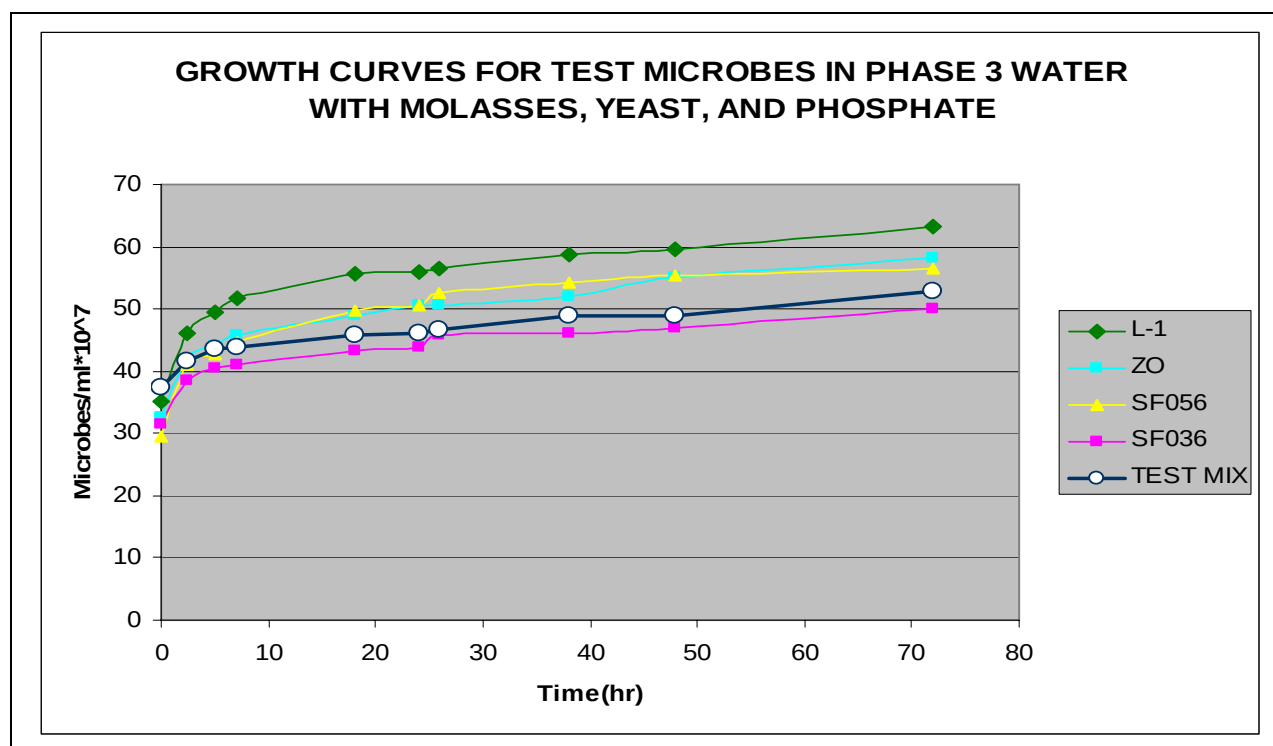


Figure 4. Growth curves of individual test microbes and the test population mix in MYP nutrient over a 72 hour period at 24° C (Laboratory temperature).

Nucleic Acid Profiling

The following discussion is presented because initially these bacteria were sub-cultured together to enhance selenium reduction in the site microbes and in a bioreactor test population that later became defined as containing SF036, ZO, SF056, and Lorax-1 (L-1). It is now accepted that the vast majority of microbes have not yet been isolated, identified or characterized. This is largely due to a lack of knowledge of how these organisms survive and grow in natural habitats. When one also considers that a bacterium is often part of a larger more complex community or ecosystem with possible co-dependence on other members, it is understandable why traditional culturing techniques fail to accurately reflect the large microbial diversity in an environmental sample. Identification and classification of microbes is further confounded by a general absence of morphologically distinct features, thousands of bacterial species are classically categorized by a few different (~17) morphologies.

The advent of culture-independent techniques has transformed the field of microbiology. PCR-based techniques allow the classification of microorganisms based on particular genetic markers and the profiling of complex microbial communities on the basis of nucleic acid sequence diversity (including the uncultured majority). For the past 10 –15 years, microbiologists have relied upon DNA sequence information for microbial identification, based primarily on the genes encoding the small subunit RNA molecule of the ribosome (16S rRNA or SSU rRNA).

Functional constraints on the cellular nucleic acid translational apparatus limit variability in the 16S rRNA molecule, resulting in a high degree of sequence conservation; therefore, a high degree of matching between the same microbes from different sources and different growth conditions. So, even if microbes exchange genes for selenium reduction, the conservation of the rRNA gene sequence permits bacterial characterization and identification based on sequence information obtained from pure cultures or cloned genes from mixed communities. This is possible because rRNA sequence data is used to design phylogenetically conserved probes that target both individual and closely related groups of microorganisms without cultivation.

A principle repository of 16S rRNA sequences, the Ribosomal Database Project (RDP), currently maintains over 17,000 aligned entries representing 850 of 940 formally recognized prokaryotic genera, which are placed into 1,149 phylogenetic groups. Comparative DNA sequencing analysis is widely considered to be the best genotypic method for microbial identification. The most common approach is PCR amplification and sequencing of all or a 500 Base Pair portion of the 16S ribosomal RNA gene. Sequence data is then compared against a sequence database, which ideally contains only validated microbial sequences.

One technique, based on PCR amplification and sequencing of 16S ribosomal RNA, now routinely used is denaturing gradient gel electrophoresis (DGGE). DGGE is a genetic fingerprinting technique that is used to separate individual sequences from a complex mixture. DNA sequences with differing base composition have different melting properties when passed through an acrylamide gel containing an increasing gradient of a chemical denaturant. The melting temperature of a double stranded DNA fragment is influenced by hydrogen bonds formed between complementary base pairs and also by the attraction between neighboring bases on the same strand (known as stacking interactions). The order of bases on a strand determines the degree of stacking. A DNA molecule may therefore have several melting domains with characteristic melting temperatures. DGGE profiles of the selected microbial population and individual isolated microbial constituents were conducted and results are shown in *Figure 5*. As can be seen, all test microbes are quite similar, but slightly different, and the bands found on the individual test microbes are present in the population profile 4M.

DGGE bands were extracted, amplified, and sent for sequence analysis. The DGGE and amplified sequence analysis shows that all microbes tested appear closely related, but their sequences matched no known microbial sequences in the on-line databases; they are unknown at both the genus and species level but closely related. Metabolic tests have shown that these microbes are quite different metabolically. A previous database check of repository microbe SF036 had shown no matching sequences and cultures of all test microbes exhibited the same DGGE profile before and after sub-culturing.

Microbial stock cultures have been made and are available for pilot-scale testing.



Figure 5. DGGE profiles of site microbial RNA from L-1 and ZO, two repository microbes, 4M - a mixture of all bioreactor test microbes, and a *A. ferrooxidans* control.

BIOREACTOR TESTING

Bioreactor Configuration and Operation

Both reactors contained modified pumice materials as the bulk of the microbial support surface. Each bioreactor has a void volume of approximately 700mls and test waters have a twenty-two hour retention time in each bioreactor. Each reactor has three sampling ports used to monitor conditions within the bioreactor at the bottom, middle, and top. Bioreactors were operated at Laboratory temperatures of ~24° C. Bioreactor feed water was added to a clean feed water container on a daily or every other day basis followed by adjustment of the pH between 6.8 and 7.2 using hydrochloric acid. For one test, nutrients, at 3.75 gm/L, were added every other day to a pretreatment container that contained two days of test waters spiked to 9 mg/L selenium. In all other tests shown, nutrients were added to one or each reactor separately at a rate of 3.75 gm/L on a daily basis by mixing the nutrient into a 100mls of pH adjusted test water and pumping it into the reactor over a five minute time period. The flow rate through the bioreactor was then re-adjusted for a twenty-two hour retention time and re-connected to the feed water container.

All reactors were tested with an economical nutrient solution containing 3.75 gm/L MYP nutrient added to test waters. Testing was initially conducted in two new biochemical-enhanced material reactors (BEMR) while a third electro-biochemical reactor (EBR) was being constructed and undergoing preliminary tests. The BEMRs were operated in series for a total retention time of forty-four hours. *Figure 6* depicts the two initial BEMRs tested; no photo of the EBR is provided because patent approval is still in progress. The EBR was constructed and operated in a manner similar to the BEMR; a twenty-two hour retention time was used in this reactor. In one test all three reactors were connected in series, two BEMRs followed by the EBR for a total retention time of sixty-six hours.

Bioreactor effluent samples were collected during nutrient addition into a sterile 50 ml tube. All samples, including paired feed samples were centrifuged for 30 minutes and filtered through a pre-filter followed by a 0.22 micron filter. Samples were preserved by adjusting the pH below 1 with nitric acid and stored at 4° C until analysis. pH and ORP measurements were made before nutrient addition using the three sampling ports; fifteen milliliter samples were collected, centrifuged for 10 minutes, and pH and ORP were measured.

Bioreactor Testing Results and Discussion

BEMR inoculation and start-up was initiated with waters spiked to 9 mg/l selenium at pH ~7. This water was from the first five buckets of waters initially received for *Phase 3* that did not initially contain any significant selenium or other contaminants. Bioreactors were started and operated for one month using these waters. A second water sample was received for *Phase 3* tests that consisted of nine buckets of water; five buckets containing a clear test solution were used for the bulk of the bioreactor testing; these buckets were the ones that closely matched the water chemistry shown in attachment 1. The selenium content of these waters was ~4.3 mg/L. The EBR was started using test waters containing ~4.3 mg/L selenium. The final tests, conducted with three reactors in series, two BEMRs followed by the EBR, with a total retention time of 66 hours used water from a bucket containing a redish precipitate and ~15 mg/L selenium. Testing results are presented in *Figure 7*.



Figure 6. Two BEMR in series using a retention time of twenty-two hour each for a total retention time of forty-four hours.

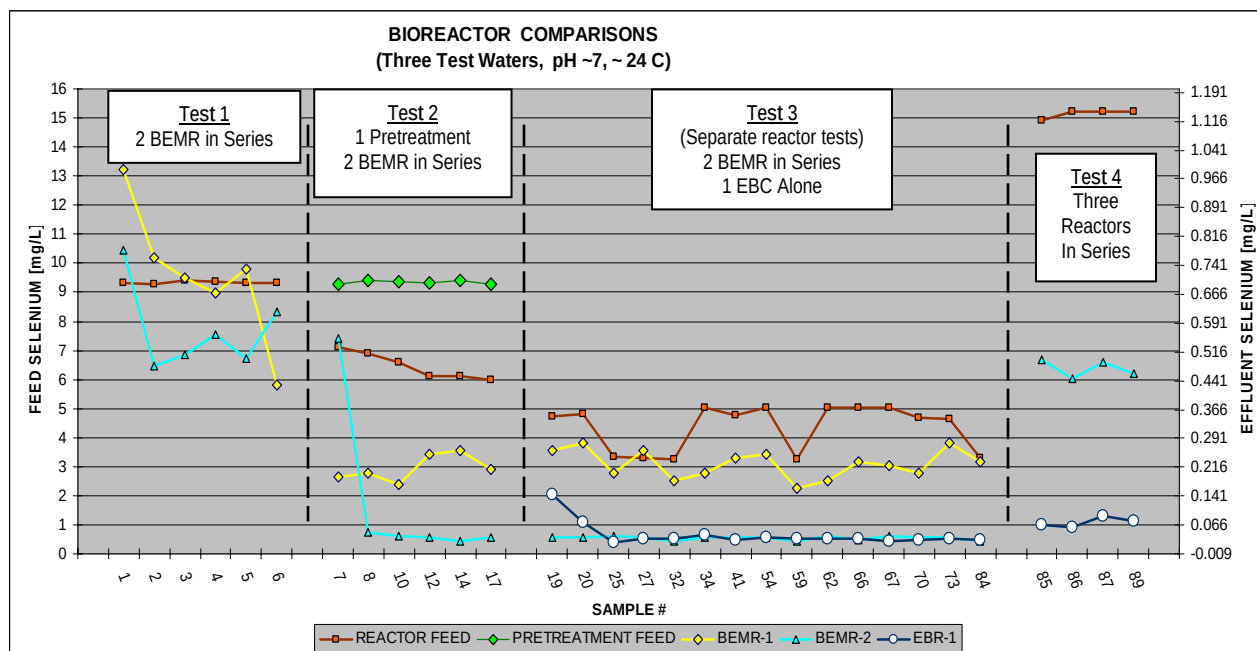


Figure 7. A comparison of a two-stage BEMR and a separate single-stage EBR comparison using a twenty-two hour retention time per stage for a forty-four hour overall retention time in the BEMRs and a twenty-two hour retention time in the EBR. Dashed lines show breaks in reactor testing that included reactor start-up, down time, and re-equilibration of bioreactors for new test solutions or test configurations. The BEMRs and EBR comparisons were made with one test water at ~4.3 mg/L selenium; the BEMRs tests used three different test waters. The BEMRs were used to test three different test water selenium concentrations ~9 mg/L (spiked), ~4.3 mg/L, and ~15 mg/L. The reactor data shown represents operation at one nutrient concentration; 3.75 g/L. Reactors were operated at Laboratory temperature ~24° C.

In Test 1 the bioreactors appear to still be approaching a steady state. In this test, waters containing ~9 mg/L selenium were introduced into the bottom of BEMR-1 and flowed from the bottom to the top of BEMR-1 then into the bottom of BEMR-2; effluents were sampled at the top of BEMR-1 and BEMR-2. Nutrients were added to the feed solution entering the bottom of BEMR-1 using 100 mL of 3.75 gm/L nutrient once daily; no nutrients were added to BEMR-2 during this test except what carried over from BEMR-1. Retention time in each BEMR stage was twenty-two hours for a total retention time of forty-four hours and produced a final effluent averaging ~0.58 mg/L selenium.

In Test 2 the bioreactor configuration was changed to include a pretreatment step in which the feed waters containing ~9 mg/L selenium were held at ~24° C for forty eight hours with microbes and 100 mL of nutrient before entering the bioreactor. This simulated holding pond, with no microbial support materials, removed an average of ~2.9 mg/L selenium. At this point, the test water now containing ~6.5 mg/L selenium was again supplemented with 100 mL of nutrient and continued to flow into BEMR-1 and BEMR-2 as in Test 1; no nutrients were added to BEMR-2 during this test except what carried over from BEMR-1. Retention time in each BEMR stage was twenty-two hours for a total retention time of forty-four hours and produced a final effluent averaging ~0.029 mg/L selenium, if the first data point in this test is not included.

In Test 3 the bioreactor configuration was changed to eliminate the pretreatment step in Test 2. In this test, waters containing ~4.3 mg/L selenium were introduced into BEMR-1 and BEMR-2 as in Test 1, but 100 mL nutrient was added to the bottom of both BEMR-1 and BEMR-2 for a total of 200 mL nutrient once daily; the effluent was sampled at the top of BEMR-2. Retention time in each BEMR stage was twenty-two hours for a total retention time of forty-four hours producing an average final effluent of ~0.031 mg/L selenium.

During Test 3, the EBR was started after a period of preliminary tests and operated independent of the BEMRs; no pretreatment step was included. Separate test waters were introduced into the bottom of the EBR and flowed to the top where the effluent was sampled. One hundred milliliters of 3.75 gm/L nutrient was added to the bottom of the EBR once daily. Retention time in the EBR was twenty-two hours and produced a final effluent of ~0.030 mg/L selenium if the initial data point is discarded.

In Test 4 the bioreactor configuration was again changed to connect the BEMRs and EBR in series using new test waters containing ~15 mg/L selenium and a different water chemistry than in Tests 1, 2, and 3; no pretreatment step was included. In this test, waters were introduced into the bottom of BEMR-1 - to the bottom of BEMR-2 - to the bottom of the EBR; 100 mL of 3.75 gm/L nutrient was added to the bottom all reactors for a total of 300 mL nutrient once daily. Retention time in each reactor stage was twenty-two hours for a total retention time of sixty-six hours and produced an effluent averaging ~0.47 mg/L selenium from the two stage BEMRs and a final effluent from the EBR averaging ~0.072 mg/L selenium.

Evaluation for pilot-scale tests

Several different water chemistries were tested in *Phase 3*; one was close to the provided target process water chemistry with ~4.3 mg/L selenium, and all three were samples were initially thought to be samples of potential water chemistry. A two stage BEMR system of a single stage EBR came close to meeting target discharge criteria of 20 ppb on two of the potential target water chemistries. Addition of another reactor stage or increased retention times should meet these goals, but selenium removal is dependent on the water chemistry, and initial selenium concentration. In assessment of reactor performance, using the five buckets containing ~4.3 gm/L selenium, good selenium reduction and removal was achieved in the BEMRs with a forty-four hour retention time and in the EBR with a twenty-two hour retention time. Oxidation-reduction potential and pH were measured at three points within each reactor and provided for the BEMRs as Attachment 2.

Testing results indicate that a holding pond can be used for slower but significant selenium reduction if treated with nutrients and microbes. The effectiveness of the holding pond could be increased by addition of a microbial support growth surface; however, this would reduce the effective size of the pond. There was no attempt to determine the trade-off between pond size and addition of microbial growth surface which would increase the reaction kinetics.

The single stage EBR, with a twenty-two hour retention time, had the same performance as the two-stage BEMRs with a forty-four hour retention time. The level of selenium removals should be improved in both systems with the addition of a holding pond with microbes and nutrients. *It is likely that target selenium goals of 20 ug/L would have been obtained if a holding pond, with microbial support materials, had been used ahead of the bioreactors in Test 3, Figure 7.*

Selenium removal was good within the BEMRs even as the oxidation-reduction potential dropped into the -200 to -250 mV range between samples 40 and 45. This range is lower than is often considered optimal for the best selenium removal and is due to the amount of nutrients added to the bioreactors. This profile decrease in ORP has been noted in bench- pilot- and full-scale bioreactors and indicates that even though lower nutrient levels exhibited lower growth rates, *Figure 3*, in the long term these lower nutrient concentrations will still develop a substantial biofilm that should function well for selenium removal with significantly lower nutrient concentrations. *In all full-scale biotreatment systems implemented to date, significantly less nutrients were required once biofilm establishment was complete.*

Therefore, it is appropriate to start out a pilot- or full-scale bioreactor with higher nutrient levels to establish a biofilm and then reduce the nutrients significantly once the biofilm is developed. In colder water temperatures the formation of microbial biofilms is slowed considerably and unless the water can be heated, the development of a robust biofilm can take many months. This means the drop in ORP, observed in the bench-scale reactors, may not be observed for a much longer time, but is a good indicator of a mature biofilm and excess nutrients.

The pH increased within the BEMR environment as expected because the concentrated nutrient solution was slightly acidic even when made up with pH adjusted test water; it initially degrades into less acidic byproducts. The bench-scale reactors exhibited pH profiles similar to those observed in full-scale bioreactors. A similar pH profile would be expected during pilot-scale tests.

When nutrient levels in biotreatment systems are not well balanced and in some instances where they are well balanced, post treatment to reduce biological oxygen demand (BOD) is required. In colder climates and instances where the biotreatment systems are shut down for any period a post treatment system is required to reduce BOD.

Additional Water Quality Criteria

As Phase 3 was being completed, a number of additional metals were identified as potential permitting criteria. As indicated in *Table 1*, the pumice materials used as a microbial growth support were a significant source of several metals of interest. This source of metals could be removed by using gravel or activated carbon, but the gravel would provide significantly less surface area for a microbial biofilm, therefore lower selenium reduction kinetics, and virgin activated carbon would be considerably more expensive. The two different bioreactor types removed different amounts of different metals; however a significant reduction in all metals of interest except copper and nickel was achieved. Copper, at these levels is a component in many nutrients; but the origin of the nickel increase is currently unknown in the BEMRs. *Table 1* data is average data from 14 points throughout the experiment.

Table 1. Additional Water Quality Criteria - Bench-Scale Bioreactors

	ITEM	ELEMENT	Al	S	Fe	Ni	Cu	Zn	As	Mo	Ag	Cd	Sb	Pb	Hg
			μg/L	mg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
	AVERAGE FEED WATERS		998.95	460.67	32.00	6.23	3.00	19.48	2.61	632.52	2.04	1.77	14.93	5.02	2.15
TWO BR IN SERIES	AVERAGE BEMR-1 EFFLUENT	22 HR RETENTION	162.63	421.73	177.37	8.31	3.00	21.77	2.67	57.64	0.30	0.16	6.21	0.77	3.41
	AVERAGE BEMR-2 EFFLUENT	44 HR RETENTION	58.17	339.88	255.68	11.49	4.05	32.51	1.93	12.25	0.21	0.06	3.05	2.61	1.46
	AVERAGE EBR EFFLUENT	22 HR RETENTION	23.21	176.09	339.41	10.41	3.04	31.65	1.40	55.65	0.00	0.18	10.69	5.31	2.74
BR FILL	AVERAGE ELUTED FROM PUMICE*	(gm)	200.07	0.00	175.19	1.22	1.07	7.73	0.00	0.00	0.00	0.00	0.00	0.00	0.08

(BEMR) – Bio-enhanced Materials Reactor

(BER) – Bio-electrochemical reactor

* - Average of two pumice elutions in amount per gram of pumice. Second elution amounts generally decreased by 50% to 75% with the exception of mercury which did not decrease with the 2nd elution. Elutions carried out in a manner to approximate release over the course of the experiments. No new elements showed up in 2nd elution; might expect some elution of these elements to continue over the course of the experiments conducted.

BACKGROUND FOR PILOT-SCALE TESTING

Pre- and Post-Treatments

Considering the range of selenium values and water chemistry differences in the water samples tested in *Phases 1-3*, a pre-treatment stage is strongly recommended. This system should be sized to handle any larger than normal flow events such as those that normally occur in the spring and fall. A recommended system would consist of a holding or equilibration pond either unfilled or partially filled with a microbial growth support. Based on water chemistry and temperature, this pond should have a minimum retention time of seven days to two weeks; or based on a flow rate of 9 L/s, a void volume of ~13,000 m³ for two weeks retention time. A better estimate of pond size, optimal retention time, and an economical trade-off in microbial support surface fill depth can be determined during pilot-scale testing.

Post-treatment is required to reduce treatment system BOD, and will be required at this site due to temperatures and operational requirements; a post-treatment system is also usually required to deal process water chemistry changes. Post-treatment consists of an aerobic stage where the selenium treatment effluents would be aerated in contact with a dense microbial population. Usually this microbial population will be available in site waters and will ultimately consist of a portion of the selenium reducing population; some of the facultative anaerobes. The type of post-treatment system required is dependent on nutrient load and can vary from a conventional trickling filter to an actively aerated system.

Pilot-Scale Treatment Size

The project flow rate for full scale treatment is approximately 9 L/s; therefore, recommended flow rates for a large pilot-scale test would be 0.7, 0.9, and 1.1 L/s or flow rates about one-tenth of the full-scale flow. Smaller pilot-scale tests can be conducted and are often designed around flow rates of 0.02% of the target flow rate or 0.14, 0.18, and 0.22 L/s. Test flow rates are not fixed and should be adjusted to meet site requirements. Based on 50% void volumes and retention times needed, estimated system sizes for the pilot-scale tests are presented in *Table 2* below.

Table 2. Treatment System Component Size – Void Volume 50%.

Flow Rate (L/s)	Total Flow/ Tmt Cycle (L/Day)	Pre-treatment Size (m ³)	Treatment System Size (m ³)	Post-treatment Size (m ³)
0.14	12,096.0	406.4	79.8	14.5
0.18	15,552.0	522.5	102.6	18.7
0.22	19,008.0	638.7	125.5	22.8
0.7	60,480.0	2032.1	399.2	72.6
0.9	77,760.0	2612.7	513.2	93.3
1.1	95,040.0	3193.3	627.3	114.0

Total Flow – Flow Rate L/sec*60 sec/min*60 min/hr*24 hrs/day

Pre-treatment Size – (Flow Rate L/sec*60 sec/min*60 min/hr*24 hrs/day*14 days)/1,000 L/m³*2 v*1.2 sizing factor

Treatment System – (Flow Rate L/sec*60 sec/min*60 min/hr*66 hrs)/1,000 L/m³*2 v*1.2 sizing factor

Post-Treatment Size – (Flow Rate L/sec*60 sec/min*60 min/hr*12 hrs)/1,000 L/m³*2 v*1.2 sizing factor

Treatment Costing Assumptions

The following assumptions are made for the included pilot-scale cost estimate.

- o Site lodging and meals will be provided during time at site
- o Testing time is June through August – three months
- o Labor assistance by on-site personnel
- o Weekends or cycle time in Whitehorse, YK (~24 days) - Transportation to Whitehorse
- o Power, pumps, tanks/ponds, piping, and water heater at site
- o Near-by gravel or pumice supply – provided on site
- o Inoculum scale-up tanks – can use treatment system tanks
- o Nutrient tank, costs, and transportation to site – ~106 tons OR ~20,000 gal – covered in cost estimate
- o 1/10 flow pilot-scale test

Cost Estimate

This is a rough estimate of costs for a 1/10 flow pilot-scale test for a period of three months. Costs will change upon further discussion and refinement of desired test period, test parameters, potential site personnel involvement, and materials that can be provided on site.

Cost Proposal for Pilot-Scale Study at Yukon Mine Site

	Technical Director Consultant	Principal Engineer/ Scientist	Senior Engineer	Associate Engineer/ Scientist	Environmental Scientist Microbiologist	Technician	TOTAL HOURS	TOTAL LABOR \$
Hourly Billing Rate	\$185	\$120	\$80	\$83	\$54	\$36		
TASKS								
1. Project Management								
a. Coordination and Oversight	30			20	40		90	\$9,370.00
b. Client Review Meetings	16				16		32	\$3,824.00
Project Management Hours	46	0	0	20	56	0	122	
Project Management Subtotal Labor Dollars	\$8,510	\$0	\$0	\$1,660	\$3,024	\$0		\$13,194.00
2. Laboratory Optimization								
a. Water Characterization	4			8	16		28	\$2,268.00
b. Culture Screening	4				24		28	\$2,036.00
Laboratory Optimization Subtotal Hours	8	0	0	8	40	0	56	
Laboratory Optimization Subtotal Labor Dollars	\$1,480	\$0	\$0	\$664	\$2,160	\$0	\$4,304	\$4,304.00
3. Pilot-Scale Operations								
a. Bioreactor Preparation	40			16	160		216	\$17,368.00
b. Inoculum Preparation	40				160	40	240	\$17,480.00
c. Pilot-Scale Operation	40			16	160		216	\$17,368.00
d. Microbial Support	8				8	40	56	\$3,352.00
e. Report Preparation	24			16	24		64	\$7,064.00
Pilot-Scale Operations Hours	152	0	0	48	512	80	792	
Total Pilot-Scale Operations Labor Dollars	\$28,120	\$0	\$0	\$3,984	\$27,648	\$2,880		\$62,632.00
Total Project Hours	206	0	0	76	608	80	970	
Total Project Labor Dollars	\$38,110	\$0	\$0	\$6,308	\$32,832	\$2,880	\$80,130	\$80,130.00
						Total Other Direct Charges		\$82,351.50
						Total Estimated Project Fees		\$162,481.50

Other Direct Charges (ODC's)

Air/Mileage	Mileage Cost	Misc. Supplies	Nutrients	Equipment Lease	Lodging & Meals	TOTAL ODC's
	0.45					
2000	900.00					\$900.00
						\$0.00
\$9,600.00					\$2,880.00	\$12,480.00
Project Management Subtotal ODC's						\$13,380.00
400	180.00					\$180.00
	-					\$0.00
Laboratory Optimization Subtotal Subtotal ODC's						\$180.00
-	\$2,000.00			\$3,700.00		\$5,700.00
-	\$350.00		\$50,000.00			\$50,350.00
-	\$2,000.00					\$2,000.00
-						\$0.00
-						\$0.00
Total Pilot-Scale Operations Subtotal ODC's						\$58,050.00

Subtotal Other Direct Charges	\$71,610.00
Administrative and Handling Fee @ 15%	\$10,741.50
Total Other Direct Charges	\$82,351.50

ATTACHMENT 1. BULK TAILINGS ANALYSIS

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TAILINGS SERVICES

Environmental Division



ANALYTICAL REPORT

LORAX ENVIRONMENTAL SERVICES

ATTN: JONATHAN MACKIN

2289 BURRARD STREET

VANCOUVER, BC V6J 3H9

Reported On: 27-SEP-07 11:13 AM

Lab Work Order #: L550875

Date Received: 06-SEP-07

Project P.O. #:

Job Reference: 474-1 YUKON ZINC

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Timothy Guy Crowther
General Manager, Vancouver

For any questions about this report please contact your Account Manager:

Andre Langlais

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID		L550876-1	L550876-2	L550876-3	L550876-4	L550876-5
		05-SEP-07	05-SEP-07	05-SEP-07	05-SEP-07	05-SEP-07
		BULK TAILINGS 1 (9/10/11)	BULK TAILINGS 2 (12/13/17)	BULK TAILINGS 3 (14/15/16)	PB RO CONC	CU RO CONC
Grouping	Analyte					
WATER						
Physical Tests	Hardness (as CaCO ₃) (mg/L)	802	834	697	411	463
	Conductivity (uS/cm)	1730	1830	1530	1110	1190
	pH (pH)	10.3	10.7	10.2	7.62	7.91
	Total Dissolved Solids (mg/L)	1550	1560	1330	875	952
	Total Suspended Solids (mg/L)	9.3	<3.0	5.3	<3.0	<3.0
	Turbidity (NTU)	7.38	0.57	3.48	13.9	19.9
Anions and Nutrients	Ammonia as N (mg/L)	0.265	0.389	0.164	0.235	0.197
	Alkalinity, Total (as CaCO ₃) (mg/L)	106	151	101	7.3	81.3
	Bromide (Br) (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Chloride (Cl) (mg/L)	4.44	4.91	5.27	6.07	5.89
	Fluoride (F) (mg/L)	0.167	0.161	0.134	0.114	0.093
	Sulfate (SO ₄) (mg/L)	597	632	534	393	460
	Nitrate (as N) (mg/L)	0.556	0.550	0.459	0.434	0.473
	Nitrite (as N) (mg/L)	0.0167	0.0085	0.0115	0.0067	0.0059
	Ortho Phosphate as P (mg/L)	0.0042	0.0048	0.0029	0.0035	<0.0010
	Total Phosphate as P (mg/L)	0.213	0.142	0.130	0.242	0.0038
Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanide, Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Thiocyanate (SCN) (mg/L)	<0.50	0.58	0.55	<0.50	0.69
Total Metals	Aluminum (Al)-Total (mg/L)	1.19	1.26	1.11	0.0219	0.0117
	Antimony (Sb)-Total (mg/L)	0.0287	0.0294	0.0301	0.0253	0.0598
	Arsenic (As)-Total (mg/L)	0.00789	0.00532	0.00611	0.00379	0.00458
	Barium (Ba)-Total (mg/L)	0.190	0.188	0.174	0.120	0.160
	Beryllium (Be)-Total (mg/L)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	Bismuth (Bi)-Total (mg/L)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	Boron (B)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Total (mg/L)	<0.0020	<0.0020	<0.0020	0.00229	0.00601
	Calcium (Ca)-Total (mg/L)	321	334	279	155	175
	Chromium (Cr)-Total (mg/L)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	Cobalt (Co)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	0.00195
	Copper (Cu)-Total (mg/L)	0.00335	0.00095	0.00125	0.0118	0.0652
	Iron (Fe)-Total (mg/L)	0.308	0.039	0.158	0.048	1.02
	Lead (Pb)-Total (mg/L)	0.469	0.748	0.239	0.294	0.622
	Lithium (Li)-Total (mg/L)	<0.025	<0.025	<0.025	<0.025	<0.025
	Magnesium (Mg)-Total (mg/L)	<0.10	<0.10	<0.10	5.81	6.14
	Manganese (Mn)-Total (mg/L)	0.00548	0.00048	0.00208	0.146	2.98
	Molybdenum (Mo)-Total (mg/L)	0.661	0.696	0.562	0.0183	0.00529
	Nickel (Ni)-Total (mg/L)	<0.0025	<0.0025	<0.0025	<0.0025	0.0546
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30

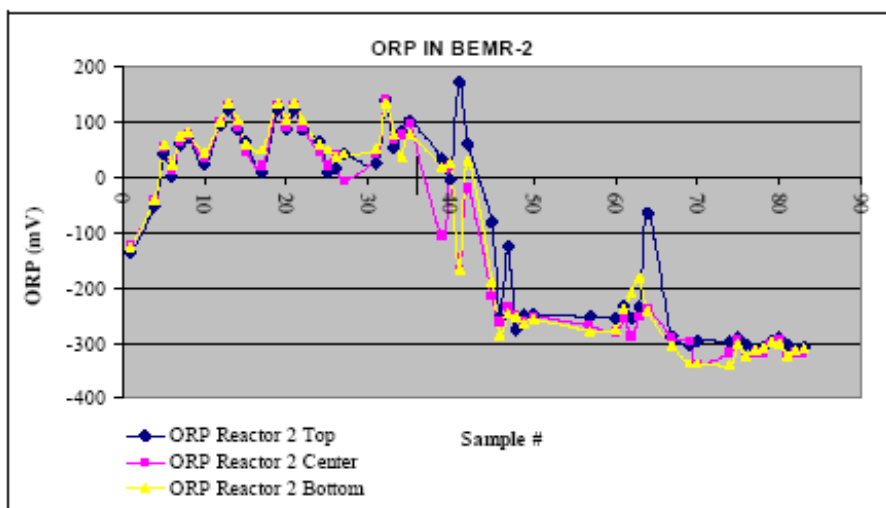
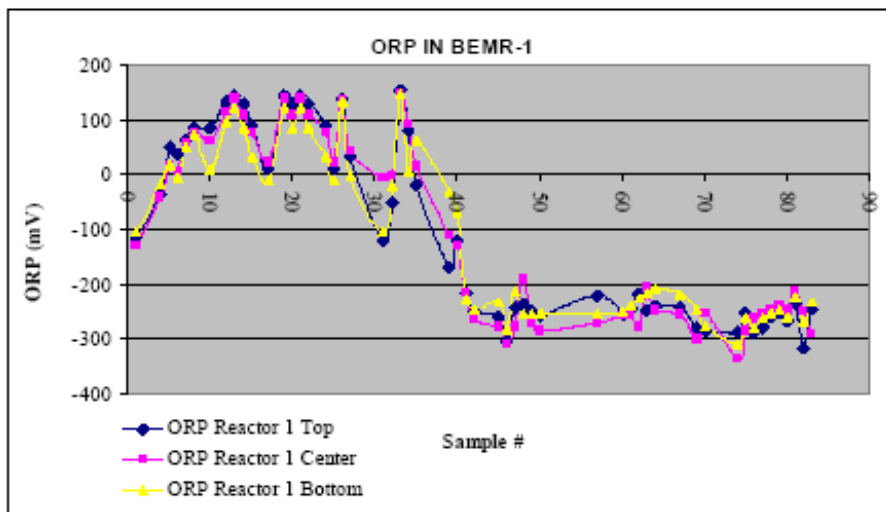
ALS LABORATORY GROUP ANALYTICAL REPORT

		Sample ID Description Sampled Date Sampled Time Client ID	L550876-1 05-SEP-07 BULK TAILINGS 1 (9/10/11)	L550876-2 05-SEP-07 BULK TAILINGS 2 (12/13/17)	L550876-3 05-SEP-07 BULK TAILINGS 3 (14/15/16)	L550876-4 05-SEP-07 PB RO CONC	L550876-5 05-SEP-07 CU RO CONC
Grouping	Analyte						
WATER							
Total Metals	Potassium (K)-Total (mg/L)		8.2	7.4	6.4	5.7	5.4
	Selenium (Se)-Total (mg/L)		3.05	3.21	2.54	0.907	0.676
	Silicon (Si)-Total (mg/L)		0.149	0.110	0.148	0.145	1.05
	Silver (Ag)-Total (mg/L)		0.00262	0.00217	0.00122	0.00317	0.00849
	Sodium (Na)-Total (mg/L)		80.8	87.6	70.5	65.8	66.3
	Strontium (Sr)-Total (mg/L)		0.859	0.876	0.747	0.396	0.433
	Thallium (Tl)-Total (mg/L)		0.00152	0.00154	0.00187	0.00721	0.0103
	Tin (Sn)-Total (mg/L)		0.00825	0.00897	0.0165	0.00126	0.00194
	Titanium (Ti)-Total (mg/L)		<0.010	<0.010	<0.010	<0.010	<0.010
	Uranium (U)-Total (mg/L)		<0.000050	<0.000050	<0.000050	<0.000050	0.000520
	Vanadium (V)-Total (mg/L)		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Zinc (Zn)-Total (mg/L)		0.314	0.486	0.293	0.190	2.44

ATTACHMENT 2. BEMR ORP and pH PROFILES

ATTACHMENT 2. OXIDATION REDUCTION POTENTIAL AND pH IN BEMRs

Oxidation Reduction Potential



pH in Bemrs

