Annual Water Licence Report for 2020

Property Name: Pine Point Tailings Impoundment Area
Company: Teck Metals Ltd.
Water Use Licence : MV2017L2-0007
Land Use Licence : MV2019X0006

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Pine Point Tailings Impoundment Area Annual Water Licence Report for 2020

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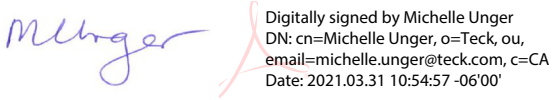

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EXECUTIVE SUMMARY

The Pine Point mine was operated by Cominco (a predecessor of Teck Metals Ltd.) as a large open-pit lead (Pb) and zinc (Zn) mine from 1964 to 1988. When the Pine Point Mine closed in 1988, the original Closure and Reclamation Plan (titled "Restoration and Abandonment Plan", approved June 1987) was implemented. Updates to the plan were issued in 1990 and again in 1991 as reclamation work neared completion. In accordance with the plan, surfaces leases and mining claims were surrendered back to the Crown during the mid to late 1990s, with the exception of one surface land lease (#85B/16-9-9), which encompasses the Tailings Impoundment Area (TIA). Restoration work at the TIA has focused on surface stability, effluent quality, and long term stability of the dykes and decant structures. The TIA is considered to be in the Closure-Active Care phase of mine life and operates under a Type B Water License (licence MV2017L2-0007).

In 2020, the Land Use Permit (MV2019X0006) was amended to include reclamation research activities on the recently acquired surface lease on Commissioner's land (L-2000009T) that encompasses the southern portion of the TIA.

In 2018, a Reclamation Research Plan was submitted which outlines research activities to be conducted in 2018, 2019 and 2020, which will inform the updated Closure and Reclamation Plan (CRP). The CRP was initially required to be submitted to the MVLWB by December 31, 2020 however an extension was requested and granted till June 1, 2021. The goal of research is to resolve uncertainties regarding zinc movement (and other metals as necessary) within environmental media in the TIA.

Community engagement was conducted in 2020 related to the amendment of the Land Use Permit. Due to COVID-19 restrictions, in-person meetings could not be held in 2020, as such engagement occurred in the form of phone calls and emails. Fort Resolution residents were also employed during the reclamation research field activities in 2020. Community engagement will continue in 2021 with respect to ongoing reclamation research activities and development of the Closure and Reclamation Plan.

Water accumulates in the pond every spring from snowmelt and rainfall. The water is elevated in Zinc, Lead and Copper and cannot be released to the environment without treatment. Routine water treatment was then conducted from 1July to 16 September 2020. The total volume discharged was 383,451 m^3. The effluent discharge water quality was analyzed as per the water licence and met all the effluent quality criteria.

Other activities in 2020 included the routine dyke inspections, maintenance of erosion rills on the dykes, sediment removal of the entire polishing pond and phase three of the Reclamation Research plan.

Work in 2021 will include a continuation of the Reclamation Research plan activities, routine dam inspections and water treatment.

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1.0 Introduction

The Pine Point mine was operated by Cominco (a predecessor of Teck Metals Ltd.) as a large open-pit lead (Pb) and zinc (Zn) mine from 1964 to 1988. The mine is located approximately 75 km east of Hay River, 50 km SW of Fort Resolution, and 13 km south of the southern shoreline of Great Slave Lake. The site location is shown on Figure 1.

When the Pine Point Mine closed in 1988, the original Closure and Reclamation Plan (titled "Restoration and Abandonment Plan", approved June 1987) was implemented. Updates to the plan were issued in 1990 and again in 1991 as reclamation work neared completion. In accordance with the plan, surfaces leases and mining claims were surrendered back to the Crown during the mid to late 1990s, with the exception of one surface land lease (#85B/16-9-9), which encompasses the Tailings Impoundment Area (TIA). Restoration work at the TIA has focused on surface stability, effluent quality, and long term stability of the dykes and decant structures. In 2006 the reclamation plan (titled "Update to Restoration and Abandonment Plan, Tailings Impoundment Area") was updated to focus on the latter two elements. The TIA is considered to be in the Closure-Active Care phase of mine life and operates under a Type B Water Licence (licence MV2017L2-0007).

In 2020, the Land Use Permit (MV2019X0006) was amended to include reclamation research activities on the recently acquired surface lease on Commissioner's land (L-2000009T) that encompasses the southern portion of the TIA.

The following constitutes the 2020 Annual Report required by Part B, Item 12 of Water Licence MV2017L2-0007 issued October 25, 2017.

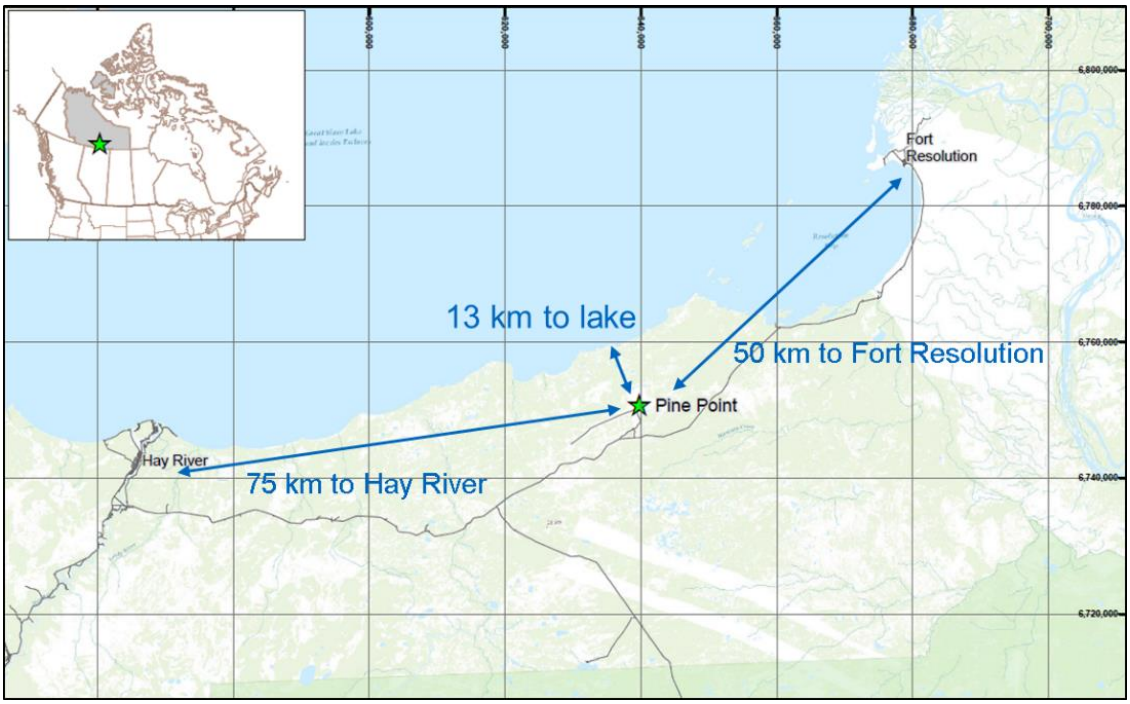

Figure 1: Site Location

1.1 2020 Reclamation Research Activities

In May 2018, Teck submitted a Reclamation Research Plan to the MVLWB outlining the phased research activities that would culminate in an updated Closure and Reclamation Plan. Phase three of the research was carried out in 2020. A summary of the 2020 activities and anticipated activities for 2021 are provided below. The goal of the research is to resolve uncertainties regarding zinc movement (and other metals as necessary) within environmental media in the Tailings Impoundment Area (TIA) at the former Pine Point Mine. Research activities will inform the updated Closure and Reclamation Plan to be submitted to the MVLWB by June 1, 2021[1]. The results from the reclamation research activities conducted between September 2018 and August 2020 will be presented in a Reclamation Research report that will accompany the updated Closure and Reclamation Plan. Note that the geotechnical evaluation is being conducted separately from the approved 2018 Reclamation Research Plan.

The 2020 research activities focused on the following disciplines:

- Geotechnical evaluation of perimeter dykes and tailings
- Surface water and groundwater quality evaluation
- Water balance evaluation
- Geochemical evaluation

1 An extension to the original submission date of the CRP from Dec. 31, 2020 to June 1, 2021 was requested and received.

- Long-term water treatment options
- Revegetation trial monitoring

1.1.1 Geotechnical Evaluation

In 2020, geotechnical borings, cone penetration tests, test pits, and geophysical surveys were used to characterize the tailings, dyke fills, and dyke foundations. A total of 16 rotosonic borings (2 of which were duplicates to allow for cone penetration testing) and 6 test pits were completed at the TIA. Three (3) nested vibrating wire piezometers were installed in one of the borings to monitor water pressure in a dyke and in the foundation, and one vibrating wire piezometer was installed in the main pond to monitor the pond water level. The vibrating wire piezometers were connected to an existing remote monitoring system, which continuously collects data. Twenty (20) cone penetration tests (CPTs) were completed, 18 in the tailings and 2 in natural ground. Thirty (30) pore water pressure dissipation tests were performed as part of CPT testing to assess the in-situ permeability of tailings and native soils. Approximately 3 km of surface geophysics survey lines were completed along the north and west dykes to evaluate depth to bedrock.

The investigation report is currently in progress. In summary the investigation indicated tailings were generally saturated near the pond at the north end, and became less saturated to the south and east (away from the main pond), though some areas of saturation were encountered near the southwest corner of the TIA. Dyke fills typically consist of sandy silty clays, silty sands, and to coarse sands and gravels. The maximum height of dyke fill encountered was 9.6 m near the middle of the west dyke. Dyke foundation conditions included 0.2 to 0.9 m of organic materials over 1.5 and 13.2 m of lacustrine soils over 4.7 to 12.5 m clay till, with bedrock at 13 to 40 m depth below original ground.

Samples of foundation soils and dyke fills were collected and submitted for geotechnical testing including water content, grain size distribution, Atterberg limits, unit weight, specific gravity, organic content, shear strength, and hydraulic conductivity.

1.1.2 Surface Water and Groundwater Quality Evaluation

Surface water samples were collected in the main pond, within drainages and ditches in the east portion of the TIA (referred to as east drainage area) and in the downstream drainage network north of the north dike. The east drainage area is a combination of tailings area and forested area that contributes surface water to the main pond. Drainage ditches and channels were constructed during operations to direct run off water to the main pond. Surface water samples were collected in spring, summer and fall depending on the availability of water at the locations. The downstream drainage network is a series of channels and ponds that were created from previous borrow activities. The downstream drainage network receives treated water from the polishing pond via a spillway. Water is naturally released from the downstream drainage network to the surrounding muskeg. Downstream drainage network surface water

samples were collected in the summer before water treatment and in the early fall after the release of treated water.

A total of 26 locations were sampled; 2 main pond locations, 16 east drainage area locations and 8 downstream drainage area locations. Water samples were collected for submission to an analytical laboratory for analyses of total and dissolved metals, routine parameters and other parameters required for water quality assessment and geochemical model development. A reference location, as identified by community assistants, was sampled for water quality analyses comparisons. The purpose of the surface water samples was to understand seasonal variability in metals concentrations within the main pond and downstream of the treated water discharge point. The east drainage area data provided a better understanding of contact water flow direction and mixing with snowmelt water.

Eighteen groundwater monitoring wells were installed in 2018 and 2019. In 2020, monitoring wells were accessed for water level measurements and water quality. Two of the shallow wells were dry in 2020. Water levels were measured in the remaining 16 monitoring wells in July and September. Water samples were also collected and submitted to an analytical laboratory for total and dissolved metals and routine parameters analyses. In addition, several boreholes equipped with vibrating wire piezometers (VWPs) continue to be monitored for changes in groundwater levels throughout the year.

1.1.3 Water Balance Evaluation

A water balance evaluation, using the software GoldSim, based on current data was completed using historical and site-specific data. The model includes several watersheds within the TIA and to the east, based on currently available topographic maps. Several developments to the model included: a refined understanding of the contribution of water from the east drainage to the main pond, the amount of precipitation that infiltrates through the cover into the tailings, and the rate of evaporation from the main pond. The model of the TIA includes coarser to finer tailings zones that mimic the characteristics of the tailings deposition and includes both unsaturated and saturated tailings layers. The climatic history was summarized, and additional calibration was done in 2020 with site-specific data. The annual inputs and outputs from the main pond were quantified and the effect of climate change were simulated to aid in closure planning. Additionally, the model is being used to support operational planning for treatment operations by predicting water levels based on climatological inputs. A geochemical component (the contaminant transport module, CTM) was added to the model to better understand the fate and transport of metals at the facility, including the impact of tailings weathering on main pond water quality over time. The model will be used to better understand water movement through the tailings and TIA system, and how changes incorporated through reclamation activities may change the water balance and fate and transport of metals in water at the TIA.

A meteorological station on the north-central portion of the TIA (installed in 2018) is collecting precipitation, temperature, relative humidity, wind speed, wind direction, evaporation and short-wave radiation measurements. During the winter, a grid of snowpack monitoring stations was

established. Each station has a staff gauge and camera. The cameras are set to periodically take pictures of the staff gauge, which is then used to track snow levels throughout the winter months. Snow coring is completed periodically during the winter to collect snow-water equivalent measurements.

1.1.4 Revegetation Trial Monitoring

During community engagement meetings in Fort Resolution, Teck received suggestions that purposeful seeding would improve vegetation cover. In 2019, a cover vegetation trial was initiated to test revegetation strategies incorporating community suggestions and site observations. Fifteen 3 m^2 plots were established to test plant emergence success with seeding, log placement and addition of minimal organic material. Test plots were monitored in 2020 by using the same protocols that were applied in 2019 to obtain “pre-treatment” data on vegetation density and species diversity. Data from 2020 were compared with data from 2019 to determine whether microsite establishment improved vegetation growth.

1.1.5 Geochemical Evaluation

The geochemical program was designed to determine zinc loading to the main pond by understanding the rate of metal leaching in the tailings, fluctuation of flow and zinc concentrations over time, and how metals concentrations vary in response to closure options. By understanding mineral availability (mineralogy), metal release rates (kinetics), and the water balance (volume), the load of zinc to the main pond can be estimated.

A conceptual geochemical model was developed to assess the fate and transport of zinc and other constituents of concern (COC) within the TIA. The overall objectives of the conceptual model are to describe the current geochemical conditions at the TIA, estimate how those conditions may change with time, and evaluate the potential effects that closure options will have on COC concentrations in the future. Geochemists Workbench® 12.0 (GWB), a thermodynamic equilibrium geochemical model, is being used to estimate equilibrium conditions, and evaluate changes to water quality and mineral precipitation.

In 2020, geochemical assessment and the development of model inputs and source terms was on-going. Seasonal surface and groundwater quality sample collection within and around the TIA, infiltration data, and results from geochemical tests were completed to understand solute mass transport. Based on the 2020 data, the conceptual model for the TIA was refined by identifying areas that have different characteristics with respect to fate and transport of tailings constituents. The water balance model was updated with a contaminant transport module to estimate solute load to the main pond (including zinc).

Unsaturated zone monitoring was completed on shallow tailings (immediately below the cover) in both the coarser and finer tailings zones. Three multi-depth (from 5 to 50 cm) soil moisture probes were installed in the vicinity of groundwater wells to measure changes in soil moisture and to estimate infiltration through the tailings in response to precipitation events throughout the

summer months. Data from the infiltration studies was used in the water balance and geochemical models.

In 2020, ten test pits were completed across the TIA to improve understanding of the depth of the tailings that may interact with runoff and freshet. The test pits were excavated to a depth of 100 cm below the tailings-cover interface. Samples were collected at specified intervals from the cover and the tailings for field and laboratory analyses as follows:

- Recorded observations of tailings colour, qualitative moisture content, and qualitative particle size distribution;
- Measured cover depth;
- Collected composite samples of the upper 50 cm of tailings for grain size analysis;
- Measured tailings pH and electrical conductivity in the field using a leach method to identify the gradient in leachability between the relatively leached tailings near the surface to the non-leached tailings at depth;
- Extracted leach samples along the test pit profile from the top and bottom of the cover and from 0 to 40 cm below the cover-tailings interface to quantify the magnitude of extractable constituents of interest that may contribute mass to the runoff and freshet. Extracted samples were sent to an accredited laboratory for chemical analyses; and
- Collected additional leach samples along the profile from 0 to 10 cm for Synthetic Precipitation Leaching Procedure extractions at an accredited laboratory.

Three multiparameter continuous monitoring sondes, outfitted with temperature, conductivity, pH, and oxidation-reduction potential (ORP) probes (AquaTroll 600 sonde), were deployed in the Main Pond; two sondes at the deepest point of the pond, near surface water sampling location SW-1, and the third near the water treatment inlet (referred to as Surveillance Network Program location 35-1A). Understanding variability in pH, ORP, conductivity, and temperature will allow more accurate geochemical modelling of the dynamics of zinc and other metals in the main pond. The purpose of the sondes is to:

1. Verify trends observed in the historical data series and improve clarity around seasonal shifts in pH, conductivity, and temperature;
2. Verify the assumption in the contaminant transport model that the main pond is well-mixed;
3. Observe more discrete water quality changes during the treatment season as the result of polishing pond recirculation to the main pond and late season dosing of the main pond with excess lime that are not available in the historical dataset; and
4. Observe more discrete water quality changes over-winter and during snowmelt that are not available in the historical dataset.

The second component of the main pond investigation was to characterize solid minerals that may have precipitated and settled to the bottom as a function of:

- Entrained particles in runoff entering the main pond;

- Authigenic (mineral precipitate) formation within the pond water column; or
- Seasonal lime addition to the pond from active water treatment.

Duplicate surficial sediment samples were collected near surface water sampling location SW-1-SONDE. Suspended sediment samples were filtered and collected on a 0.45-micron membrane filter. Samples were submitted to GR Petrology Consultants (Calgary, Alberta) and analyzed using quantitative X-ray dispersive spectroscopy, energy-dispersive x-ray spectroscopy, and image analysis by scanning electron microscopy.

1.1.6 Human and Ecological Health Risk Assessment

There was no data collection carried out in 2020 related to projects established in 2019.

1.1.7 Long-Term Water Treatment Options

As a component of the reclamation research program, active and passive water treatment systems were reviewed to determine if there were options that could optimize water treatment and/or may be beneficial for transitioning the TIA to a more passive care phase. An initial treatment technology screening identified that Constructed Wetland Treatment Systems (CWTS) have been demonstrated to be effective at metals-impacted sites and can be designed to promote either aerobic or anaerobic conditions to promote physical, chemical, or biological processes to remove zinc from water. For this site, a CWTS with anaerobic conditions to promote reducing conditions and sequestration of zinc primarily as zinc sulphide in soils may be a suitable technology for treating water that can be relatively self-sustaining and require minimal maintenance.

In 2020, the second phase of a bench-scale test was implemented at the offices of Maskwa Engineering (Maskwa) in Hay River to test this concept. The bench-scale test included test vessels (20-L plastic buckets) that were filled with wetland material from adjacent to the TIA. The wetland material included cattails and sedges, and the soil in which they were growing. The material was placed in the buckets and for half of the test vessels, biochar (a carbon rich charcoal-like material that can aid in metals sorption) was added. Cattail and sedge test vessels were established in series, meaning that the main pond feedwater was fed through the cattail vessels first and through the sedge vessels second.

Water from the main pond was transported to Maskwa and stored in a 950-L tank. Water from the tank was pumped into an indoor feed tank system (380-L barrel). Water from the feed tank was supplied to the test vessels at a rate of approximately 2 mL/min. Grow lights were used to provide 16 hours of light per day. Test vessels were monitored for approximately 16 weeks to maintain water flow and to collect water quality samples. Water from the effluent of the cattail and sedge vessels was monitored weekly using a multi-parameter probe and submitted to an analytical laboratory for total organic carbon and zinc analyses. Monthly samples were submitted to an analytical laboratory for general water parameters and additional metals analyses.

In 2020, the bench-scale tests were done in two phases. During weeks 1 to 9, main pond feed water was used through the system as-is. During the second phase, weeks, 10 to 16, the feed water was enriched with zinc chloride (0.1 M ZnCl2) to observe the capacity of the systems to treat higher concentrations of zinc. The zinc chloride solution increased influent zinc concentrations during Phase 2B to a target of 10 mg/L, approximately one order of magnitude greater than unmodified Main Pond concentrations.

1.1.8 2021 Research Activities

The Closure and Reclamation Plan will be completed and submitted to the MVLWB by June 1, 2021. The results of the 2018 to 2020 research activities will be submitted at the same time. Additional data gathering and ongoing research will be necessary to complete remaining data gaps. Research activities expected for 2021 are presented in Table 1 below.

Table 1 - 2021 Research Activities

Category	Activity
Ongoing Monitoring	• Pore water/groundwater water levels and quality • Surface water quality of main pond, downstream drainage network and east drainage area • Continued field study of infiltration for water balance and geochemical evaluation
Field Trials	• Evaluate efficacy of microsites as a means of improving vegetation growth on the cover material • Potential operation of field CWTS trial – pending bench test review and efforts to source materials for a larger scale system
Desk-top Assessments	• Calibration and validation of GoldSim model for use in current pond operations and to assess closure options • Review of active water treatment processes and potential for system optimization
Geochemical Evaluation	• Geochemical model development to evaluate current conditions and determine key sensitivities • Focused testing of tailings, as needed, to refine leaching rates or other sensitivities Further investigation of the ‘interflow’ depth in which flow moves through the tailings toward the main pond

Category	Activity
Updated Closure and Reclamation Plan Development	• Compile a reclamation research report with results of the reclamation research conducted from 2018 to August 2020 • Update previous closure and reclamation plan.

2.0 Engagement Summary

The Public Engagement Plan was reviewed in 2020, but no changes were required. As per the Public Engagement Plan, affected parties received the annual report and updated management plans (contingency, water treatment and waste management plans). Engagement occurred, in the form of phone calls and emails, for the amendment of the Land Use Permit to include reclamation research activities on the recently acquired surface lease that encompasses the southern portion of the TIA. Due to COVID-19 restrictions, in-person meetings could not be held in 2020.

Fort Resolution residents were employed during the reclamation research activities in July and September. Residents carried out roles such as wildlife monitoring and assistance in the collection of environmental samples (water). A total of 18 working days were completed by Métis residents of Fort Resolution in support of field days during which the reclamation research activities occurred.

More than 30 email exchanges and phone calls occurred between Teck representatives and affected parties. Most of these communication exchanges were in relation to field program support and identifying options for information sharing; however, communication also included notifications regarding the Land Use Permit application amendment and report submissions such as the annual Water Licence report and annual Dam Safety Inspection report. Community engagement will continue in 2021 as per the Public Engagement Plan, with anticipation of greater in-person participation as COVID-19 restrictions ease. In addition, a web GIS based ‘Story Map’ will be circulated in 2021 which will provide preliminary information on the reclamation research that has been done at the site to support the Closure and Reclamation Plan and gain input from the communities of interest.

3.0 Major Modification or Construction Activities

There were no modifications or construction activities in accordance with Part E of the Licence. Maintenance works were conducted and are further discussed in Section 5.0.

4.0 Water Management Plan Activities

Water accumulates in the pond every spring from snowmelt and rainfall. The water is elevated in Zinc, Lead and Copper and cannot be released to the environment without treatment.

Therefore every summer the accumulated water is treated and the water level in the pond is dropped to a minimum level.

The water treatment plant is a simple lime treatment system that consists of: a lime silo, trailer mounted pump/blower unit, lime slurry tank, jet mixer, water pump and a trailer mounted laboratory. Most of the equipment is stored in Hay River through the winter and is assembled for the operating period.

On 8 May 2020, the following manuals were revised and submitted to MVLWB for approval to include the projected use of flocculants to control suspended sediments within the polishing pond:

- Pine Point Mine Tailings Impoundment Water Treatment Manual
- Pine Point Mine Tailings Impoundment Waste Management Plan
- Pine Point Mine Tailings Impoundment Contingency Manual.

The Waste Management Plan was approved upon review. The Pine Point Water Treatment Manual and Waste Management Plan were conditionally approved at the time but were resubmitted on August 21, 2020 and were unconditionally approved.

4.1 Annual Water Treatment Summary

The annual water treatment kickoff meeting was conducted at the Kimberley Teck office on June 12, 2020. All relevant safety documents including the Mine Emergency Response plan were reviewed with treatment operators at the time. Updated versions of the Pine Point Mine Tailings Impoundment Water Treatment Manual, the Pine Point Mine Tailings Impoundment Waste Management Plan and the Pine Point Mine Tailings Impoundment Contingency Manual were reviewed at the time, focusing on recent version updates. Major topics of the kickoff meeting included training on new total zinc and total suspended solids determination procedures, as well as, familiarity with spill response and reporting requirements.

Water treatment was initiated on 1 July 2020 and completed on 16 September 2020. A total of 383,451 m^3 of treated water was released during the 2020 water treatment period as recorded by the flow meter equipment from the discharge siphons. No discharge occurred on July 4 through 6 inclusive, from July 8 through July 21 inclusive, July 23, July 25, July 29 through August 3 inclusive, August 24, August 25, September 8, September 11 and September 14. Reasons for not discharging were related to pH or zinc concentrations reaching action levels. Daily discharge volumes and cumulative volumes as shown in Table 2.

Table 2 - Discharge Volume at Station 35-1B

Sampling Date (YYYY-MM-DD)	Volume Discharged m^3	Cumulative Volume Discharged m^3	Comments
2020-07-01	3,750.5	3,750.5	
2020-07-02	10,015.6	13,766.2	
2020-07-03	9,099.3	22,865.5	
2020-07-04	0	22,865.5	
2020-07-05	0	22,865.5	
2020-07-06	0	22,865.5	
2020-07-07	3,793.3	26,658.8	
2020-07-08	0	26,658.8	
2020-07-09	0	26,658.8	
2020-07-10	0	26,658.8	
2020-07-11	0	26,658.8	
2020-07-12	0	26,658.8	
2020-07-13	0	26,658.8	
2020-07-14	0	26,658.8	
2020-07-15	0	26,658.8	
2020-07-16	0	26,658.8	
2020-07-17	0	26,658.8	
2020-07-18	0	26,658.8	
2020-07-19	0	26,658.8	
2020-07-20	0	26,658.8	
2020-07-21	0	26,658.8	
2020-07-22	1,191.7	27,850.4	
2020-07-23	0	27,850.4	
2020-07-24	3,965.7	31,816.1	
2020-07-25	0	31,816.1	
2020-07-26	3,078.3	34,894.5	
2020-07-27	5,397.6	40,292.1	
2020-07-28	2,072.4	42,364.5	
2020-07-29	0	42,364.5	
2020-07-30	0	42,364.5	
2020-07-31	0	42,364.5	
2020-08-01	0	42,364.5	
2020-08-02	0	42,364.5	
2020-08-03	0	42,364.5	
2020-08-04	2,782.3	45,146.7	
2020-08-05	6,550.2	51,696.9	
2020-08-06	9,174.3	60,871.3	

Sampling Date (YYYY-MM-DD)	Volume Discharged m^3	Cumulative Volume Discharged m^3	Comments
2020-08-07	9,825.4	70,696.7	
2020-08-08	4,297.0	74,993.7	
2020-08-09	11,660.5	86,654.2	
2020-08-10	11,033.9	97,688.1	
2020-08-11	7,547.7	105,235.8	
2020-08-12	11,722.3	116,958.1	
2020-08-13	12,907.0	129,865.0	
2020-08-14	13,099.0	142,964.0	
2020-08-15	12,918.8	155,882.7	
2020-08-16	10,448.7	166,331.4	
2020-08-17	9,834.7	176,166.1	
2020-08-18	12,655.1	188,821.1	
2020-08-19	8,889.9	197,711.0	
2020-08-20	11,327.6	209,038.6	
2020-08-21	11,362.9	220,401.5	
2020-08-22	4,277.9	224,679.4	
2020-08-23	2,088.2	226,767.6	
2020-08-24	0	226,767.6	
2020-08-26	6,491.5	233,259.1	
2020-08-27	11,038.1	244,297.2	
2020-08-28	10,539.5	254,836.7	
2020-08-29	11,032.7	265,869.4	
2020-08-30	11,415.8	277,285.1	
2020-08-31	12,049.5	289,334.7	
2020-09-01	9,905.8	299,240.4	
2020-09-02	9,860.5	309,100.9	
2020-09-03	9,634.6	318,735.49	
2020-09-04	9,925.1	328,660.6	
2020-09-05	9,622.3	338,282.9	
2020-09-06	3,831.7	342,114.6	
2020-09-07	7,552.7	349,667.4	
2020-09-08	0	349,667.4	
2020-09-09	4,246.9	353,914.2	
2020-09-10	7,677.4	361,591.6	
2020-09-11	0	361,591.6	
2020-09-12	6,836.0	368,427.6	
2020-09-13	3,818.0	372,245.6	
2020-09-14	0	372,245.6	

Sampling Date (YYYY-MM-DD)	Volume Discharged m^3	Cumulative Volume Discharged m^3	Comments
2020-09-15	5,394.0	377,639.6	
2020-09-16	5,811.9	383,451.4	
Total		383,451.4	Total 2020 discharge volume

4.2 Water Treatment Process Updates

Flocculant blocks were deployed 4 times during 2020 in response to increases in total suspended solids and visible increases in turbidity. No more than 12 blocks were deployed at anytime or were they in place for in excess of 10 days. Generally, total suspended solids (TSS) levels were low throughout 2020 and were significantly reduced from levels observed in 2018 and 2019 as shown in Figure 7. On average, grab samples throughout the treatment season were significantly below the action levels of 25 mg/L (average) and 50 mg/L (max). The average observed TSS over the entire treatment season was 4.2 mg/L and the maximum grab was 8.0 mg/L. These low levels were attributable to favorable wind patterns and mitigation by placement of turbidity curtains.

A fabricated bubble curtain was trialed in 2020 with temporary authorization from the Water Resource Officer received on August 24, 2020. The curtain was constructed of 2 rows of 2-inch water line hose affixed to a compressor and was used for the remainder of the water treatment campaign. A minor drop in pH from one side of the curtain was observed, effects on TSS were difficult to determine due to mobilization of sediments from the bottom of the treatment pond. Due to water quality/treatment difficulties at the time of deployment, a proper test could not be carried out.

5.0 Operations and Maintenance Plan Update and Activities

The Operations and Maintenance Plan entitled *Operations, Maintenance and Surveillance Plan for Pine Point Tailings Impoundment Area – Version 5* was submitted in May 2020 (Teck, 2020). Updates included the addition of a requirement to update emergency response documentation. The OMS also incorporates the Water Treatment Plant and Contingency Manuals which were previously referenced in Section **Error! Reference source not found.**

5.1 Surveillance Activities

Surveillance activities at the Pine Point TIA in 2020 included regular site inspections by both the Engineer of Record and by Maskwa Engineering Limited (Maskwa):

- Engineer of Record
    - 22 September 2020 – annual Dam Safety Inspection (DSI) routine inspection (with Maskwa and Teck)

- Maskwa
    - 18 May 2020 – routine spring inspection
    - 22 October 2020 – routine fall inspection

The results of the surveillance are documented in the 2020 Annual Inspection prepared by Golder (Golder Associates Ltd., 2020), submitted to MVWLB on December 17, 2020.

In 2020, the water level in the pond did exceed the operating levels (Teck, 2020) but was within the one meter freeboard limit (202.4 m) as per Part F 5(d) for the monitoring period. The following exceedances and actions were taken:

- On 10 May 2020 the pond level was 201.68 m, marginally exceeding the 201.6 m first alert level. This alert triggered the corresponding operation, maintenance, and surveillance (OMS) (Teck, 2020) actions inclusive of daily climate monitoring.
- Per above, the daily monitoring of climate and pond level was completed from 11 May to 19 June 2020, at which point the water level had dropped to just below this initial alert level (dropped to 201.57 m).
- The maximum pond level that was measured in monitoring period was 201.68 m on 14 May 2020, and was below the maximum operating water level of 201.8 m.

Installation of a remote view camera to monitor the main pond staff gauge was installed in September 2020. This will support monitoring the water levels remotely. Additionally, the water level at the end of the water treatment campaign is higher than historically. As such a 2021 freshet management plan will be developed.

5.2 Maintenance Activities

Maintenance activities in 2020 involved removal of sludge deposits from the entire Polishing Pond area. Sediment removal was carried out from October 13 to October 17, 2020. Approximately 365 m^3 of lime sludge was removed and placed over previously deposited sludge east of the Polishing Pond within the TIA.

Maintenance was also completed in September 2020 to repair 5 rills that either extended into or near the dyke crests and/or more than 30 cm deep. The erosion was considered to be the result of higher than average rainfall in 2020 compared to recent years and was identified during the annual inspection.

6.0 Spill Contingency Plan

There was one water/sediment release event that occurred in 2020 and was reported to Water and Land Resource Inspectors. The event occurred on September 23, 2020 when there was a release of water from the drilling activity on the downstream bench of the North Dyke. The drillers set up a sediment screen downstream of the rig at the start of the day. At 15:40 they noticed that there was a bit of sediment in the ponded water downstream from the drilling

location (pictures attached). It looked like some water seeped through the sediment screen and flowed into the ponded water. It is unclear whether the sediment was from above the screen or mobilized by the water below the screen. The drilling uses regular water to advance casing, nothing is added to, and the drillers have the water delivered from Hay River. Based on the visual observation, the area impacted was 5 m x 5 m. Once observed the drilling operations were ceased and a secondary sediment screen was installed. The pond is quite shallow and is unlikely to contain any fish. This event was not considered a spill as such there is no corresponding spill reporting information. No further action or mitigation was considered necessary.

The Spill Contingency Plan was updated in May 2020 and was included in the updated revision of the Operations, Maintenance and Surveillance Plan (Teck, 2020). Training of the spill procedures and waste management plan was conducted with the water treatment operators at the annual kick-off meeting preceding the water treatment campaign.

7.0 Surveillance Network Program

Surveillance Network Program (SNP) sampling was conducted according to Mackenzie Valley Land and Water Board Water Licence MV2017L2-0007, specifically the section "Surveillance Network Program" annexed to the licence (i.e., Annex A). All sampling methods and analyses were conducted according to the Pine Point Tailings Impoundment Area Quality Assurance and Quality Control Plan for the Surveillance Network Program (Teck, 2019). Samples were analyzed by ALS, which is a Canadian Association for Laboratory Accreditation (CALA) certified laboratory.

A summary of the sample station descriptions, parameters and sampling frequency is presented in Table 3. The table also includes a column summarizing how the condition of the licence requirement was satisfied. Sample locations area shown on Figure 2.

Table 3 - Surveillance Network Program Stations, Sampling Parameters, and Compliance Summary

Surveillance Network Program Station	Descriptions	Location	Parameters	Frequency	2020 Compliance Summary
35-1a: Main Pond	Main pond prior to discharge to the serpentine channel (water treatment area/settling pond)	60°53'41.3"N 114°25'30.7"W	Total Copper Total Lead Total Zinc pH Total Suspended Solids Total Arsenic [(a)] Ammonia [(a)] Total Cyanide [(a)]	Weekly during discharge	Sampled daily/weekly between 21 June to 4 September. Results included in Table 5 Note that water treatment occurred from 1 July to 16 September. It has been identified that a weekly sample from 35-1a was missed for the last week of water treatment.
			Water level	3 times per year, once in Spring, Summer, and Fall; during periods of open water	Water levels were conducted 3 times as shown in Table 6
35-1b: Post-Treatment Effluent Discharge	Post-treatment effluent discharge at the decant structure	60°53'41.3"N 114°25'30.7"W	Volume, measured and recorded in cubic metres.	Weekly during discharge	Discharge volume was recorded and included in . Table 2
			Total Copper Total Lead Total Zinc pH Total Suspended Solids Ammonia [(a)] Total Cyanide [(a)]		Samples were collected daily and/or weekly during regular operations and are included in Table . Graphical summaries which include the previous two years results for Total Zinc, Lead, Copper, TSS, and pH, are included in Figure 3 to Figure 7

Surveillance Network Program Station	Descriptions	Location	Parameters	Frequency	2020 Compliance Summary
SNP Station 35-4	Pond surface water north of SNP station 35-1, 4.0 km from Great Slave Lake.	60°54'41.8"N 114°26'17.2"W	Total Copper; Total Lead; Total Zinc; and pH	Annually; in fall following discharge	The routine fall sampling was completed on September 24, 2020, results are included in Table 8
SNP Station 35-5	Pond surface water 1.6 km south of Great Slave Lake.	60°54'27.7"N 114°26'17.2"W			
SNP Station 35-6	Pond surface water 2.4 km due south of SNP station 35-5.	60°55'26.6"N 114°28'25.4"W			
SNP Station 35-9	Great Slave Lake, 2.4 km southwest of Presquile Point.	60°55'35.0"N 114°36'04.1"W			
SNP Station 35-10	Great Slave Lake, 4.8 km east of Presquile Point.	60°57'00.2"N 114°27'56.6"W			
SNP Station 35-12	Pond surface water 4.8 km north of Tailings area decant structures, 0.8 km south of Great Slave Lake shoreline.	60°57'02.1"N 114°25'06.6"W			
SNP Station 35-13	Pond surface water, 4.0 km east of SNP Station 35-9, and 0.8 km south of Great Slave Lake shoreline.	60°55'59.1"N 114°31'59.0"W			

(a) Test parameter is not stipulated in the Water Licence but is included in the analyses.

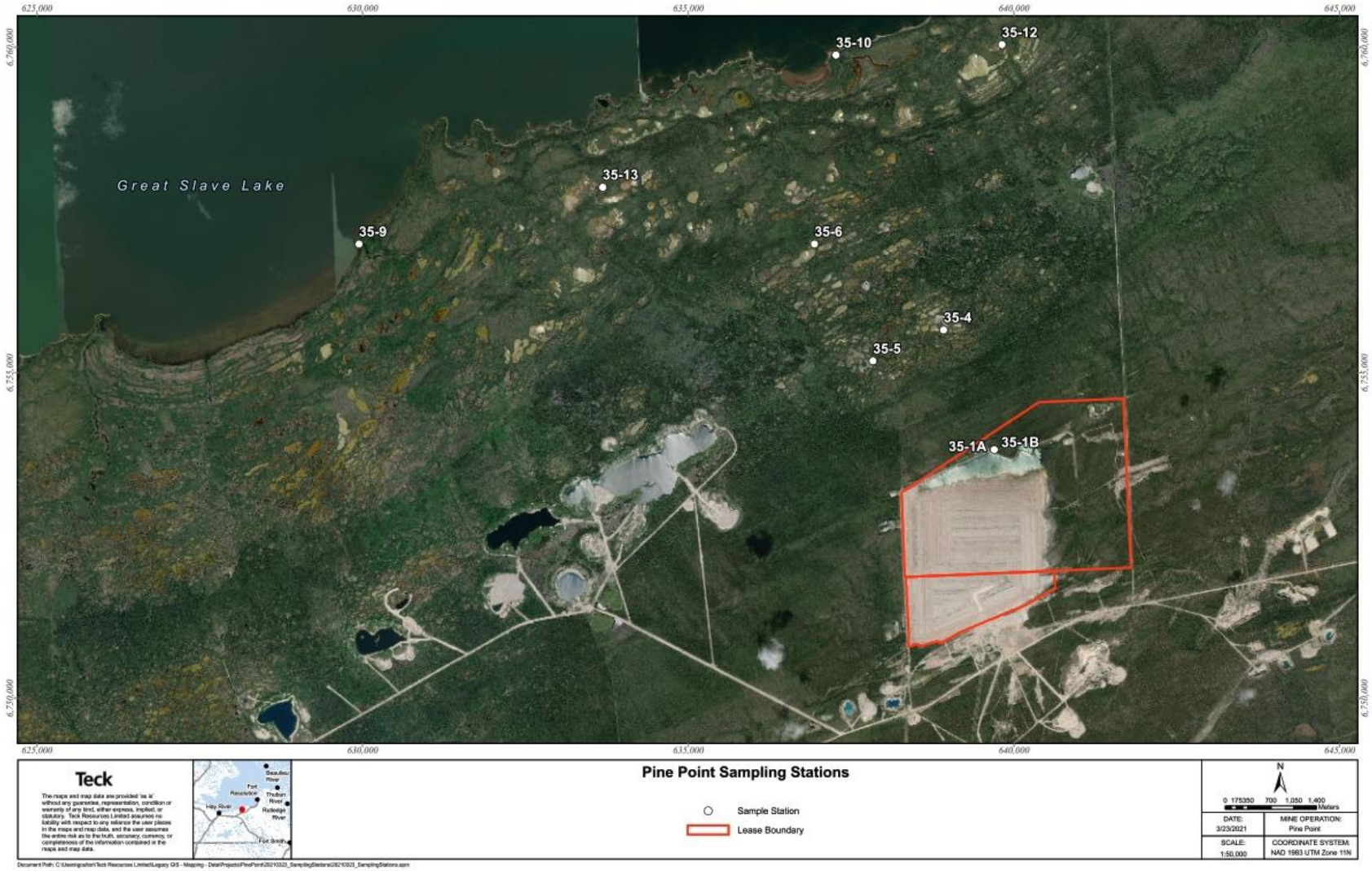

Figure 2: Pine Point SNP Stations

7.1 SNP Results

As outlined in the table above, tabular summaries of the data generated under the "Surveillance Network Program" are presented in Tables 5 to 8 in this section. Graphical summaries have been included for 35-1B which include the previous two years results and are included in Figures 3 – 7. The analytical results for the fall SNP downstream locations are included in Appendix A.

The following is a summary of the data results:

- 35-1A (sample within the pond before treatment) - Consistent with previous years, concentrations of total zinc are above the discharge limits and therefore validated the need for treatment prior to discharge. No other analytes exceeded permit limits or action levels.
- 35-1B (post treatment effluent discharge) – During 2020, water quality was consistently below the effluent quality discharge limits. There were no exceedances of Action Levels with the exception of pH. Lab pHs exceeded on September 1 (9.34 pH units) and September 9 (9.35 pH units). Field pH measurements were commonly above the Action Level and on average 9.31 pH units and is discussed further in Section 7.2.
- All samples collected from SNP locations downstream of 35-1B had concentrations that were less than the Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life. The total lead concentration at location 35-12 and total zinc concentrations at 35-5 and 35-10 are higher compared to previous years. This is attributed to elevated TSS levels associated with these samples

Sample-related quality assurance/quality control (QA/QC) procedures included use of duplicate samples and field blanks. The QA/QC procedures for Pine Point require Quality Control (QC) samples be prepared and analyzed during the sampling period (Teck, 2019). Duplicate samples were collected from the same location and depth as the original field sample. Duplicate samples were prepared (i.e., filtered and preserved as required), the same way as field samples, and then submitted to the appropriate analytical laboratory along with the field sample. These samples were used to check for variability between samples collected at the same time and location measure potential within-site variability and the precision of field methods and laboratory analyses. Copies of the 2020 lab Certificates of Analysis including the lab's QA/QC data are available upon request.

In 2020, four duplicate samples were taken at location 35-1A, three duplicate samples were taken at location 35-1B, and one duplicate sample was taken at location 35-10. In all cases, duplicates were collected for analysis of full water chemistry, the same as the parent samples. Results for all analyzed parameters were compared by calculating the Relative Percent Difference (RPD), where RPD was calculated as the absolute difference of two sampling results, divided by the absolute value of their arithmetic mean, as follows:

$$RPD = \left(\frac{2 \cdot (sample - duplicate)}{(sample + duplicate)}\right) \times 100$$

RPD values of twice the laboratory control criteria for precision were used to identify differences between original and duplicate samples. Teck's database specifies that an RPD value of 30% for values ≥10 times the method detection limit (MDL) should be used to identify differences between original and duplicate samples. RPDs that were calculated if one or both duplicate concentrations were <10 times the MDL are considered a conditional pass due to uncertainty in analytical results within this range.

The results for duplicate samples and calculated RPD values are presented in Appendix B. The results for the duplicate samples with an RPD greater than 50% were flagged to identify notable differences between field and duplicate samples.

Out of the eight duplicate sample sets, there was only one duplicate set collected on September 24, 2020 from 35-10 where there were three parameters (total aluminum, total iron, and total titanium) that were greater than 50%, indicating a notable difference between the original and duplicate samples. Differences are likely the result of sample heterogeneity due to elevated TSS (20.1 – 24.3 mg/L). Analytical results are considered reliable and reproducible for the purposes of interpreting results from the 2020 monitoring program.

7.2 Action Levels

The Action Levels included in the approved Water Treatment Manual (Teck, 2020b) for Station 35-1b are summarized in Table 4. Monitoring endpoints (Action Levels) are only meaningful for Station 35-1b, where treated water is discharged from the facility. The Action Levels for all parameters except for pH are the maximum average concentration specified in the Water Licence. The Action Level for pH is 9.3 standard units (s.u.). This is because pH is the only parameter that historically has deviated from the levels specified in the water licence and because pH is the most sensitive parameter to be affected by water treatment. Setting the Action Level lower than the water licence levels allows the operator time to respond. Action levels for pH were frequently at or above Action Levels in 2020. When above, pH levels were frequently monitored to ensure discharge pH did not reach maximum limits and to assess trends used to determine if levels were rising or falling. Generally, pH levels that approached and were just below the max limit of 9.5 pH units were conducive to achieving zinc concentrations below the Action Level of 0.50 mg/L.

The operator measures pH, total suspended solids (TSS) and or turbidity[2] and concentrations of zinc at least 3 times a day, which provides an opportunity to determine if any of the measured parameters are trending upwards and approaching the Action Levels. If the ***average*** value of samples collected that day exceeds the Action Level, then the response action sequence should be initiated. A single grab sample above the Action Level would not constitute a trigger for response actions, however a single grab sample above the Grab Maximum Concentration would initiate cease of operation and notification to the appropriate authorities.

Table 4 - Action Levels for Station 35-1b

Parameter	Maximum Average Concentration (mg/L)	Maximum Grab Concentration (mg/L)	Action Level for Station 35-1b
pH (in s.u.)	6.5 to 9.5 s.u.	6.5 to 9.5 s.u.	9.3 s.u. maximum
Arsenic, total	0.50	1.00	0.50
Copper, total	0.15	0.30	0.15
Cyanide, total	0.10	0.20	0.10
Lead, total	0.20	0.40	0.20
Zinc, total	0.50	1.00	0.50
Ammonia as N	2.00	4.00	2.00
Total Suspended Solids	25.00	50.00	25.00

In 2020, only pH exceeded the action level on a few occurrences. Total zinc concentrations did trend higher in July affected by higher zinc concentrations at 35-1A and in September likely affected by colder water temperatures. Elevated zinc levels were ultimately responsible for not allowing discharge for 22 days in July, 4 days in August and 3 days in September. In 2020, total suspended solids concentrations within the treatment pond were greatly reduced compared to observances in 2018 and 2019 (Figure 7). As discussed in Section 4.2, favourable wind patterns and optimal deployment of turbidity curtains were likely reasons for the reduction.

7.3 Calibration

The SNP locations 35-1A and 1B are tested regularly during water treatment operations and are tested in the field to determine pH, total suspended solids (TSS), and total zinc concentration. All instruments are calibrated as per the manual instructions with each sample collected. The Hach Company is the manufacturer of the Hach 3900 Spectrophotometer and the Zincon Method with a range of 0-1.5, 0-3.0 mg/l is used to measure zinc levels. This instrument is calibrated as per the manual instructions with each sample collected. The instrument is also shipped away at the end of each water treatment campaign for calibration by the manufacturer.

2 The relationship between Turbidity and TSS is developed for the site by comparing TSS laboratory data with the turbidity meter.

The certificate of calibration is included in Appendix C. The zinc field results are compared to the lab results for SNP location 35-1B. In 2020, there appeared to be a positive correlation of 0.7756. On average the difference between the field results and the lab results was 0.04 mg/L. Field determination of TSS was introduced in 2020. Ability to perform this analysis and obtain immediate results was a vast improvement over the previous methodology relying on Turbidity to TSS correlations. Along with lab TSS values, field TSS values are presented in Table 7. A positive correlation of 0.4964 was calculated for the relationship with an average difference of 0.76 between the field and lab results at SNP location 35-1B.

Table 5 - Water Sampling in the Tailings Containment Area (Station 35-1A) (Part B Item 2) – Lab and Field results

Sampling Date	Lab pH	Field pH	Total Zinc mg/L	Field Zinc mg/	Total Arsenic mg/L	Total Lead mg/L	Total Copper mg/L	TSS mg/L	Cyanide mg/L	Ammonia mg/L
2020-05-19	7.78		1.4		0.00016	0.0382	0.00528	3.4	< 0.0020	< 0.050
2020-06-21	7.96		1.27		0.00016	0.04	0.00608	4.5	< 0.0050	< 0.050
2020-07-03	7.79	8.1	1.45	1.49	0.00012	0.0394	0.00676	3.5	< 0.0020	< 0.050
2020-07-16	8.02	8.41	1.19	1.4	-	-	-	< 3.0	-	-
2020-07-21	8.35	8.35	1.01	1.24	0.00021	0.0331	0.00821	3.3	< 0.0020	< 0.050
2020-07-24	8.3	8.44	0.953	1.09	0.00025	0.0349	0.00772	4.3	< 0.0020	< 0.050
2020-08-07	8.1	8.24	0.96	1.01	0.00019	0.0325	0.00868	< 3.0	< 0.0020	< 0.050
2020-08-14	8.1	8.15	1.00	-	0.00019	0.0311	0.00793	< 3.0	-	< 0.050
2020-08-21	8.13	8.28	0.936	1.83	0.00018	0.0319	0.00731	< 3.0	-	< 0.050
2020-08-28	7.90	8.02	1.06	1.06	0.00017	0.0264	0.00758	< 3.0	-	< 0.050
2020-09-04	7.97	8.07	1.00	1.09	0.00018	0.0412	0.00792	< 3.0	-	< 0.050
Average	8.04	8.23	1.11	1.28	0.00018	0.0349	0.0073	3.36	< 0.0020	< 0.050

Table 6 - Water Levels in the Tailings Pond at 35-1A

Date	Metres (AMSL)
Spring (May 14)	201.68
Summer (July 1)	201.48
Fall (September 22)	200.92

Table 7 - Tailings area discharge at decant structure at SNP 35-1B Post Treatment Effluent Discharge

Sampling Date	Lab pH	Field pH	Field Zinc mg/L	Total Zinc mg/L	Total Arsenic mg/L	Total Lead mg/L	Total Copper mg/L	TSS mg/L	Field TSS mg/L	Cyanide* mg/L	Ammonia mg/L
7/1/2020	8.5	8.6	0.27	0.254	0.00018	0.00571	0.0129	< 3.0	2.33		< 0.050
7/2/2020	8.6	8.63	0.28	0.27	0.00017	0.00646	0.0138	< 3.0	4.37		< 0.050
7/3/2020	8.26	8.8	0.39	0.438	0.00015	0.0104	0.0111	3.1	5.66	< 0.0020	< 0.050
7/7/2020	8.85	9.21	0.34	0.267	0.00018	0.00673	0.00793	5.4	10.33		< 0.050
7/16/2020	8.73	9.24	0.43	0.502				4.7	5.366		
7/17/2020	8.96	9.26	0.56	0.479	0.00015	0.0105	0.00802	4.6	4.66	< 0.0020	< 0.050
7/21/2020	9.05	9.26	0.43	0.282	0.00019	0.00739	0.0073	4.3	6.1	< 0.0020	< 0.050
7/22/2020	9.06	9.3	0.37	0.286	0.00016	0.00814	0.00780	3.8	5.9		< 0.050
7/24/2020	9.25	9.33	0.33	0.275	0.00015	0.00799	0.00795	4.8	7.7		< 0.050
7/26/2020	9.21	9.38	0.36	0.314	0.00017	0.00746	0.00825	< 3.0	4.4		< 0.050
7/27/2020	9.19	9.38	0.36	0.384	0.00017	0.00872	0.00826	< 3.0	4.4		< 0.050
7/28/2020	8.85	9.39	0.42	0.413	0.00016	0.00976	0.00866	< 3.0	4	< 0.0020	< 0.050
8/4/2020	8.96	9.0	0.48	0.497	0.00016	0.0107	0.0121	4.2	8.1		< 0.050
8/5/2020	9.11	9.09	0.48	0.432	0.00018	0.0102	0.0108	3.8	5.5		< 0.050
8/6/2020	9.1	9.15	0.44	0.403	0.00017	0.0102	0.0101	< 3.0	4.7		< 0.050
8/7/2020	9.05	9.29	0.46	0.415	0.00018	0.0109	0.00985	3.5	4.9		< 0.050
8/8/2020	8.5	9.35	0.44	0.378	0.00017	0.00985	0.00895	< 3.0	4.2		< 0.050
8/9/2020	8.75	9.35	0.4	0.349	0.00015	0.0102	0.0091	3	5.5		< 0.050
8/10/2020	8.81	9.4	0.4	0.407	0.00017	0.0106	0.00847	< 3.0	6.6	< 0.0020	< 0.050
8/11/2020	8.85	9.33	0.48	0.414	0.00014	0.0118	0.00823	< 3.0	4.17		< 0.050
8/12/2020	8.93	9.35	0.39	0.375	0.00016	0.011	0.00881	4.5	5.3		< 0.050
8/13/2020	9.27	9.34	0.41	0.349	0.00019	0.0119	0.00898	6.1	8.2		< 0.050
8/14/2020	9.24	9.35	0.33	0.348	0.00018	0.0108	0.00809	3.7	-		< 0.050
8/15/2020	8.92	9.35	0.39	0.361	0.00019	0.0114	0.00837	5	7.3		< 0.050
8/16/2020	9.03	9.43	0.41	0.362	0.00019	0.0111	0.00867	4.2	5.37		< 0.050
8/17/2020	9.04	9.36	0.38	0.353	0.0002	0.011	0.0086	4.7	8	< 0.0020	< 0.050
8/18/2020	8.98	9.42	0.41	0.336	0.00018	0.0105	0.0081	4.7	5.9		< 0.050
8/19/2020	8.78	9.31	0.48	0.415	0.00018	0.0121	0.00837	5.3	7.7		< 0.050
8/20/2020	8.9	9.31	0.39	0.339	0.0002	0.0101	0.00735	< 3.0	7.2		< 0.050
8/21/2020	9.0	9.38	0.44	0.358	0.00018	0.0102	0.00737	< 3.0	4.9		< 0.050
8/22/2020	8.95	9.34	0.49	0.402	0.00016	0.0105	0.00765	< 3.0	3.63		< 0.050
8/23/2020	8.96	9.30	0.49	0.43	0.00017	0.00991	0.0078	< 3.0	4.6		< 0.050
8/26/2020	8.95	9.30	0.46	0.42	0.00019	0.00885	0.0101	< 3.0	4.07	< 0.0020	< 0.050
8/27/2020	9.04	9.39	0.28	0.368	0.00019	0.009	0.00747	3.7	6.62		< 0.050
8/28/2020	9.06	9.33	0.36	0.345	0.00019	0.00867	0.00712	3.8	6.4		< 0.050
8/29/2020	9.01	9.37	0.40	0.376	0.00023	0.00951	0.00753	5.7	6.1		< 0.050
8/30/2020	9.01	9.42	0.39	0.363	0.00022	0.0105	0.00798	6.5	4.77		< 0.050
8/31/2020	9.05	9.45	0.44	0.409	0.00025	0.011	0.00836	5.3	7.8	< 0.0020	< 0.050
9/1/2020	9.34	9.34	0.47	0.428	0.0002	0.0141	0.00815	4.9	6		< 0.050
9/2/2020	8.85	9.44	0.47	0.445	0.00019	0.0122	0.00872	4.3	6.43		< 0.050
9/3/2020	9.18	9.45	0.49	0.434	0.00017	0.0159	0.00794	4.2	6.93		< 0.050
9/4/2020	9.21	9.35	0.47	0.435	0.00019	0.0148	0.00846	4.2	6.97		< 0.050
9/5/2020	9.12	9.48	0.49	0.425	0.00019	0.0145	0.00728	8	6.23		< 0.050
9/6/2020	9.21	9.45	0.48	0.394	0.00017	0.0114	0.00738	4.6	4.2		< 0.050
9/7/2020	9.22	9.44	0.52	0.443	0.00019	0.0122	0.00712	5.6	5.33	< 0.0020	< 0.050
9/9/2020	9.35	9.21	0.48	0.423	0.00021	0.0151	0.00769	4.3	6.47		< 0.050
9/10/2020	8.91	9.42	0.52	0.531	0.00016	0.0132	0.00851	6.4	7.13		< 0.050
9/12/2020	8.69	9.45	0.43	0.426	0.00018	0.0102	0.0079	4.1	5.5		< 0.050
9/13/2020	8.68	9.47	0.48	0.416	0.00016	0.0102	0.0073	3.6	6.3		< 0.050
9/15/2020	8.98	9.45	0.45	0.414	0.00021	0.00976	0.0076	4.0	4.8		< 0.050
9/16/2020	8.98	9.49	0.46	0.428	0.00019	0.0109	0.0079	4.8	6.6		< 0.050
Action Level Concentration	9.30	9.30	0.50	0.50	0.50	0.20	0.15	25.0	25.0		
Average Sample Concentration	8.97	9.31	0.42	0.39	0.0002	0.010	0.009	4.2	5.8	< 0.0020	< 0.050
EQC Max. Average	6.50 - 9.50	6.50 - 9.50	0.50	0.50	0.50	0.20	0.15	25	25	0.10	2.00
Max Sample Concentration	9.35	9.49	0.56	0.531	0.00025	0.016	0.014	8.0	10.3	< 0.0020	< 0.050
EQC Max Grab	6.50 - 9.50	6.50 - 9.50	1.00	1.00	1.00	0.40	0.30	50.0	50.0	0.20	4.00

*Cyanide is analyzed weekly

Table 8- Results of Fall SNP Locations

Sample Location	Sampling Date	Lab pH	Total Arsenic (mg/L)	Total Copper (mg/L)	Total Cyanide (mg/L)	Total Lead (mg/L)	Total Zinc (mg/L)	Ammonia (mg/L)	TSS (mg/L)
CCME Guideline	-	6.5 - 9.0	0.005	0.00266 – 0.004[a]	0.005	0.00380 – 0.007 [a]	0.0089 – 0.033[b]	0.499[c]	25mg/L increase from background
35-4	5/21/2017	8.10	0.00026	0.00086	-	0.00049	0.0153	-	-
	9/25/2017	8.34	0.00053	<0.00050	-	0.00007	<0.0030	-	-
	5/18/2018	7.64	0.00050	<0.00250	< 0.002	<0.00025	0.0150	< 0.05	< 3
	7/23/2018	8.31	0.00072	0.00109	< 0.002	0.0001	<0.0030	< 0.05	< 3.0
	10/3/2018	8.13	0.00055	<0.00050	-	0.00019	<0.0030	--	24.1
	9/27/2019	8.19	0.00065	< 0.00050	< 0.002	0.000057	< 0.0030	0.091	< 3.0
	9/24/2020	8.14	0.00045	<0.00050	*	0.00007	0.00550	*	< 3.0
35-5	5/21/2017	8.12	0.00034	<0.00050	-	0.00012	<0.0030	-	-
	9/25/2017	8.34	0.00029	0.00075	-	0.00021	0.0096	-	-
	10/3/2018	8.08	0.00050	0.00132	-	0.00056	0.0059	-	116
	9/27/2019	8.13	0.00041	< 0.00050	< 0.002	0.000087	< 0.0030	< 0.05	6.0
	9/24/2020	8.19	0.00025	0.00124	*	0.00018	0.0213	*	< 3.0
35-6	5/21/2017	8.12	0.00039	<0.00050	-	0.00011	<0.0030	-	-
	9/25/2017	8.08	0.00101	<0.00050	-	0.0001	<0.0030	-	-
	10/3/2018	8.02	0.00150	0.00234	-	0.0012	0.117	-	80.8
	n/a[d]	-	-	-	-	-	-	-	-
	9/24/2020	8.17	0.00044	<0.00050	*	0.00009	0.0041	*	4.3
35-9	5/21/2017	8.09	0.00041	<0.00050	-	<0.00005	<0.0030	-	-
	9/25/2017	8.21	0.00055	<0.00050	-	<0.00005	<0.0030	-	-
	10/3/2018	8.25	0.00107	<0.00050	-	0.00037	0.0031	-	82.5
	9/27/2019	7.82	0.00045	< 0.00050	< 0.002	0.00007	< 0.0030	< 0.05	13.2
	9/24/2020	8.11	0.00042	<0.00050	*	<0.00005	<0.0030	*	3.1
35-10	5/21/2017	8.02	0.00032	0.00120	-	<0.00005	<0.0030	-	-
	9/25/2017	8.08	0.00045	0.00143	-	0.00008	<0.0030	-	-
	10/3/2018	8.05	0.00054	0.00170	-	0.00033	<0.0030	-	121
	9/27/2019	7.89	0.00055	0.00167	< 0.002	0.000359	< 0.0030	< 0.05	30.7
	9/24/2020	8.19	0.00065	0.00207	*	0.00048	0.0132	*	20.1
35-12	5/21/2017	8.18	0.00047	<0.00050	-	<0.00005	<0.0030	-	-
	9/25/2017	8.13	0.00043	<0.00050	-	<0.00005	<0.0030	-	-
	10/3/2018	8.26	0.00051	<0.00050	-	<0.00005	<0.0030	-	66.1
	9/27/2019	8.03	0.00052	< 0.00050	< 0.002	< 0.00005	< 0.0030	0.092	3.9
	9/24/2020	8.19	0.00050	<0.00050	*	0.00554	<0.0030	*	31.1

[a] CCME Water Quality Guidelines for the Protection of Aquatic Life for Total Copper and Lead calculated using water hardness concentration of 115 mg/L, which was the lowest concentration measured in any of the SNP locations. The Total Copper Guideline is 0.004 mg/L and Lead Guideline is 0.007 mg/L at hardness > 180 mg/L which is applicable to all of the sample locations except for 35-10.

[b] CCME Water Quality Guideline for the Protection of Aquatic Life for Dissolved Zinc was used to compare total zinc concentrations measured in the SNP locations, which is a conservative comparison since total concentrations are greater than dissolved concentrations. The water quality guideline range was calculated using water hardness concentration of 115 mg/L and 399 mg/L, pH of 8.0 and assuming the most conservative dissolved organic carbon of 0.5 mg/L, since DOC was not measured in samples.

[C] CCME Water Quality Guideline for the Protection of Aquatic Life for Ammonia was calculated using pH of 8.0 and water temperature of 20°C (assuming summer conditions in shallow ponds).

[d] 35-6 was not sampled in 2019 because dense peat prohibited on-foot access to standing water at the pond's centre (conditions were drier or frozen during previous sampling events).

* Parameter is not a Licence requirement for these SNP locations

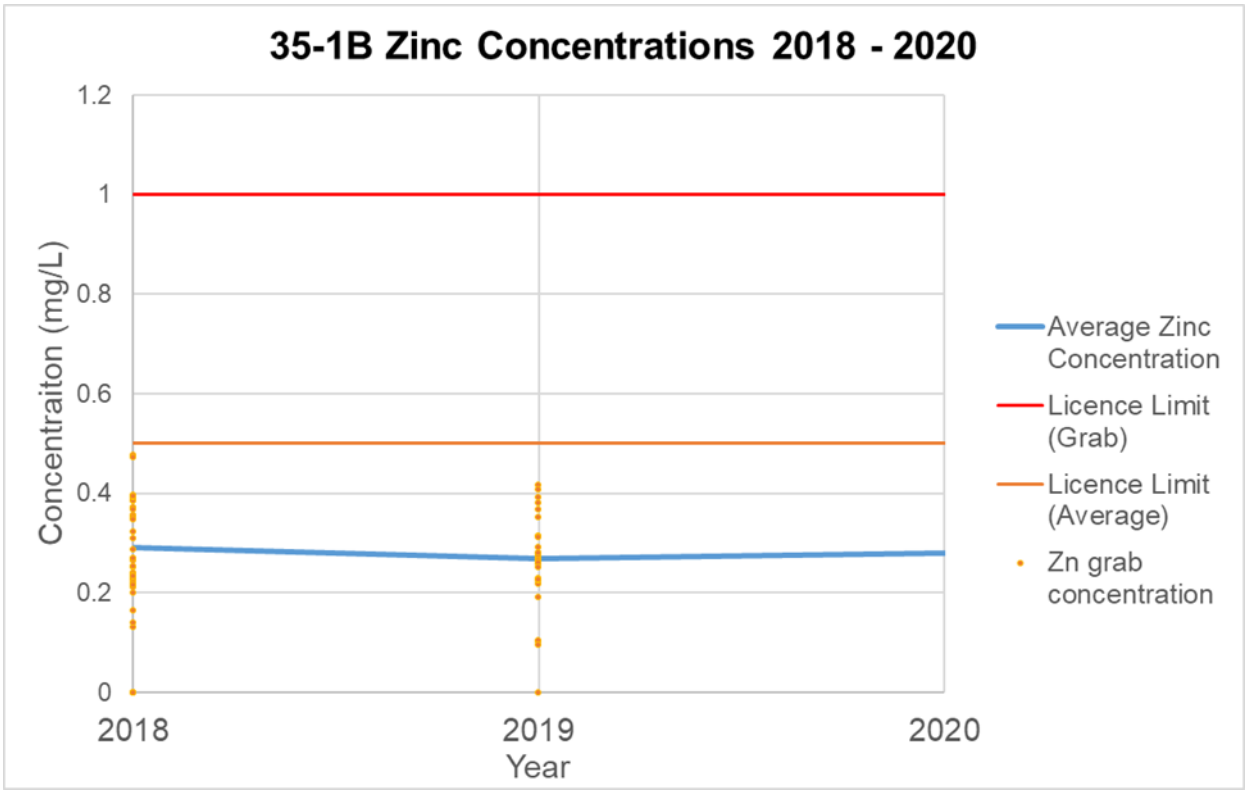

Figure 3: 35-1B Zinc Concentrations 2018 – 2020

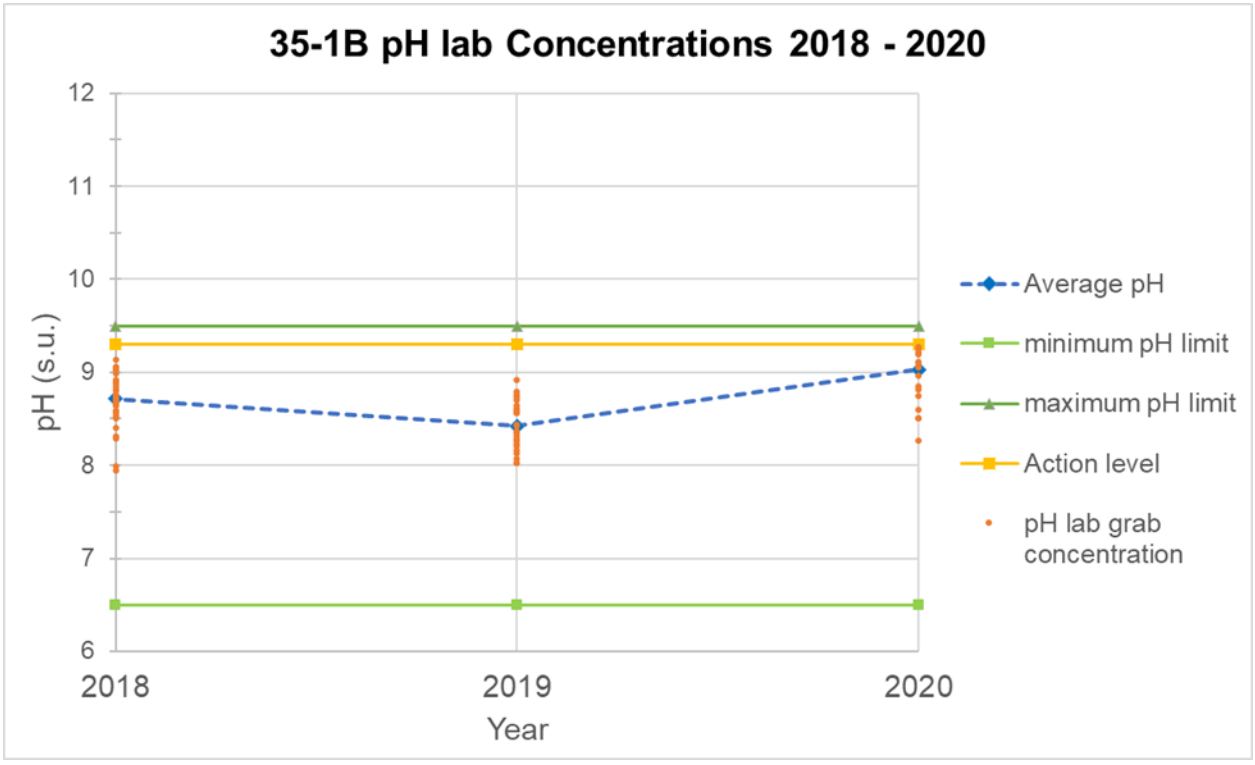

Figure 4: 35-1B pH Concentrations 2018 - 2020

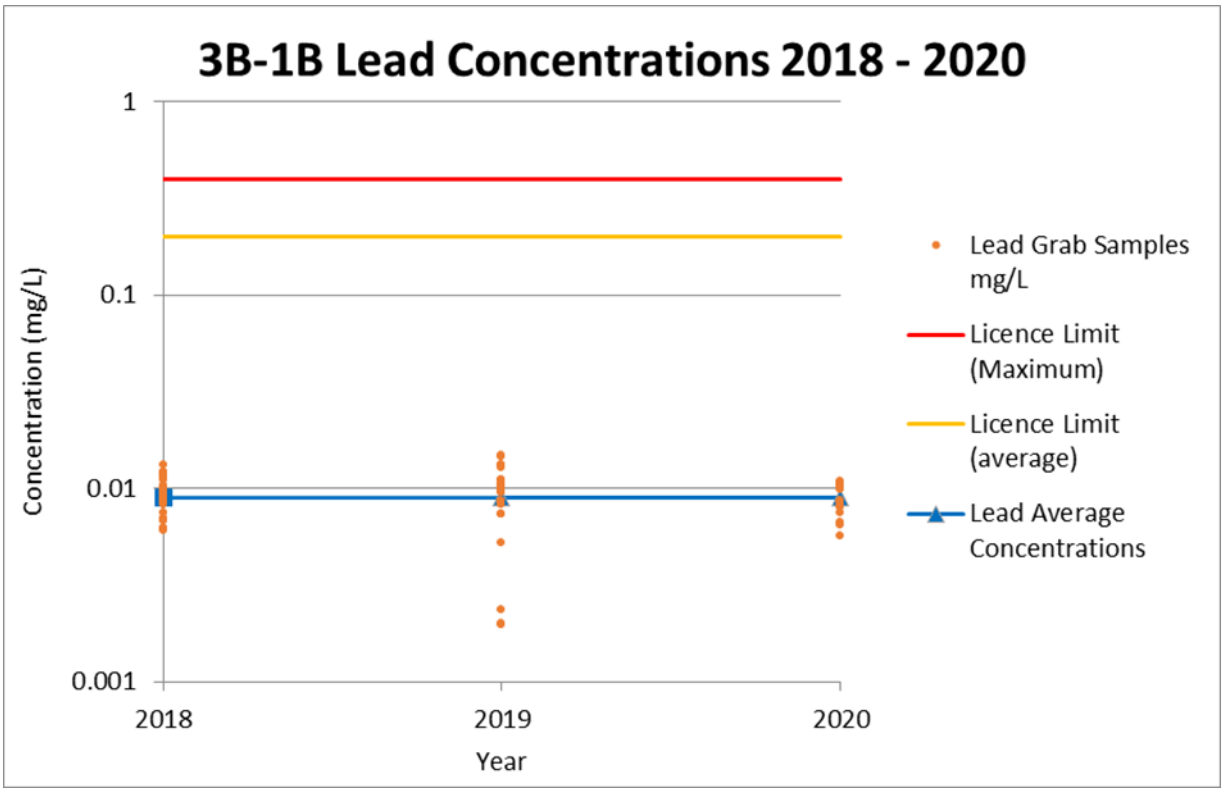

Figure 5: 35-1B Lead Concentrations 2018 - 2020

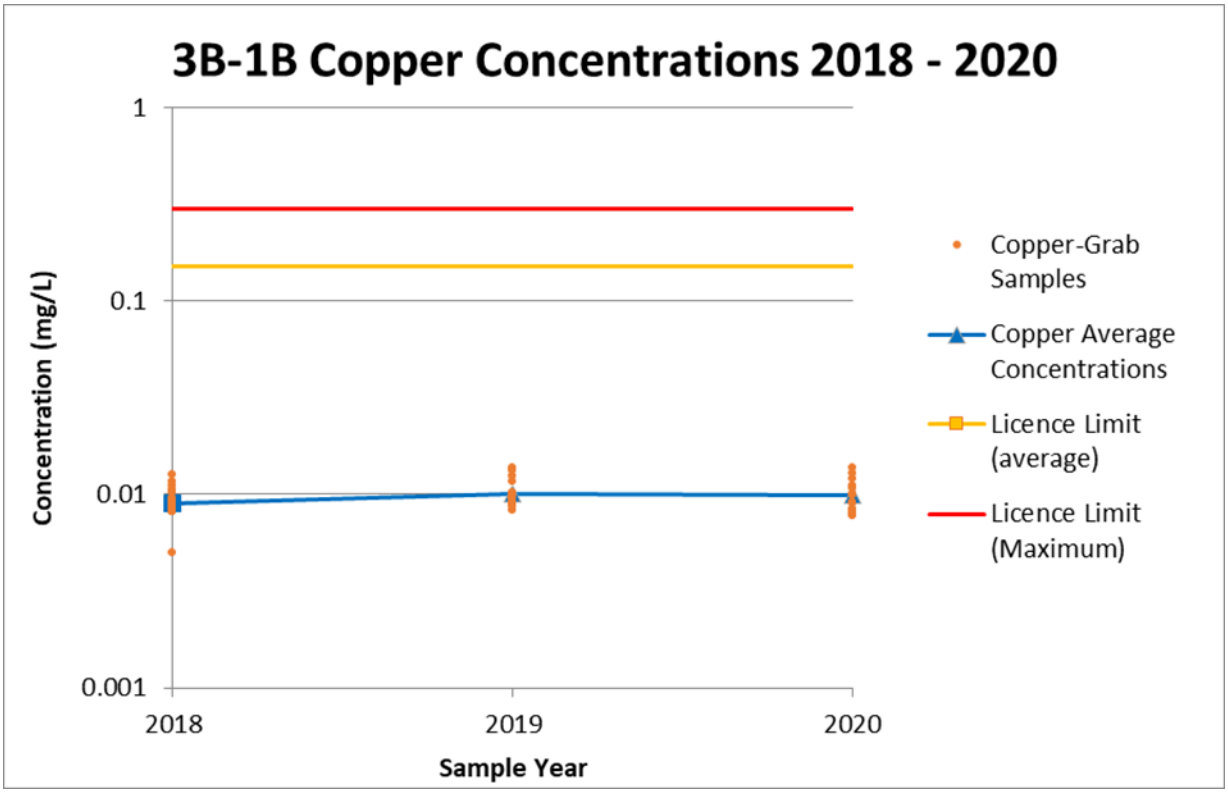

Figure 6: 35-1B Copper Concentrations 2018 - 2020

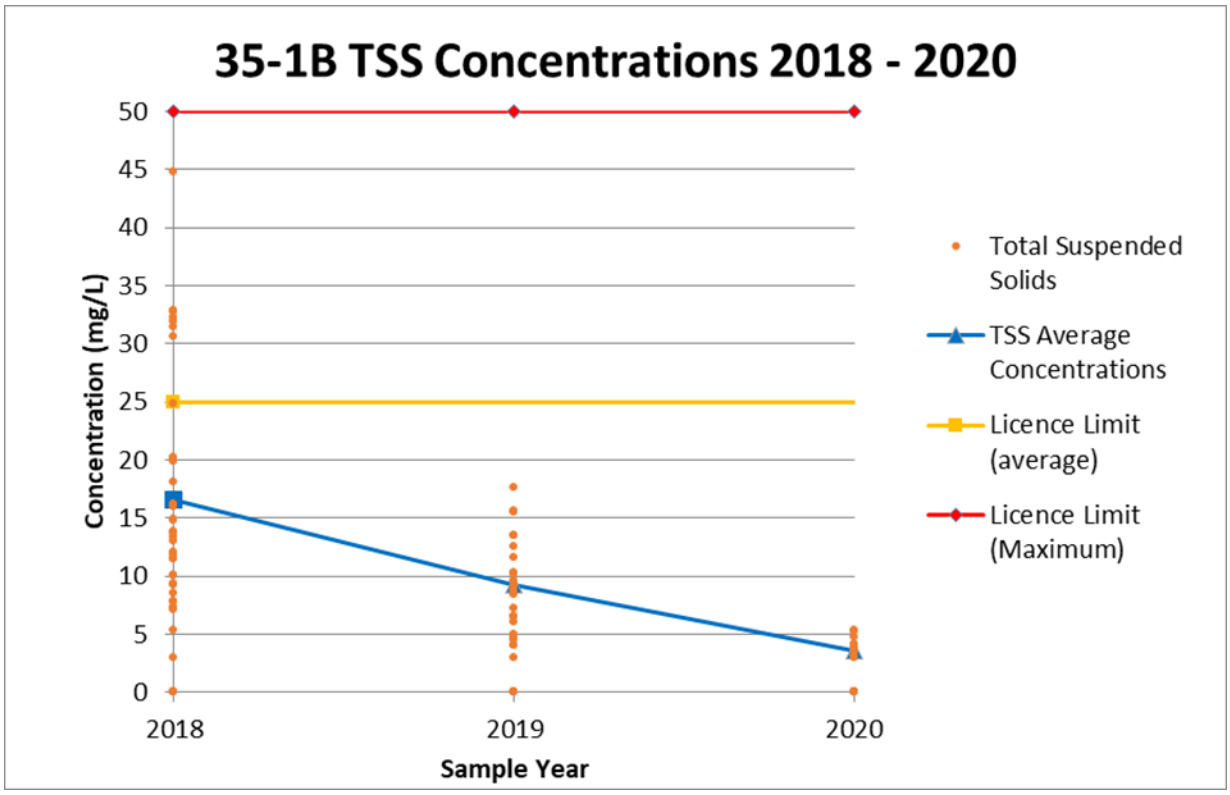

Figure 7: 35-1B TSS Concentrations 2018 - 2020

8.0 Regulator Inspections

An annual water licence site inspection was conducted by the Water Resource Officer Wendy Bidwell from Department of Lands, South Slave Region on July 6, 2020. The inspector met the water treatment operators to review the operations. An inspection report was not received.

A site inspection was also conducted by Resource Management Officers Jayda Robillard and Norm McCowan on Sept. 28, 2020. The inspectors met with Morgan Lypka of Teck, and Zack Smith of Golder to inspection the geotechnical drilling operations. As per the inspection report received on Oct 8. 2020 all aspects of the operation appeared satisfactory at the time of the inspection.

9.0 References

Golder Associates Ltd. (2020). *2020 Annual Inspection, Pine Point Tailings Impoundment, Pine Point, NT, dated 16 December 2020.*

Teck. (2019). *Pine Point Tailings Impoundment Area Quality Assurance and Quality Control Plan for the Surveillance Network Program.*

Teck. (2020). *Operations, Maintenance and Surveillance Plan for Pine Point Tailings Impoundment Area.*

Teck. (2020b). *Water Treatment Manual, revised Aug. 2020.*

APPENDIX A
SNP LABORATORY ANALYSIS

TECK METALS LTD.
ATTN: Neil MacDonald
601 Knighton Road
Kimberley BC V1A 3E1

Date Received: 26-SEP-20
Report Date: 27-SEP-20 18:51 (MT)
Version: FINAL

Client Phone: 250-427-8404

Certificate of Analysis

Lab Work Order #: L2508722

Project P.O. #: 9865
Job Reference: PINE POINT
C of C Numbers:
Legal Site Desc:

Kieran Tordoff
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2508722-1	L2508722-2	L2508722-3	L2508722-4	L2508722-5
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20
	Sampled Time	14:45	15:15	13:15	11:15	12:00
	Client ID	PP_35-4_20200924	PP_35-5_20200924	PP_35-6_20200924	PP_35-9_20200924	PP_35-10_20200924
Grouping	**Analyte**					
WATER						
Physical Tests	Hardness (as CaCO3) (mg/L)	302 HTC	475 HTC	614 HTC	697 HTC	155 HTC
		310	468	599	700	151
	pH (pH)	8.14	8.19	8.17	8.11	8.19
	Total Suspended Solids (mg/L)	<3.0	<3.0	4.3	3.1	20.1
Anions and Nutrients	Ammonia, Total (as N) (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Total Metals	Aluminum (Al)-Total (mg/L)	<0.0030	<0.0030	0.0041	0.0032	0.176
	Antimony (Sb)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00011
	Arsenic (As)-Total (mg/L)	0.00045	0.00025	0.00044	0.00042	0.00065
	Barium (Ba)-Total (mg/L)	0.00799	0.0139	0.0131	0.0174	0.0556
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Boron (B)-Total (mg/L)	0.050	0.026	0.072	0.079	0.018
	Cadmium (Cd)-Total (mg/L)	<0.0000050	0.0000106	<0.0000050	<0.0000050	0.0000250
	Calcium (Ca)-Total (mg/L)	71.8	118	142	156	42.9
	Chromium (Cr)-Total (mg/L)	0.00057	<0.00010	<0.00010	<0.00010	0.00027
	Cobalt (Co)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00022
	Copper (Cu)-Total (mg/L)	<0.00050	0.00124	<0.00050	<0.00050	0.00207
	Iron (Fe)-Total (mg/L)	<0.010	0.015	0.026	0.077	0.390
	Lead (Pb)-Total (mg/L)	0.000070	0.000178	0.000093	<0.000050	0.000482
	Lithium (Li)-Total (mg/L)	0.0093	0.0066	0.0121	0.0190	0.0050
	Magnesium (Mg)-Total (mg/L)	29.8	42.3	59.3	75.4	11.7
	Manganese (Mn)-Total (mg/L)	0.00576	0.00593	0.00880	0.00944	0.0164
	Mercury (Hg)-Total (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
	Molybdenum (Mo)-Total (mg/L)	0.000103	0.00191	0.000601	0.000091	0.000658
	Nickel (Ni)-Total (mg/L)	<0.00050	0.00064	<0.00050	<0.00050	0.00184
	Potassium (K)-Total (mg/L)	1.37	1.77	2.19	2.33	1.31
	Selenium (Se)-Total (mg/L)	0.000057	0.000064	0.000060	<0.000050	0.000210
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	5.00	6.78	17.1	17.6	9.14
	Thallium (Tl)-Total (mg/L)	<0.000010	0.000021	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	0.00401
	Uranium (U)-Total (mg/L)	<0.000010	0.000141	0.000015	0.000142	0.000433
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	0.00101
	Zinc (Zn)-Total (mg/L)	0.0055	0.0213	0.0041	<0.0030	0.0132
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)	<0.0010	<0.0010	0.0014	<0.0010	0.0017

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2508722-6	L2508722-7	L2508722-8	L2508722-9	L2508722-10
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20
	Sampled Time	12:50	11:35	12:10	16:30	
	Client ID	PP_35-12_20200924	PP_35-13_20200924	PP_DUP_20200924	PP_FB_20200924	PP_TB_20200924
Grouping	**Analyte**					
WATER						
Physical Tests	Hardness (as CaCO3) (mg/L)	459 HTC	651 HTC	155 HTC	<0.13	<0.13 HTC
		459	653	152	<0.13 HTC	<0.13
	pH (pH)	8.19	8.15	8.22	6.60	
	Total Suspended Solids (mg/L)	31.1	5.1	24.3	<3.0	
Anions and Nutrients	Ammonia, Total (as N) (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Total Metals	Aluminum (Al)-Total (mg/L)	0.0071	<0.0030	0.742	<0.0030	<0.0030
	Antimony (Sb)-Total (mg/L)	<0.00010	<0.00010	0.00014	<0.00010	<0.00010
	Arsenic (As)-Total (mg/L)	0.00050	0.00041	0.00096	<0.00010	<0.00010
	Barium (Ba)-Total (mg/L)	0.0176	0.0159	0.0611	<0.00010	<0.00010
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Boron (B)-Total (mg/L)	0.051	0.078	0.020	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	<0.0000050	<0.0000050	0.0000311	<0.0000050	<0.0000050
	Calcium (Ca)-Total (mg/L)	109	149	42.3	<0.050	<0.050
	Chromium (Cr)-Total (mg/L)	0.00014	0.00016	0.00119	0.00021	<0.00010
	Cobalt (Co)-Total (mg/L)	<0.00010	<0.00010	0.00047	<0.00010	<0.00010
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050	0.00258	<0.00050	<0.00050
	Iron (Fe)-Total (mg/L)	0.022	0.012	1.24	<0.010	<0.010
	Lead (Pb)-Total (mg/L)	0.00554	<0.000050	0.000743	<0.000050	<0.000050
	Lithium (Li)-Total (mg/L)	0.0113	0.0165	0.0056	<0.0010	<0.0010
	Magnesium (Mg)-Total (mg/L)	45.0	67.9	12.1	<0.0050	<0.0050
	Manganese (Mn)-Total (mg/L)	0.00762	0.00368	0.0218	<0.00010	<0.00010
	Mercury (Hg)-Total (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
	Molybdenum (Mo)-Total (mg/L)	0.000112	0.000126	0.000756	<0.000050	<0.000050
	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	0.00290	<0.00050	<0.00050
	Potassium (K)-Total (mg/L)	1.61	1.78	1.51	<0.050	<0.050
	Selenium (Se)-Total (mg/L)	0.000071	<0.000050	0.000258	<0.000050	<0.000050
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	7.30	17.1	8.76	<0.050	<0.050
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010	0.000015	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	0.00038	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.00030	<0.00030	0.0167	<0.00030	<0.00030
	Uranium (U)-Total (mg/L)	0.000225	0.000338	0.000492	<0.000010	<0.000010
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	0.00253	<0.00050	<0.00050
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	0.0075	<0.0030	<0.0030
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)	0.0011	<0.0010	0.0017	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2508722-1	L2508722-2	L2508722-3	L2508722-4	L2508722-5
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20
	Sampled Time	14:45	15:15	13:15	11:15	12:00
	Client ID	PP_35-4_20200924	PP_35-5_20200924	PP_35-6_20200924	PP_35-9_20200924	PP_35-10_20200924
Grouping	**Analyte**					
WATER						
Dissolved Metals	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00011
	Arsenic (As)-Dissolved (mg/L)	0.00043	0.00020	0.00041	0.00039	0.00036
	Barium (Ba)-Dissolved (mg/L)	0.00801	0.0142	0.0133	0.0170	0.0478
	Beryllium (Be)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Boron (B)-Dissolved (mg/L)	0.049	0.025	0.070	0.076	0.018
	Cadmium (Cd)-Dissolved (mg/L)	<0.0000050	0.0000064	<0.0000050	<0.0000050	0.0000060
	Calcium (Ca)-Dissolved (mg/L)	75.1	120	146	152	41.3
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Copper (Cu)-Dissolved (mg/L)	<0.00020	0.00105	<0.00020	<0.00020	0.00137
	Iron (Fe)-Dissolved (mg/L)	<0.010	0.012	0.015	0.042	<0.010
	Lead (Pb)-Dissolved (mg/L)	<0.000050	0.000126	0.000061	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)	0.0091	0.0066	0.0125	0.0191	0.0049
	Magnesium (Mg)-Dissolved (mg/L)	29.8	42.8	60.9	76.9	11.5
	Manganese (Mn)-Dissolved (mg/L)	0.00499	0.00573	0.00678	0.00450	0.00258
	Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
	Molybdenum (Mo)-Dissolved (mg/L)	0.000146	0.00194	0.000618	0.000081	0.000878
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	0.00059	<0.00050	<0.00050	0.00125
	Potassium (K)-Dissolved (mg/L)	1.20	1.74	2.17	2.22	1.21
	Selenium (Se)-Dissolved (mg/L)	0.000057	0.000098	0.000783 DTSE	0.000061	0.000218
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	4.91	6.83	16.3	16.9	8.80
	Thallium (Tl)-Dissolved (mg/L)	<0.000010	0.000019	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Uranium (U)-Dissolved (mg/L)	<0.000010	0.000142	0.000016	0.000146	0.000400
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Dissolved (mg/L)	<0.0010	0.0171	0.0030	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L2508722-6	L2508722-7	L2508722-8	L2508722-9	L2508722-10
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20	24-SEP-20
Sampled Time	12:50	11:35	12:10	16:30	
Client ID	PP_35-12_20200924	PP_35-13_20200924	PP_DUP_20200924	PP_FB_20200924	PP_TB_20200924
Grouping / **Analyte**					
WATER					
Dissolved Metals Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	0.00012	<0.00010	<0.00010
Arsenic (As)-Dissolved (mg/L)	0.00040	0.00038	0.00035	<0.00010	<0.00010
Barium (Ba)-Dissolved (mg/L)	0.0158	0.0151	0.0480	<0.00010	<0.00010
Beryllium (Be)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Boron (B)-Dissolved (mg/L)	0.045	0.072	0.017	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	<0.0000050	<0.0000050	0.0000059	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved (mg/L)	107	150	42.1	<0.050	<0.050
Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	0.00012	<0.00010	<0.00010
Cobalt (Co)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper (Cu)-Dissolved (mg/L)	<0.00020	<0.00020	0.00148	<0.00020	<0.00020
Iron (Fe)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium (Li)-Dissolved (mg/L)	0.0109	0.0170	0.0050	<0.0010	<0.0010
Magnesium (Mg)-Dissolved (mg/L)	46.9	67.6	11.5	<0.0050	<0.0050
Manganese (Mn)-Dissolved (mg/L)	0.00152	0.00416	0.00274	<0.00010	<0.00010
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved (mg/L)	0.000168	0.000190	0.000853	<0.000050	<0.000050
Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	0.00124	<0.00050	<0.00050
Potassium (K)-Dissolved (mg/L)	1.55	1.75	1.25	<0.050	<0.050
Selenium (Se)-Dissolved (mg/L)	0.000309 DTSE	0.000111	0.000229	<0.000050	<0.000050
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium (Na)-Dissolved (mg/L)	6.86	15.7	8.92	<0.050	<0.050
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	0.00028	<0.00010
Titanium (Ti)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Uranium (U)-Dissolved (mg/L)	0.000215	0.000338	0.000432	<0.000010	<0.000010
Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Antimony (Sb)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Zinc (Zn)-Dissolved	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Total	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Total	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Total	MS-B	L2508722-1, -10, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DTSE	Dissolved Se concentration exceeds total. Positive bias on D-Se suspected due to signal enhancement from volatile selenium species. Contact ALS if an alternative test to address this interference is needed.
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ETL-HARDNESS-DIS-ED	Water	Hardness (from Dissolved Ca and Mg)	APHA 2340 B-Calculation
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculation
HG-D-CVAA-ED	Water	Dissolved Mercury in Water by CVAAS	APHA 3030B/EPA 1631E (mod)
Water samples are filtered (0.45 um), preserved with hydrochloric acid, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.			
HG-T-CVAA-ED	Water	Total Mercury in Water by CVAAS	EPA 1631E (mod)
Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.			
MET-D-CCMS-ED	Water	Dissolved Metals in Water by CRC ICPMS	APHA 3030B/6020A (mod)
Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.			
Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.			
MET-T-CCMS-ED	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020A (mod)
Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.			
Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.			
NH3-COL-ED	Water	Ammonia in Water by Colour	APHA 4500 NH3-NITROGEN (AMMONIA)
This analysis is carried out using procedures adapted from APHA Method 4500 NH3 "NITROGEN (AMMONIA)". Ammonia is determined using the automated phenate colourimetric method.			
PH-ED	Water	pH	APHA 4500 H-Electrode
All samples analyzed by this method for pH will have exceeded the 15 minute recommended hold time from time of sampling (field analysis is recommended for pH where highly accurate results are needed)			
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
Gravimetric determination of solids in waters by filtration and drying filter at 104 degrees Celsius.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
mg/kg - milligrams per kilogram based on dry weight of sample.
mg/kg wwt - milligrams per kilogram based on wet weight of sample.
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Chain of Custody (COC) / Analytical Request Form - Annual

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2508722-COFC

COC Number: 2020 -

Page 1 of 1

Report To	Neil MacDonald	Report Format / Distribution	Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	Teck Metals Ltd.	Select Report Format: ☑PDF ☐EXCEL ☑EDD (DIGITAL)	R ☑Regular (Standard TAT if received by 3 pm - business days)
Contact:	Neil MacDonald	Quality Control (QC) Report with Report ☑ Yes ☐ No	P ☐Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
Address:	Bag 2000, Kimberley, BC V1A 3E1	☐Criteria on Report - provide details below if box checked	E ☐Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
Phone:	250-427-8415	Select Distribution: ☑EMAIL ☑MAIL ☐FAX	E2 ☐Same day or weekend emergency - contact ALS to confirm TAT and surcharge
		Email 1 or Fax Neil.MacDonald@teck.com	Specify Date Required for E2,E or P:
		Email 2 teckkimb@equisonline.com crobinson@barr.com	

Invoice To	Same as Report To ☐ Yes ☐ No	Select Invoice Distribution: ☑EMAIL ☑MAIL ☐FAX
	Copy of Invoice with Report ☑ Yes ☐ No	
Company:	Teck Metals Ltd.	Email 1 or Fax roxanne.menear@teck.com
Contact:	Roxanne Menear	Email 2

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID:	Cost Center:
Job #:	Pine Point	GL Account:	Routing Code:
PO / AFE:	9865	Activity Code:	
LSD:		Location:	

ALS Lab Work Order # (lab use only): L2508722 **ALS Contact:** Kieren **Sampler:** Barr (ETB)

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Total Metals		TSS	pH	Ammonia as N		Dissolved Mercury	Total Mercury	Dissolved Metals					Number of Containers
					P				P	P	F/P	P	F/P					
	PP_35-4_20200924	24-SEP-20	14:45	Water	E		E	E	E		E	E	E					
	PP_35-5_20200924		15:15	Water	E		E	E	E		E	E	E					
	PP_35-6_20200924		13:15	Water	E		E	E	E		E	E	E					
	PP_35-9_20200924		11:15	Water	E		E	E	E		E	E	E					
	PP_35-10_20200924		12:00	Water	E		E	E	E		E	E	E					
	PP_35-12_20200924		12:50	Water	E		E	E	E		E	E	E					
	PP_35-13_20200924		11:35	Water	E		E	E	E		E	E	E					
	PP_DUP_20200924		12:10	Water	E		E	E	E		E	E	E					
	PP_FB_20200924		16:30	Water	E		E	E	E		E	E	E					
	PP_TB_20200924	↓	N/A	Water	E		E	E	E		E	E	E					

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ Yes ☑ No

Are samples for human drinking water use? ☐ Yes ☑ No

Special Instructions / Specify Criteria to add on report (client Use)

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice packs Yes ☐ No ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
1.9					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	Sep. 25/20	5:00 pm		Sep 26/20	11:15 AM			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0326e v09 Front/04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

APPENDIX B
QA/QC RPD ANALYSIS

Location:	PP_35-1A	PP_35-1A
Sample ID:	PP_35-1A_20200703	PP_DUP_20200703
Date Sampled:	7/3/2020	7/3/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	<0.00050	<0.0005	0.00%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0156	0.0144	8.00%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00013	0.00013	0.00%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00012	0.00017	34.48%	Pass-1
BARIUM, D	0.0001	0.0001	mg/l	0.0226	0.0223	1.34%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0224	0.0226	0.89%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.011	0.011	0.00%	Pass
BORON, T	0.01	0.01	mg/l	0.011	0.011	0.00%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.000939	0.000879	6.60%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.00107	0.00107	0.00%	Pass
CALCIUM, D	0.05	0.05	mg/l	72.7	72.6	0.14%	Pass
CALCIUM, T	0.05	0.05	mg/l	72.2	71.5	0.97%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
COBALT, D	0.0001	0.0001	mg/l	0.00040	0.0004	0.00%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00040	0.0004	0.00%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00250	0.00244	2.43%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00676	0.0069	2.05%	Pass
CYANIDE, T	0.002	0.002	mg/l	<0.0010	<0.001	0.00%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	243	244	0.41%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	241	242	0.41%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.036	0.033	8.70%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.0287	0.028	2.47%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.0394	0.0387	1.79%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0016	0.0015	6.45%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0015	0.0015	0.00%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	14.9	15.2	1.99%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	14.8	15.5	4.62%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.0161	0.0162	0.62%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.0186	0.0192	3.17%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000821	0.000906	9.84%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000691	0.000796	14.12%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00198	0.00206	3.96%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00197	0.00206	4.47%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	7.79	8.03	3.03%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.14	1.14	0.00%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.17	1.17	0.00%	Pass
SELENIUM, D	0.05	0.05	ug/l	0.06	<0.025	82.35%	Pass-1
SELENIUM, T	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	1.85	1.86	0.54%	Pass
SODIUM, T	0.05	0.05	mg/l	1.86	1.88	1.07%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000277	0.000279	0.72%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000283	0.000272	3.96%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00050	0.00039	24.72%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	3.5	<1.5	80.00%	Pass-1
URANIUM, D	0.00001	0.00001	mg/l	0.000107	0.00011	2.76%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000112	0.000114	1.77%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	1.38	1.41	2.15%	Pass
ZINC, T	0.003	0.003	mg/l	1.45	1.46	0.69%	Pass

RPD Control Limits

Pass - RPD <= 30%

Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit

Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit

Exceeds RPD Control Limits

Location:	PP_35-1A	PP_35-1A
Sample ID:	PP_35-1A_20200807	PP_DUP_20200807
Date Sampled:	8/7/2020	8/7/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	<0.00050	<0.0005	0.00%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0190	0.0166	13.48%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00012	0.00013	8.00%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00019	0.00024	23.26%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0224	0.023	2.64%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0224	0.0221	1.35%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.012	0.012	0.00%	Pass
BORON, T	0.01	0.01	mg/l	0.014	0.014	0.00%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.000537	0.000511	4.96%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000662	0.000648	2.14%	Pass
CALCIUM, D	0.05	0.05	mg/l	82.0	81.6	0.49%	Pass
CALCIUM, T	0.05	0.05	mg/l	80.1	81.4	1.61%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	0.00021	0.00016	27.03%	Pass
COBALT, D	0.0001	0.0001	mg/l	0.00029	0.0003	3.39%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00033	0.00031	6.25%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00526	0.00519	1.34%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00868	0.00863	0.58%	Pass
CYANIDE, T	0.002	0.002	mg/l	<0.0010	<0.001	0.00%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	277	276	0.36%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	272	276	1.46%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.048	0.049	2.06%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.0207	0.0209	0.96%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.0325	0.0327	0.61%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0020	0.0019	5.13%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0020	0.002	0.00%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	17.6	17.5	0.57%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	17.5	17.6	0.57%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.0151	0.0155	2.61%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.0181	0.0185	2.19%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000616	0.000594	3.64%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000698	0.000668	4.39%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00147	0.00155	5.30%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00171	0.00166	2.97%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	8.10	8.25	1.83%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.19	1.23	3.31%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.22	1.19	2.49%	Pass
SELENIUM, D	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SELENIUM, T	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	1.99	2.02	1.50%	Pass
SODIUM, T	0.05	0.05	mg/l	2.05	2	2.47%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000279	0.000281	0.71%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000295	0.000292	1.02%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00044	0.00039	12.05%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	<1.5	<1.5	0.00%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000132	0.000128	3.08%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000167	0.000176	5.25%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	0.889	0.905	1.78%	Pass
ZINC, T	0.003	0.003	mg/l	0.960	0.943	1.79%	Pass

RPD Control Limits

Pass - RPD <= 30%

Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit

Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit

Exceeds RPD Control Limits

Location:	PP_35-1A	PP_35-1A
Sample ID:	PP_35-1A_20200821	PP_DUP_20200821
Date Sampled:	8/21/2020	8/21/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0012	0.0012	0.00%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0123	0.0133	7.81%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00014	0.00013	7.41%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00018	0.00019	5.41%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0234	0.0238	1.69%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0231	0.0231	0.00%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.013	0.012	8.00%	Pass
BORON, T	0.01	0.01	mg/l	0.013	0.012	8.00%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.000646	0.000632	2.19%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000655	0.000687	4.77%	Pass
CALCIUM, D	0.05	0.05	mg/l	83.7	82.5	1.44%	Pass
CALCIUM, T	0.05	0.05	mg/l	82.2	81.4	0.98%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	0.00013	0.00014	7.41%	Pass
COBALT, D	0.0001	0.0001	mg/l	0.00030	0.0003	0.00%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00031	0.0003	3.28%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00572	0.00577	0.87%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00731	0.00747	2.17%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	281	275	2.16%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	277	273	1.45%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.043	0.044	2.30%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.0234	0.0236	0.85%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.0319	0.0325	1.86%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0019	0.0019	0.00%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0022	0.002	9.52%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	17.4	16.8	3.51%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	17.5	17	2.90%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.0133	0.0134	0.75%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.0152	0.0153	0.66%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000656	0.000658	0.30%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000657	0.000661	0.61%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00152	0.00153	0.66%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00284	0.00172	49.12%	Pass-1
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	8.13	8.22	1.10%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.22	1.24	1.63%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.17	1.2	2.53%	Pass
SELENIUM, D	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SELENIUM, T	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	2.01	1.99	1.00%	Pass
SODIUM, T	0.05	0.05	mg/l	2.05	2.07	0.97%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000277	0.000275	0.72%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000271	0.00028	3.27%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	<1.5	<1.5	0.00%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000146	0.000144	1.38%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000161	0.000153	5.10%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	0.907	0.915	0.88%	Pass
ZINC, T	0.003	0.003	mg/l	0.936	0.941	0.53%	Pass

RPD Control Limits
Pass - RPD <= 30%
Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit
Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit
Exceeds RPD Control Limits

Location:	PP_35-1A	PP_35-1A
Sample ID:	PP_35-1A_20200904	PP_DUP_20200904
Date Sampled:	9/4/2020	9/4/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0016	0.0013	20.69%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0281	0.028	0.36%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00013	0.00013	0.00%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00018	0.00017	5.71%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0217	0.0218	0.46%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0213	0.0214	0.47%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.011	0.011	0.00%	Pass
BORON, T	0.01	0.01	mg/l	0.012	0.012	0.00%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.000682	0.000646	5.42%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000721	0.000717	0.56%	Pass
CALCIUM, D	0.05	0.05	mg/l	82.8	79.2	4.44%	Pass
CALCIUM, T	0.05	0.05	mg/l	80.4	81.3	1.11%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	0.00015	0.00018	18.18%	Pass
COBALT, D	0.0001	0.0001	mg/l	0.00030	0.00029	3.39%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00030	0.0003	0.00%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00552	0.00549	0.54%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00792	0.00811	2.37%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	279	271	2.91%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	273	273	0.00%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.053	0.054	1.87%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.0270	0.0264	2.25%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.0412	0.0392	4.98%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0021	0.0019	10.00%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0019	0.002	5.13%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	17.5	17.7	1.14%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	17.4	17.1	1.74%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.00982	0.00977	0.51%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.0113	0.0116	2.62%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000622	0.000661	6.08%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000633	0.000652	2.96%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00164	0.0017	3.59%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00171	0.00172	0.58%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	7.97	8.17	2.48%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.23	1.24	0.81%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.20	1.2	0.00%	Pass
SELENIUM, D	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SELENIUM, T	0.05	0.05	ug/l	0.052	<0.025	70.13%	Pass-1
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	0.000011	<5e-006	75.00%	Pass-1
SODIUM, D	0.05	0.05	mg/l	2.03	2.08	2.43%	Pass
SODIUM, T	0.05	0.05	mg/l	2.00	2.01	0.50%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000269	0.000256	4.95%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000273	0.000258	5.65%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00074	0.00065	12.95%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	<1.5	<1.5	0.00%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000162	0.000159	1.87%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000176	0.000181	2.80%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	1.03	1.03	0.00%	Pass
ZINC, T	0.003	0.003	mg/l	1.00	1.02	1.98%	Pass

RPD Control Limits

Pass - RPD <= 30%

Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit

Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit

Exceeds RPD Control Limits

Location:	PP_35-1B	PP_35-1B
Sample ID:	PP_35-1B_20200724	PP_DUP_20200724
Date Sampled:	7/24/2020	7/24/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0032	0.0034	6.06%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0252	0.0238	5.71%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00014	0.00013	7.41%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00015	0.00015	0.00%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0194	0.0194	0.00%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0185	0.0184	0.54%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	<0.0050	0.01	66.67%	Pass-1
BORON, T	0.01	0.01	mg/l	0.021	0.018	15.38%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.0000618	6.34e-005	2.56%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000189	0.000185	2.14%	Pass
CALCIUM, D	0.05	0.05	mg/l	63.2	62.1	1.76%	Pass
CALCIUM, T	0.05	0.05	mg/l	67.3	67.7	0.59%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	0.00035	0.00033	5.88%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	0.00034	0.00036	5.71%	Pass
COBALT, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00015	0.00014	6.90%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00454	0.00467	2.82%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00795	0.00808	1.62%	Pass
CYANIDE, T	0.002	0.002	mg/l	<0.0010	<0.001	0.00%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	230	230	0.00%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	236	235	0.42%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.038	0.037	2.67%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.00114	0.00122	6.78%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.00799	0.00836	4.53%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0014	0.0013	7.41%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0020	0.0021	4.88%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	17.6	18.3	3.90%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	16.4	16.1	1.85%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.00178	0.00187	4.93%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.00847	0.00862	1.76%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000634	0.000626	1.27%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000658	0.000707	7.18%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00069	0.00076	9.66%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00139	0.00137	1.45%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	9.25	9.27	0.22%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.21	1.21	0.00%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.18	1.17	0.85%	Pass
SELENIUM, D	0.05	0.05	ug/l	0.097	0.057	51.95%	Pass-1
SELENIUM, T	0.05	0.05	ug/l	<0.025	<0.025	0.00%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	0.000030	2.1e-005	35.29%	Pass-1
SODIUM, D	0.05	0.05	mg/l	1.99	2.02	1.50%	Pass
SODIUM, T	0.05	0.05	mg/l	1.92	1.92	0.00%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000236	0.000244	3.33%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000254	0.000248	2.39%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00053	0.0006	12.39%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	4.8	5.2	8.00%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000153	0.000153	0.00%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000183	0.000195	6.35%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	0.0705	0.0708	0.42%	Pass
ZINC, T	0.003	0.003	mg/l	0.275	0.273	0.73%	Pass

RPD Control Limits
Pass - RPD <= 30%
Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit
Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit
Exceeds RPD Control Limits

Location:	PP_35-1B	PP_35-1B
Sample ID:	PP_35-1B_20200814	PP_DUP_20200814
Date Sampled:	8/14/2020	8/14/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0046	0.0053	14.14%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.0571	0.0525	8.39%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00014	0.00012	15.38%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00018	0.00018	0.00%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0192	0.0193	0.52%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0198	0.0193	2.56%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.013	0.012	8.00%	Pass
BORON, T	0.01	0.01	mg/l	0.015	0.014	6.90%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.0000301	2.5e-005	18.51%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000186	0.000188	1.07%	Pass
CALCIUM, D	0.05	0.05	mg/l	75.9	75.8	0.13%	Pass
CALCIUM, T	0.05	0.05	mg/l	75.9	74.8	1.46%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	0.00025	0.00021	17.39%	Pass
CHROMIUM, T	0.0001	0.0001	mg/l	0.00035	0.00032	8.96%	Pass
COBALT, D	0.0001	0.0001	mg/l	0.00012	0.00011	8.70%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00017	0.00019	11.11%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00453	0.00439	3.14%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00809	0.00797	1.49%	Pass
CYANIDE, T	0.002	0.002	mg/l	<0.0010	<0.001	0.00%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	264	263	0.38%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	263	260	1.15%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.048	0.049	2.06%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.00168	0.00164	2.41%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.0108	0.0109	0.92%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0021	0.002	4.88%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0018	0.0018	0.00%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	18.1	17.9	1.11%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	18.0	17.8	1.12%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.00340	0.00348	2.33%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.00901	0.00865	4.08%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000601	0.00061	1.49%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000637	0.000645	1.25%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00088	0.00083	5.85%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00130	0.0013	0.00%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	9.24	9.23	0.11%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.21	1.21	0.00%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.23	1.23	0.00%	Pass
SELENIUM, D	0.05	0.05	ug/l	0.05	<0.025	66.67%	Pass-1
SELENIUM, T	0.05	0.05	ug/l	0.055	0.066	18.18%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	1.95	1.94	0.51%	Pass
SODIUM, T	0.05	0.05	mg/l	1.98	1.98	0.00%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000265	0.000265	0.00%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000268	0.000268	0.00%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00103	0.00079	26.37%	Pass
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	3.7	3.2	14.49%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000157	0.000162	3.13%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000189	0.000179	5.43%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	0.0941	0.0934	0.75%	Pass
ZINC, T	0.003	0.003	mg/l	0.348	0.346	0.58%	Pass

RPD Control Limits
Pass - RPD <= 30%
Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit
Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit
Exceeds RPD Control Limits

Location:	PP_35-1B	PP_35-1B
Sample ID:	PP_35_1B_20200828	PP_DUP_20200828
Date Sampled:	8/28/2020	8/28/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0049	0.0158	105.31%	Pass-1
ALUMINUM, T	0.003	0.003	mg/l	0.0181	0.0189	4.32%	Pass
ANTIMONY, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00015	0.00016	6.45%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00019	0.00017	11.11%	Pass
BARIUM, D	0.0001	0.0001	mg/l	0.0178	0.0188	5.46%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0188	0.0194	3.14%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.013	0.013	0.00%	Pass
BORON, T	0.01	0.01	mg/l	0.013	0.013	0.00%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.0000512	5.22e-005	1.93%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.000191	0.000187	2.12%	Pass
CALCIUM, D	0.05	0.05	mg/l	74.8	76.1	1.72%	Pass
CALCIUM, T	0.05	0.05	mg/l	72.5	74.3	2.45%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	0.00027	0.00046	52.05%	Pass-1
CHROMIUM, T	0.0001	0.0001	mg/l	0.00035	0.00048	31.33%	Pass-1
COBALT, D	0.0001	0.0001	mg/l	0.00011	0.00011	0.00%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00015	0.00016	6.45%	Pass
COPPER, D	0.0002	0.0002	mg/l	0.00447	0.00412	8.15%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00712	0.00746	4.66%	Pass
CYANIDE, T	0.002	0.002	mg/l	<0.0010	<0.001	0.00%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	260	268	3.03%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	254	262	3.10%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.034	0.036	5.71%	Pass
LEAD, D	0.00005	0.00005	mg/l	0.00163	0.00134	19.53%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.00867	0.0086	0.81%	Pass
LITHIUM, D	0.001	0.001	mg/l	0.0023	0.0023	0.00%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0020	0.002	0.00%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	17.8	18.9	5.99%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	17.8	18.4	3.31%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.00323	0.0032	0.93%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.00712	0.00737	3.45%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000647	0.000612	5.56%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000674	0.000729	7.84%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00109	0.00118	7.93%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00152	0.00153	0.66%	Pass
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	0.057	<0.025	78.05%	Pass-1
pH, LAB	0.1	0.1	ph units	9.06	9.09	0.33%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.22	1.32	7.87%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.22	1.22	0.00%	Pass
SELENIUM, D	0.05	0.05	ug/l	0.053	0.052	1.90%	Pass
SELENIUM, T	0.05	0.05	ug/l	0.051	<0.025	68.42%	Pass-1
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	1.95	2.07	5.97%	Pass
SODIUM, T	0.05	0.05	mg/l	2.00	2.08	3.92%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	0.000241	0.000237	1.67%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	0.000238	0.000256	7.29%	Pass
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00078	0.00042	60.00%	Pass-1
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	3.8	<1.5	86.79%	Pass-1
URANIUM, D	0.00001	0.00001	mg/l	0.000177	0.000162	8.85%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000191	0.000182	4.83%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
ZINC, D	0.001	0.001	mg/l	0.0902	0.0892	1.11%	Pass
ZINC, T	0.003	0.003	mg/l	0.345	0.345	0.00%	Pass

RPD Control Limits
Pass - RPD <= 30%
Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit
Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit
Exceeds RPD Control Limits

Location:	PP_35-10	PP_35-10
Sample ID:	PP_35-10_20200924	PP_DUP_20200924
Date Sampled:	9/24/2020	9/24/2020
Sample Type:	**Primary**	**Secondary**

Analyte	Detection Limit Pri.	Detection Limit Dup.	Units			Primary vs. Duplicate	Category1
ALUMINUM, D	0.001	0.001	mg/l	0.0017	0.0017	0.00%	Pass
ALUMINUM, T	0.003	0.003	mg/l	0.176	0.742	**123.31%**	Fail
ANTIMONY, D	0.0001	0.0001	mg/l	0.00011	0.00012	8.70%	Pass
ANTIMONY, T	0.0001	0.0001	mg/l	0.00011	0.00014	24.00%	Pass
ARSENIC, D	0.0001	0.0001	mg/l	0.00036	0.00035	2.82%	Pass
ARSENIC, T	0.0001	0.0001	mg/l	0.00065	0.00096	38.51%	Pass-1
BARIUM, D	0.0001	0.0001	mg/l	0.0478	0.048	0.42%	Pass
BARIUM, T	0.0001	0.0001	mg/l	0.0556	0.0611	9.43%	Pass
BERYLLIUM, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BERYLLIUM, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
BORON, D	0.01	0.01	mg/l	0.018	0.017	5.71%	Pass
BORON, T	0.01	0.01	mg/l	0.018	0.02	10.53%	Pass
CADMIUM, D	0.000005	0.000005	mg/l	0.0000060	5.9e-006	1.68%	Pass
CADMIUM, T	0.000005	0.000005	mg/l	0.0000250	3.11e-005	21.75%	Pass
CALCIUM, D	0.05	0.05	mg/l	41.3	42.1	1.92%	Pass
CALCIUM, T	0.05	0.05	mg/l	42.9	42.3	1.41%	Pass
CHROMIUM, D	0.0001	0.0001	mg/l	<0.000050	0.00012	82.35%	Pass-1
CHROMIUM, T	0.0001	0.0001	mg/l	0.00027	0.00119	126.03%	Pass-1
COBALT, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
COBALT, T	0.0001	0.0001	mg/l	0.00022	0.00047	72.46%	Pass-1
COPPER, D	0.0002	0.0002	mg/l	0.00137	0.00148	7.72%	Pass
COPPER, T	0.0005	0.0005	mg/l	0.00207	0.00258	21.94%	Pass
Hardness, Total or Dissolved CaCO3, D	0.13	0.13	mg/l	151	152	0.66%	Pass
Hardness, Total or Dissolved CaCO3, T	0.13	0.13	mg/l	155	155	0.00%	Pass
IRON, D	0.01	0.01	mg/l	<0.0050	<0.005	0.00%	Pass
IRON, T	0.01	0.01	mg/l	0.390	1.24	**104.29%**	Fail
LEAD, D	0.00005	0.00005	mg/l	<0.000025	<2.5e-005	0.00%	Pass
LEAD, T	0.00005	0.00005	mg/l	0.000482	0.000743	42.61%	Pass-1
LITHIUM, D	0.001	0.001	mg/l	0.0049	0.005	2.02%	Pass
LITHIUM, T	0.001	0.001	mg/l	0.0050	0.0056	11.32%	Pass
MAGNESIUM, D	0.005	0.005	mg/l	11.5	11.5	0.00%	Pass
MAGNESIUM, T	0.005	0.005	mg/l	11.7	12.1	3.36%	Pass
MANGANESE, D	0.0001	0.0001	mg/l	0.00258	0.00274	6.02%	Pass
MANGANESE, T	0.0001	0.0001	mg/l	0.0164	0.0218	28.27%	Pass
MERCURY, D	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MERCURY, T	0.000005	0.000005	mg/l	<0.0000025	<2.5e-006	0.00%	Pass
MOLYBDENUM, D	0.00005	0.00005	mg/l	0.000878	0.000853	2.89%	Pass
MOLYBDENUM, T	0.00005	0.00005	mg/l	0.000658	0.000756	13.86%	Pass
NICKEL, D	0.0005	0.0005	mg/l	0.00125	0.00124	0.80%	Pass
NICKEL, T	0.0005	0.0005	mg/l	0.00184	0.0029	44.73%	Pass-1
NITROGEN, AMMONIA (AS N)	0.05	0.05	mg/l	<0.025	<0.025	0.00%	Pass
pH, LAB	0.1	0.1	ph units	8.19	8.22	0.37%	Pass
POTASSIUM, D	0.05	0.05	mg/l	1.21	1.25	3.25%	Pass
POTASSIUM, T	0.05	0.05	mg/l	1.31	1.51	14.18%	Pass
SELENIUM, D	0.05	0.05	ug/l	0.218	0.229	4.92%	Pass
SELENIUM, T	0.05	0.05	ug/l	0.21	0.258	20.51%	Pass
SILVER, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SILVER, T	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
SODIUM, D	0.05	0.05	mg/l	8.80	8.92	1.35%	Pass
SODIUM, T	0.05	0.05	mg/l	9.14	8.76	4.25%	Pass
THALLIUM, D	0.00001	0.00001	mg/l	<0.0000050	<5e-006	0.00%	Pass
THALLIUM, T	0.00001	0.00001	mg/l	<0.0000050	1.5e-005	100.00%	Pass-1
TIN, D	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TIN, T	0.0001	0.0001	mg/l	<0.000050	<5e-005	0.00%	Pass
TITANIUM, D	0.0003	0.0003	mg/l	<0.00015	<0.00015	0.00%	Pass
TITANIUM, T	0.0003	0.0003	mg/l	0.00401	0.0167	**122.55%**	Fail
TOTAL SUSPENDED SOLIDS, LAB	3	3	mg/l	20.1	24.3	18.92%	Pass
URANIUM, D	0.00001	0.00001	mg/l	0.000400	0.000432	7.69%	Pass
URANIUM, T	0.00001	0.00001	mg/l	0.000433	0.000492	12.76%	Pass
VANADIUM, D	0.0005	0.0005	mg/l	<0.00025	<0.00025	0.00%	Pass
VANADIUM, T	0.0005	0.0005	mg/l	0.00101	0.00253	85.88%	Pass-1
ZINC, D	0.001	0.001	mg/l	<0.00050	<0.0005	0.00%	Pass
ZINC, T	0.003	0.003	mg/l	0.0132	0.0075	55.07%	Pass-1

RPD Control Limits

Pass - RPD <= 30%

Pass-1 - RPD > 30%, Analysis results < 10 times Detection Limit

Pass-2 - RPD > 30% and RPD <= 50%, Analysis result > 10 times Detection Limit and < 20 times Detection Limit

Exceeds RPD Control Limits

APPENDIX C
CALIBRATION CERTIFICATE

Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : TECK METALS LTD (KIMBERLEY)

Account Number / No. de compte : 40277765

Certification Number / Numéro du Certificat : 506021

Part Number / No. de pièce : LPG440.99.00012
Serial Number / No. de série :1719627
External Reference / Référence externe :Pine Point

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Dickert, Bruce D.

Certification Date / Date de certification :
Jan. 20, 2020

Hach Sales & Services Canada Ltd
Attn: Service Dept.
3020 Gore Road
London, ON N5V 4T7
Canada
Phone: 1-800-665-7635 Opt 3
Fax: 1-970-619-5027
Email: canadaservice@hach.com

Hach Service Report

Hach Service Partnership Programs / Hach Service : contract de maintenance

Lower your long-term costs, prolong the life of your product, and ensure consistent reporting. Partner with Hach for service to be confident that your instruments and operations are well maintained and functioning smoothly. You can also be assured that if something goes wrong, Hach will help resolve problems quickly and without hassles. For details contact our customer service at 1-800-665-7635.

Réduisez vos coûts à long terme, prolongez la durée de vie de votre produit et assurez des rapports cohérents. Partenaire avec Hach pour le service pour être confiant que vos instruments et opérations sont bien entretenus et fonctionnent sans heurts. Vous pouvez également être assuré que si quelque chose se passe mal, Hach aidera à résoudre les problèmes rapidement et sans tracas. Pour plus de détails, contactez notre service à la clientèle au 1-800-665-7635.

Date : 11/14/2019

Customer/Client:
Ship to / Envoyez à: TECK METALS LTD (KIMBERLEY), 601 KNIGHTON ROAD, KIMBERLEY, British Columbia, CA, V1A 3E1
Bill to / Facturez à: TECK METALS LTD (KIMBERLEY), BAG 2000 601 KNIGHTON ROAD ACCOUNTS PAYABLE, KIMBERLEY, British Columbia, V1A 3E1, CA

Contact Name/Nom du Contact: NEIL MACDONALD
Phone/Téléphone: 1 250 4278415 Fax/Télécopieur:
Email/Courriel: neil.macdonald@teck.com
Account Number / No. de compte: 40277765
Depot / Dépôt: CANADA DEPOT SVC

Date of Service/Date de service rendu: 11/14/2019
Work Order Number / Numéro de commande de travail: WO-00506021
Purchase Order/Bon de commande: CC 12/16/19 1440

Item / Numéro d'article	Serial Number / No. de séries	Description / La description	Servicing Notes / Notes d'entretien	Additional items received / Articles supplémentaires reçus:	Condition received / Condition reçue:
LPV440.99.00012	1719627	db aa DR3900 SPECTROPHOTOMETER WITH RFID	Customer request: ANNUAL SERVICE		
			Work performed: Cleaned instrument. Updated software & firmware to current version. Checked and cleaned optics. Replaced lamp.		
			Verified operation using Hach Test Filter Kit-VAA591 Set 0293		
			PM done in accordance with Hach Factory DR3900 Spectrophotometer Work Instructions.		
			Instrument performing to factory specifications.		
			As Left Readings: Stray Light: 4.315 Abs., 		
			Photometric Accuracy: 1.402/0.615/0.304 Abs. Wavelength Accuracy:360.2/807.0 nm		

Service Price Detail for Work Listed Above/Détails de prix de service pour le travail effectué ci-dessus:

Item Number/ No. d'article	Service Activity / Activité de service	IB Serial Number/ Numéro de série IB	Item Description/ Description de l'objet	Qty	Unit Price/ Prix unitaire	Dis./ Esc.%	Net Price/Prix net
CMC_DR3900_FRA	true	1719627-DR 3000 Series	Canada DR3900 Flat Rate (P)	1.0	592.0	0	592.0
MC_FRT	true	1719627-DR 3000 Series	Misc Depot Freight Charge (M)	1.0	52.0	0	52.0

Service Charge / Frais de service: $644.00

THIS IS NOT AN INVOICE/Ceci n'est pas use facture

ANY DOLLAR AMOUNTS PRESENTED IN THIS REPORT IS AN ESTIMATION AND DOES NOT INCLUDE ANY APPLICABLE TAXES.
TOUT MONTANT PRESENTE ICI EST UNE ESTUMATION ET N'INCLUT PAS DE TAXES
IF CHARGES ARE OVER $500.00, A HARD COPY OF A PURCHASE ORDER MAY BE REQUIRED.

Customer Name/Nom du Client: **Signature:** **Date:**

Hach Tech Name/Nom de technicien: **Signature:** **Date:**