ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
STATEMENT of BASIS for the COMPLIANCE SCHEDULE EXTENSION

Permit Number: AK0038652

Teck Alaska, Incorporated

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

Technical Contact: Tim Pilon
Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
610 University Avenue
Fairbanks, AK 99709
(907) 451-2136
Fax: (907) 451-2187
tim.pilon@alaska.gov

Reissuance of an Alaska Pollutant Discharge Elimination System (APDES) permit, AK0038652 issued to

TECK ALASKA, INCORPORATED

For wastewater discharges from:

Red Dog Mine into
Middle Fork Red Dog Creek
82 Miles Northeast of Kotzebue, Alaska in the foothills of the DeLong Mountains

Alaska Department of Environmental Conservation (Department or DEC) proposes to reissue an APDES individual permit AK0038652 issued to Teck Alaska, Incorporated (Teck). The reissuance adheres to the regulations and procedures set forth in 18 AAC 15 and 18 AAC 83.

This statement of basis explains the nature of the Compliance Schedule extension including:

- information on appeal procedures
- background and technical material supporting the requirements of the extension
- regulatory basis justifying the extension
- a list of permit changes

Informal Reviews and Adjudicatory Hearings

A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page https://dec.alaska.gov/commish/review-guidance/ for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

Documents are Available

The permit, statement of basis for the Compliance Schedule extension, and related documents can be obtained by visiting or contacting DEC between 8:00 a.m. and 4:30 p.m. Monday through Friday at the addresses below. The permit, statement of basis for the Compliance Schedule extension, and other information are located on the Department's Wastewater Discharge Authorization Program website: https://dec.alaska.gov/water/wastewater/.

Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program

Fairbanks Office
610 University Ave.
Fairbanks, AK 99709
(907) 451-2136

Anchorage Office
555 Cordova Street
Anchorage, AK 99501
(907) 269-6285

1.0 PERMITTEE

This statement of basis provides information on the extended Compliance Schedule for Alaska Pollutant Discharge Elimination System (APDES) permit AK0038652 for the following entity:

Permittee:	Teck Alaska, Inc.
Facility:	Red Dog Mine
APDES Permit Number:	AK0038652
Location:	82 miles northeast of Kotzebue
Mailing Address:	2525 C Street, Suite 310; Anchorage, Alaska 99503
Contact:	Les Yesnik, General Manager, (907) 227-2020

2.0 BACKGROUND

On July 28, 2017, Teck was issued APDES Permit AK0038652 (permit), which became effective on September 1, 2017. The permit imposes three different instream total dissolved solids (TDS) limits at three different sites, and it authorizes two TDS mixing zones. Ongoing thawing of near surface permafrost in the Red Dog Creek drainage has naturally increased the TDS concentration in waters that receive the mine's discharge. This natural increase in receiving water TDS has reduced and at times eliminated the assimilative capacity of the two TDS mixing zones. Reduction and elimination of the natural assimilative capacity for TDS in the receiving water causes reduction and, at times, elimination of permitted discharge.

As a result on May 19, 2021, a Compliance Schedule was inserted into the permit. The reason for the Compliance Schedule was to allow seasonal discharge of precipitation accumulating at the mine. Specifically, wastewater storage in the tailings impoundment increased by two billion gallons from 3.3 billion gallons in 2017 to more than 5.3 billion gallons in May 2021. The Compliance Schedule allowed the discharge of treated wastewater at permitted TDS mass loading levels, while dedicating time to studying and characterizing the unstable nature of the receiving waters.

Currently, stored water threatens the safety of the tailings impoundment dams. As water storage increases, the level rises, and water encroaches on the dam freeboard limits, which are set to prevent dam overtopping and ensure safe operation. The tailings impoundment captures about 1.75 billion gallons of precipitation per year requiring seasonal discharge. Teck has implemented numerous water management initiatives to maintain safe operation and to minimize accumulation of additional water volume while continuing to meet permitted water quality limits. Despite these efforts, the site remains challenged by increased precipitation, year-to-year variability in inflows, and the limited assimilative capacity of the receiving environment.

In February 2025, Teck submitted *Red Dog Mine APDES Permit No. AK0038652 Basis for a Compliance Schedule Extension* (attachment 1) to DEC. Assuming that naturally elevated TDS continues throughout the area's receiving water, Teck estimated that it will take up to 10 years for technical evaluations and potential permitting and construction timelines to resolve and implement changes required to resolve water storage challenges. During the 10-year extension, Teck proposed discharging under the terms of the initial Compliance Schedule capping annual TDS loading from the discharge to ensure no increase from the permitted TDS loading.

In June 2025, Teck submitted *Red Dog Mine APDES Permit No. AK0038652 Compliance Schedule Extension Schedule* (attachment 2). The document justifies a 10-year implementation schedule for four wastewater management options; A) regulatory changes, B) replacement of TDS mixing zones with new end-of-pipe permit limits, C) build and permit a pipeline that discharges to the Chukchi Sea, and D) a combination of A, B, and C.

Annual biomonitoring results indicate that treated mine discharge benefits the receiving waters by diluting the naturally high concentrations of metals (especially cadmium and zinc), moderates the pH toward neutral, and diminishes metal toxicity to aquatic life by increasing hardness. Pre-mining, baseline, water quality, and aquatic life monitoring were conducted from 1979 through 1988, and it has been compared to monitoring data since mining commenced, 1989 through 2020. Results indicate that the mine's discharge has improved downstream water quality and bolstered aquatic life when compared to pre-mining conditions.

3.0 REGULATORY BASIS

Extending the Compliance Schedule is necessary to ensure safe operation of the tailings impoundment. When water in the tailings impoundment approaches within 15 feet of the freeboard limit, surpasses 971 feet above mean sea level, the discharge of high quality, treated, wastewater is allowed, as in the past, even though the natural TDS concentration of the receiving water remains elevated. Applying the interim TDS annual mass limits in the extended Compliance Schedule guarantees the permitted discharge will not result in an increased discharge of any pollutants, including TDS, while reinforcing the safe operation of the tailings impoundment. The extended Compliance Schedule requires either an annual milestone or annual reporting on progress toward milestone completion.

Under 18 AAC 83.425, on a case-by-case determination, the Compliance Schedule was extended because there is no reasonably available remedy to the thawing of permafrost and its impact on the receiving waters around the Red Dog Mine. Considering the inadequacy of the original Compliance Schedule's five-year term, good faith efforts exhibited by the permittee, complexity of considerations, and gravity of circumstances involved, the Department finds that the 10-year extension is as soon as possible in this case. An inability to treat and discharge accumulating precipitation under the permit's protective limits threatens catastrophic downstream impacts including the release of pollutant laden untreated mine drainage to dam failure.

4.0 COMPLIANCE SCHEDULE EXTENSION

Beginning on page 25 under the Special Condition section of AK0038652, Permit Part **2.4 TDS Compliance Schedule** and **Table 5: Compliance Schedule Action Items** have been changed to the following versions, and Appendix D, *Red Dog Mine APDES Permit No. AK0038652 Compliance Schedule Extension* (June 2025) was added to end of the permit.

4.1 TDS Compliance Schedule

The permittee must achieve compliance with the TDS limitations of Permit Part 1.2.8.1, not later than 10 years from May 1, 2026, the effective date of the Compliance Schedule extension. Until compliance with the TDS limitations is achieved, at a minimum, the permittee must meet the interim TDS effluent limitations in Permit Part 2.4.2 and complete the tasks and reports listed in Permit Part 2.4.3.

Table 5: Compliance Schedule Action Items

Phase	Milestone (as described in Appendix D)	Completion Date
Phase 1	Complete Phase 1	End of 2026
Phase 2	Annual Phase 2 Progress Summary	End of 2027
	Complete Phase 2	End of 2028
Phase 3	Annual Phase 3 Progress Summary	End of 2029
	Complete Phase 3	End of 2030
Phase 4	First Annual Phase 4 Progress Summary	End of 2031
	Second Annual Phase 4 Progress Summary	End of 2032
	Third Annual Phase 4 Progress Summary	End of 2033
	Fourth Phase 4 Progress Summary	End of 2034
	Complete Phase 4	End of 2035

Attachments

Attachment 1 BASIS for a COMPLIANCE SCHEDULE EXTENSION

Attachment 2 EXTENDED COMPLIANCE SCHEDULE

Attachment 3 AK0038652 FACT SHEET

Attachment 1

BASIS for a COMPLIANCE SCHEDULE EXTENSION

Red Dog Mine APDES Permit No. AK0038652 Basis for a Compliance Schedule Extension

February 2025

Teck

Table of Contents

List of Tables

List of Figures

Introduction

Teck Alaska Incorporated (Teck) is submitting this document as a basis for obtaining an extension to the 2021 compliance schedule that was part of a minor modification of the Red Dog Mine Alaska Pollutant Discharge Elimination System (APDES) Permit AK0038652. Teck has been seasonally discharging treated water to Outfall 001 since May 2021, under the terms of the 2021 APDES minor permit modification. The minor modification allows an annual Total Dissolved Solids (TDS) discharge of 24,235 tons (21,986 metric tonnes) measured at the end of pipe and required several studies under a compliance schedule; all of which have been completed.

However, water quality in the receiving environment remains naturally degraded and an increase in annual precipitation continue to challenge water volume management at the mine. The site now stores approximately 4.3B gal of water. The Tailings Storage Facility (TSF) freeboard will be threatened again unless Teck can continue to discharge under an extension of terms of the 2021 minor permit modification. The TSF is designed for minimal water volume storage behind the dam, consistent with its long term safe operational requirements, expectations from ADNR Dam Safety Division, and the forthcoming Global Industrial Standard on Tailings Management (GISTM). Teck is a responsible operator and storing an excess volume of water behind the tailings dams would be irresponsible. Significantly, historical seasonal discharge and discharge under the terms of the 2021 minor permit modification have proven to be protective of aquatic life in the Red Dog Creek system owing to the very low metals concentration in the discharge

An extension of the 2021 compliance schedule and the authorization to continue to discharge under the terms of the minor permit modification are necessary for safe water management while Teck focuses on identifying a long-term solution to water management and takes the steps required to implement the plan and incorporate it into a new APDES permit. Teck is seeking a solution that provides a low-risk reliable solution for the very long term consistent with their need to treat and discharge water for the indefinite future.

Teck estimates it will take up to 10 years to implement the changes and resolve the water volume challenges, considering the required technical evaluations, and potential permitting and construction timelines, and is requesting a 10-year extension to the 2021 compliance schedule.

This document provides a summary of the results of the studies completed as part of the 2021 compliance schedule, provides an update to prevailing water quality in Red Dog Creek, discusses the need for a 10 -year extension to the 2021 compliance schedule to identify a long-term water volume management solution, and permit and construct any facilities that are required to implement it and incorporate these changes into a new APDES permit that will serve the operation for the long-term, including into mine closure.

Teck will be submitting a draft list of the steps it sees as necessary to identify and implement a long-term water management solution during the proposed 10-yr compliance schedule extension. Teck will submit this draft list and schedule within 120 days of submitting this report to ADEC.

Need for Seasonal Discharge

Teck is authorized to discharge up to 2.4B gallons of treated water per year, subject to a combination of end-of-pipe and instream APDES permit limits, including end-of pipe limits for TDS established in the 2021 APDES minor permit modification. The discharge allows the mine to manage the site water volume while seasonally discharging net precipitation that accumulates on site. Both the life of mine (LOM) plan and the approved reclamation plan recognize the need for discharge and require annual discharge of treated water for the indefinite future. There is no practical, safe, or reasonable scenario where the mine could responsibly cease its seasonal discharge of treated water without increasing risk to site facilities and the downstream environment. Discharging treated water to the environment will be a part of site operations for the indefinite future.

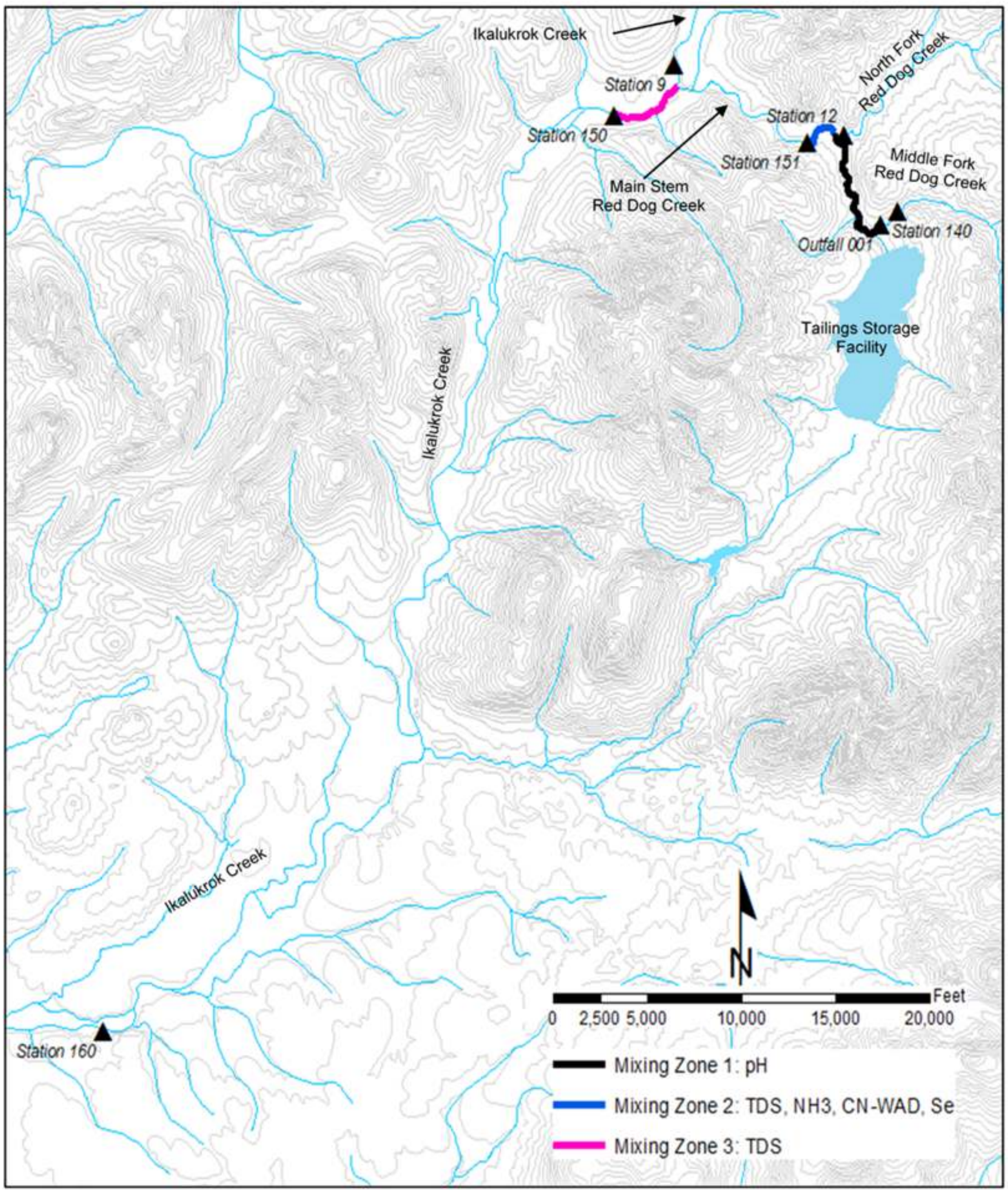


Figure 1. Locations of Red Dog Mine Outfall 001, Mixing Zones and Monitoring Stations

The volume of stored water at site increased from 3.3B gallons in 2017 to more than 5.3B gallons in 2021 and is currently (December 2024) 4.2B gallons. The increase between 2017 and 2021 was caused by the diminished ability to discharge treated water because the prevailing natural TDS concentrations had been increasing with the effect of eliminating the assimilative capacity of the two TDS mixing zones that the mine relies on to meet the APDES permit limits. While the 2021 minor permit modification allowed Teck to reduce the volume of stored water somewhat between 2021 and 2024 it is now evident that it will be necessary to continue discharging under the same terms of the 2021 minor permit modification (24,235 tons annual TDS discharge at Outfall 001) for the foreseeable future while a viable long-term water management alternative, compliant with the APDES program regulations is identified and implemented.

Treatment, Effluent and Receiving Waters

Effluent Treatment

The primary method for treating Red Dog Mine wastewater prior to discharge through Outfall 001 in Middle Fork Red Dog Creek (Middle Fork) is the high-density sludge (HDS) treatment technology. Additionally, the mine uses a much smaller reverse osmosis (RO) plant as discussed later in this section.

Following is a brief description of the HDS treatment process as applied at the mine facility:

> Reclaimed TSF water (reclaim) is pumped to Water Treatment Plants 1 & 2 (WTP-1/WTP-2) where it is treated before being discharged through Outfall 001. Within the WTP supply pipeline, reclaim water is first treated with sodium sulfide and mixed via an in-line mixer. The sulfide reacts primarily with the dissolved cadmium and – to a lesser degree – certain other metals in the reclaim water to form insoluble cadmium sulfide and other metal sulfides, which are stable throughout the remainder of the treatment process. The sodium sulfide-treated reclaim water then reports to a rapid mix tank where slaked lime (calcium hydroxide) and recycled clarifier underflow solids are added to adjust the pH. From the rapid mix tank, the solution flows into the lime reactor which provides residence time to facilitate complete chemical reactions and metal hydroxide precipitation. Gypsum slurry is added to enhance calcium sulfate precipitation as part of the treatment process. Additionally, compressed air is added into the lime reactor tank to ensure oxidation of ions in solution, specifically and most significantly the oxidation of metals.
>
> The precipitated solids containing the metal hydroxides and metal sulfide remain in suspension and flocculent is added to coalesce smaller particles into larger solids in the flocculent mix tank. The solution then flows into a clarifier where the solids can gravity-settle. Settled solids are removed through the "underflow" and the treated decant water leaves the clarifier through the "overflow". Underflow solids are recycled back to the beginning of the treatment process with some solids periodically purged from the system to the TSF to keep a constant sludge bed level in the clarifier.
>
> Clarifier overflow water reports to sand filters, which remove residual suspended solids. Automated pH and turbidity meters take final measurements of the sand filter effluent. If the pH is within the APDES permit limits and within the operating range established to ensure effective treatment and the turbidity is within an established range, which indicates that effective suspended solids removal has been accomplished, the water is discharged to Middle Fork Red Dog Creek at Outfall 001. If the pH or

turbidity are not within the prescribed range, the filtered water is automatically rerouted back into the TSF.

In August 2020, Teck commissioned a RO wastewater treatment plant (WTP) to further improve water treatment considering the degraded natural condition of receiving waters, which occasionally exceeded permit limits. RO can treat Red Dog wastewater to less than 500 milligrams per liter (mg/L) TDS, allowing for discharge when no natural assimilative capacity is available at the two TDS mixing zones or at downstream Station 160, which has a seasonal instream (non-mixing zone) TDS limit.

The RO WTP at Red Dog is fed with WTP1 or WTP2 clarifier supernatant (overflow), using these two existing HDS treatment systems as RO pre-treatment for initial metal-based TDS removal. From the clarifier overflow, the RO plant feed is first treated using micro-filtration (MF) technology to remove total suspended solids to prevent RO membrane clogging. Following MF, sulfuric acid is continuously added to adjust the pH to near neutral and prevent metals such as manganese from precipitating onto the RO membranes. Anti-scalant is also continuously added to the RO feed to increase the gypsum supersaturation to prevent deposition and precipitation on the RO membranes. After these two chemical conditioning steps, the water is fed to the RO membranes. Treated permeate is mixed with HDS WTP overflow and discharged through Outfall 001. The treatment residuals (RO brine, MF backwash, clean-in-place chemicals) are returned to the TSF.

The RO plant can discharge up to 1,570 gallons per minute of treated water and produced an average of 198 million gallons per discharge season from 2020 – 2024. The RO only discharged 33 mgal in 2020 but was subsequently expanded and discharged 237 mgal in 2024. Owing to its relatively low throughput capacity, the RO is not a stand-alone remedy for the degraded background conditions and loss of mixing zones.

Effluent Characteristics

Under the current 2021 APDES minor permit modification, an annual total discharge of 24,235 tons of TDS discharge is authorized seasonally from Outfall 001. Prior to the 2021 APDES minor permit modification, discharge from Outfall 001 was allowed only when there was sufficient flow of water in downstream Mainstem Red Dog Creek to allow demonstration that TDS permit limits were being met at the edge of two mixing zones as described in Part 1.2.1 of APDES Permit #AK0038652. From 2016 through 2019, discharge started during the first half of May, and typically ended between September 18th and 25th, and it ranged between 118 and 141 days with an average duration of 130 days. From 2021 through 2024, discharge initiated by mid-May and ended between September 19 and 25, and it ranged between 120 and 139 days with an average duration of 130 days.

VOLUME AND FLOW RATE

During the period 2016 through 2024 Teck discharged between 1.25 to 1.89B gallons during the discharge season as shown in Table 1. Average daily discharge ranged from 8.61 to 15.19 million gallons per day (Mgpd) and maximum daily discharge ranged from 18.90 to 28.2 Mgpd. Variations in daily average discharge flow rates are governed by the receiving water flow rates to comply with TDS limits at the edges of Mixing Zones 2 and 3 (Figure 1). In 2020 Teck discharged a comparatively low volume of 0.869B gallons because it terminated discharging HDS-treated water early owing to prevailing high natural TDS concentrations in the receiving water as discussed in the Quality Section.

Table 1. Summary of Mine Discharges at Outfall 001, 2016 through 2024

YEAR	DISCHARGE SEASON DURATION (Days)	TOTAL DISCHARGE (Billion Gallons)	DAILY MAXIMUM DISCHARGE (Million Gallons)	DAILY AVERAGE (DISCHARGE (Million Gallons)
2016	146	1.257	23.76	8.61
2017	141	1.891	23.31	13.41
2018	133	1.405	21.16	10.56
2019	120	1.367	22.14	12.78
2020	140	0.869	26.64	10.35
2021	139	1.176	28.20	12.43
2022	137	1.724	18.90	12.58
2023	120	1.778	20.80	15.19
2024	124	1.735	20.10	14.11

QUALITY

Treated discharge water quality at Outfall 001 had TDS concentrations ranging from 1,910 to 4,840 milligrams per liter (mg/L) during the 2016 through 2024 discharge seasons.

Prior to 2021, daily variations in flow rates were governed by the receiving water flow rates in order that compliance with TDS limits was maintained at the edges of Mixing Zone 2 in Mainstem Red Dog Creek (Station 151, maximum TDS of 1,500 mg/L) and Mixing Zone 3 in Ikalukrok Creek (Station 150, maximum TDS of 1,000 mg/L). Additionally, a maximum TDS limit of 500 mg/L had to be met further downstream on Ikalukrok Creek at Station 160 compliance point, from July 25th through the end of the discharge season.

Beginning with the 2021 discharge season and implementation of the 2021 APDES minor permit modification, daily variations were governed by water treatment operating limitations because the TDS compliance point was now the end-of-pipe at Outfall 001, measured as total annual TDS discharge and limited to 24,235 tons annually.

Compliance with these limits is demonstrated through weekly sampling at each of these sites. Maintaining compliance is also supported through real-time monitoring of specific conductance (SC) as a surrogate for TDS at these sites. More than ten years of concurrent SC and laboratory TDS data collected among Mainstem and Ikalukrok Creek sites has allowed for development of a scientifically defensible and mathematically reliable correlation between SC measurements and TDS concentrations for these waterbodies.

Treated water discharged at Outfall 001 must also meet end-of-pipe APDES permit limits for cadmium, copper, lead, mercury, selenium, zinc, pH and other constituents of concern. Historic ranges (2016 through 2024), and monthly average concentrations for constituents of concern, permit-limited metal concentrations, pH, and TDS, in the discharge at Outfall 001 are included in Table 2. Teck expects to be able to meet those permit limits throughout the period of compliance schedule proposed in this document.

Table 2. Summary of End-Of-Pipe Discharge Concentrations at Outfall 001 2016 through 2024

Parameter	APDES Permit Limit (monthly Average)	Monthly Average Range of Concentration in Discharge
Cadmium	1.4 ug/L	0.17 - 1.6 ug/L
Copper	21 ug/L	0.1 - 2.93 ug/L
Lead	8.1 ug/L	0.1 - 1.3 ug/L
Mercury	0.010 ug/L	0.000083 - 0.0012 ug/L
Selenium	11 ug/L	2.42 - 6.00 ug/L
Zinc	221 ug/L	22 - 139.7 ug/L
pH	6.5-10.5 s.u.	6.5 - 10.2 s.u.
TDS	NA	1,910 - 4,840 mg/L

Receiving Water Characteristics

Outfall 001 discharges to Middle Fork Red Dog Creek. Downstream of Outfall 001, Middle Fork Red Dog Creek flows into Mainstem Red Dog Creek, which then flows into Ikalukrok Creek.

Water quality of the upstream and downstream waters is monitored throughout the discharge season. The monitoring stations, including Station 160 are illustrated in Figure 1.

In the remainder of this section water quality at select monitoring stations is compared to illustrate the recent changes in the prevailing natural conditions in the receiving waters and the impact of this change on the mine's inability to continue discharging under the requirements of APDES permit, prior to receiving the 2021 APDES minor permit modification.

Figures 2 - 7 and 10 illustrate concentrations of permit constituents of concern at monitoring stations upstream of Outfall 001 (Stations that are not affected by mine discharge) from 2011 – 2024 and compares them to the mine discharge at Outfall 001. The graphs illustrate that by comparison the discharge at Outfall 001 dilutes the concentration of many metals in the receiving water. Figure 8 makes a similar comparison but between the mine discharge pH (Outfall 001) and prevailing natural pH conditions. Figures 9 illustrates the changes in prevailing TDS conditions in the natural environment that became more evident in 2018.

Figure 2 illustrates cadmium concentrations at Stations 140, 12 and 9 located on the Middle Fork, North Fork, and Ikalukrok Creek, respectively. Note that the scale on the y-axis is logarithmic and represents orders of magnitude changes along the scale. The prevailing natural conditions for cadmium are higher at the three monitoring stations than in the discharge at Outfall 001, particularly starting in 2018 and thereafter, when natural conditions increase markedly. The comparative differences between cadmium concentrations between the stations and Outfall 001 are profound. Even Station 12, which has typically been the most pristine water in the immediate watershed, has higher cadmium than the discharge by 2020 and remains so through 2024. This means that the discharge at Outfall 001 has the effect of diluting the natural cadmium concentrations in the receiving environment as it merges with the North Fork (Station 12 monitoring location) beginning in about

2018. The graph also illustrates that cadmium concentrations in the discharge at Outfall 001 typically remain below the end-of-pipe APDES permit limit. Cadmium permit exceedances in 2018, ‘21 and ‘22 were the result of a combination of water treatment operational irregularities that were reported and corrected at the time. Moving forward, Red Dog anticipates continuing to meet its permit limits for cadmium.

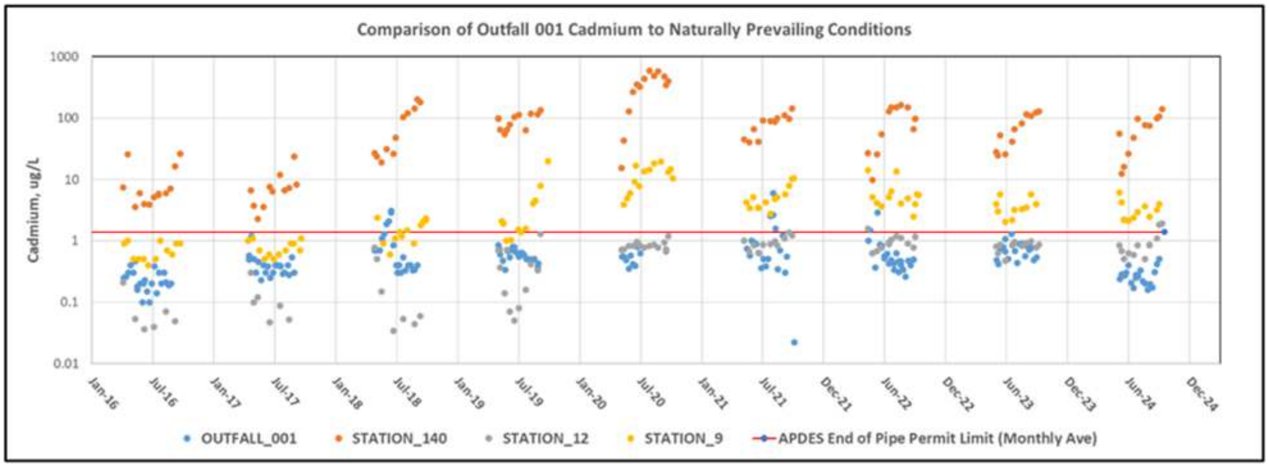


Figure 2. Comparison of Cadmium at Outfall 001 with APDES Permit Limits for Cadmium and Prevailing Natural Conditions

Figure 3 illustrates copper concentrations at Stations 140, 12 and 9 (partial) located on the Middle Fork, North Fork, and Ikalukrok Creek, respectively. The data show a marked increase in the concentration of copper at Station 140 and more moderate increase at Station 12. In 2020 copper concentrations at Station 140 consistently exceeded the APDES permit limit of 21 µg/L. The copper data for Station 9 also periodically exceed permit limits for the 2021-2024 reporting period.

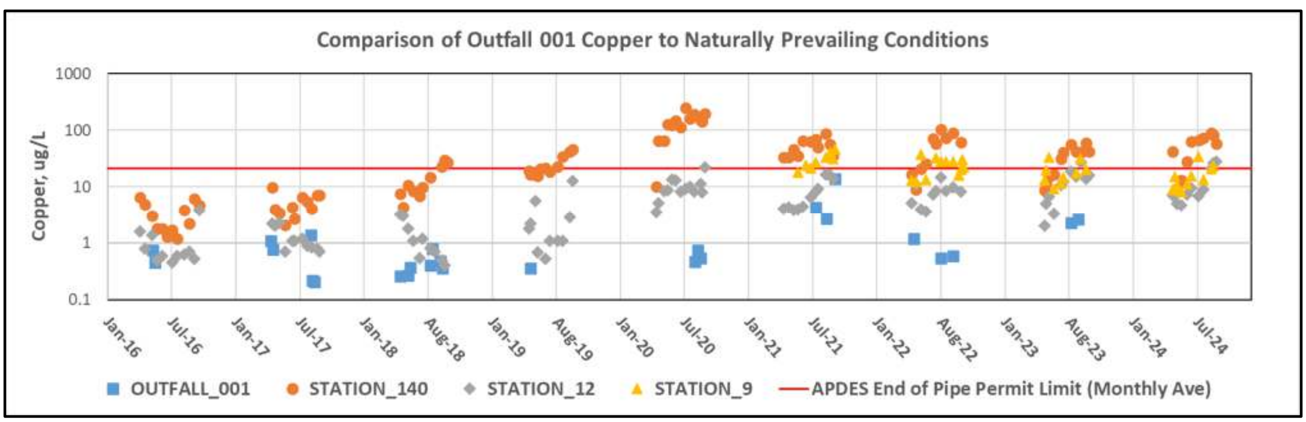


Figure 3. Comparison of Copper at Outfall 001 with Prevailing Natural Conditions

Figure 4 illustrates lead concentrations at Stations 140, 12 and 9 located on the Middle Fork, North Fork, and Ikalukrok Creek, respectively. It is apparent that lead concentrations, particularly at Station 140, but also at Station 9, have been increasing naturally since 2017 although by comparison the increases are not as marked as some other metals. In 2020 the prevailing natural conditions for lead concentrations at Station 140 were consistently above the APDES end-of-pipe limit of 8.1 µg/L.

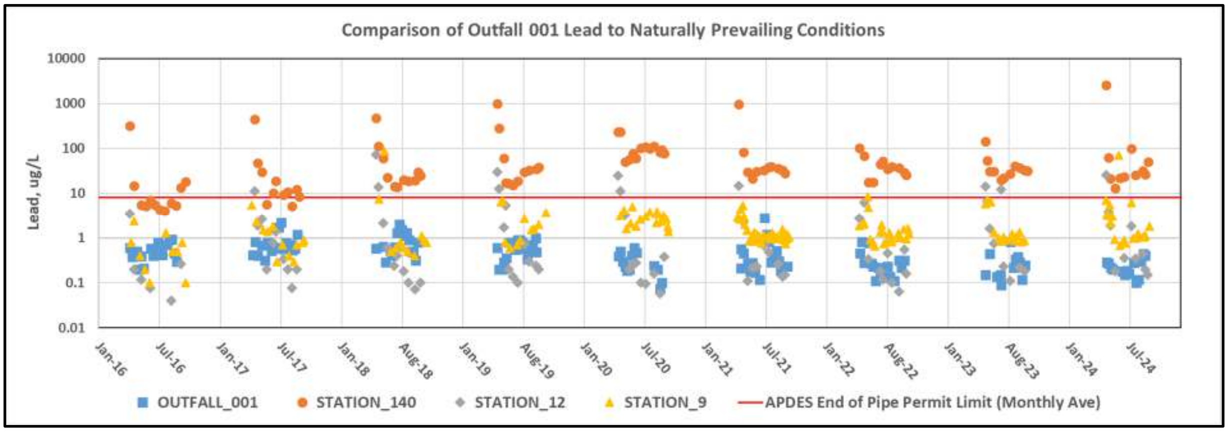


Figure 4. Comparison of Lead at Outfall 001 with Prevailing Natural Conditions

Figure 5 illustrates mercury concentrations at Stations 140, 12 and 9 (one data point in 2024) located on the Middle Fork and North Fork Red dog Creek and Ikalukrok Creek, respectively. The data suggest that mercury concentrations in the area have been unaffected by the trend of naturally increasing TDS. This can be attributed to extremely limited mercury availability throughout drainage.

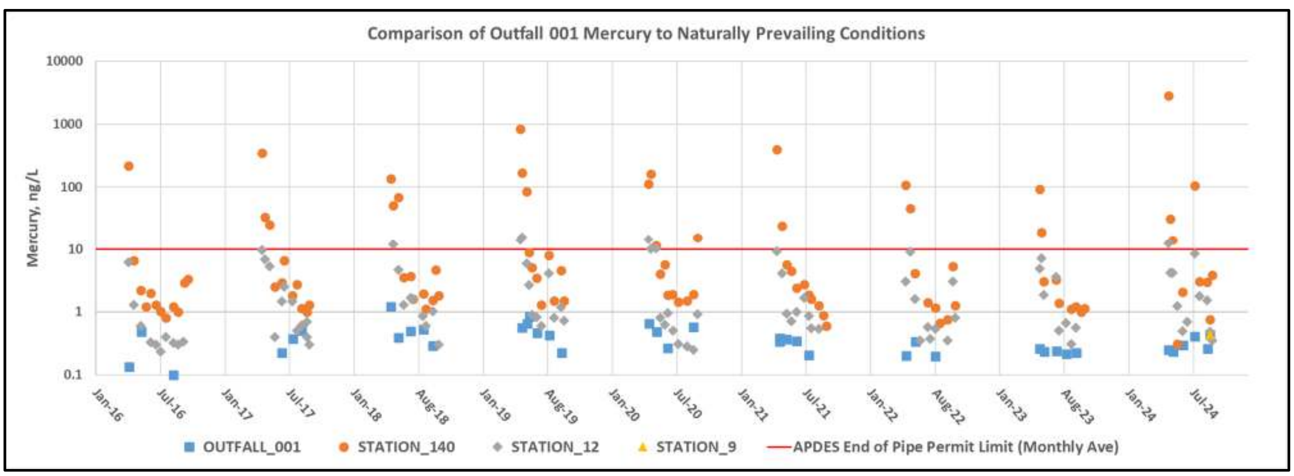


Figure 5. Comparison of Mercury at Outfall 001 with Prevailing Natural Conditions

In Figure 6 one can see the increasing natural concentrations in selenium at Station 140, 9 and 12 in 2019. The data suggest that Se concentrations started to rise as early as 2015. Station 140 illustrates the highest increase in selenium in 2019 and 2020 before decreasing again in 2021. Selenium concentration in the discharge at Outfall 001 remains below the permit limit.

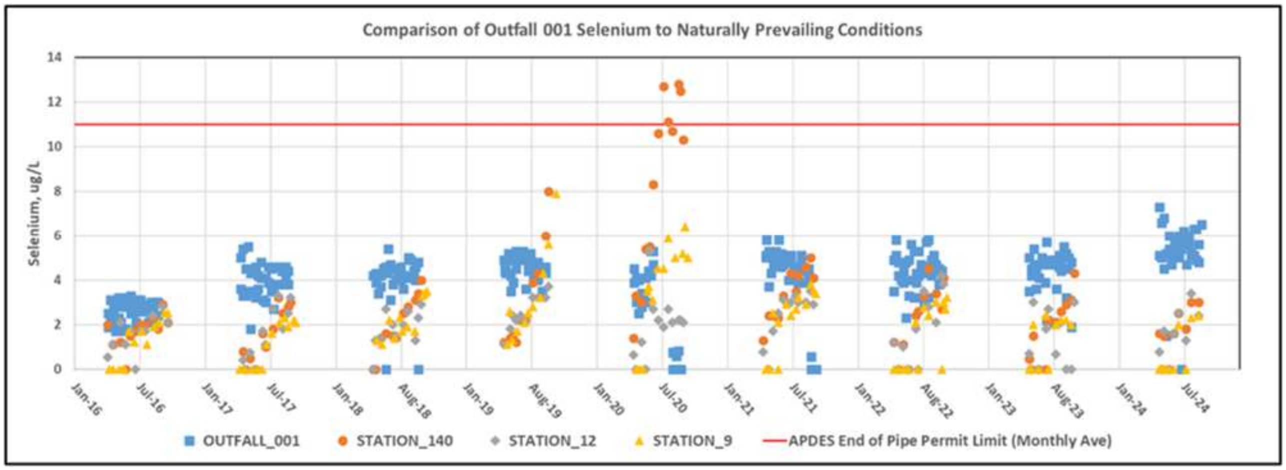


Figure 6. Comparison of Selenium at Outfall 001 with Prevailing Natural Conditions

In Figure 7 zinc concentrations at Outfall 001 are compared with the prevailing natural conditions for zinc at the upgradient monitoring stations. Note again that the scale on the y-axis is logarithmic and represents orders of magnitude changes along the scale. It shows a similar relationship as Figure 3. The discharge at Outfall 001 has lower zinc concentrations than natural environment for all years except for Station 12. This means the discharge at Outfall 001 has the effect of diluting the natural zinc concentrations in the receiving environment as it moves downstream past each of these monitoring stations. While this has been the case since the mine started discharging water in 1988, it is more apparent as prevailing natural metal concentrations increase relative to the relatively constant Zn concentration in the mine discharge at Outfall 001, particularly since 2018.

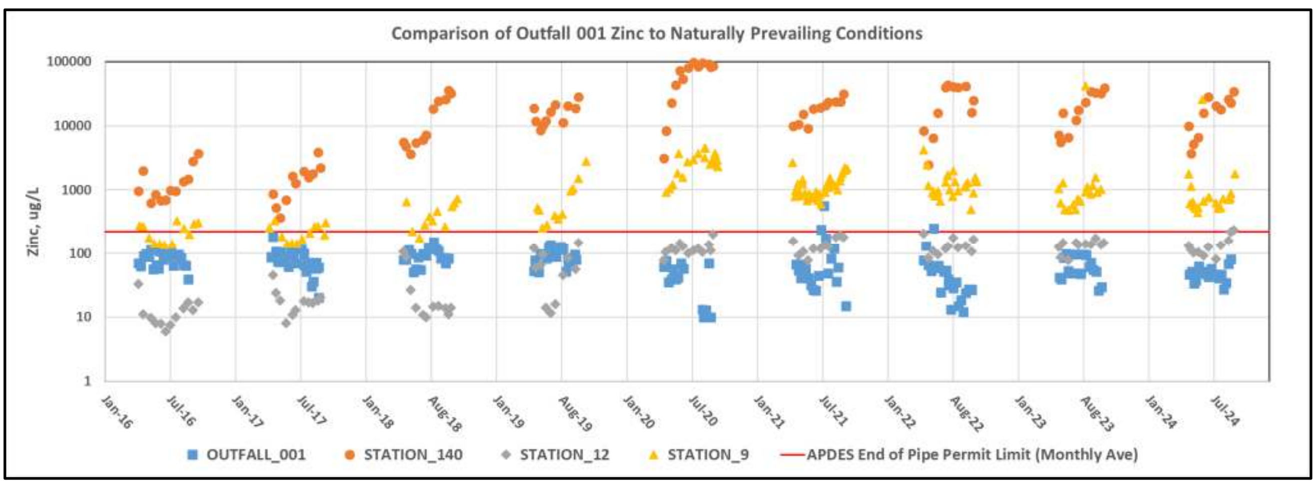


Figure 7. Comparison of Zinc at Outfall 001 with Prevailing Natural Conditions

Figure 8 illustrates the pH at Outfall 001 and at Stations 140, 12 and 9, relative to the APDES permit limit for pH (on a linear scale y-axis). The previous figures illustrated a recent marked increase in metal concentration for the prevailing natural conditions. Figure 8 also illustrates that at least at Station 140 (Middle Fork, upstream from Outfall 001) the increase in metal concentrations starting in 2018, and markedly in 2020, is accompanied by a reduction of the pH toward more acidic natural conditions ("down" in the graph Y-axis is a decrease in pH corresponding to an increase in acidity). The prevailing pH remains low (close to the lower permit limit) from 2018 through 2024. As with the metals, the comparatively high pH of the treated mine discharge at Outfall 001 would moderate/increase the more acidic pH in the natural environment.

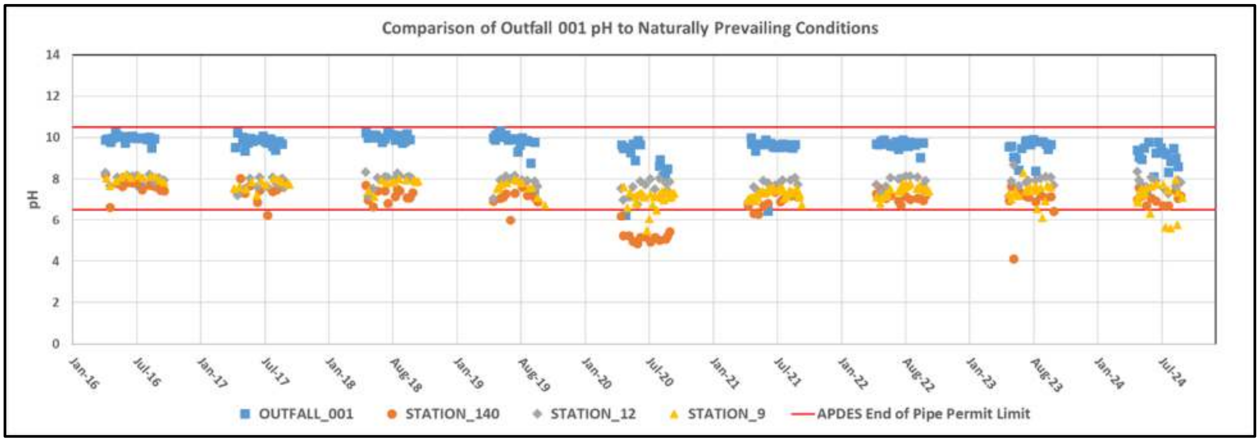


Figure 8. Comparison of APDES Permit Limits for pH with Prevailing Natural Conditions for pH

In Figure 9 prevailing natural conditions for TDS are illustrated for Stations 140, 12 and 9, which reflect the water quality in upgradient receiving water unaffected by mine discharge, compared with the APDES instream permit limits for TDS at Stations 151, 150 and 160 (dashed lines, edge of mixing zones). It is apparent that prevailing natural conditions for TDS show an increase starting in 2018 and then increase dramatically in 2020 upstream from, and unrelated to, any mine activities. This is particularly true for Station 9 on Ikalukrok Creek and Station 140 on Middle Fork. It is also apparent that in 2018 and more so by 2020, the natural conditions at Stations 140 and 9 exceeded some of the permit limits for TDS. When natural conditions exceed the instream permit limits for TDS at Stations 140 and 9, the assimilative capacities of mixing zones 2 (Station 151) and 3 (Station 150) are eliminated. This was the case in 2019 through 2022. This is the root cause of the mine's inability to discharge in compliance with its 2017 APDES instream permit limits for TDS. It is difficult to predict any future trends in the receiving waters' natural elevated TDS and metal concentrations. Red Dog Mine has observed these increases are concomitant with a broader trend of widespread degradation (warming and partial thawing) of permafrost and increasing TDS in the region. The degradation of the permafrost has been documented elsewhere and may be related to climate change (SRK, 2019, USGS, 2024).

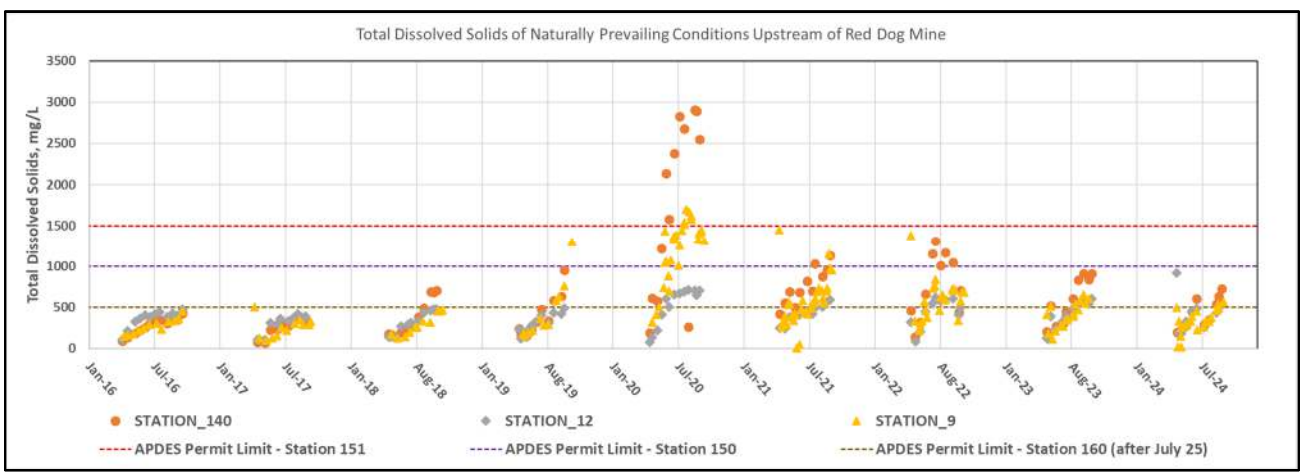


Figure 9. Comparison of Prevailing Natural TDS Conditions with APDES Permit Limits at Stations 150, 151 and 160

As shown in Table 3, during the 2016 through 2019 discharge seasons the TDS concentration in the mine discharge varied between 3,875 and 4,134 mg/L while the total annual TDS discharge varied between 9,908 and 27,655 tonnes (10,922 and 30,484 tons). The average annual total quantity of TDS during that period was 21,986 tonnes (22,558 tons).

Table 3. Summary of Annual Mine Discharge Volumes, TDS Loading and Total TDS Discharge Weights

Discharge Year	Annual Discharge (million gallons)	Wt. Average TDS Concentration (mg/L)	Total TDS Discharge (tonnes)	Total TDS Discharge (tons)
2016	1,253	4,134	19,613	21,620
2017	1,885	3,875	27,655	30,484
2018	1,382	3,882	20,303	22,380
2019	1,378	3,905	20,372	22,456
2020	869	3,016	9,908	10,922
2021	1,716	3,278	21,262	23,437
2022	1,724	3,331	21,709	23,930
2023	1,778	3,232	21,714	23,936
2024	1,735	3,300	21,644	23,858
Average	1,524	3,549	20,464	22,558

Iron concentrations are shown in Figure 10 and again illustrate a naturally increasing concentration trend in the prevailing natural environment. Note again that the scale on the y-axis is logarithmic and represents orders of magnitude changes along the scale. In this figure one can see the increasing natural concentrations in iron at Stations 140, 12 and 9 particularly over the period 2018 through 2020. The significantly lower concentration of iron in the discharge at Outfall 001 has the effect of diluting the iron concentration in the receiving waters.

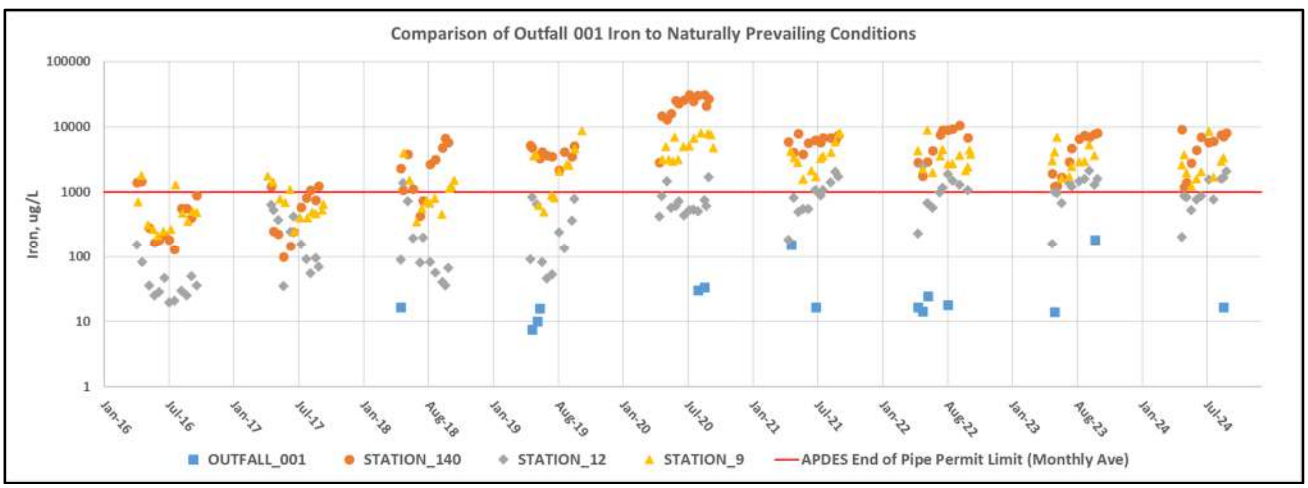


Figure 10. Comparison of Iron at Outfall 001 with Prevailing Natural Conditions at Monitoring Stations 140, 12 and 9

In the preceding figures we illustrated the trends of increasing natural concentrations of cadmium, copper, lead, selenium, zinc, TDS, and iron, and a decrease in pH (increased acidity) in Red Dog and Ikalukrok creeks in the Red Dog Mine area. These changes are somewhat irregular in that they do not occur necessarily at every station or in the same year but there is consistency in that they appear to change discernably starting in 2018. The figures also illustrate the concentrations of these constituents in the mine discharge (Outfall 001) are lower than the prevailing natural conditions and it follows that the mine discharge would dilute naturally high metals, and moderate pH (increase alkalinity) to the benefit of aquatic life in the stream systems downstream. Certainly, without the benefit of the relatively metal-poor and basic pH discharge at Outfall 001, natural conditions could have a stronger negative effect on aquatic life in Red Dog and Ikalukrok creeks.

The low concentration of metals in the discharge at Outfall 001 is the result of the water treatment at the mine, which effectively removes the metals. The TDS in the discharge is dominated by calcium sulfate (88-94% $CaS0_4$). This effective dilution of metals and the moderation of pH in the natural environment created by the discharge of treated mine water at Outfall 001 is significant and key to the fact that the Outfall 001 discharge is beneficial to aquatic life, even more-so as the background metal concentration began to increase in 2018.

This idea that the mine discharge was beneficial to aquatic life was originally proposed by Alaska Department of Fish and Game (ADF&G) in 2005 who compared current (in 2004) and pre-mining aquatic conditions of the Mainstem and concluded:

> "Over the last six years (1998 through 2004) there has been a viable aquatic community in Mainstem Red Dog Creek with the current water quality and mine discharge. Analysis of the water quality data supports the finding that the mine discharge is a net benefit to the creek. The naturally occurring concentrations of metals (especially cadmium and zinc) are diluted, the pH is moderated, and the higher hardness of the discharge water moderates the toxicity of the metals" (ADF&G 2005).[1]

We also offer additional evidence that the mine discharge improves water quality for aquatic life in Red Dog Creek. The mine had to construct a fish weir to prevent fish from migrating up Middle Fork Red Dog Creek after the mine startup and the initiation of seasonal discharge of treated mine water at Outfall 001. Prior to mining, the natural acidic and metal-rich water quality in Middle Fork Red Creek made it uninhabitable for salmon, Dolly Varden or grayling. Conditions for aquatic life improved with the addition of the treated water discharge and fish expanded their range up into the Middle Fork until the weir was constructed to prevent the new presence of fish from interfering with mine operations.

Existing Uses

Water Use and Water Recreation

No water supply use (aside from industrial) is known to occur within the Middle Fork drainage. No contact recreation (aside from APDES permit-related activities such as wading, water sampling and stream gauging) is known to occur, and no secondary recreation (aside from angling, capturing or other APDES permit-related monitoring activities) is known to occur.

Growth and Propagation

An existing use that has apparently been attained since initiation of mining activities (after approximately 1988) is the establishment of a "viable aquatic community"[1], including Dolly Varden rearing and Arctic grayling spawning and rearing. This existing use may be categorized under the designated use, "Growth and

---

[1] Scannell Technical Services (Prepared for Alaska Department of Fish and Game). 2005. Comparison of Mainstem Red Dog Creek Pre-Mining and Current Conditions. ADF&G Habitat Technical Report# 03-2005. Juneau, Alaska (March).

Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife" (however, note that this potential "designated use" of Middle Fork Red Dog Creek is specifically excluded by Alaska regulation at 18 AAC 70.230). Ironically, emergence of this viable community is apparently attributable to the existence of Red Dog Mine discharge as in its 2005 report, the ADF&G compared current and pre-mining (prior to approximately 1988) aquatic conditions of the Mainstem to conclude that the mine discharge at Outfall 001 is a net benefit to aquatic life in Red Dog Creek as previously described under the Receiving Waters Section.

Teck offers that the continued ability to discharge treated mine wastewater at Outfall 001 is important to the health of aquatic communities downstream. This is perhaps more important now with the increase in natural background cadmium and zinc bearing TDS in Red Dog and Ikalukrok creeks. Based on the findings of ADF&G and the recent natural water quality trends, now more than ever the treated mine discharge will dilute the background TDS with treated water with very low metal concentration, moderate the pH and increase the hardness with the effect of moderating the toxicity of metals in the receiving waters.

Passage or Barrier to Migratory Fish

Since Red Dog Mine began discharging treated water, Dolly Varden continuously use the Mainstem for rearing and Arctic grayling also use the Mainstem continuously for both spawning and rearing and/or pass through it to reach the North Fork for both spawning and rearing during the open-water season. Regarding the potential for the interim TDS limits at Outfall 001 to act as an elevated TDS-barrier to migratory species or a safe passage zone, under the minor permit modification Teck has been discharging water treated to same or better quality (i.e., same or lower TDS concentration) and TDS annual mass quantity as in the past and that the discharge at Outfall 001 is comparable to what it has been when safe fish passage and use in Mainstem has been historically documented. Therefore, it is anticipated the continuation of the discharge under the 2021 APDES minor permit modification would not inhibit passage, but enhance it, nor would it form a barrier to migratory species. On the other hand, in Mainstem in the absence of the discharge at Outfall 001, the prevailing natural condition concentration for metals could prohibit spawning & rearing and create a barrier to fish passage during lower-flow conditions as was observed prior to the onset of mine operations.

Cumulative Effects of Multiple Nonpoint Source Inputs

As there are no other industrial or municipal dischargers in the Wulik River watershed. Red Dog Mine is the sole source of industrial discharge within that watershed with its discharge to Red Dog Creek at Outfall 001. As previously described, there are multiple nonpoint sources for TDS in the Wulik watershed including the recent natural increases in TDS in Red Dog and Ikalukrok creeks. The sources for this TDS appear to be natural as there are no measurable human activities away from the mine, affecting these creeks. Recent work by the USGS has documented increases in TDS in more than 75 drainages across northern Alaska, tentatively attributed to warming permafrost. As previously described, the Red Dog Mine wastewater discharged at Outfall 001 has been treated by high-density sludge and/or RO processes that effectively remove the metals. As a result, the discharge has had the effect of diluting the metal concentration (primarily Cd and Zn) in the receiving waters since mine water treatment began and has been more effective in diluting these metal concentrations since they began naturally increasing noticeably in 2018.

Adverse Effect on Threatened or Endangered Species

Threatened or endangered species are not known to be present in the Red Dog Creek, Ikalukrok Creek, or Wulik River systems.

Undesirable or Nuisance Aquatic Life

Dolly Varden, Arctic grayling and Slimy sculpin in the Mainstem are not anticipated to be adversely affected by continued mine discharge at Outfall 001. Therefore, it is not expected these indigenous species would be displaced or replaced by non-indigenous or other nuisance species.

Objectionable Color, Taste, or Odor in Aquatic Resources

Natural TDS can impart a cloudy or colored appearance in water. TDS-bearing mine discharge has a clear appearance and generally appears rather clear in comparison to the naturally high TDS receiving waters. The in-line WTP turbidity discharge-control action-threshold is very low @ 1.4 - 1.9 NTU (EPA secondary drinking water standard & WHO-established drinking water limit are 5 NTU). In addition, the mine discharge water is not known to impart a taste or odor to water or aquatic organisms.

Summary of Studies and Evaluations Completed Under The 2021 Compliance Schedule

The following are summaries of the studies required under the 2021 compliance schedule. All the studies were completed on schedule and reports for each were previously submitted to ADEC.

Aquatic Studies

TDS LITERATURE REVIEW

The task was to assemble an annotated bibliography of all recent studies regarding effects of TDS on freshwater salmonids. This annotated bibliography summarizes the status of knowledge on the effects of elevated total dissolved solids/specific electrical conductivity on freshwater primary producers and primary and secondary consumers compiled from 25 peer-reviewed and grey literature publications. The prevailing conclusion of this summary evaluation is that TDS toxicity is both species and life-stage specific. Furthermore, the ionic composition of TDS, not just the concentration, at a site influences toxicity. Consequently, TDS may be a reasonable surrogate of the combined toxicity of major ions at a given site if ratios between ions are relatively constant, but caution should be used in evaluating the toxicity of TDS across sites or across toxicity studies where the ionic composition of TDS varies.

DESKTOP DATABASE STUDY

The objectives of the study were to compile and create a secure, accessible database of environmental water quality data provided by Teck and biomonitoring data from Red Dog Mine (RDM) provided by ADF&G, and to conduct a comprehensive analysis of available data to provide a better understanding of the relationships between water quality and aquatic communities surrounding the Red Dog Mine. This comprehensive analysis was tailored to address long-term and recent trends and spatial changes in water quality and biology and the relationships between them, with a system-wide approach.

This investigation was not designed to answer cause and effect questions, rather the primary objective was to explore correlations and relationships between variables over time and space.

Several significant drainage-wide temporal trends in water quality parameters and biological indices were found in the present investigation. Increases in TDS, sulfate, total calcium, magnesium, zinc, aluminum, selenium, and dissolved zinc, magnesium, nickel, cadmium, selenium, sodium, aluminum, iron, and manganese were seen in the water quality data. In the biological data, increases were seen drainage-wide in the number of aquatic taxa and whole-body burden levels of zinc, selenium, lead, cadmium, and mercury in juvenile Dolly Varden. Decreasing trends were seen drainage-wide in alkalinity, dissolved potassium and lead, Chl-a concentrations, % Ephemeroptera, Plecoptera and Trichoptera (EPT) taxa, and fish catch per unit effort (CPUE).

Spatial trends are also apparent in the historical data analysis. Most strikingly, Station 20, the station investigated closest to and downstream of Outfall 001 on the middle fork of Red Dog Creek, exhibits the highest TDS, sulfate calcium, zinc, magnesium, selenium, dissolved metals levels, and highest water temperature for the period when this station was sampled for water chemistry from 2000-2013 compared to the other four stations investigated. Furthermore, Station 20 had the lowest alkalinity, Chl-a concentrations, and lowest aquatic macroinvertebrate densities. No fish samples were reported from this station because there are no fish upstream from the Fish Weir. This station had the highest number of total aquatic (macroinvertebrate) taxa until recently (2015/2016).

Station 9, on the upper Ikalukrok Creek above the confluence with Red Dog Creek, provides a reference station for potential discharge effects. Station 12, in North Fork Red Dog Creek immediately above the confluence with Middle Fork Red Dog Creek where the mine effluent is discharged, also provides a reference station. At these two stations TDS, sulfate, calcium concentrations, and water temperatures have historically been the lowest and the average aquatic density of macroinvertebrates has been highest. Other environmental and biological parameters differ between these two stations. The rate of increase in TDS concentrations for Station 9 is steeper than that of stations downstream from the discharge (Station 10/151, 150 and 160) indicating that natural changes in water chemistry in the drainage are substantial. Station 12 has the highest alkalinity, Chl-a concentrations, and highest average aquatic macroinvertebrate density together with the lowest zinc, % Chironomidae, and lowest CPUE although not statistically evaluated. Stations 10/151, 150 and 160 were not extreme in any of the investigated environmental or biological parameters.

TDS had the most widespread significant correlations of all the water quality parameters with negative relationships with periphyton (through Chl-a) and aquatic macroinvertebrates (number of aquatic taxa and average aquatic density parameters). While TDS concentrations are negatively correlated with Chl-a, relatively high Chl-a values are still seen at TDS concentrations of 2000 mg/L. If the non-normalized linear equation that explains very little of the variability in the data (R2adj=0.019) is used to calculate at what TDS concentration Chl-a reaches zero, a rough estimation that lacks biological relevance, 3000 mg/L is indicated as a threshold for zero Chl-a in the Red Dog drainage. However, because TDS explains less than 2% of the variation in Chl-a concentrations in the data set, other factors are more of a driver for periphyton communities in the drainage than TDS.

WHOLE EFFLUENT TOXICITY TESTING

The purpose of the whole effluent toxicity (WET) testing on stream samples collected from multiple sample locations in the Ikalukrok drainage in July and September 2021 was to evaluate instream toxicity to two sensitive indicator organisms, *Ceriodaphnia dubia* (*C. Dubia*) and *Daphnia magna* (*D. Magna*). The *C. dubia* reproductive endpoint was more sensitive to all samples than the *D. magna* growth endpoint. All sample stations exhibited some level of toxicity in July with Station 12 exhibiting low toxicity, Stations 9 and 160 intermediate toxicity and Stations 150 and 151 the highest toxicity.

Toxicity increased at all stations in September when the mine was no longer discharging compared to July when the mine was discharging. This supports the thesis that the aquatic life benefits from the mine discharge, possibly specifically related to increased hardness that results in a reduction of metal bioavailability. However, toxicity also increased in September at Stations 9 and 12, which are not influenced by mine discharge, which suggests the increased toxicity at all stations may be the result of increased toxicants (e.g., metals from seeps, warming permafrost, shallow groundwater) entering the Ikalukrok Creek drainage.

However, both July and September results suggest at least in part, there is a natural input of toxicants (e.g., metals from seeps) in upper Middle Fork Red Dog Creek within or above the mine influenced reaches of the creek upstream from Station 140. Consequently, data should be interpreted with caution until analytical chemistry data becomes available, and a more detailed analysis of these factors and their interactions is undertaken.

EXPANDED ROUTINE BIOMONITORING

This report presents data collected during the 2022 summer season and where applicable these data are compared with data for previous years. Five sampling events occurred in the Red Dog vicinity in 2022. The work repeated work done in previous years except that it was expanded to include Arctic Grayling gamete sampling to meet the compliance schedule requirements of the 2021 APDES minor permit modification.

Water quality sampling that accompanied the aquatic biomonitoring showed a reduction of several constituent metals since a high of 2020 in background water quality. Chlorphyll-a exhibited a decrease in average concentration after 2020 in Red Dog Creek stations. Chlorophyll-a shows a reduction in average concentration in Ikalukrok Creek beginning in 2017 and disappeared altogether in 2019 through 2022 commensurate with increasing concentration of zinc and cadmium over the same period.

EGG FERTILIZATION, EMBRYO SURVIVAL AND GROWTH STUDY

Results from these experiments provide useful information with respect to regulating TDS discharges from RDM within the context of increasing background TDS in the drainage as well as providing important information about increasing metal concentrations in the system and their interactions with TDS. Based on experimental results, the report concluded:

1) Previous experiments indicating chum salmon fertilization is much more sensitive to TDS than are other locally occurring indigenous species (i.e., Dolly Varden or Arctic grayling) are not supported. Chum salmon are insensitive to TDS at concentrations up to 2,306-2,325 mg L-1, for all endpoints evaluated except water hardening, but results from the early life stage (ELS) experiment indicates this effect has no long-term consequence on embryo-larval survival or growth. However, interactions between TDS and metals on embryo-larval survival indicate that if these metal concentrations continue, TDS concentrations at Station 160 should not exceed the nominally lower concentration of 2,293 mg L-1.TDS, the estimated, though somewhat uncertain, effective concentration of 20% (EC20) in the TDS+metals experiment.

2) Consistent with previous experiments and now extended to early life stages, Dolly Varden are also insensitive to TDS across all endpoints evaluated, again except for water hardening which has no long-term impact. However, interactions between TDS and metals on embryo-larval survival and growth indicate that if these metal concentrations continue, TDS concentrations at Station 160 should not exceed 2,150 mg L-1 TDS, the estimated EC20 in the TDS+metals experiment for larval growth.

3) As previously demonstrated, Arctic grayling appear to be more sensitive to TDS than Dolly Varden and now chum salmon. Effects on fertilization were observed in 2 of 6 TDS-only fertilization experiments, on water hardening through 96 hours, and on embryo-larval survival and growth. Across the range of endpoints evaluated, embryo larval survival was the most sensitive endpoint with an EC20 of 1,265 mg L-1 TDS. One of the fertilization experiments had a slightly lower EC20 of 1,187 mg L-1 but the geometric mean of all six tests was >1,992 mg L-1. The water hardening endpoint was much more sensitive than embryo-larval survival (EC20 of 441 mg L-1), but this effect is either moderated or inconsequential in longer exposures as evidenced by the higher EC20 for embryo-larval survival and growth. Considering all the above, we recommend TDS concentrations should not exceed 1,265 mg L-1 at locations where larval Arctic grayling are rearing.

4) The TDS+metals experiment on Arctic grayling indicates that TDS concentrations <315 mg L-1 are likely to result in complete failure of larval recruitment if metal concentrations used in this experiment continue to occur. They also indicate that in the range of 315 to ~1,200 mg L-1 TDS, these metal concentrations are still the limiting stressor for Arctic grayling. Only at concentrations exceeding the TDS EC20 (1,265 mg L-1) is TDS expected to be the limiting stressor for ELS Arctic grayling.

Technical Evaluations

PIPELINE TO CHUKCHI SEA EVALUATION

The evaluation report summarizes the history of various previous pipeline evaluations, including buried and above-ground variants, before providing updates in terms of design, costs and permitting. The base case for the 2022 evaluations was 30-inch diameter pipe to accommodate 1.4 billion gallons discharge of a 5-month annual discharge season using single-walled HDPE pipe placed along the road, “at grade”. Several other alternatives were also evaluated but not carried forward. The study concluded that it was feasible to complete most of the construction in a single summer season with appropriate logistics, planning, material and equipment procurement and pre-production of bench gravel. However, there are likely to be concerns regarding potential pipeline impacts to caribou migration.

The estimated cost for the project is $279 million. The study also identified various environmental permits, additional studies and other regulatory/landowner approvals that would be required prior to construction. Studies would include wetlands delineation and culvert surveys and right-of-way (ROW) modifications. Kuna concluded that ROW does not currently include provisions for a pipeline but an independent legal analysis by Perkins Coie indicates that the National Park Service has the statutory authority to issue a right-of-way for a water pipeline under 16 U.S.C. § 79. Permits may include a CWA Section 404 permit, a new APDES permit and a NWAB Title 9 permit. Other minor permits may also be required.

REVERSE OSMOSIS IMPLEMENTATION EVALUATION

To address the RDM water balance challenge in addition to an observed higher background TDS concentration in the receiving environment, deployment of a reverse osmosis (RO) water treatment plant (RO-WTP) was completed in 2020. The primary goal of implementing the RO-WTP was to ensure that RDM would have a method of discharging under the original discharge permit limitations regardless of elevated TDS in the receiving environment, and, ideally, all year around. The RO-WTP treated WTP#1 or WTP#2 effluent and produced permeate, brine, and other associated waste streams (which are routed back to the WTP#1 and #2 or the TSF). In accordance with APDES Permit AK0038652, including Whole Effluent Toxicity (WET) testing requirements, blended permeate (with microfiltration [MF] filtrate or WTP clarifier overflow) was discharged into Outfall 001 to the Middle Fork of Red Dog Creek.

The RO-WTP was commissioned in August 2020 and the initial operating period extended from August 27 to September 26, 2020. Over this short period, the plant experienced long downtime and did not reach its design production capacity, mostly due to severe membrane biofouling and scaling.

After this challenging season, various strategies were implemented in 2021 to sustain the plant's continuous operation and maximize permeate production. These strategies included the optimization of existing and new RO pre-treatment systems, tuning of RO operational setpoints, as well as implementation of ‘measurement and control’ strategies. Process improvement opportunities continue to be investigated to improve RO-WTP operability and performance, requiring constant attention at this time.

Although the RO process produces a low TDS (< 40 ppm) stream by virtue of high salt (TDS) rejection (up to 99.7%) from the feed, a concentrated brine stream is also co-produced. RO brine and associated waste streams are returned to the TSF. Returning RO-WTP brine (highly concentrated reclaim water) to the TSF was identified as a risk due to increasing concentrations of TDS, Gypsum Supersaturation, and particularly Constituents of Concern (CoC). Notably, the long-term operation of the RO-WTP without proper mitigation could result in CoC accumulation in TSF water, which may severely impact RDM’s discharge objectives in the future

EVAPORATION EVALUATION

An initial mine evaporator trial conducted in 2015 provided mixed results, however significant lessons were identified for potential future applications. The equipment and data from the earlier trial were reviewed and recommendations made within this report to clarify what potential benefits and risks were associated with this technology.

The greatest risks identified by the assessment were:

1. Potential/perceived/actual personnel exposure to decreased air quality, due to (constituents in) airborne water and increased power demand emissions resulting in increased suspended particulates, other airborne pollutants, or both.
2. Inefficiency – evaporation system efficiency was estimated at 1.5MW of power for ~1400 GPM of water evaporated, compared with 1.0MW for 1400 GPM of RO water discharged.
3. To provide material water volume removal from RDM through evaporation technology there is a requirement for additional generating capacity beyond the ability of the current mine to produce. Requires modeling and air permitting that may not be feasible or even achievable.

No further action was recommended at the time based on the identified risks. It was recommended to reassess evaporative equipment and technologies in 3-5 years as they evolve, and which may yet provide for more practical and appreciable potential evaporation opportunities at RDM.

EXPANDED PERMAFROST MONITORING

Additional permafrost monitoring was accomplished in summer 2021 and 2022 with aerial reconnaissance for permafrost thaw features in the Ikalukrok Creek drainage, and in April 2022 with the expansion of the soil temperature and shallow groundwater level monitoring well network in the Ikalukrok and North Fork Red Dog Creek drainages (Ikalukrok Creek Permafrost Monitoring, 2023).

Ground temperature monitoring for the six temperature cables installed in 2021 commenced in June 2021. Ground temperature monitoring for the eight temperature cables installed in 2022 began in May 2022.

Ground temperatures were not available from all sites or for all times since installation, in part because of logger connection problems or failure, or potential temperature cable failure. One logger installed in 2021, at location 2T, was damaged when the monument was toppled, and the logger was immersed. All loggers initially installed at the 2022 installations required replacement because of an adhesive problem that caused the faceplate of the logger to separate, allowing precipitation to enter the loggers. As a result, several of the loggers were moved throughout the field season to attempt to maintain readings at the new installations. In addition, readings have not been collected from three of the new temperature cable locations, East Seep, Midpoint, and Avonella, possibly because of cable failure or damage.

Some of the data indicate warmer permafrost temperatures in 2021 compared to the same season in 2022 (Location 1b, vegetation kill zone, Location 3R).

The results of the groundwater sampling events in September 2023 indicated the East Seep and Nic's Seep locations on Ikalukrok Creek had elevated TDS and metals concentrations. The TDS at these locations was likely almost all attributable to sulfate, although sulfate was only analyzed on a total basis. The TDS concentration in groundwater at Nic's Seep (11,300 mg/L) was more than twice as high as in a surface water sample from the site in August 2022 (3,630 mg/L). Also notable was significant acidity in groundwater at East Seep and Nic's Seep, and pH levels of 3.3 and 3.2, respectively. The monitoring wells in the Ikalukrok Creek drainage near the confluence of Red Dog Creek (4R) and in the North Fork Red Dog Creek had moderate TDS (approximately 1,400 mg/L) and metals concentrations, with approximately half of the TDS attributable to sulfate. Acidity was not present above the detection limit, and pH in these wells was near neutral (6.2 to 7.7).

Very high TDS concentrations (>5,000 mg/L) and acidity were observed at three seep locations on the Ikalukrok Creek approximately 2 miles upstream from the Red Dog Creek confluence (Unnamed Seep, Nic's Seep, and East Seep), a tributary to Ikalukrok Creek above West Fork Ikalukrok (Upper Ikalukrok), in the West

Fork Ikalukrok and a tributary (Upper West Fork Ikalukrok, West Fork Ikalukrok, Warf), a tributary to Grayling Creek (Upper Grayling Junior), and two tributaries to Upper Middle Fork Red Dog Creek (Rachel Creek and Kaviqsaaq Seep). The pH levels at these locations ranged between 2.9 and 4.1, acidity was generally elevated, and the water did not have detectable concentrations of alkalinity.

SNOW MAKING EVALUATION

An initial mine ice making trial conducted in 2020 provided mixed results, however significant lessons were identified for potential future applications. At the same time, the RO plant was being constructed and a table-top study was completed to investigate the potential for year-round water discharge. The equipment and data from the earlier ice making trial and this study are reviewed and recommendations made within this report to clarify what potential benefits and risks were associated with this process.

The greatest risks identified by the assessment were:

- Permitting requirements for new discharge locations and water quality and quantity (multiple year process)
- Land use for snow/ice formation – study of wetlands, damage to vegetation beneath ice and uncertainties regarding meltwater runoff (e.g., would spring breakup result in sheet flow or channeling/eroding [effectively, dredging] runoff discharge downstream of the melting snowfield, etc.).
- Increased electrical power load beyond the ability of the current mine to produce. Requires air quality modeling and air permitting that may not be feasible or even achievable. New power generator equipment may need to be purchased as well.
- New equipment, personnel resources, training and operating requirements for winter snow making.
- Operating the RO plant and piping in freezing conditions, were not designed for flow interruptions.

No further action was recommended based on the identified risks. It was recommended to reassess snow making equipment and technologies in 3-5 years as they evolve, and which may yet provide for more practical and appreciable potential winter discharge opportunities at RDM. It was recommended that the site pursue other water discharge opportunities and quantify potential impacts, if any, of ice formation on tundra by assessment of operating snow fences which can create similar (snowfield) conditions and have existed in the mine vicinity for ~30 years.

Compliance Schedule Extension

As previously discussed, Teck completed all the studies required under the 2021 compliance schedule. While that work helped inform potential solutions to improving water management at Red Dog, the 5-year duration of the schedule was not sufficient to identify and implement any long-term water management solution. As a result, Teck requires additional time to develop a long-term water management solution and adapt to the naturally changing receiving environment.

At this juncture it is unclear whether the long-term water management solution is: 1) increased water treatment efficacy at the mine site, 2) modified site-specific water quality criteria, 3) a pipeline to the Chukchi Sea, or 4) a combination of these, or something altogether different.

Teck is developing a list of, and a schedule for, additional studies, decision points and implementation steps that it believes will lead to a long-term water management solution under the terms of a new APDES permit. Teck is committed to submitting this draft list and schedule within 120 days of submitting this report to ADEC. Teck believes that a reasonable estimate of the time required to complete this work is 10 years and Teck is requesting a 10-year extension of the 2021 compliance schedule (to May 2036) to identify and implement the fix. This timeframe is realistic when one incorporates the steps of identifying a solution, engineering it, permitting it and constructing it. This includes the time required to develop a new APDES permit for Red Dog Mine where Red Dog will comply with the applicable water quality-based effluent limits (WQBEL) long into the future consistent with its need to discharge water into the indefinite future. Teck recognizes that the Clean Water Act (40 CFR 122.47) requires that a schedule of compliance which exceeds 1 year include specific interim dates for submission of reports of progress toward completion of the interim compliance schedule requirements and must indicate a project completion date.

During the 10-year extension Teck is proposing to continue to discharge seasonally at Outfall 001 under the terms of the 2021 APDES minor permit modification (annual TDS mass limit of 24,235 tons), while it performs additional studies and evaluations that will inform the decisions required to adopt and implement a long-term strategy for managing water at the mine under persistently high natural conditions for TDS.

Compliance Schedule Trigger

The volume of contained water at Red Dog varies seasonally and annually. The TSF is the primary reservoir for mine water at site. Typically, the water elevation in the TSF is lowest in September, coinciding with the end of the summer discharge season at Outfall 001. Conversely, the water level in the TSF is highest in spring, owing primarily to about 9 months' accumulation of precipitation from rain and snow.

The fundamental reason for maintaining low water level in the TSF is to accommodate extreme storm events by providing temporary water storage. Climate change is affecting weather patterns in the Arctic with an increase in storm intensity and frequency and an increase in annual precipitation totals at Red Dog. For example, 2012 was an extraordinary year. In August, the mine received 15.2 inches of rain. A 30-day rain event with a 1,000-year average recurrence at Red Dog would only be 10.9 inches of rain. This is three times more than the historic average August precipitation for the mine. Also in 2012, the mine received an annual total of 31.4 inches of precipitation; 165 percent of typical annual precipitation. This was followed by 27.1-inches for the annual precipitation in 2013, and 30.0 inches in 2019. The prior 20-year weather record had not measured an annual participation greater than 25.6 inches and that was once with an average of 17.7 inches. Combined, the events in 2012 and 2013 increased stored water at Red Dog that that would have raised the water level in the TSF by approximately 12 ft. had much of the water not been directed to the Main Pit, which has since been filled with waste rock and otherwise is full of water. The 15.2-inch total in August 2012 is equivalent to a volume of ~1,044 million gallons of water for the entire site and 655 million gallons (mgal) for the TSF catchment. The design criteria for the TSF dams at Red Dog are based on an Inflow Design Flood equivalent to ~570 million gallons of water for a 24hr design storm event for the TSF catchment. As a result of the increase in annual precipitation and increasingly limited options for storing excess water, relying on the TSF to store excess water is an increasingly risky strategy.

The 2021 minor permit modification specifies a trigger limit (Section 2.4.1) allowing Teck to discharge under the terms of the minor permit modification whenever the water elevation in the TSF exceeds 971 ft above mean sea level (972.4 ft WSE AMSL, new Low Distortion Projection). Teck see no reason to change that permit trigger limit during the requested 10-year extension of the compliance schedule. This trigger limit offers Teck the greatest flexibility in continuing to manage the water level in the TSF by lowering the water level to the greatest possible extent.

Appendix A –Total Dissolved Solids Data for Outfall 001 Stations 151, 150, 160, 140, 12 &9

Table Appendix A-1 Outfall 001 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Total Dissolved Solids	3830	mg/L
Outfall 001	5/10/2016	Total Dissolved Solids	4140	mg/L
Outfall 001	5/17/2016	Total Dissolved Solids	4340	mg/L
Outfall 001	5/20/2016	Total Dissolved Solids	*7*	mg/L
Outfall 001	5/20/2016	Total Dissolved Solids	*5*	mg/L
Outfall 001	5/24/2016	Total Dissolved Solids	2110	mg/L
Outfall 001	6/1/2016	Total Dissolved Solids	4200	mg/L
Outfall 001	6/7/2016	Total Dissolved Solids	4300	mg/L
Outfall 001	6/14/2016	Total Dissolved Solids	4240	mg/L
Outfall 001	6/21/2016	Total Dissolved Solids	4280	mg/L
Outfall 001	6/28/2016	Total Dissolved Solids	4180	mg/L
Outfall 001	7/2/2016	Total Dissolved Solids	4240	mg/L
Outfall 001	7/5/2016	Total Dissolved Solids	4190	mg/L
Outfall 001	7/12/2016	Total Dissolved Solids	4100	mg/L
Outfall 001	7/19/2016	Total Dissolved Solids	4190	mg/L
Outfall 001	7/26/2016	Total Dissolved Solids	4260	mg/L
Outfall 001	8/2/2016	Total Dissolved Solids	4040	mg/L
Outfall 001	8/9/2016	Total Dissolved Solids	3980	mg/L
Outfall 001	8/16/2016	Total Dissolved Solids	4440	mg/L
Outfall 001	8/23/2016	Total Dissolved Solids	4230	mg/L
Outfall 001	8/31/2016	Total Dissolved Solids	4200	mg/L
Outfall 001	9/6/2016	Total Dissolved Solids	3880	mg/L
Outfall 001	9/13/2016	Total Dissolved Solids	4000	mg/L
Outfall 001	9/20/2016	Total Dissolved Solids	3520	mg/L
Outfall 001	9/26/2016	Total Dissolved Solids	*<10*	mg/L
Outfall 001	9/26/2016	Total Dissolved Solids	*<10*	mg/L
Outfall 001	5/1/2017	Total Dissolved Solids	*9*	mg/L
Outfall 001	5/1/2017	Total Dissolved Solids	*<5*	mg/L
Outfall 001	5/9/2017	Total Dissolved Solids	3590	mg/L
Outfall 001	5/9/2017	Total Dissolved Solids	*38*	mg/L
Outfall 001	5/9/2017	Total Dissolved Solids	4400	mg/L
Outfall 001	5/15/2017	Total Dissolved Solids	4000	mg/L
Outfall 001	5/23/2017	Total Dissolved Solids	3840	mg/L
Outfall 001	5/30/2017	Total Dissolved Solids	4080	mg/L
Outfall 001	6/5/2017	Total Dissolved Solids	3750	mg/L
Outfall 001	6/13/2017	Total Dissolved Solids	3980	mg/L
Outfall 001	6/20/2017	Total Dissolved Solids	2030	mg/L
Outfall 001	6/27/2017	Total Dissolved Solids	4370	mg/L

Table Appendix A-1 Outfall 001 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/4/2017	Total Dissolved Solids	4140	mg/L
Outfall 001	7/10/2017	Total Dissolved Solids	4050	mg/L
Outfall 001	7/18/2017	Total Dissolved Solids	4150	mg/L
Outfall 001	7/26/2017	Total Dissolved Solids	4300	mg/L
Outfall 001	8/2/2017	Total Dissolved Solids	4120	mg/L
Outfall 001	8/9/2017	Total Dissolved Solids	4120	mg/L
Outfall 001	8/16/2017	Total Dissolved Solids	4330	mg/L
Outfall 001	8/22/2017	Total Dissolved Solids	3910	mg/L
Outfall 001	8/31/2017	Total Dissolved Solids	3710	mg/L
Outfall 001	9/4/2017	Total Dissolved Solids	3760	mg/L
Outfall 001	9/12/2017	Total Dissolved Solids	3560	mg/L
Outfall 001	9/19/2017	Total Dissolved Solids	4180	mg/L
Outfall 001	9/27/2017	Total Dissolved Solids	*7*	mg/L
Outfall 001	9/27/2017	Total Dissolved Solids	*7*	mg/L
Outfall 001	5/4/2018	Total Dissolved Solids	*242*	mg/L
Outfall 001	5/4/2018	Total Dissolved Solids	*<5*	mg/L
Outfall 001	5/14/2018	Total Dissolved Solids	4420	mg/L
Outfall 001	5/22/2018	Total Dissolved Solids	3870	mg/L
Outfall 001	5/29/2018	Total Dissolved Solids	3560	mg/L
Outfall 001	6/5/2018	Total Dissolved Solids	4080	mg/L
Outfall 001	6/12/2018	Total Dissolved Solids	3980	mg/L
Outfall 001	6/19/2018	Total Dissolved Solids	4240	mg/L
Outfall 001	6/26/2018	Total Dissolved Solids	3950	mg/L
Outfall 001	7/2/2018	Total Dissolved Solids	3660	mg/L
Outfall 001	7/9/2018	Total Dissolved Solids	3560	mg/L
Outfall 001	7/17/2018	Total Dissolved Solids	4160	mg/L
Outfall 001	7/24/2018	Total Dissolved Solids	4040	mg/L
Outfall 001	7/31/2018	Total Dissolved Solids	3730	mg/L
Outfall 001	8/7/2018	Total Dissolved Solids	3350	mg/L
Outfall 001	8/14/2018	Total Dissolved Solids	3470	mg/L
Outfall 001	8/21/2018	Total Dissolved Solids	3650	mg/L
Outfall 001	8/28/2018	Total Dissolved Solids	3500	mg/L
Outfall 001	9/4/2018	Total Dissolved Solids	3360	mg/L
Outfall 001	9/10/2018	Total Dissolved Solids	3280	mg/L
Outfall 001	5/15/2019	Total Dissolved Solids	4840	mg/L
Outfall 001	5/18/2019	Total Dissolved Solids	4160	mg/L
Outfall 001	5/19/2019	Total Dissolved Solids	4400	mg/L
Outfall 001	5/28/2019	Total Dissolved Solids	3870	mg/L

Table Appendix A-1 Outfall 001 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/3/2019	Total Dissolved Solids	3180	mg/L
Outfall 001	6/10/2019	Total Dissolved Solids	3740	mg/L
Outfall 001	6/18/2019	Total Dissolved Solids	3960	mg/L
Outfall 001	6/26/2019	Total Dissolved Solids	4110	mg/L
Outfall 001	6/26/2019	Total Dissolved Solids	*<20*	mg/L
Outfall 001	6/26/2019	Total Dissolved Solids	4010	mg/L
Outfall 001	7/1/2019	Total Dissolved Solids	3830	mg/L
Outfall 001	7/8/2019	Total Dissolved Solids	3840	mg/L
Outfall 001	7/15/2019	Total Dissolved Solids	3900	mg/L
Outfall 001	7/22/2019	Total Dissolved Solids	3860	mg/L
Outfall 001	7/29/2019	Total Dissolved Solids	4050	mg/L
Outfall 001	8/5/2019	Total Dissolved Solids	4060	mg/L
Outfall 001	8/12/2019	Total Dissolved Solids	3480	mg/L
Outfall 001	8/17/2019	Total Dissolved Solids	3460	mg/L
Outfall 001	8/19/2019	Total Dissolved Solids	3600	mg/L
Outfall 001	8/29/2019	Total Dissolved Solids	3700	mg/L
Outfall 001	9/7/2019	Total Dissolved Solids	3450	mg/L
Outfall 001	9/9/2019	Total Dissolved Solids	3420	mg/L
Outfall 001	5/9/2020	Total Dissolved Solids	*<5*	mg/L
Outfall 001	5/9/2020	Total Dissolved Solids	*<5*	mg/L
Outfall 001	5/13/2020	Total Dissolved Solids	3960	mg/L
Outfall 001	5/19/2020	Total Dissolved Solids	3700	mg/L
Outfall 001	5/26/2020	Total Dissolved Solids	3140	mg/L
Outfall 001	6/3/2020	Total Dissolved Solids	2440	mg/L
Outfall 001	6/8/2020	Total Dissolved Solids	2380	mg/L
Outfall 001	6/15/2020	Total Dissolved Solids	3390	mg/L
Outfall 001	6/22/2020	Total Dissolved Solids	3900	mg/L
Outfall 001	6/29/2020	Total Dissolved Solids	3990	mg/L
Outfall 001	7/6/2020	Total Dissolved Solids	3320	mg/L
Outfall 001	*8/29/2020*	*Total Dissolved Solids*	*378*	*mg/L*
Outfall 001	*8/31/2020*	*Total Dissolved Solids*	*404*	*mg/L*
Outfall 001	*9/8/2020*	*Total Dissolved Solids*	*428*	*mg/L*
Outfall 001	*9/15/2020*	*Total Dissolved Solids*	*438*	*mg/L*
Outfall 001	*9/21/2020*	*Total Dissolved Solids*	*448*	*mg/L*
Outfall 001	10/4/2021	Total Dissolved Solids	8	mg/L
Outfall 001	5/10/2022	Total Dissolved Solids	3880	mg/L
Outfall 001	5/16/2022	Total Dissolved Solids	3660	mg/L
Outfall 001	5/23/2022	Total Dissolved Solids	3220	mg/L

Table Appendix A-1
Outfall 001 Total Dissolved Solids Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Outfall 001	5/31/2022	Total Dissolved Solids	2960	mg/L
Outfall 001	6/6/2022	Total Dissolved Solids	2900	mg/L
Outfall 001	6/13/2022	Total Dissolved Solids	3240	mg/L
Outfall 001	6/20/2022	Total Dissolved Solids	3270	mg/L
Outfall 001	6/27/2022	Total Dissolved Solids	3430	mg/L
Outfall 001	7/5/2022	Total Dissolved Solids	3190	mg/L
Outfall 001	7/11/2022	Total Dissolved Solids	3020	mg/L
Outfall 001	7/11/2022	Total Dissolved Solids	3010	mg/L
Outfall 001	7/18/2022	Total Dissolved Solids	3290	mg/L
Outfall 001	7/18/2022	Total Dissolved Solids	3290	mg/L
Outfall 001	7/25/2022	Total Dissolved Solids	3400	mg/L
Outfall 001	8/1/2022	Total Dissolved Solids	3360	mg/L
Outfall 001	8/8/2022	Total Dissolved Solids	3470	mg/L
Outfall 001	8/15/2022	Total Dissolved Solids	3590	mg/L
Outfall 001	8/22/2022	Total Dissolved Solids	3590	mg/L
Outfall 001	8/29/2022	Total Dissolved Solids	3430	mg/L
Outfall 001	9/5/2022	Total Dissolved Solids	3280	mg/L
Outfall 001	9/12/2022	Total Dissolved Solids	3180	mg/L
Outfall 001	9/21/2022	Total Dissolved Solids	3530	mg/L
Outfall 001	5/24/2023	Total Dissolved Solids	3000	mg/L
Outfall 001	5/29/2023	Total Dissolved Solids	3210	mg/L
Outfall 001	6/5/2023	Total Dissolved Solids	3440	mg/L
Outfall 001	6/12/2023	Total Dissolved Solids	2910	mg/L
Outfall 001	6/19/2023	Total Dissolved Solids	3290	mg/L
Outfall 001	6/27/2023	Total Dissolved Solids	3090	mg/L
Outfall 001	7/7/2023	Total Dissolved Solids	3080	mg/L
Outfall 001	7/10/2023	Total Dissolved Solids	2960	mg/L
Outfall 001	7/17/2023	Total Dissolved Solids	3270	mg/L
Outfall 001	7/24/2023	Total Dissolved Solids	3230	mg/L
Outfall 001	7/31/2023	Total Dissolved Solids	3230	mg/L
Outfall 001	8/7/2023	Total Dissolved Solids	2980	mg/L
Outfall 001	8/16/2023	Total Dissolved Solids	3310	mg/L
Outfall 001	8/21/2023	Total Dissolved Solids	3600	mg/L
Outfall 001	8/28/2023	Total Dissolved Solids	3370	mg/L
Outfall 001	9/4/2023	Total Dissolved Solids	3530	mg/L
Outfall 001	9/11/2023	Total Dissolved Solids	3050	mg/L
Outfall 001	9/19/2023	Total Dissolved Solids	3320	mg/L
Outfall 001	5/22/2024	Total Dissolved Solids	3300	mg/L

Table Appendix A-1 Outfall 001 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/28/2024	Total Dissolved Solids	3340	mg/L
Outfall 001	6/4/2024	Total Dissolved Solids	3570	mg/L
Outfall 001	6/10/2024	Total Dissolved Solids	3370	mg/L
Outfall 001	6/17/2024	Total Dissolved Solids	3550	mg/L
Outfall 001	6/24/2024	Total Dissolved Solids	3300	mg/L
Outfall 001	6/24/2024	Total Dissolved Solids	3280	mg/L
Outfall 001	7/2/2024	Total Dissolved Solids	3090	mg/L
Outfall 001	7/2/2024	Total Dissolved Solids	3120	mg/L
Outfall 001	7/8/2024	Total Dissolved Solids	3250	mg/L
Outfall 001	7/15/2024	Total Dissolved Solids	3190	mg/L
Outfall 001	7/22/2024	Total Dissolved Solids	3290	mg/L
Outfall 001	7/29/2024	Total Dissolved Solids	3270	mg/L
Outfall 001	8/5/2024	Total Dissolved Solids	3180	mg/L
Outfall 001	8/12/2024	Total Dissolved Solids	3190	mg/L
Outfall 001	8/19/2024	Total Dissolved Solids	3030	mg/L
Outfall 001	8/26/2024	Total Dissolved Solids	3230	mg/L
Outfall 001	9/2/2024	Total Dissolved Solids	3430	mg/L
Outfall 001	9/9/2024	Total Dissolved Solids	3150	mg/L
Outfall 001	9/16/2024	Total Dissolved Solids	3070	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Total Dissolved Solids	864	mg/L
Station 151	5/9/2016	Total Dissolved Solids	616	mg/L
Station 151	5/16/2016	Total Dissolved Solids	1410	mg/L
Station 151	5/23/2016	Total Dissolved Solids	1350	mg/L
Station 151	6/1/2016	Total Dissolved Solids	1300	mg/L
Station 151	6/6/2016	Total Dissolved Solids	1340	mg/L
Station 151	6/13/2016	Total Dissolved Solids	1280	mg/L
Station 151	6/20/2016	Total Dissolved Solids	1350	mg/L
Station 151	6/27/2016	Total Dissolved Solids	1390	mg/L
Station 151	7/1/2016	Total Dissolved Solids	1350	mg/L
Station 151	7/4/2016	Total Dissolved Solids	1320	mg/L
Station 151	7/11/2016	Total Dissolved Solids	1330	mg/L

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/18/2016	Total Dissolved Solids	1350	mg/L
Station 151	7/25/2016	Total Dissolved Solids	1210	mg/L
Station 151	8/1/2016	Total Dissolved Solids	1200	mg/L
Station 151	8/8/2016	Total Dissolved Solids	1200	mg/L
Station 151	8/15/2016	Total Dissolved Solids	1090	mg/L
Station 151	8/22/2016	Total Dissolved Solids	1110	mg/L
Station 151	8/29/2016	Total Dissolved Solids	1150	mg/L
Station 151	9/5/2016	Total Dissolved Solids	1210	mg/L
Station 151	9/12/2016	Total Dissolved Solids	1020	mg/L
Station 151	9/19/2016	Total Dissolved Solids	1000	mg/L
Station 151	9/26/2016	Total Dissolved Solids	417	mg/L
Station 151	10/3/2016	Total Dissolved Solids	379	mg/L
Station 151	10/10/2016	Total Dissolved Solids	420	mg/L
Station 151	10/17/2016	Total Dissolved Solids	496	mg/L
Station 151	5/8/2017	Total Dissolved Solids	736	mg/L
Station 151	5/14/2017	Total Dissolved Solids	710	mg/L
Station 151	5/22/2017	Total Dissolved Solids	840	mg/L
Station 151	5/29/2017	Total Dissolved Solids	634	mg/L
Station 151	6/4/2017	Total Dissolved Solids	919	mg/L
Station 151	6/12/2017	Total Dissolved Solids	1280	mg/L
Station 151	6/19/2017	Total Dissolved Solids	1410	mg/L
Station 151	6/26/2017	Total Dissolved Solids	1340	mg/L
Station 151	7/3/2017	Total Dissolved Solids	1290	mg/L
Station 151	7/3/2017	Total Dissolved Solids	*13*	mg/L
Station 151	7/3/2017	Total Dissolved Solids	1290	mg/L
Station 151	7/9/2017	Total Dissolved Solids	1430	mg/L
Station 151	7/17/2017	Total Dissolved Solids	1240	mg/L
Station 151	7/25/2017	Total Dissolved Solids	996	mg/L
Station 151	8/1/2017	Total Dissolved Solids	636	mg/L
Station 151	8/8/2017	Total Dissolved Solids	1320	mg/L
Station 151	8/15/2017	Total Dissolved Solids	1220	mg/L
Station 151	8/21/2017	Total Dissolved Solids	1250	mg/L
Station 151	8/30/2017	Total Dissolved Solids	*<10*	mg/L
Station 151	8/30/2017	Total Dissolved Solids	1200	mg/L
Station 151	8/30/2017	Total Dissolved Solids	1190	mg/L
Station 151	9/3/2017	Total Dissolved Solids	1190	mg/L
Station 151	9/11/2017	Total Dissolved Solids	297	mg/L
Station 151	9/18/2017	Total Dissolved Solids	1040	mg/L

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/25/2017	Total Dissolved Solids	436	mg/L
Station 151	5/14/2018	Total Dissolved Solids	780	mg/L
Station 151	5/21/2018	Total Dissolved Solids	862	mg/L
Station 151	5/28/2018	Total Dissolved Solids	566	mg/L
Station 151	6/4/2018	Total Dissolved Solids	388	mg/L
Station 151	6/11/2018	Total Dissolved Solids	884	mg/L
Station 151	6/18/2018	Total Dissolved Solids	1320	mg/L
Station 151	6/25/2018	Total Dissolved Solids	1070	mg/L
Station 151	7/1/2018	Total Dissolved Solids	972	mg/L
Station 151	7/8/2018	Total Dissolved Solids	1150	mg/L
Station 151	7/16/2018	Total Dissolved Solids	1630	mg/L
Station 151	7/16/2018	Total Dissolved Solids	1400	mg/L
Station 151	7/16/2018	Total Dissolved Solids	1420	mg/L
Station 151	7/16/2018	Total Dissolved Solids	1420	mg/L
Station 151	7/23/2018	Total Dissolved Solids	1340	mg/L
Station 151	7/30/2018	Total Dissolved Solids	*<10*	mg/L
Station 151	7/30/2018	Total Dissolved Solids	1230	mg/L
Station 151	7/30/2018	Total Dissolved Solids	1230	mg/L
Station 151	8/6/2018	Total Dissolved Solids	992	mg/L
Station 151	8/13/2018	Total Dissolved Solids	987	mg/L
Station 151	8/20/2018	Total Dissolved Solids	1090	mg/L
Station 151	8/27/2018	Total Dissolved Solids	1010	mg/L
Station 151	9/3/2018	Total Dissolved Solids	934	mg/L
Station 151	9/9/2018	Total Dissolved Solids	667	mg/L
Station 151	9/17/2018	Total Dissolved Solids	1040	mg/L
Station 151	9/25/2018	Total Dissolved Solids	574	mg/L
Station 151	5/14/2019	Total Dissolved Solids	940	mg/L
Station 151	5/19/2019	Total Dissolved Solids	589	mg/L
Station 151	5/27/2019	Total Dissolved Solids	460	mg/L
Station 151	6/2/2019	Total Dissolved Solids	427	mg/L
Station 151	6/9/2019	Total Dissolved Solids	770	mg/L
Station 151	6/17/2019	Total Dissolved Solids	1070	mg/L
Station 151	6/24/2019	Total Dissolved Solids	1470	mg/L
Station 151	6/30/2019	Total Dissolved Solids	1350	mg/L
Station 151	7/7/2019	Total Dissolved Solids	1210	mg/L
Station 151	7/14/2019	Total Dissolved Solids	1450	mg/L
Station 151	7/21/2019	Total Dissolved Solids	1360	mg/L
Station 151	7/28/2019	Total Dissolved Solids	1160	mg/L

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	8/4/2019	Total Dissolved Solids	544	mg/L
Station 151	8/11/2019	Total Dissolved Solids	552	mg/L
Station 151	8/16/2019	Total Dissolved Solids	546	mg/L
Station 151	8/18/2019	Total Dissolved Solids	638	mg/L
Station 151	8/28/2019	Total Dissolved Solids	*<20*	mg/L
Station 151	8/28/2019	Total Dissolved Solids	992	mg/L
Station 151	8/28/2019	Total Dissolved Solids	1010	mg/L
Station 151	9/6/2019	Total Dissolved Solids	471	mg/L
Station 151	9/8/2019	Total Dissolved Solids	558	mg/L
Station 151	9/16/2019	Total Dissolved Solids	556	mg/L
Station 151	5/12/2020	Total Dissolved Solids	577	mg/L
Station 151	5/18/2020	Total Dissolved Solids	744	mg/L
Station 151	5/25/2020	Total Dissolved Solids	510	mg/L
Station 151	6/2/2020	Total Dissolved Solids	437	mg/L
Station 151	6/7/2020	Total Dissolved Solids	1250	mg/L
Station 151	6/14/2020	Total Dissolved Solids	950	mg/L
Station 151	6/21/2020	Total Dissolved Solids	1160	mg/L
Station 151	6/26/2020	Total Dissolved Solids	934	mg/L
Station 151	6/28/2020	Total Dissolved Solids	590	mg/L
Station 151	7/5/2020	Total Dissolved Solids	1070	mg/L
Station 151	7/12/2020	Total Dissolved Solids	891	mg/L
Station 151	7/19/2020	Total Dissolved Solids	962	mg/L
Station 151	7/28/2020	Total Dissolved Solids	958	mg/L
Station 151	8/3/2020	Total Dissolved Solids	1180	mg/L
Station 151	8/16/2020	Total Dissolved Solids	1060	mg/L
Station 151	8/23/2020	Total Dissolved Solids	1000	mg/L
Station 151	8/28/2020	Total Dissolved Solids	1080	mg/L
Station 151	8/30/2020	Total Dissolved Solids	1050	mg/L
Station 151	8/31/2020	Total Dissolved Solids	1060	mg/L
Station 151	9/7/2020	Total Dissolved Solids	1140	mg/L
Station 151	9/15/2020	Total Dissolved Solids	996	mg/L
Station 151	9/20/2020	Total Dissolved Solids	1040	mg/L
Station 151	9/27/2020	Total Dissolved Solids	1260	mg/L
Station 151	5/9/2021	Total Dissolved Solids	544	mg/L
Station 151	5/16/2021	Total Dissolved Solids	1000	mg/L
Station 151	5/24/2021	Total Dissolved Solids	778	mg/L
Station 151	5/30/2021	Total Dissolved Solids	884	mg/L
Station 151	6/6/2021	Total Dissolved Solids	1080	mg/L

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	6/13/2021	Total Dissolved Solids	980	mg/L
Station 151	6/20/2021	Total Dissolved Solids	1170	mg/L
Station 151	6/27/2021	Total Dissolved Solids	1020	mg/L
Station 151	7/4/2021	Total Dissolved Solids	878	mg/L
Station 151	7/12/2021	Total Dissolved Solids	1080	mg/L
Station 151	7/18/2021	Total Dissolved Solids	1320	mg/L
Station 151	7/25/2021	Total Dissolved Solids	924	mg/L
Station 151	8/2/2021	Total Dissolved Solids	468	mg/L
Station 151	8/8/2021	Total Dissolved Solids	1170	mg/L
Station 151	8/15/2021	Total Dissolved Solids	1250	mg/L
Station 151	8/23/2021	Total Dissolved Solids	1440	mg/L
Station 151	8/31/2021	Total Dissolved Solids	896	mg/L
Station 151	9/6/2021	Total Dissolved Solids	1080	mg/L
Station 151	9/12/2021	Total Dissolved Solids	1040	mg/L
Station 151	9/19/2021	Total Dissolved Solids	624	mg/L
Station 151	9/27/2021	Total Dissolved Solids	682	mg/L
Station 151	5/9/2022	Total Dissolved Solids	1400	mg/L
Station 151	5/15/2022	Total Dissolved Solids	2320	mg/L
Station 151	5/22/2022	Total Dissolved Solids	428	mg/L
Station 151	5/30/2022	Total Dissolved Solids	676	mg/L
Station 151	6/5/2022	Total Dissolved Solids	799	mg/L
Station 151	6/12/2022	Total Dissolved Solids	1700	mg/L
Station 151	6/19/2022	Total Dissolved Solids	1480	mg/L
Station 151	6/26/2022	Total Dissolved Solids	1100	mg/L
Station 151	7/4/2022	Total Dissolved Solids	1400	mg/L
Station 151	7/10/2022	Total Dissolved Solids	1780	mg/L
Station 151	7/17/2022	Total Dissolved Solids	2060	mg/L
Station 151	7/24/2022	Total Dissolved Solids	2200	mg/L
Station 151	8/1/2022	Total Dissolved Solids	1640	mg/L
Station 151	8/7/2022	Total Dissolved Solids	1820	mg/L
Station 151	8/14/2022	Total Dissolved Solids	1890	mg/L
Station 151	8/21/2022	Total Dissolved Solids	2030	mg/L
Station 151	8/28/2022	Total Dissolved Solids	1310	mg/L
Station 151	9/4/2022	Total Dissolved Solids	1610	mg/L
Station 151	9/11/2022	Total Dissolved Solids	1570	mg/L
Station 151	9/20/2022	Total Dissolved Solids	608	mg/L
Station 151	9/26/2022	Total Dissolved Solids	532	mg/L
Station 151	5/23/2023	Total Dissolved Solids	418	mg/L

Table Appendix A-2 Station 151 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/28/2023	Total Dissolved Solids	348	mg/L
Station 151	6/4/2023	Total Dissolved Solids	1320	mg/L
Station 151	6/11/2023	Total Dissolved Solids	337	mg/L
Station 151	6/18/2023	Total Dissolved Solids	576	mg/L
Station 151	6/26/2023	Total Dissolved Solids	506	mg/L
Station 151	7/7/2023	Total Dissolved Solids	710	mg/L
Station 151	7/9/2023	Total Dissolved Solids	678	mg/L
Station 151	7/16/2023	Total Dissolved Solids	1140	mg/L
Station 151	7/23/2023	Total Dissolved Solids	1230	mg/L
Station 151	7/30/2023	Total Dissolved Solids	1220	mg/L
Station 151	8/6/2023	Total Dissolved Solids	1400	mg/L
Station 151	8/15/2023	Total Dissolved Solids	1740	mg/L
Station 151	8/20/2023	Total Dissolved Solids	1880	mg/L
Station 151	8/27/2023	Total Dissolved Solids	1880	mg/L
Station 151	9/3/2023	Total Dissolved Solids	1870	mg/L
Station 151	9/10/2023	Total Dissolved Solids	1320	mg/L
Station 151	9/18/2023	Total Dissolved Solids	1280	mg/L
Station 151	9/26/2023	Total Dissolved Solids	676	mg/L
Station 151	5/21/2024	Total Dissolved Solids	704	mg/L
Station 151	5/27/2024	Total Dissolved Solids	952	mg/L
Station 151	6/3/2024	Total Dissolved Solids	682	mg/L
Station 151	6/9/2024	Total Dissolved Solids	413	mg/L
Station 151	6/16/2024	Total Dissolved Solids	1100	mg/L
Station 151	6/23/2024	Total Dissolved Solids	1050	mg/L
Station 151	7/1/2024	Total Dissolved Solids	1500	mg/L
Station 151	7/7/2024	Total Dissolved Solids	792	mg/L
Station 151	7/14/2024	Total Dissolved Solids	1220	mg/L
Station 151	7/21/2024	Total Dissolved Solids	1290	mg/L
Station 151	7/28/2024	Total Dissolved Solids	1330	mg/L
Station 151	8/4/2024	Total Dissolved Solids	420	mg/L
Station 151	8/11/2024	Total Dissolved Solids	746	mg/L
Station 151	8/18/2024	Total Dissolved Solids	466	mg/L
Station 151	8/25/2024	Total Dissolved Solids	736	mg/L
Station 151	9/1/2024	Total Dissolved Solids	1400	mg/L
Station 151	9/8/2024	Total Dissolved Solids	775	mg/L
Station 151	9/15/2024	Total Dissolved Solids	502	mg/L
Station 151	9/23/2024	Total Dissolved Solids	580	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	Total Dissolved Solids	534	mg/L
Station 150	5/9/2016	Total Dissolved Solids	411	mg/L
Station 150	5/16/2016	Total Dissolved Solids	546	mg/L
Station 150	5/16/2016	Total Dissolved Solids	*<10*	mg/L
Station 150	5/16/2016	Total Dissolved Solids	534	mg/L
Station 150	5/23/2016	Total Dissolved Solids	518	mg/L
Station 150	6/1/2016	Total Dissolved Solids	474	mg/L
Station 150	6/6/2016	Total Dissolved Solids	526	mg/L
Station 150	6/13/2016	Total Dissolved Solids	490	mg/L
Station 150	6/20/2016	Total Dissolved Solids	488	mg/L
Station 150	6/27/2016	Total Dissolved Solids	546	mg/L
Station 150	7/4/2016	Total Dissolved Solids	514	mg/L
Station 150	7/4/2016	Total Dissolved Solids	528	mg/L
Station 150	7/11/2016	Total Dissolved Solids	488	mg/L
Station 150	7/18/2016	Total Dissolved Solids	478	mg/L
Station 150	7/25/2016	Total Dissolved Solids	524	mg/L
Station 150	8/1/2016	Total Dissolved Solids	508	mg/L
Station 150	8/8/2016	Total Dissolved Solids	523	mg/L
Station 150	8/15/2016	Total Dissolved Solids	512	mg/L
Station 150	8/22/2016	Total Dissolved Solids	506	mg/L
Station 150	8/29/2016	Total Dissolved Solids	514	mg/L
Station 150	9/5/2016	Total Dissolved Solids	590	mg/L
Station 150	9/5/2016	Total Dissolved Solids	*<10*	mg/L
Station 150	9/5/2016	Total Dissolved Solids	588	mg/L
Station 150	9/12/2016	Total Dissolved Solids	510	mg/L
Station 150	9/19/2016	Total Dissolved Solids	520	mg/L
Station 150	9/26/2016	Total Dissolved Solids	369	mg/L
Station 150	10/3/2016	Total Dissolved Solids	348	mg/L
Station 150	10/10/2016	Total Dissolved Solids	382	mg/L
Station 150	10/17/2016	Total Dissolved Solids	454	mg/L
Station 150	10/17/2016	Total Dissolved Solids	*<10*	mg/L
Station 150	10/17/2016	Total Dissolved Solids	454	mg/L
Station 150	5/8/2017	Total Dissolved Solids	740	mg/L
Station 150	5/14/2017	Total Dissolved Solids	494	mg/L
Station 150	5/22/2017	Total Dissolved Solids	478	mg/L
Station 150	5/31/2017	Total Dissolved Solids	388	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/31/2017	Total Dissolved Solids	314	mg/L
Station 150	6/4/2017	Total Dissolved Solids	374	mg/L
Station 150	6/4/2017	Total Dissolved Solids	*108*	mg/L
Station 150	6/4/2017	Total Dissolved Solids	374	mg/L
Station 150	6/12/2017	Total Dissolved Solids	441	mg/L
Station 150	6/19/2017	Total Dissolved Solids	460	mg/L
Station 150	6/26/2017	Total Dissolved Solids	488	mg/L
Station 150	7/3/2017	Total Dissolved Solids	548	mg/L
Station 150	7/9/2017	Total Dissolved Solids	564	mg/L
Station 150	7/17/2017	Total Dissolved Solids	526	mg/L
Station 150	7/25/2017	Total Dissolved Solids	466	mg/L
Station 150	8/1/2017	Total Dissolved Solids	338	mg/L
Station 150	8/8/2017	Total Dissolved Solids	594	mg/L
Station 150	8/15/2017	Total Dissolved Solids	594	mg/L
Station 150	8/21/2017	Total Dissolved Solids	552	mg/L
Station 150	8/30/2017	Total Dissolved Solids	572	mg/L
Station 150	9/3/2017	Total Dissolved Solids	568	mg/L
Station 150	9/11/2017	Total Dissolved Solids	518	mg/L
Station 150	9/18/2017	Total Dissolved Solids	550	mg/L
Station 150	9/25/2017	Total Dissolved Solids	364	mg/L
Station 150	10/5/2017	Total Dissolved Solids	296	mg/L
Station 150	5/14/2018	Total Dissolved Solids	*<10*	mg/L
Station 150	5/14/2018	Total Dissolved Solids	454	mg/L
Station 150	5/14/2018	Total Dissolved Solids	460	mg/L
Station 150	5/21/2018	Total Dissolved Solids	484	mg/L
Station 150	5/28/2018	Total Dissolved Solids	310	mg/L
Station 150	6/4/2018	Total Dissolved Solids	252	mg/L
Station 150	6/11/2018	Total Dissolved Solids	410	mg/L
Station 150	6/18/2018	Total Dissolved Solids	576	mg/L
Station 150	6/25/2018	Total Dissolved Solids	422	mg/L
Station 150	7/1/2018	Total Dissolved Solids	450	mg/L
Station 150	7/8/2018	Total Dissolved Solids	486	mg/L
Station 150	7/16/2018	Total Dissolved Solids	618	mg/L
Station 150	7/23/2018	Total Dissolved Solids	*<10*	mg/L
Station 150	7/23/2018	Total Dissolved Solids	480	mg/L
Station 150	7/23/2018	Total Dissolved Solids	480	mg/L
Station 150	7/30/2018	Total Dissolved Solids	524	mg/L
Station 150	8/6/2018	Total Dissolved Solids	544	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/13/2018	Total Dissolved Solids	488	mg/L
Station 150	8/20/2018	Total Dissolved Solids	*<10*	mg/L
Station 150	8/20/2018	Total Dissolved Solids	510	mg/L
Station 150	8/20/2018	Total Dissolved Solids	512	mg/L
Station 150	8/27/2018	Total Dissolved Solids	490	mg/L
Station 150	9/3/2018	Total Dissolved Solids	478	mg/L
Station 150	9/9/2018	Total Dissolved Solids	396	mg/L
Station 150	9/17/2018	Total Dissolved Solids	518	mg/L
Station 150	9/25/2018	Total Dissolved Solids	454	mg/L
Station 150	5/14/2019	Total Dissolved Solids	550	mg/L
Station 150	5/19/2019	Total Dissolved Solids	344	mg/L
Station 150	5/27/2019	Total Dissolved Solids	314	mg/L
Station 150	6/2/2019	Total Dissolved Solids	306	mg/L
Station 150	6/2/2019	Total Dissolved Solids	*<20*	mg/L
Station 150	6/2/2019	Total Dissolved Solids	282	mg/L
Station 150	6/9/2019	Total Dissolved Solids	448	mg/L
Station 150	6/17/2019	Total Dissolved Solids	550	mg/L
Station 150	6/24/2019	Total Dissolved Solids	732	mg/L
Station 150	6/30/2019	Total Dissolved Solids	648	mg/L
Station 150	7/7/2019	Total Dissolved Solids	553	mg/L
Station 150	7/14/2019	Total Dissolved Solids	702	mg/L
Station 150	7/21/2019	Total Dissolved Solids	598	mg/L
Station 150	7/28/2019	Total Dissolved Solids	654	mg/L
Station 150	8/4/2019	Total Dissolved Solids	416	mg/L
Station 150	8/4/2019	Total Dissolved Solids	*<20*	mg/L
Station 150	8/4/2019	Total Dissolved Solids	410	mg/L
Station 150	8/11/2019	Total Dissolved Solids	477	mg/L
Station 150	8/16/2019	Total Dissolved Solids	494	mg/L
Station 150	8/18/2019	Total Dissolved Solids	632	mg/L
Station 150	8/28/2019	Total Dissolved Solids	624	mg/L
Station 150	9/6/2019	Total Dissolved Solids	464	mg/L
Station 150	9/8/2019	Total Dissolved Solids	534	mg/L
Station 150	9/16/2019	Total Dissolved Solids	658	mg/L
Station 150	5/12/2020	Total Dissolved Solids	292	mg/L
Station 150	5/19/2020	Total Dissolved Solids	480	mg/L
Station 150	5/26/2020	Total Dissolved Solids	544	mg/L
Station 150	6/3/2020	Total Dissolved Solids	504	mg/L
Station 150	6/7/2020	Total Dissolved Solids	753	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	6/14/2020	Total Dissolved Solids	806	mg/L
Station 150	6/21/2020	Total Dissolved Solids	904	mg/L
Station 150	6/23/2020	Total Dissolved Solids	1012	mg/L
Station 150	6/26/2020	Total Dissolved Solids	1140	mg/L
Station 150	6/26/2020	Total Dissolved Solids	990	mg/L
Station 150	6/28/2020	Total Dissolved Solids	606	mg/L
Station 150	7/3/2020	Total Dissolved Solids	912	mg/L
Station 150	7/5/2020	Total Dissolved Solids	862	mg/L
Station 150	7/10/2020	Total Dissolved Solids	1004	mg/L
Station 150	7/12/2020	Total Dissolved Solids	1070	mg/L
Station 150	7/12/2020	Total Dissolved Solids	*19*	mg/L
Station 150	7/12/2020	Total Dissolved Solids	1080	mg/L
Station 150	7/18/2020	Total Dissolved Solids	1196	mg/L
Station 150	7/19/2020	Total Dissolved Solids	1270	mg/L
Station 150	7/24/2020	Total Dissolved Solids	1308	mg/L
Station 150	7/28/2020	Total Dissolved Solids	1140	mg/L
Station 150	7/31/2020	Total Dissolved Solids	1018	mg/L
Station 150	8/3/2020	Total Dissolved Solids	1220	mg/L
Station 150	8/9/2020	Total Dissolved Solids	1324	mg/L
Station 150	8/16/2020	Total Dissolved Solids	1400	mg/L
Station 150	8/16/2020	Total Dissolved Solids	1410	mg/L
Station 150	8/21/2020	Total Dissolved Solids	1538	mg/L
Station 150	8/23/2020	Total Dissolved Solids	1410	mg/L
Station 150	8/28/2020	Total Dissolved Solids	1440	mg/L
Station 150	8/29/2020	Total Dissolved Solids	1522	mg/L
Station 150	8/30/2020	Total Dissolved Solids	1450	mg/L
Station 150	8/31/2020	Total Dissolved Solids	1380	mg/L
Station 150	9/4/2020	Total Dissolved Solids	1450	mg/L
Station 150	9/7/2020	Total Dissolved Solids	1500	mg/L
Station 150	9/15/2020	Total Dissolved Solids	1410	mg/L
Station 150	9/20/2020	Total Dissolved Solids	986	mg/L
Station 150	9/25/2020	Total Dissolved Solids	1290	mg/L
Station 150	9/27/2020	Total Dissolved Solids	1340	mg/L
Station 150	10/2/2020	Total Dissolved Solids	1420	mg/L
Station 150	5/7/2021	Total Dissolved Solids	622	mg/L
Station 150	5/9/2021	Total Dissolved Solids	744	mg/L
Station 150	5/14/2021	Total Dissolved Solids	564	mg/L
Station 150	5/16/2021	Total Dissolved Solids	635	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/23/2021	Total Dissolved Solids	504	mg/L
Station 150	5/24/2021	Total Dissolved Solids	562	mg/L
Station 150	5/28/2021	Total Dissolved Solids	462	mg/L
Station 150	5/30/2021	Total Dissolved Solids	480	mg/L
Station 150	6/4/2021	Total Dissolved Solids	810	mg/L
Station 150	6/6/2021	Total Dissolved Solids	688	mg/L
Station 150	6/11/2021	Total Dissolved Solids	524	mg/L
Station 150	6/13/2021	Total Dissolved Solids	577	mg/L
Station 150	6/18/2021	Total Dissolved Solids	458	mg/L
Station 150	6/20/2021	Total Dissolved Solids	540	mg/L
Station 150	6/25/2021	Total Dissolved Solids	658	mg/L
Station 150	6/27/2021	Total Dissolved Solids	650	mg/L
Station 150	7/3/2021	Total Dissolved Solids	574	mg/L
Station 150	7/4/2021	Total Dissolved Solids	652	mg/L
Station 150	7/9/2021	Total Dissolved Solids	644	mg/L
Station 150	7/12/2021	Total Dissolved Solids	718	mg/L
Station 150	7/18/2021	Total Dissolved Solids	572	mg/L
Station 150	7/18/2021	Total Dissolved Solids	532	mg/L
Station 150	7/23/2021	Total Dissolved Solids	528	mg/L
Station 150	7/25/2021	Total Dissolved Solids	486	mg/L
Station 150	8/2/2021	Total Dissolved Solids	212	mg/L
Station 150	8/6/2021	Total Dissolved Solids	724	mg/L
Station 150	8/8/2021	Total Dissolved Solids	742	mg/L
Station 150	8/15/2021	Total Dissolved Solids	732	mg/L
Station 150	8/16/2021	Total Dissolved Solids	786	mg/L
Station 150	8/20/2021	Total Dissolved Solids	946	mg/L
Station 150	8/23/2021	Total Dissolved Solids	650	mg/L
Station 150	8/27/2021	Total Dissolved Solids	880	mg/L
Station 150	8/31/2021	Total Dissolved Solids	618	mg/L
Station 150	9/3/2021	Total Dissolved Solids	830	mg/L
Station 150	9/11/2021	Total Dissolved Solids	644	mg/L
Station 150	9/12/2021	Total Dissolved Solids	638	mg/L
Station 150	9/17/2021	Total Dissolved Solids	768	mg/L
Station 150	9/19/2021	Total Dissolved Solids	706	mg/L
Station 150	9/24/2021	Total Dissolved Solids	1212	mg/L
Station 150	9/28/2021	Total Dissolved Solids	854	mg/L
Station 150	5/9/2022	Total Dissolved Solids	864	mg/L
Station 150	5/15/2022	Total Dissolved Solids	2090	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/22/2022	Total Dissolved Solids	372	mg/L
Station 150	5/30/2022	Total Dissolved Solids	400	mg/L
Station 150	6/3/2022	Total Dissolved Solids	238	mg/L
Station 150	6/5/2022	Total Dissolved Solids	396	mg/L
Station 150	6/10/2022	Total Dissolved Solids	568	mg/L
Station 150	6/12/2022	Total Dissolved Solids	941	mg/L
Station 150	6/17/2022	Total Dissolved Solids	962	mg/L
Station 150	6/19/2022	Total Dissolved Solids	724	mg/L
Station 150	6/25/2022	Total Dissolved Solids	542	mg/L
Station 150	6/26/2022	Total Dissolved Solids	384	mg/L
Station 150	7/10/2022	Total Dissolved Solids	932	mg/L
Station 150	7/15/2022	Total Dissolved Solids	1022	mg/L
Station 150	7/17/2022	Total Dissolved Solids	1190	mg/L
Station 150	7/24/2022	Total Dissolved Solids	1110	mg/L
Station 150	7/29/2022	Total Dissolved Solids	71	mg/L
Station 150	8/1/2022	Total Dissolved Solids	918	mg/L
Station 150	8/6/2022	Total Dissolved Solids	836	mg/L
Station 150	8/7/2022	Total Dissolved Solids	1040	mg/L
Station 150	8/13/2022	Total Dissolved Solids	952	mg/L
Station 150	8/14/2022	Total Dissolved Solids	926	mg/L
Station 150	8/21/2022	Total Dissolved Solids	1150	mg/L
Station 150	8/28/2022	Total Dissolved Solids	778	mg/L
Station 150	9/2/2022	Total Dissolved Solids	1032	mg/L
Station 150	9/4/2022	Total Dissolved Solids	958	mg/L
Station 150	9/9/2022	Total Dissolved Solids	1018	mg/L
Station 150	9/11/2022	Total Dissolved Solids	1060	mg/L
Station 150	9/20/2022	Total Dissolved Solids	432	mg/L
Station 150	9/26/2022	Total Dissolved Solids	564	mg/L
Station 150	10/1/2022	Total Dissolved Solids	634	mg/L
Station 150	5/23/2023	Total Dissolved Solids	388	mg/L
Station 150	5/28/2023	Total Dissolved Solids	246	mg/L
Station 150	5/30/2023	Total Dissolved Solids	382	mg/L
Station 150	6/4/2023	Total Dissolved Solids	786	mg/L
Station 150	6/9/2023	Total Dissolved Solids	184	mg/L
Station 150	6/11/2023	Total Dissolved Solids	247	mg/L
Station 150	6/18/2023	Total Dissolved Solids	362	mg/L
Station 150	6/26/2023	Total Dissolved Solids	302	mg/L
Station 150	7/2/2023	Total Dissolved Solids	430	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	7/7/2023	Total Dissolved Solids	432	mg/L
Station 150	7/9/2023	Total Dissolved Solids	416	mg/L
Station 150	7/16/2023	Total Dissolved Solids	584	mg/L
Station 150	7/21/2023	Total Dissolved Solids	514	mg/L
Station 150	7/23/2023	Total Dissolved Solids	548	mg/L
Station 150	7/30/2023	Total Dissolved Solids	542	mg/L
Station 150	8/5/2023	Total Dissolved Solids	654	mg/L
Station 150	8/6/2023	Total Dissolved Solids	716	mg/L
Station 150	8/11/2023	Total Dissolved Solids	780	mg/L
Station 150	8/15/2023	Total Dissolved Solids	915	mg/L
Station 150	8/20/2023	Total Dissolved Solids	856	mg/L
Station 150	8/25/2023	Total Dissolved Solids	1106	mg/L
Station 150	8/27/2023	Total Dissolved Solids	1010	mg/L
Station 150	9/3/2023	Total Dissolved Solids	1110	mg/L
Station 150	9/8/2023	Total Dissolved Solids	912	mg/L
Station 150	9/10/2023	Total Dissolved Solids	840	mg/L
Station 150	9/18/2023	Total Dissolved Solids	770	mg/L
Station 150	9/26/2023	Total Dissolved Solids	724	mg/L
Station 150	9/26/2023	Total Dissolved Solids	704	mg/L
Station 150	5/21/2024	Total Dissolved Solids	542	mg/L
Station 150	5/23/2024	Total Dissolved Solids	28	mg/L
Station 150	5/27/2024	Total Dissolved Solids	552	mg/L
Station 150	5/31/2024	Total Dissolved Solids	25	mg/L
Station 150	6/3/2024	Total Dissolved Solids	398	mg/L
Station 150	6/9/2024	Total Dissolved Solids	288	mg/L
Station 150	6/14/2024	Total Dissolved Solids	362	mg/L
Station 150	6/16/2024	Total Dissolved Solids	540	mg/L
Station 150	6/23/2024	Total Dissolved Solids	422	mg/L
Station 150	6/28/2024	Total Dissolved Solids	638	mg/L
Station 150	7/1/2024	Total Dissolved Solids	698	mg/L
Station 150	7/7/2024	Total Dissolved Solids	517	mg/L
Station 150	7/14/2024	Total Dissolved Solids	660	mg/L
Station 150	7/17/2024	Total Dissolved Solids	74	mg/L
Station 150	7/21/2024	Total Dissolved Solids	826	mg/L
Station 150	7/28/2024	Total Dissolved Solids	564	mg/L
Station 150	8/4/2024	Total Dissolved Solids	322	mg/L
Station 150	8/10/2024	Total Dissolved Solids	444	mg/L
Station 150	8/11/2024	Total Dissolved Solids	501	mg/L

Table Appendix A-3 Station 150 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/18/2024	Total Dissolved Solids	382	mg/L
Station 150	8/25/2024	Total Dissolved Solids	502	mg/L
Station 150	8/25/2024	Total Dissolved Solids	520	mg/L
Station 150	9/1/2024	Total Dissolved Solids	809	mg/L
Station 150	9/8/2024	Total Dissolved Solids	564	mg/L
Station 150	9/13/2024	Total Dissolved Solids	73	mg/L
Station 150	9/15/2024	Total Dissolved Solids	888	mg/L
Station 150	9/23/2024	Total Dissolved Solids	556	mg/L
Station 150	9/27/2024	Total Dissolved Solids	554	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Total Dissolved Solids	159	mg/L
Station 160	5/9/2016	Total Dissolved Solids	350	mg/L
Station 160	5/16/2016	Total Dissolved Solids	414	mg/L
Station 160	5/23/2016	Total Dissolved Solids	380	mg/L
Station 160	6/1/2016	Total Dissolved Solids	338	mg/L
Station 160	6/6/2016	Total Dissolved Solids	426	mg/L
Station 160	6/13/2016	Total Dissolved Solids	406	mg/L
Station 160	6/20/2016	Total Dissolved Solids	420	mg/L
Station 160	6/27/2016	Total Dissolved Solids	464	mg/L
Station 160	7/1/2016	Total Dissolved Solids	462	mg/L
Station 160	7/4/2016	Total Dissolved Solids	470	mg/L
Station 160	7/11/2016	Total Dissolved Solids	456	mg/L
Station 160	7/18/2016	Total Dissolved Solids	428	mg/L
Station 160	7/25/2016	Total Dissolved Solids	464	mg/L
Station 160	8/1/2016	Total Dissolved Solids	450	mg/L
Station 160	8/8/2016	Total Dissolved Solids	468	mg/L
Station 160	8/15/2016	Total Dissolved Solids	454	mg/L
Station 160	8/22/2016	Total Dissolved Solids	348	mg/L
Station 160	8/29/2016	Total Dissolved Solids	412	mg/L
Station 160	9/5/2016	Total Dissolved Solids	478	mg/L
Station 160	9/12/2016	Total Dissolved Solids	424	mg/L
Station 160	9/19/2016	Total Dissolved Solids	432	mg/L
Station 160	9/26/2016	Total Dissolved Solids	347	mg/L
Station 160	10/3/2016	Total Dissolved Solids	335	mg/L
Station 160	10/10/2016	Total Dissolved Solids	362	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	10/17/2016	Total Dissolved Solids	394	mg/L
Station 160	5/8/2017	Total Dissolved Solids	391	mg/L
Station 160	5/14/2017	Total Dissolved Solids	232	mg/L
Station 160	5/22/2017	Total Dissolved Solids	306	mg/L
Station 160	5/29/2017	Total Dissolved Solids	258	mg/L
Station 160	6/4/2017	Total Dissolved Solids	224	mg/L
Station 160	6/12/2017	Total Dissolved Solids	346	mg/L
Station 160	6/19/2017	Total Dissolved Solids	392	mg/L
Station 160	6/26/2017	Total Dissolved Solids	342	mg/L
Station 160	7/3/2017	Total Dissolved Solids	441	mg/L
Station 160	7/9/2017	Total Dissolved Solids	423	mg/L
Station 160	7/17/2017	Total Dissolved Solids	426	mg/L
Station 160	7/25/2017	Total Dissolved Solids	320	mg/L
Station 160	8/1/2017	Total Dissolved Solids	244	mg/L
Station 160	8/8/2017	Total Dissolved Solids	320	mg/L
Station 160	8/15/2017	Total Dissolved Solids	444	mg/L
Station 160	8/21/2017	Total Dissolved Solids	422	mg/L
Station 160	8/30/2017	Total Dissolved Solids	472	mg/L
Station 160	9/3/2017	Total Dissolved Solids	476	mg/L
Station 160	9/11/2017	Total Dissolved Solids	442	mg/L
Station 160	9/18/2017	Total Dissolved Solids	428	mg/L
Station 160	9/25/2017	Total Dissolved Solids	350	mg/L
Station 160	5/14/2018	Total Dissolved Solids	201	mg/L
Station 160	5/21/2018	Total Dissolved Solids	240	mg/L
Station 160	5/28/2018	Total Dissolved Solids	216	mg/L
Station 160	6/4/2018	Total Dissolved Solids	60	mg/L
Station 160	6/11/2018	Total Dissolved Solids	290	mg/L
Station 160	6/18/2018	Total Dissolved Solids	410	mg/L
Station 160	6/25/2018	Total Dissolved Solids	*<10*	mg/L
Station 160	6/25/2018	Total Dissolved Solids	298	mg/L
Station 160	6/25/2018	Total Dissolved Solids	320	mg/L
Station 160	7/1/2018	Total Dissolved Solids	319	mg/L
Station 160	7/8/2018	Total Dissolved Solids	358	mg/L
Station 160	7/16/2018	Total Dissolved Solids	444	mg/L
Station 160	7/23/2018	Total Dissolved Solids	352	mg/L
Station 160	7/30/2018	Total Dissolved Solids	434	mg/L
Station 160	8/6/2018	Total Dissolved Solids	426	mg/L
Station 160	8/13/2018	Total Dissolved Solids	432	mg/L

Table Appendix A-4
Station 160 Total Dissolved Solids Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	8/20/2018	Total Dissolved Solids	452	mg/L
Station 160	8/27/2018	Total Dissolved Solids	446	mg/L
Station 160	9/3/2018	Total Dissolved Solids	435	mg/L
Station 160	9/9/2018	Total Dissolved Solids	368	mg/L
Station 160	9/17/2018	Total Dissolved Solids	456	mg/L
Station 160	9/25/2018	Total Dissolved Solids	418	mg/L
Station 160	5/14/2019	Total Dissolved Solids	220	mg/L
Station 160	5/19/2019	Total Dissolved Solids	201	mg/L
Station 160	5/27/2019	Total Dissolved Solids	206	mg/L
Station 160	6/2/2019	Total Dissolved Solids	180	mg/L
Station 160	6/9/2019	Total Dissolved Solids	310	mg/L
Station 160	6/17/2019	Total Dissolved Solids	402	mg/L
Station 160	6/24/2019	Total Dissolved Solids	518	mg/L
Station 160	6/30/2019	Total Dissolved Solids	477	mg/L
Station 160	7/7/2019	Total Dissolved Solids	426	mg/L
Station 160	7/14/2019	Total Dissolved Solids	558	mg/L
Station 160	7/14/2019	Total Dissolved Solids	*<20*	mg/L
Station 160	7/14/2019	Total Dissolved Solids	552	mg/L
Station 160	7/21/2019	Total Dissolved Solids	438	mg/L
Station 160	7/28/2019	Total Dissolved Solids	506	mg/L
Station 160	8/4/2019	Total Dissolved Solids	316	mg/L
Station 160	8/11/2019	Total Dissolved Solids	443	mg/L
Station 160	8/16/2019	Total Dissolved Solids	333	mg/L
Station 160	8/18/2019	Total Dissolved Solids	448	mg/L
Station 160	8/28/2019	Total Dissolved Solids	424	mg/L
Station 160	9/6/2019	Total Dissolved Solids	387	mg/L
Station 160	9/8/2019	Total Dissolved Solids	473	mg/L
Station 160	9/16/2019	Total Dissolved Solids	568	mg/L
Station 160	5/12/2020	Total Dissolved Solids	*<5*	mg/L
Station 160	5/12/2020	Total Dissolved Solids	146	mg/L
Station 160	5/12/2020	Total Dissolved Solids	134	mg/L
Station 160	5/19/2020	Total Dissolved Solids	334	mg/L
Station 160	5/26/2020	Total Dissolved Solids	382	mg/L
Station 160	6/3/2020	Total Dissolved Solids	368	mg/L
Station 160	6/7/2020	Total Dissolved Solids	*<5*	mg/L
Station 160	6/7/2020	Total Dissolved Solids	589	mg/L
Station 160	6/7/2020	Total Dissolved Solids	580	mg/L
Station 160	6/14/2020	Total Dissolved Solids	692	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/21/2020	Total Dissolved Solids	828	mg/L
Station 160	6/23/2020	Total Dissolved Solids	850	mg/L
Station 160	6/26/2020	Total Dissolved Solids	951	mg/L
Station 160	6/26/2020	Total Dissolved Solids	816	mg/L
Station 160	6/28/2020	Total Dissolved Solids	766	mg/L
Station 160	7/3/2020	Total Dissolved Solids	756	mg/L
Station 160	7/5/2020	Total Dissolved Solids	746	mg/L
Station 160	7/10/2020	Total Dissolved Solids	852	mg/L
Station 160	7/12/2020	Total Dissolved Solids	884	mg/L
Station 160	7/18/2020	Total Dissolved Solids	984	mg/L
Station 160	7/19/2020	Total Dissolved Solids	1030	mg/L
Station 160	7/25/2020	Total Dissolved Solids	990	mg/L
Station 160	7/28/2020	Total Dissolved Solids	890	mg/L
Station 160	7/31/2020	Total Dissolved Solids	822	mg/L
Station 160	8/3/2020	Total Dissolved Solids	995	mg/L
Station 160	8/9/2020	Total Dissolved Solids	1026	mg/L
Station 160	8/16/2020	Total Dissolved Solids	1110	mg/L
Station 160	8/16/2020	Total Dissolved Solids	1130	mg/L
Station 160	8/21/2020	Total Dissolved Solids	1222	mg/L
Station 160	8/23/2020	Total Dissolved Solids	1150	mg/L
Station 160	8/28/2020	Total Dissolved Solids	1260	mg/L
Station 160	8/29/2020	Total Dissolved Solids	1274	mg/L
Station 160	8/30/2020	Total Dissolved Solids	1190	mg/L
Station 160	8/30/2020	Total Dissolved Solids	1200	mg/L
Station 160	8/30/2020	Total Dissolved Solids	*<20*	mg/L
Station 160	8/31/2020	Total Dissolved Solids	1060	mg/L
Station 160	9/4/2020	Total Dissolved Solids	1242	mg/L
Station 160	9/7/2020	Total Dissolved Solids	1280	mg/L
Station 160	9/15/2020	Total Dissolved Solids	1200	mg/L
Station 160	9/20/2020	Total Dissolved Solids	914	mg/L
Station 160	9/25/2020	Total Dissolved Solids	1100	mg/L
Station 160	9/27/2020	Total Dissolved Solids	1200	mg/L
Station 160	10/2/2020	Total Dissolved Solids	1180	mg/L
Station 160	5/7/2021	Total Dissolved Solids	814	mg/L
Station 160	5/9/2021	Total Dissolved Solids	562	mg/L
Station 160	5/14/2021	Total Dissolved Solids	278	mg/L
Station 160	5/16/2021	Total Dissolved Solids	304	mg/L
Station 160	5/23/2021	Total Dissolved Solids	308	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/24/2021	Total Dissolved Solids	436	mg/L
Station 160	5/28/2021	Total Dissolved Solids	394	mg/L
Station 160	5/30/2021	Total Dissolved Solids	426	mg/L
Station 160	6/4/2021	Total Dissolved Solids	570	mg/L
Station 160	6/6/2021	Total Dissolved Solids	526	mg/L
Station 160	6/11/2021	Total Dissolved Solids	418	mg/L
Station 160	6/13/2021	Total Dissolved Solids	526	mg/L
Station 160	6/18/2021	Total Dissolved Solids	424	mg/L
Station 160	6/20/2021	Total Dissolved Solids	510	mg/L
Station 160	6/25/2021	Total Dissolved Solids	54	mg/L
Station 160	6/27/2021	Total Dissolved Solids	554	mg/L
Station 160	7/3/2021	Total Dissolved Solids	45	mg/L
Station 160	7/4/2021	Total Dissolved Solids	469	mg/L
Station 160	7/9/2021	Total Dissolved Solids	484	mg/L
Station 160	7/12/2021	Total Dissolved Solids	560	mg/L
Station 160	7/18/2021	Total Dissolved Solids	562	mg/L
Station 160	7/18/2021	Total Dissolved Solids	534	mg/L
Station 160	7/23/2021	Total Dissolved Solids	468	mg/L
Station 160	7/25/2021	Total Dissolved Solids	488	mg/L
Station 160	8/2/2021	Total Dissolved Solids	335	mg/L
Station 160	8/6/2021	Total Dissolved Solids	532	mg/L
Station 160	8/8/2021	Total Dissolved Solids	558	mg/L
Station 160	8/15/2021	Total Dissolved Solids	606	mg/L
Station 160	8/16/2021	Total Dissolved Solids	644	mg/L
Station 160	8/20/2021	Total Dissolved Solids	732	mg/L
Station 160	8/23/2021	Total Dissolved Solids	558	mg/L
Station 160	8/27/2021	Total Dissolved Solids	720	mg/L
Station 160	8/31/2021	Total Dissolved Solids	514	mg/L
Station 160	9/3/2021	Total Dissolved Solids	682	mg/L
Station 160	9/6/2021	Total Dissolved Solids	612	mg/L
Station 160	9/11/2021	Total Dissolved Solids	534	mg/L
Station 160	9/12/2021	Total Dissolved Solids	566	mg/L
Station 160	9/17/2021	Total Dissolved Solids	656	mg/L
Station 160	9/19/2021	Total Dissolved Solids	692	mg/L
Station 160	9/24/2021	Total Dissolved Solids	996	mg/L
Station 160	9/28/2021	Total Dissolved Solids	688	mg/L
Station 160	5/9/2022	Total Dissolved Solids	533	mg/L
Station 160	5/15/2022	Total Dissolved Solids	1170	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/22/2022	Total Dissolved Solids	204	mg/L
Station 160	5/30/2022	Total Dissolved Solids	316	mg/L
Station 160	6/3/2022	Total Dissolved Solids	296	mg/L
Station 160	6/5/2022	Total Dissolved Solids	319	mg/L
Station 160	6/10/2022	Total Dissolved Solids	442	mg/L
Station 160	6/12/2022	Total Dissolved Solids	752	mg/L
Station 160	6/17/2022	Total Dissolved Solids	848	mg/L
Station 160	6/19/2022	Total Dissolved Solids	706	mg/L
Station 160	6/25/2022	Total Dissolved Solids	458	mg/L
Station 160	6/26/2022	Total Dissolved Solids	400	mg/L
Station 160	7/10/2022	Total Dissolved Solids	806	mg/L
Station 160	7/15/2022	Total Dissolved Solids	886	mg/L
Station 160	7/17/2022	Total Dissolved Solids	932	mg/L
Station 160	7/24/2022	Total Dissolved Solids	890	mg/L
Station 160	7/29/2022	Total Dissolved Solids	552	mg/L
Station 160	8/1/2022	Total Dissolved Solids	757	mg/L
Station 160	8/6/2022	Total Dissolved Solids	824	mg/L
Station 160	8/7/2022	Total Dissolved Solids	857	mg/L
Station 160	8/13/2022	Total Dissolved Solids	772	mg/L
Station 160	8/14/2022	Total Dissolved Solids	732	mg/L
Station 160	8/21/2022	Total Dissolved Solids	906	mg/L
Station 160	8/28/2022	Total Dissolved Solids	654	mg/L
Station 160	9/2/2022	Total Dissolved Solids	814	mg/L
Station 160	9/4/2022	Total Dissolved Solids	795	mg/L
Station 160	9/9/2022	Total Dissolved Solids	824	mg/L
Station 160	9/11/2022	Total Dissolved Solids	823	mg/L
Station 160	9/20/2022	Total Dissolved Solids	372	mg/L
Station 160	9/26/2022	Total Dissolved Solids	502	mg/L
Station 160	10/1/2022	Total Dissolved Solids	54	mg/L
Station 160	5/23/2023	Total Dissolved Solids	309	mg/L
Station 160	5/28/2023	Total Dissolved Solids	158	mg/L
Station 160	5/30/2023	Total Dissolved Solids	228	mg/L
Station 160	6/4/2023	Total Dissolved Solids	623	mg/L
Station 160	6/9/2023	Total Dissolved Solids	126	mg/L
Station 160	6/11/2023	Total Dissolved Solids	208	mg/L
Station 160	6/18/2023	Total Dissolved Solids	288	mg/L
Station 160	6/26/2023	Total Dissolved Solids	228	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/2/2023	Total Dissolved Solids	344	mg/L
Station 160	7/7/2023	Total Dissolved Solids	328	mg/L
Station 160	7/9/2023	Total Dissolved Solids	309	mg/L
Station 160	7/16/2023	Total Dissolved Solids	462	mg/L
Station 160	7/21/2023	Total Dissolved Solids	510	mg/L
Station 160	7/23/2023	Total Dissolved Solids	494	mg/L
Station 160	7/30/2023	Total Dissolved Solids	452	mg/L
Station 160	8/5/2023	Total Dissolved Solids	592	mg/L
Station 160	8/6/2023	Total Dissolved Solids	595	mg/L
Station 160	8/11/2023	Total Dissolved Solids	680	mg/L
Station 160	8/15/2023	Total Dissolved Solids	754	mg/L
Station 160	8/20/2023	Total Dissolved Solids	668	mg/L
Station 160	8/25/2023	Total Dissolved Solids	880	mg/L
Station 160	8/27/2023	Total Dissolved Solids	800	mg/L
Station 160	9/3/2023	Total Dissolved Solids	884	mg/L
Station 160	9/8/2023	Total Dissolved Solids	690	mg/L
Station 160	9/10/2023	Total Dissolved Solids	701	mg/L
Station 160	9/18/2023	Total Dissolved Solids	644	mg/L
Station 160	9/26/2023	Total Dissolved Solids	600	mg/L
Station 160	5/21/2024	Total Dissolved Solids	349	mg/L
Station 160	5/23/2024	Total Dissolved Solids	186	mg/L
Station 160	5/27/2024	Total Dissolved Solids	362	mg/L
Station 160	5/31/2024	Total Dissolved Solids	18	mg/L
Station 160	6/3/2024	Total Dissolved Solids	325	mg/L
Station 160	6/9/2024	Total Dissolved Solids	247	mg/L
Station 160	6/14/2024	Total Dissolved Solids	344	mg/L
Station 160	6/16/2024	Total Dissolved Solids	400	mg/L
Station 160	6/23/2024	Total Dissolved Solids	390	mg/L
Station 160	6/28/2024	Total Dissolved Solids	524	mg/L
Station 160	7/1/2024	Total Dissolved Solids	572	mg/L
Station 160	7/7/2024	Total Dissolved Solids	391	mg/L
Station 160	7/14/2024	Total Dissolved Solids	514	mg/L
Station 160	7/17/2024	Total Dissolved Solids	562	mg/L
Station 160	7/21/2024	Total Dissolved Solids	648	mg/L
Station 160	7/28/2024	Total Dissolved Solids	520	mg/L
Station 160	8/4/2024	Total Dissolved Solids	294	mg/L
Station 160	8/10/2024	Total Dissolved Solids	35	mg/L
Station 160	8/11/2024	Total Dissolved Solids	395	mg/L

Table Appendix A-4 Station 160 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	8/18/2024	Total Dissolved Solids	326	mg/L
Station 160	8/25/2024	Total Dissolved Solids	388	mg/L
Station 160	8/25/2024	Total Dissolved Solids	418	mg/L
Station 160	9/1/2024	Total Dissolved Solids	612	mg/L
Station 160	9/8/2024	Total Dissolved Solids	464	mg/L
Station 160	9/13/2024	Total Dissolved Solids	562	mg/L
Station 160	9/15/2024	Total Dissolved Solids	494	mg/L
Station 160	9/23/2024	Total Dissolved Solids	490	mg/L
Station 160	9/27/2024	Total Dissolved Solids	474	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-5 Station 140 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Total Dissolved Solids	94	mg/L
Station 140	5/16/2016	Total Dissolved Solids	132	mg/L
Station 140	6/6/2016	Total Dissolved Solids	182	mg/L
Station 140	6/20/2016	Total Dissolved Solids	220	mg/L
Station 140	7/4/2016	Total Dissolved Solids	256	mg/L
Station 140	7/18/2016	Total Dissolved Solids	302	mg/L
Station 140	8/1/2016	Total Dissolved Solids	313	mg/L
Station 140	8/15/2016	Total Dissolved Solids	346	mg/L
Station 140	8/15/2016	Total Dissolved Solids	*<10*	mg/L
Station 140	8/15/2016	Total Dissolved Solids	344	mg/L
Station 140	9/5/2016	Total Dissolved Solids	307	mg/L
Station 140	9/19/2016	Total Dissolved Solids	344	mg/L
Station 140	10/3/2016	Total Dissolved Solids	348	mg/L
Station 140	10/17/2016	Total Dissolved Solids	424	mg/L
Station 140	5/14/2017	Total Dissolved Solids	75	mg/L
Station 140	5/22/2017	Total Dissolved Solids	90	mg/L
Station 140	6/4/2017	Total Dissolved Solids	71	mg/L
Station 140	6/19/2017	Total Dissolved Solids	226	mg/L
Station 140	7/9/2017	Total Dissolved Solids	237	mg/L
Station 140	7/17/2017	Total Dissolved Solids	294	mg/L
Station 140	8/8/2017	Total Dissolved Solids	277	mg/L
Station 140	8/21/2017	Total Dissolved Solids	310	mg/L
Station 140	9/3/2017	Total Dissolved Solids	397	mg/L
Station 140	9/18/2017	Total Dissolved Solids	344	mg/L
Station 140	9/25/2017	Total Dissolved Solids	342	mg/L

Table Appendix A-5 Station 140 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/14/2018	Total Dissolved Solids	176	mg/L
Station 140	5/21/2018	Total Dissolved Solids	172	mg/L
Station 140	6/4/2018	Total Dissolved Solids	144	mg/L
Station 140	6/18/2018	Total Dissolved Solids	200	mg/L
Station 140	7/8/2018	Total Dissolved Solids	235	mg/L
Station 140	7/16/2018	Total Dissolved Solids	268	mg/L
Station 140	8/6/2018	Total Dissolved Solids	384	mg/L
Station 140	8/20/2018	Total Dissolved Solids	492	mg/L
Station 140	9/9/2018	Total Dissolved Solids	690	mg/L
Station 140	9/17/2018	Total Dissolved Solids	686	mg/L
Station 140	9/25/2018	Total Dissolved Solids	708	mg/L
Station 140	5/14/2019	Total Dissolved Solids	242	mg/L
Station 140	5/14/2019	Total Dissolved Solids	*<20*	mg/L
Station 140	5/14/2019	Total Dissolved Solids	244	mg/L
Station 140	5/19/2019	Total Dissolved Solids	168	mg/L
Station 140	6/2/2019	Total Dissolved Solids	152	mg/L
Station 140	6/9/2019	Total Dissolved Solids	188	mg/L
Station 140	6/17/2019	Total Dissolved Solids	220	mg/L
Station 140	6/30/2019	Total Dissolved Solids	320	mg/L
Station 140	7/14/2019	Total Dissolved Solids	474	mg/L
Station 140	8/4/2019	Total Dissolved Solids	334	mg/L
Station 140	8/18/2019	Total Dissolved Solids	584	mg/L
Station 140	9/8/2019	Total Dissolved Solids	631	mg/L
Station 140	9/16/2019	Total Dissolved Solids	952	mg/L
Station 140	5/12/2020	Total Dissolved Solids	188	mg/L
Station 140	5/18/2020	Total Dissolved Solids	612	mg/L
Station 140	6/2/2020	Total Dissolved Solids	573	mg/L
Station 140	6/14/2020	Total Dissolved Solids	1220	mg/L
Station 140	6/26/2020	Total Dissolved Solids	2140	mg/L
Station 140	7/5/2020	Total Dissolved Solids	1580	mg/L
Station 140	7/19/2020	Total Dissolved Solids	2380	mg/L
Station 140	8/3/2020	Total Dissolved Solids	2830	mg/L
Station 140	8/16/2020	Total Dissolved Solids	2680	mg/L
Station 140	8/28/2020	Total Dissolved Solids	262	mg/L
Station 140	9/15/2020	Total Dissolved Solids	2910	mg/L
Station 140	9/20/2020	Total Dissolved Solids	2890	mg/L
Station 140	9/27/2020	Total Dissolved Solids	2550	mg/L
Station 140	5/9/2021	Total Dissolved Solids	418	mg/L

Table Appendix A-5 Station 140 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/24/2021	Total Dissolved Solids	552	mg/L
Station 140	6/6/2021	Total Dissolved Solids	690	mg/L
Station 140	6/20/2021	Total Dissolved Solids	500	mg/L
Station 140	7/4/2021	Total Dissolved Solids	684	mg/L
Station 140	7/25/2021	Total Dissolved Solids	818	mg/L
Station 140	8/8/2021	Total Dissolved Solids	700	mg/L
Station 140	8/15/2021	Total Dissolved Solids	1030	mg/L
Station 140	9/6/2021	Total Dissolved Solids	875	mg/L
Station 140	9/19/2021	Total Dissolved Solids	960	mg/L
Station 140	9/27/2021	Total Dissolved Solids	1130	mg/L
Station 140	5/9/2022	Total Dissolved Solids	464	mg/L
Station 140	5/22/2022	Total Dissolved Solids	144	mg/L
Station 140	6/5/2022	Total Dissolved Solids	323	mg/L
Station 140	6/19/2022	Total Dissolved Solids	660	mg/L
Station 140	7/10/2022	Total Dissolved Solids	1150	mg/L
Station 140	7/17/2022	Total Dissolved Solids	1310	mg/L
Station 140	8/1/2022	Total Dissolved Solids	1010	mg/L
Station 140	8/14/2022	Total Dissolved Solids	1170	mg/L
Station 140	9/4/2022	Total Dissolved Solids	1050	mg/L
Station 140	9/20/2022	Total Dissolved Solids	442	mg/L
Station 140	9/26/2022	Total Dissolved Solids	702	mg/L
Station 140	5/23/2023	Total Dissolved Solids	206	mg/L
Station 140	5/28/2023	Total Dissolved Solids	170	mg/L
Station 140	6/4/2023	Total Dissolved Solids	517	mg/L
Station 140	6/18/2023	Total Dissolved Solids	268	mg/L
Station 140	7/9/2023	Total Dissolved Solids	299	mg/L
Station 140	7/16/2023	Total Dissolved Solids	446	mg/L
Station 140	8/6/2023	Total Dissolved Solids	607	mg/L
Station 140	8/20/2023	Total Dissolved Solids	830	mg/L
Station 140	9/3/2023	Total Dissolved Solids	911	mg/L
Station 140	9/18/2023	Total Dissolved Solids	838	mg/L
Station 140	9/27/2023	Total Dissolved Solids	910	mg/L
Station 140	5/21/2024	Total Dissolved Solids	199	mg/L
Station 140	5/27/2024	Total Dissolved Solids	186	mg/L
Station 140	6/3/2024	Total Dissolved Solids	227	mg/L
Station 140	6/16/2024	Total Dissolved Solids	276	mg/L
Station 140	7/1/2024	Total Dissolved Solids	448	mg/L
Station 140	7/14/2024	Total Dissolved Solids	608	mg/L

Table Appendix A-5 Station 140 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/4/2024	Total Dissolved Solids	292	mg/L
Station 140	8/18/2024	Total Dissolved Solids	346	mg/L
Station 140	9/8/2024	Total Dissolved Solids	544	mg/L
Station 140	9/15/2024	Total Dissolved Solids	634	mg/L
Station 140	9/23/2024	Total Dissolved Solids	724	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-6 Station 12 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Total Dissolved Solids	107	mg/L
Station 12	5/16/2016	Total Dissolved Solids	214	mg/L
Station 12	6/6/2016	Total Dissolved Solids	324	mg/L
Station 12	6/20/2016	Total Dissolved Solids	364	mg/L
Station 12	7/4/2016	Total Dissolved Solids	402	mg/L
Station 12	7/18/2016	Total Dissolved Solids	386	mg/L
Station 12	8/1/2016	Total Dissolved Solids	420	mg/L
Station 12	8/15/2016	Total Dissolved Solids	438	mg/L
Station 12	9/5/2016	Total Dissolved Solids	387	mg/L
Station 12	9/19/2016	Total Dissolved Solids	424	mg/L
Station 12	10/3/2016	Total Dissolved Solids	396	mg/L
Station 12	10/17/2016	Total Dissolved Solids	478	mg/L
Station 12	5/14/2017	Total Dissolved Solids	109	mg/L
Station 12	5/22/2017	Total Dissolved Solids	100	mg/L
Station 12	6/4/2017	Total Dissolved Solids	105	mg/L
Station 12	6/19/2017	Total Dissolved Solids	314	mg/L
Station 12	7/9/2017	Total Dissolved Solids	295	mg/L
Station 12	7/17/2017	Total Dissolved Solids	364	mg/L
Station 12	8/8/2017	Total Dissolved Solids	331	mg/L
Station 12	8/21/2017	Total Dissolved Solids	370	mg/L
Station 12	9/3/2017	Total Dissolved Solids	419	mg/L
Station 12	9/18/2017	Total Dissolved Solids	362	mg/L
Station 12	9/25/2017	Total Dissolved Solids	388	mg/L
Station 12	5/14/2018	Total Dissolved Solids	142	mg/L
Station 12	5/21/2018	Total Dissolved Solids	142	mg/L
Station 12	6/4/2018	Total Dissolved Solids	126	mg/L
Station 12	6/18/2018	Total Dissolved Solids	272	mg/L
Station 12	7/8/2018	Total Dissolved Solids	289	mg/L
Station 12	7/16/2018	Total Dissolved Solids	316	mg/L

Table Appendix A-6 Station 12 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/6/2018	Total Dissolved Solids	334	mg/L
Station 12	8/20/2018	Total Dissolved Solids	434	mg/L
Station 12	9/9/2018	Total Dissolved Solids	464	mg/L
Station 12	9/17/2018	Total Dissolved Solids	474	mg/L
Station 12	9/25/2018	Total Dissolved Solids	480	mg/L
Station 12	5/14/2019	Total Dissolved Solids	240	mg/L
Station 12	5/19/2019	Total Dissolved Solids	123	mg/L
Station 12	6/2/2019	Total Dissolved Solids	141	mg/L
Station 12	6/9/2019	Total Dissolved Solids	224	mg/L
Station 12	6/17/2019	Total Dissolved Solids	280	mg/L
Station 12	6/30/2019	Total Dissolved Solids	327	mg/L
Station 12	7/14/2019	Total Dissolved Solids	408	mg/L
Station 12	8/4/2019	Total Dissolved Solids	303	mg/L
Station 12	8/18/2019	Total Dissolved Solids	434	mg/L
Station 12	9/8/2019	Total Dissolved Solids	420	mg/L
Station 12	9/16/2019	Total Dissolved Solids	492	mg/L
Station 12	5/12/2020	Total Dissolved Solids	74	mg/L
Station 12	5/18/2020	Total Dissolved Solids	132	mg/L
Station 12	6/2/2020	Total Dissolved Solids	220	mg/L
Station 12	6/14/2020	Total Dissolved Solids	414	mg/L
Station 12	6/26/2020	Total Dissolved Solids	603	mg/L
Station 12	7/5/2020	Total Dissolved Solids	506	mg/L
Station 12	7/19/2020	Total Dissolved Solids	654	mg/L
Station 12	8/3/2020	Total Dissolved Solids	666	mg/L
Station 12	8/16/2020	Total Dissolved Solids	690	mg/L
Station 12	8/28/2020	Total Dissolved Solids	712	mg/L
Station 12	9/15/2020	Total Dissolved Solids	702	mg/L
Station 12	9/20/2020	Total Dissolved Solids	646	mg/L
Station 12	9/20/2020	Total Dissolved Solids	*<20*	mg/L
Station 12	9/20/2020	Total Dissolved Solids	658	mg/L
Station 12	9/27/2020	Total Dissolved Solids	704	mg/L
Station 12	5/9/2021	Total Dissolved Solids	247	mg/L
Station 12	5/24/2021	Total Dissolved Solids	244	mg/L
Station 12	6/6/2021	Total Dissolved Solids	387	mg/L
Station 12	6/20/2021	Total Dissolved Solids	402	mg/L
Station 12	7/4/2021	Total Dissolved Solids	415	mg/L
Station 12	7/25/2021	Total Dissolved Solids	462	mg/L
Station 12	8/8/2021	Total Dissolved Solids	423	mg/L

Table Appendix A-6 Station 12 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/15/2021	Total Dissolved Solids	492	mg/L
Station 12	9/6/2021	Total Dissolved Solids	502	mg/L
Station 12	9/19/2021	Total Dissolved Solids	570	mg/L
Station 12	9/27/2021	Total Dissolved Solids	594	mg/L
Station 12	5/9/2022	Total Dissolved Solids	317	mg/L
Station 12	5/22/2022	Total Dissolved Solids	82	mg/L
Station 12	6/5/2022	Total Dissolved Solids	204	mg/L
Station 12	6/19/2022	Total Dissolved Solids	450	mg/L
Station 12	7/10/2022	Total Dissolved Solids	547	mg/L
Station 12	7/17/2022	Total Dissolved Solids	620	mg/L
Station 12	8/1/2022	Total Dissolved Solids	567	mg/L
Station 12	8/14/2022	Total Dissolved Solids	592	mg/L
Station 12	9/4/2022	Total Dissolved Solids	602	mg/L
Station 12	9/20/2022	Total Dissolved Solids	402	mg/L
Station 12	9/26/2022	Total Dissolved Solids	500	mg/L
Station 12	5/23/2023	Total Dissolved Solids	129	mg/L
Station 12	5/28/2023	Total Dissolved Solids	114	mg/L
Station 12	6/4/2023	Total Dissolved Solids	392	mg/L
Station 12	6/18/2023	Total Dissolved Solids	238	mg/L
Station 12	7/9/2023	Total Dissolved Solids	336	mg/L
Station 12	7/16/2023	Total Dissolved Solids	400	mg/L
Station 12	8/6/2023	Total Dissolved Solids	482	mg/L
Station 12	8/20/2023	Total Dissolved Solids	530	mg/L
Station 12	9/3/2023	Total Dissolved Solids	569	mg/L
Station 12	9/18/2023	Total Dissolved Solids	538	mg/L
Station 12	9/26/2023	Total Dissolved Solids	604	mg/L
Station 12	5/21/2024	Total Dissolved Solids	919	mg/L
Station 12	5/27/2024	Total Dissolved Solids	192	mg/L
Station 12	6/3/2024	Total Dissolved Solids	185	mg/L
Station 12	6/16/2024	Total Dissolved Solids	328	mg/L
Station 12	7/1/2024	Total Dissolved Solids	450	mg/L
Station 12	7/14/2024	Total Dissolved Solids	484	mg/L
Station 12	8/4/2024	Total Dissolved Solids	256	mg/L
Station 12	8/18/2024	Total Dissolved Solids	346	mg/L
Station 12	9/8/2024	Total Dissolved Solids	435	mg/L
Station 12	9/15/2024	Total Dissolved Solids	506	mg/L
Station 12	9/23/2024	Total Dissolved Solids	528	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix A-7 Station 9 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	Total Dissolved Solids	148	mg/L
Station 9	5/16/2016	Total Dissolved Solids	160	mg/L
Station 9	6/2/2016	Total Dissolved Solids	180	mg/L
Station 9	6/17/2016	Total Dissolved Solids	220	mg/L
Station 9	7/1/2016	Total Dissolved Solids	248	mg/L
Station 9	7/15/2016	Total Dissolved Solids	288	mg/L
Station 9	8/5/2016	Total Dissolved Solids	304	mg/L
Station 9	8/19/2016	Total Dissolved Solids	236	mg/L
Station 9	9/8/2016	Total Dissolved Solids	326	mg/L
Station 9	9/23/2016	Total Dissolved Solids	338	mg/L
Station 9	10/6/2016	Total Dissolved Solids	362	mg/L
Station 9	10/17/2016	Total Dissolved Solids	452	mg/L
Station 9	5/5/2017	Total Dissolved Solids	506	mg/L
Station 9	5/19/2017	Total Dissolved Solids	130	mg/L
Station 9	6/8/2017	Total Dissolved Solids	102	mg/L
Station 9	6/23/2017	Total Dissolved Solids	130	mg/L
Station 9	7/7/2017	Total Dissolved Solids	158	mg/L
Station 9	7/20/2017	Total Dissolved Solids	256	mg/L
Station 9	8/4/2017	Total Dissolved Solids	220	mg/L
Station 9	8/25/2017	Total Dissolved Solids	302	mg/L
Station 9	9/8/2017	Total Dissolved Solids	348	mg/L
Station 9	9/18/2017	Total Dissolved Solids	288	mg/L
Station 9	10/5/2017	Total Dissolved Solids	292	mg/L
Station 9	10/9/2017	Total Dissolved Solids	328	mg/L
Station 9	5/23/2018	Total Dissolved Solids	170	mg/L
Station 9	6/8/2018	Total Dissolved Solids	126	mg/L
Station 9	6/29/2018	Total Dissolved Solids	144	mg/L
Station 9	7/13/2018	Total Dissolved Solids	202	mg/L
Station 9	7/27/2018	Total Dissolved Solids	252	mg/L
Station 9	8/3/2018	Total Dissolved Solids	256	mg/L
Station 9	8/18/2018	Total Dissolved Solids	334	mg/L
Station 9	9/7/2018	Total Dissolved Solids	320	mg/L
Station 9	9/28/2018	Total Dissolved Solids	458	mg/L
Station 9	10/5/2018	Total Dissolved Solids	452	mg/L
Station 9	10/12/2018	Total Dissolved Solids	*<10*	mg/L
Station 9	10/12/2018	Total Dissolved Solids	472	mg/L
Station 9	10/12/2018	Total Dissolved Solids	466	mg/L
Station 9	5/25/2019	Total Dissolved Solids	184	mg/L

Table Appendix A-7 Station 9 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/30/2019	Total Dissolved Solids	154	mg/L
Station 9	6/7/2019	Total Dissolved Solids	192	mg/L
Station 9	6/21/2019	Total Dissolved Solids	218	mg/L
Station 9	7/12/2019	Total Dissolved Solids	*<20*	mg/L
Station 9	7/12/2019	Total Dissolved Solids	360	mg/L
Station 9	7/12/2019	Total Dissolved Solids	372	mg/L
Station 9	7/21/2019	Total Dissolved Solids	282	mg/L
Station 9	8/3/2019	Total Dissolved Solids	288	mg/L
Station 9	8/25/2019	Total Dissolved Solids	580	mg/L
Station 9	9/1/2019	Total Dissolved Solids	628	mg/L
Station 9	9/16/2019	Total Dissolved Solids	760	mg/L
Station 9	10/7/2019	Total Dissolved Solids	1300	mg/L
Station 9	5/19/2020	Total Dissolved Solids	322	mg/L
Station 9	5/29/2020	Total Dissolved Solids	414	mg/L
Station 9	6/6/2020	Total Dissolved Solids	502	mg/L
Station 9	6/19/2020	Total Dissolved Solids	738	mg/L
Station 9	6/23/2020	Total Dissolved Solids	1440	mg/L
Station 9	6/23/2020	Total Dissolved Solids	1050	mg/L
Station 9	6/26/2020	Total Dissolved Solids	1058	mg/L
Station 9	7/3/2020	Total Dissolved Solids	886	mg/L
Station 9	7/4/2020	Total Dissolved Solids	698	mg/L
Station 9	7/10/2020	Total Dissolved Solids	1078	mg/L
Station 9	7/18/2020	Total Dissolved Solids	1334	mg/L
Station 9	7/18/2020	Total Dissolved Solids	1370	mg/L
Station 9	7/24/2020	Total Dissolved Solids	1390	mg/L
Station 9	7/31/2020	Total Dissolved Solids	1010	mg/L
Station 9	8/3/2020	Total Dissolved Solids	1260	mg/L
Station 9	8/9/2020	Total Dissolved Solids	1448	mg/L
Station 9	8/16/2020	Total Dissolved Solids	1520	mg/L
Station 9	8/16/2020	Total Dissolved Solids	1548	mg/L
Station 9	8/21/2020	Total Dissolved Solids	1700	mg/L
Station 9	8/29/2020	Total Dissolved Solids	1676	mg/L
Station 9	9/4/2020	Total Dissolved Solids	1626	mg/L
Station 9	9/5/2020	Total Dissolved Solids	1580	mg/L
Station 9	9/25/2020	Total Dissolved Solids	1330	mg/L
Station 9	9/26/2020	Total Dissolved Solids	1410	mg/L
Station 9	10/2/2020	Total Dissolved Solids	1454	mg/L
Station 9	10/3/2020	Total Dissolved Solids	1430	mg/L

Table Appendix A-7 Station 9 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	10/10/2020	Total Dissolved Solids	1320	mg/L
Station 9	5/6/2016	Total Dissolved Solids	148	mg/L
Station 9	5/7/2021	Total Dissolved Solids	1450	mg/L
Station 9	5/14/2021	Total Dissolved Solids	262	mg/L
Station 9	5/16/2021	Total Dissolved Solids	308	mg/L
Station 9	5/23/2021	Total Dissolved Solids	400	mg/L
Station 9	5/26/2021	Total Dissolved Solids	322	mg/L
Station 9	5/28/2021	Total Dissolved Solids	288	mg/L
Station 9	6/4/2021	Total Dissolved Solids	536	mg/L
Station 9	6/5/2021	Total Dissolved Solids	564	mg/L
Station 9	6/11/2021	Total Dissolved Solids	394	mg/L
Station 9	6/18/2021	Total Dissolved Solids	342	mg/L
Station 9	6/19/2021	Total Dissolved Solids	402	mg/L
Station 9	6/20/2021	Total Dissolved Solids	424	mg/L
Station 9	6/25/2021	Total Dissolved Solids	5	mg/L
Station 9	7/3/2021	Total Dissolved Solids	48	mg/L
Station 9	7/9/2021	Total Dissolved Solids	480	mg/L
Station 9	7/12/2021	Total Dissolved Solids	584	mg/L
Station 9	7/18/2021	Total Dissolved Solids	434	mg/L
Station 9	7/23/2021	Total Dissolved Solids	446	mg/L
Station 9	7/26/2021	Total Dissolved Solids	422	mg/L
Station 9	8/6/2021	Total Dissolved Solids	492	mg/L
Station 9	8/8/2021	Total Dissolved Solids	558	mg/L
Station 9	8/15/2021	Total Dissolved Solids	568	mg/L
Station 9	8/16/2021	Total Dissolved Solids	606	mg/L
Station 9	8/20/2021	Total Dissolved Solids	688	mg/L
Station 9	8/27/2021	Total Dissolved Solids	730	mg/L
Station 9	9/3/2021	Total Dissolved Solids	706	mg/L
Station 9	9/6/2021	Total Dissolved Solids	610	mg/L
Station 9	9/11/2021	Total Dissolved Solids	558	mg/L
Station 9	9/17/2021	Total Dissolved Solids	696	mg/L
Station 9	9/19/2021	Total Dissolved Solids	732	mg/L
Station 9	9/24/2021	Total Dissolved Solids	1152	mg/L
Station 9	9/28/2021	Total Dissolved Solids	978	mg/L
Station 9	10/2/2021	Total Dissolved Solids	954	mg/L
Station 9	5/9/2022	Total Dissolved Solids	1380	mg/L
Station 9	5/22/2022	Total Dissolved Solids	336	mg/L
Station 9	6/3/2022	Total Dissolved Solids	220	mg/L

Table Appendix A-7 Station 9 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/5/2022	Total Dissolved Solids	296	mg/L
Station 9	6/10/2022	Total Dissolved Solids	336	mg/L
Station 9	6/17/2022	Total Dissolved Solids	570	mg/L
Station 9	6/19/2022	Total Dissolved Solids	460	mg/L
Station 9	6/25/2022	Total Dissolved Solids	376	mg/L
Station 9	7/10/2022	Total Dissolved Solids	736	mg/L
Station 9	7/15/2022	Total Dissolved Solids	758	mg/L
Station 9	7/17/2022	Total Dissolved Solids	842	mg/L
Station 9	7/29/2022	Total Dissolved Solids	464	mg/L
Station 9	8/1/2022	Total Dissolved Solids	624	mg/L
Station 9	8/6/2022	Total Dissolved Solids	656	mg/L
Station 9	8/13/2022	Total Dissolved Solids	594	mg/L
Station 9	8/14/2022	Total Dissolved Solids	600	mg/L
Station 9	9/2/2022	Total Dissolved Solids	726	mg/L
Station 9	9/4/2022	Total Dissolved Solids	702	mg/L
Station 9	9/9/2022	Total Dissolved Solids	722	mg/L
Station 9	9/20/2022	Total Dissolved Solids	340	mg/L
Station 9	9/26/2022	Total Dissolved Solids	574	mg/L
Station 9	10/1/2022	Total Dissolved Solids	680	mg/L
Station 9	10/1/2022	Total Dissolved Solids	684	mg/L
Station 9	10/5/2022	Total Dissolved Solids	682	mg/L
Station 9	5/23/2023	Total Dissolved Solids	412	mg/L
Station 9	5/28/2023	Total Dissolved Solids	186	mg/L
Station 9	6/4/2023	Total Dissolved Solids	510	mg/L
Station 9	6/9/2023	Total Dissolved Solids	116	mg/L
Station 9	6/18/2023	Total Dissolved Solids	216	mg/L
Station 9	7/2/2023	Total Dissolved Solids	276	mg/L
Station 9	7/9/2023	Total Dissolved Solids	272	mg/L
Station 9	7/16/2023	Total Dissolved Solids	350	mg/L
Station 9	7/21/2023	Total Dissolved Solids	354	mg/L
Station 9	8/5/2023	Total Dissolved Solids	390	mg/L
Station 9	8/6/2023	Total Dissolved Solids	422	mg/L
Station 9	8/11/2023	Total Dissolved Solids	542	mg/L
Station 9	8/20/2023	Total Dissolved Solids	472	mg/L
Station 9	8/25/2023	Total Dissolved Solids	580	mg/L
Station 9	9/3/2023	Total Dissolved Solids	652	mg/L
Station 9	9/8/2023	Total Dissolved Solids	548	mg/L
Station 9	9/18/2023	Total Dissolved Solids	602	mg/L

Table Appendix A-7 Station 9 Total Dissolved Solids Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/21/2024	Total Dissolved Solids	500	mg/L
Station 9	5/23/2024	Total Dissolved Solids	23	mg/L
Station 9	5/27/2024	Total Dissolved Solids	334	mg/L
Station 9	5/31/2024	Total Dissolved Solids	148	mg/L
Station 9	6/3/2024	Total Dissolved Solids	258	mg/L
Station 9	6/3/2024	Total Dissolved Solids	20	mg/L
Station 9	6/3/2024	Total Dissolved Solids	254	mg/L
Station 9	6/14/2024	Total Dissolved Solids	290	mg/L
Station 9	6/16/2024	Total Dissolved Solids	286	mg/L
Station 9	6/28/2024	Total Dissolved Solids	332	mg/L
Station 9	7/1/2024	Total Dissolved Solids	388	mg/L
Station 9	7/14/2024	Total Dissolved Solids	454	mg/L
Station 9	7/17/2024	Total Dissolved Solids	228	mg/L
Station 9	8/4/2024	Total Dissolved Solids	262	mg/L
Station 9	8/10/2024	Total Dissolved Solids	342	mg/L
Station 9	8/18/2024	Total Dissolved Solids	324	mg/L
Station 9	8/25/2024	Total Dissolved Solids	378	mg/L
Station 9	9/8/2024	Total Dissolved Solids	462	mg/L
Station 9	9/13/2024	Total Dissolved Solids	542	mg/L
Station 9	9/15/2024	Total Dissolved Solids	492	mg/L
Station 9	9/27/2024	Total Dissolved Solids	572	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix B – Zinc Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Zinc	0.0692	mg/L
Outfall 001	5/10/2016	Zinc	0.0628	mg/L
Outfall 001	5/17/2016	Zinc	0.09	mg/L
Outfall 001	5/17/2016	Zinc	0.09	mg/L
Outfall 001	5/20/2016	Zinc	*0.0206*	mg/L
Outfall 001	5/20/2016	Zinc	*0.0219*	mg/L
Outfall 001	5/24/2016	Zinc	0.099	mg/L
Outfall 001	6/1/2016	Zinc	0.088	mg/L
Outfall 001	6/7/2016	Zinc	0.115	mg/L
Outfall 001	6/14/2016	Zinc	*0.0171*	mg/L
Outfall 001	6/14/2016	Zinc	0.0537	mg/L
Outfall 001	6/14/2016	Zinc	0.0563	mg/L
Outfall 001	6/21/2016	Zinc	0.065	mg/L
Outfall 001	6/28/2016	Zinc	0.058	mg/L
Outfall 001	7/2/2016	Zinc	0.108	mg/L
Outfall 001	7/5/2016	Zinc	0.111	mg/L
Outfall 001	7/12/2016	Zinc	0.0791	mg/L
Outfall 001	7/19/2016	Zinc	0.091	mg/L
Outfall 001	7/26/2016	Zinc	0.096	mg/L
Outfall 001	8/2/2016	Zinc	0.104	mg/L
Outfall 001	8/9/2016	Zinc	0.0643	mg/L
Outfall 001	8/16/2016	Zinc	0.093	mg/L
Outfall 001	8/23/2016	Zinc	0.097	mg/L
Outfall 001	8/31/2016	Zinc	0.085	mg/L
Outfall 001	9/6/2016	Zinc	0.0657	mg/L
Outfall 001	9/13/2016	Zinc	0.0637	mg/L
Outfall 001	9/20/2016	Zinc	0.039	mg/L
Outfall 001	9/26/2016	Zinc	*0.028*	mg/L
Outfall 001	9/26/2016	Zinc	*0.028*	mg/L
Outfall 001	5/1/2017	Zinc	*0.0215*	mg/L
Outfall 001	5/1/2017	Zinc	*0.0222*	mg/L
Outfall 001	5/9/2017	Zinc	0.0883	mg/L
Outfall 001	5/9/2017	Zinc	0.0974	mg/L
Outfall 001	5/9/2017	Zinc	*0.0256*	mg/L
Outfall 001	5/9/2017	Zinc	0.0865	mg/L
Outfall 001	5/15/2017	Zinc	0.187	mg/L
Outfall 001	5/23/2017	Zinc	0.108	mg/L
Outfall 001	5/23/2017	Zinc	0.101	mg/L

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/28/2017	Zinc	0.078	mg/L
Outfall 001	5/29/2017	Zinc	0.072	mg/L
Outfall 001	5/30/2017	Zinc	0.072	mg/L
Outfall 001	6/5/2017	Zinc	0.105	mg/L
Outfall 001	6/13/2017	Zinc	0.0741	mg/L
Outfall 001	6/20/2017	Zinc	0.086	mg/L
Outfall 001	6/27/2017	Zinc	0.061	mg/L
Outfall 001	7/4/2017	Zinc	0.116	mg/L
Outfall 001	7/10/2017	Zinc	0.0959	mg/L
Outfall 001	7/18/2017	Zinc	0.069	mg/L
Outfall 001	7/26/2017	Zinc	0.114	mg/L
Outfall 001	8/2/2017	Zinc	0.117	mg/L
Outfall 001	8/9/2017	Zinc	0.1	mg/L
Outfall 001	8/9/2017	Zinc	0.0968	mg/L
Outfall 001	8/9/2017	Zinc	0.065	mg/L
Outfall 001	8/16/2017	Zinc	0.0669	mg/L
Outfall 001	8/16/2017	Zinc	0.052	mg/L
Outfall 001	8/22/2017	Zinc	0.071	mg/L
Outfall 001	8/22/2017	Zinc	0.063	mg/L
Outfall 001	8/31/2017	Zinc	0.057	mg/L
Outfall 001	8/31/2017	Zinc	0.03	mg/L
Outfall 001	9/4/2017	Zinc	0.0579	mg/L
Outfall 001	9/4/2017	Zinc	0.036	mg/L
Outfall 001	9/12/2017	Zinc	0.0716	mg/L
Outfall 001	9/12/2017	Zinc	0.058	mg/L
Outfall 001	9/19/2017	Zinc	0.06	mg/L
Outfall 001	9/19/2017	Zinc	0.02	mg/L
Outfall 001	9/27/2017	Zinc	*0.0352*	mg/L
Outfall 001	9/27/2017	Zinc	*0.0359*	mg/L
Outfall 001	5/4/2018	Zinc	*0.0028*	mg/L
Outfall 001	5/4/2018	Zinc	*0.0024*	mg/L
Outfall 001	5/14/2018	Zinc	0.0794	mg/L
Outfall 001	5/22/2018	Zinc	0.08	mg/L
Outfall 001	5/29/2018	Zinc	0.113	mg/L
Outfall 001	6/5/2018	Zinc	0.0977	mg/L
Outfall 001	6/12/2018	Zinc	0.0509	mg/L
Outfall 001	6/19/2018	Zinc	0.056	mg/L
Outfall 001	6/26/2018	Zinc	0.087	mg/L

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/2/2018	Zinc	0.055	mg/L
Outfall 001	7/9/2018	Zinc	0.0972	mg/L
Outfall 001	7/17/2018	Zinc	0.092	mg/L
Outfall 001	7/24/2018	Zinc	0.126	mg/L
Outfall 001	7/31/2018	Zinc	0.127	mg/L
Outfall 001	8/7/2018	Zinc	0.155	mg/L
Outfall 001	8/14/2018	Zinc	0.117	mg/L
Outfall 001	8/21/2018	Zinc	0.109	mg/L
Outfall 001	8/28/2018	Zinc	0.083	mg/L
Outfall 001	9/4/2018	Zinc	0.0852	mg/L
Outfall 001	9/10/2018	Zinc	0.0703	mg/L
Outfall 001	9/18/2018	Zinc	0.082	mg/L
Outfall 001	5/15/2019	Zinc	0.053	mg/L
Outfall 001	5/18/2019	Zinc	0.077	mg/L
Outfall 001	5/19/2019	Zinc	0.0555	mg/L
Outfall 001	5/28/2019	Zinc	0.051	mg/L
Outfall 001	6/3/2019	Zinc	0.0986	mg/L
Outfall 001	6/10/2019	Zinc	0.0957	mg/L
Outfall 001	6/18/2019	Zinc	0.082	mg/L
Outfall 001	6/26/2019	Zinc	0.13	mg/L
Outfall 001	6/26/2019	Zinc	*<0.04*	mg/L
Outfall 001	6/26/2019	Zinc	0.15	mg/L
Outfall 001	7/1/2019	Zinc	0.139	mg/L
Outfall 001	7/8/2019	Zinc	0.102	mg/L
Outfall 001	7/15/2019	Zinc	0.089	mg/L
Outfall 001	7/22/2019	Zinc	0.113	mg/L
Outfall 001	7/29/2019	Zinc	0.13	mg/L
Outfall 001	8/5/2019	Zinc	0.119	mg/L
Outfall 001	8/12/2019	Zinc	0.0521	mg/L
Outfall 001	8/17/2019	Zinc	0.0849	mg/L
Outfall 001	8/19/2019	Zinc	0.064	mg/L
Outfall 001	8/29/2019	Zinc	0.077	mg/L
Outfall 001	9/7/2019	Zinc	0.0967	mg/L
Outfall 001	9/9/2019	Zinc	0.0788	mg/L
Outfall 001	5/9/2020	Zinc	*0.0429*	mg/L
Outfall 001	5/9/2020	Zinc	*0.0423*	mg/L
Outfall 001	5/13/2020	Zinc	0.0614	mg/L
Outfall 001	5/19/2020	Zinc	0.076	mg/L

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/26/2020	Zinc	0.035	mg/L
Outfall 001	6/3/2020	Zinc	0.0388	mg/L
Outfall 001	6/8/2020	Zinc	0.0565	mg/L
Outfall 001	6/15/2020	Zinc	0.039	mg/L
Outfall 001	6/22/2020	Zinc	0.042	mg/L
Outfall 001	6/29/2020	Zinc	0.07	mg/L
Outfall 001	7/6/2020	Zinc	0.058	mg/L
Outfall 001	8/29/2020	Zinc	0.0132	*mg/L*
Outfall 001	8/31/2020	Zinc	0.01	*mg/L*
Outfall 001	9/8/2020	Zinc	0.013	*mg/L*
Outfall 001	9/15/2020	Zinc	0.0696	*mg/L*
Outfall 001	9/21/2020	Zinc	0.01	*mg/L*
Outfall 001	5/25/2021	Zinc	0.0541	*mg/L*
Outfall 001	5/31/2021	Zinc	0.0409	*mg/L*
Outfall 001	6/7/2021	Zinc	0.0673	*mg/L*
Outfall 001	6/14/2021	Zinc	0.0571	*mg/L*
Outfall 001	6/21/2021	Zinc	0.0412	*mg/L*
Outfall 001	6/28/2021	Zinc	0.0317	*mg/L*
Outfall 001	7/5/2021	Zinc	0.0265	*mg/L*
Outfall 001	7/12/2021	Zinc	0.0263	*mg/L*
Outfall 001	7/19/2021	Zinc	0.0447	mg/L
Outfall 001	7/26/2021	Zinc	0.241	mg/L
Outfall 001	8/3/2021	Zinc	0.56	mg/L
Outfall 001	8/9/2021	Zinc	0.173	mg/L
Outfall 001	8/16/2021	Zinc	0.0487	mg/L
Outfall 001	8/23/2021	Zinc	0.083	mg/L
Outfall 001	8/31/2021	Zinc	0.12	mg/L
Outfall 001	9/8/2021	Zinc	0.0357	mg/L
Outfall 001	9/13/2021	Zinc	0.06	mg/L
Outfall 001	9/20/2021	Zinc	0	mg/L
Outfall 001	10/4/2021	Zinc	0.015	mg/L
Outfall 001	5/10/2022	Zinc	0.0778	mg/L
Outfall 001	5/16/2022	Zinc	0.131	mg/L
Outfall 001	5/23/2022	Zinc	0.0657	mg/L
Outfall 001	5/31/2022	Zinc	0.0529	mg/L
Outfall 001	6/6/2022	Zinc	0.252	mg/L
Outfall 001	6/13/2022	Zinc	0.0591	mg/L
Outfall 001	6/20/2022	Zinc	0.0644	mg/L

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/27/2022	Zinc	0.0245	mg/L
Outfall 001	7/5/2022	Zinc	0.0512	mg/L
Outfall 001	7/11/2022	Zinc	0.0538	mg/L
Outfall 001	7/18/2022	Zinc	0.0314	mg/L
Outfall 001	7/18/2022	Zinc	0.039	mg/L
Outfall 001	7/25/2022	Zinc	0.0133	mg/L
Outfall 001	8/1/2022	Zinc	0.0283	mg/L
Outfall 001	8/8/2022	Zinc	0.0351	mg/L
Outfall 001	8/15/2022	Zinc	0.015	mg/L
Outfall 001	8/22/2022	Zinc	0.0187	mg/L
Outfall 001	8/29/2022	Zinc	0.0121	mg/L
Outfall 001	9/5/2022	Zinc	0.0238	mg/L
Outfall 001	9/12/2022	Zinc	0.0275	mg/L
Outfall 001	9/21/2022	Zinc	0.0271	mg/L
Outfall 001	9/21/2022	Zinc	0.0264	mg/L
Outfall 001	5/24/2023	Zinc	0.0413	mg/L
Outfall 001	5/29/2023	Zinc	0.0388	mg/L
Outfall 001	6/5/2023	Zinc	0.0843	mg/L
Outfall 001	6/12/2023	Zinc	0.0977	mg/L
Outfall 001	6/19/2023	Zinc	0.0531	mg/L
Outfall 001	6/27/2023	Zinc	0.0488	mg/L
Outfall 001	7/7/2023	Zinc	0.0966	mg/L
Outfall 001	7/10/2023	Zinc	0.0966	mg/L
Outfall 001	7/17/2023	Zinc	0.0484	mg/L
Outfall 001	7/24/2023	Zinc	0.0478	mg/L
Outfall 001	7/31/2023	Zinc	0.0958	mg/L
Outfall 001	8/7/2023	Zinc	0.095	mg/L
Outfall 001	8/16/2023	Zinc	0.061	mg/L
Outfall 001	8/21/2023	Zinc	0.071	mg/L
Outfall 001	8/28/2023	Zinc	0.0552	mg/L
Outfall 001	9/4/2023	Zinc	0.0522	mg/L
Outfall 001	9/11/2023	Zinc	0.0261	mg/L
Outfall 001	9/19/2023	Zinc	0.0299	mg/L
Outfall 001	5/22/2024	Zinc	0.0463	mg/L
Outfall 001	5/28/2024	Zinc	0.0522	mg/L
Outfall 001	6/4/2024	Zinc	0.0335	mg/L
Outfall 001	6/10/2024	Zinc	0.0375	mg/L
Outfall 001	6/17/2024	Zinc	0.0624	mg/L

Table Appendix B-1 Outfall 001 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/24/2024	Zinc	0.0513	mg/L
Outfall 001	7/2/2024	Zinc	0.0519	mg/L
Outfall 001	7/8/2024	Zinc	0.0478	mg/L
Outfall 001	7/15/2024	Zinc	0.043	mg/L
Outfall 001	7/22/2024	Zinc	0.0576	mg/L
Outfall 001	7/29/2024	Zinc	0.0465	mg/L
Outfall 001	8/5/2024	Zinc	0.0468	mg/L
Outfall 001	8/12/2024	Zinc	0.0407	mg/L
Outfall 001	8/19/2024	Zinc	0.0464	mg/L
Outfall 001	8/26/2024	Zinc	0.027	mg/L
Outfall 001	9/2/2024	Zinc	0.0348	mg/L
Outfall 001	9/9/2024	Zinc	0.0688	mg/L
Outfall 001	9/16/2024	Zinc	0.0812	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix B-2 Station 151 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Zinc	0.296	mg/L
Station 151	5/16/2016	Zinc	0.538	mg/L
Station 151	6/6/2016	Zinc	0.470	mg/L
Station 151	6/20/2016	Zinc	0.492	mg/L
Station 151	7/4/2016	Zinc	0.637	mg/L
Station 151	7/18/2016	Zinc	0.533	mg/L
Station 151	8/1/2016	Zinc	0.631	mg/L
Station 151	8/15/2016	Zinc	0.607	mg/L
Station 151	9/5/2016	Zinc	0.396	mg/L
Station 151	9/19/2016	Zinc	0.498	mg/L
Station 151	10/3/2016	Zinc	0.490	mg/L
Station 151	10/17/2016	Zinc	0.345	mg/L
Station 151	5/14/2017	Zinc	0.212	mg/L
Station 151	5/22/2017	Zinc	0.138	mg/L
Station 151	6/4/2017	Zinc	0.182	mg/L
Station 151	6/19/2017	Zinc	0.477	mg/L
Station 151	7/9/2017	Zinc	0.411	mg/L
Station 151	7/17/2017	Zinc	0.445	mg/L
Station 151	8/8/2017	Zinc	0.309	mg/L

Table Appendix B-2 Station 151 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	8/21/2017	Zinc	0.347	mg/L
Station 151	9/3/2017	Zinc	0.402	mg/L
Station 151	9/18/2017	Zinc	0.467	mg/L
Station 151	9/25/2017	Zinc	0.480	mg/L
Station 151	5/14/2018	Zinc	2.55	mg/L
Station 151	5/21/2018	Zinc	0.636	mg/L
Station 151	6/4/2018	Zinc	0.675	mg/L
Station 151	6/18/2018	Zinc	1.04	mg/L
Station 151	7/8/2018	Zinc	1.34	mg/L
Station 151	7/16/2018	Zinc	0.993	mg/L
Station 151	8/6/2018	Zinc	2.91	mg/L
Station 151	8/20/2018	Zinc	2.78	mg/L
Station 151	9/9/2018	Zinc	6.18	mg/L
Station 151	9/17/2018	Zinc	5.15	mg/L
Station 151	9/25/2018	Zinc	6.29	mg/L
Station 151	5/14/2019	Zinc	3.55	mg/L
Station 151	5/19/2019	Zinc	1.76	mg/L
Station 151	6/2/2019	Zinc	1.81	mg/L
Station 151	6/9/2019	Zinc	2.26	mg/L
Station 151	6/17/2019	Zinc	2.85	mg/L
Station 151	6/30/2019	Zinc	4.17	mg/L
Station 151	7/14/2019	Zinc	3.10	mg/L
Station 151	8/4/2019	Zinc	2.79	mg/L
Station 151	8/18/2019	Zinc	3.56	mg/L
Station 151	9/8/2019	Zinc	4.96	mg/L
Station 151	9/16/2019	Zinc	3.87	mg/L
Station 151	5/12/2020	Zinc	0.881	mg/L
Station 151	5/18/2020	Zinc	1.31	mg/L
Station 151	6/2/2020	Zinc	4.70	mg/L
Station 151	6/14/2020	Zinc	9.61	mg/L
Station 151	6/26/2020	Zinc	13.8	mg/L
Station 151	7/5/2020	Zinc	12.8	mg/L
Station 151	7/19/2020	Zinc	13.3	mg/L
Station 151	8/3/2020	Zinc	23.4	mg/L
Station 151	8/16/2020	Zinc	17.1	mg/L
Station 151	8/28/2020	Zinc	17.3	mg/L
Station 151	9/15/2020	Zinc	14.1	mg/L
Station 151	9/20/2020	Zinc	15.0	mg/L

Table Appendix B-2 Station 151 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/27/2020	Zinc	28.1	mg/L
Station 151	5/9/2021	Zinc	2.89	mg/L
Station 151	5/24/2021	Zinc	1.72	mg/L
Station 151	6/6/2021	Zinc	3.78	mg/L
Station 151	6/20/2021	Zinc	2.81	mg/L
Station 151	7/4/2021	Zinc	2.97	mg/L
Station 151	7/25/2021	Zinc	2.86	mg/L
Station 151	8/8/2021	Zinc	2.42	mg/L
Station 151	8/15/2021	Zinc	2.6	mg/L
Station 151	9/6/2021	Zinc	3.57	mg/L
Station 151	9/19/2021	Zinc	3.86	mg/L
Station 151	9/27/2021	Zinc	4.3	mg/L
Station 151	5/9/2022	Zinc	4.24	mg/L
Station 151	5/22/2022	Zinc	0.55	mg/L
Station 151	6/5/2022	Zinc	1.32	mg/L
Station 151	6/19/2022	Zinc	3.59	mg/L
Station 151	7/10/2022	Zinc	4.65	mg/L
Station 151	7/17/2022	Zinc	4.78	mg/L
Station 151	8/1/2022	Zinc	8.3	mg/L
Station 151	8/14/2022	Zinc	5.22	mg/L
Station 151	9/4/2022	Zinc	6.82	mg/L
Station 151	9/20/2022	Zinc	2.97	mg/L
Station 151	9/26/2022	Zinc	3.63	mg/L
Station 151	5/23/2023	Zinc	9.71	mg/L
Station 151	5/28/2023	Zinc	1.09	mg/L
Station 151	6/4/2023	Zinc	2.38	mg/L
Station 151	6/18/2023	Zinc	1.44	mg/L
Station 151	7/9/2023	Zinc	2.81	mg/L
Station 151	7/16/2023	Zinc	2.9	mg/L
Station 151	8/6/2023	Zinc	4.29	mg/L
Station 151	8/20/2023	Zinc	3.78	mg/L
Station 151	9/3/2023	Zinc	4.47	mg/L
Station 151	9/18/2023	Zinc	6.92	mg/L
Station 151	9/26/2023	Zinc	6.73	mg/L
Station 151	5/21/2024	Zinc	2.8	mg/L
Station 151	5/27/2024	Zinc	1.06	mg/L
Station 151	6/3/2024	Zinc	1.28	mg/L
Station 151	6/16/2024	Zinc	1.81	mg/L

Table Appendix B-2 Station 151 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/1/2024	Zinc	3.54	mg/L
Station 151	7/14/2024	Zinc	4.38	mg/L
Station 151	8/4/2024	Zinc	5.34	mg/L
Station 151	8/18/2024	Zinc	2.55	mg/L
Station 151	9/8/2024	Zinc	4.43	mg/L
Station 151	9/15/2024	Zinc	4.07	mg/L
Station 151	9/23/2024	Zinc	4.73	mg/L

Gray italicized indicates Field Blank

Gray italicized and underlined indicates Equipment Blank

Table Appendix B-3 Station 150 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	Zinc	0.319	mg/L
Station 150	6/6/2016	Zinc	0.257	mg/L
Station 150	7/4/2016	Zinc	0.199	mg/L
Station 150	8/1/2016	Zinc	0.241	mg/L
Station 150	9/5/2016	Zinc	0.28	mg/L
Station 150	9/5/2016	Zinc	*0.029*	mg/L
Station 150	9/5/2016	Zinc	0.278	mg/L
Station 150	10/3/2016	Zinc	0.293	mg/L
Station 150	5/14/2017	Zinc	0.285	mg/L
Station 150	6/4/2017	Zinc	0.198	mg/L
Station 150	6/4/2017	Zinc	*0.008*	mg/L
Station 150	6/4/2017	Zinc	0.188	mg/L
Station 150	7/9/2017	Zinc	0.26	mg/L
Station 150	8/8/2017	Zinc	0.313	mg/L
Station 150	9/3/2017	Zinc	0.285	mg/L
Station 150	10/5/2017	Zinc	0.245	mg/L
Station 150	5/14/2018	Zinc	*0.015*	mg/L
Station 150	5/14/2018	Zinc	1.29	mg/L
Station 150	5/14/2018	Zinc	1.28	mg/L
Station 150	6/4/2018	Zinc	0.365	mg/L
Station 150	7/8/2018	Zinc	0.476	mg/L
Station 150	8/6/2018	Zinc	0.9	mg/L
Station 150	9/9/2018	Zinc	0.888	mg/L
Station 150	5/19/2019	Zinc	0.835	mg/L
Station 150	6/2/2019	Zinc	0.827	mg/L
Station 150	6/2/2019	Zinc	*0.02*	mg/L

Table Appendix B-3 Station 150 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	6/2/2019	Zinc	0.812	mg/L
Station 150	6/9/2019	Zinc	0.966	mg/L
Station 150	6/30/2019	Zinc	1.49	mg/L
Station 150	8/4/2019	Zinc	1.22	mg/L
Station 150	8/4/2019	Zinc	*0.023*	mg/L
Station 150	8/4/2019	Zinc	1.23	mg/L
Station 150	9/8/2019	Zinc	1.48	mg/L
Station 150	5/12/2020	Zinc	0.482	mg/L
Station 150	6/3/2020	Zinc	1.72	mg/L
Station 150	6/26/2020	Zinc	4.51	mg/L
Station 150	7/5/2020	Zinc	3.55	mg/L
Station 150	8/3/2020	Zinc	5.9	mg/L
Station 150	8/28/2020	Zinc	5.32	mg/L
Station 150	9/4/2020	Zinc	7.24	mg/L
Station 150	9/4/2020	Zinc	4.71	mg/L
Station 150	9/15/2020	Zinc	5.49	mg/L
Station 150	9/18/2020	Zinc	3.91	mg/L
Station 150	9/25/2020	Zinc	4.16	mg/L
Station 150	9/27/2020	Zinc	6.24	mg/L
Station 150	10/2/2020	Zinc	6.13	mg/L
Station 150	10/9/2020	Zinc	6.5	mg/L
Station 150	5/7/2021	Zinc	3.12	mg/L
Station 150	5/9/2021	Zinc	3.41	mg/L
Station 150	5/14/2021	Zinc	0.828	mg/L
Station 150	5/23/2021	Zinc	1.48	mg/L
Station 150	5/28/2021	Zinc	1.19	mg/L
Station 150	6/4/2021	Zinc	1.75	mg/L
Station 150	6/6/2021	Zinc	1.71	mg/L
Station 150	6/11/2021	Zinc	1.19	mg/L
Station 150	6/18/2021	Zinc	0.99	mg/L
Station 150	6/25/2021	Zinc	1.33	mg/L
Station 150	7/3/2021	Zinc	1.6	mg/L
Station 150	7/4/2021	Zinc	1.65	mg/L
Station 150	7/9/2021	Zinc	1.57	mg/L
Station 150	7/18/2021	Zinc	1.09	mg/L
Station 150	7/23/2021	Zinc	1.44	mg/L
Station 150	8/6/2021	Zinc	1.31	mg/L
Station 150	8/8/2021	Zinc	1.36	mg/L

Table Appendix B-3 Station 150 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/16/2021	Zinc	1.67	mg/L
Station 150	8/20/2021	Zinc	2.05	mg/L
Station 150	8/27/2021	Zinc	2.05	mg/L
Station 150	9/3/2021	Zinc	1.84	mg/L
Station 150	9/11/2021	Zinc	1.4	mg/L
Station 150	9/17/2021	Zinc	1.95	mg/L
Station 150	9/24/2021	Zinc	2.06	mg/L
Station 150	9/28/2021	Zinc	1.92	mg/L
Station 150	10/1/2021	Zinc	2.27	mg/L
Station 150	5/9/2022	Zinc	2.88	mg/L
Station 150	5/20/2022	Zinc	1.46	mg/L
Station 150	6/3/2022	Zinc	1.01	mg/L
Station 150	6/5/2022	Zinc	1.02	mg/L
Station 150	6/10/2022	Zinc	1.2	mg/L
Station 150	6/17/2022	Zinc	1.35	mg/L
Station 150	6/25/2022	Zinc	0.996	mg/L
Station 150	7/10/2022	Zinc	1.66	mg/L
Station 150	7/15/2022	Zinc	2.35	mg/L
Station 150	7/22/2022	Zinc	1.99	mg/L
Station 150	7/29/2022	Zinc	2.52	mg/L
Station 150	8/1/2022	Zinc	2.87	mg/L
Station 150	8/6/2022	Zinc	2.33	mg/L
Station 150	8/13/2022	Zinc	1.84	mg/L
Station 150	9/2/2022	Zinc	2.37	mg/L
Station 150	9/4/2022	Zinc	2.23	mg/L
Station 150	9/9/2022	Zinc	2.55	mg/L
Station 150	10/1/2022	Zinc	2.06	mg/L
Station 150	5/23/2023	Zinc	1.2	mg/L
Station 150	5/30/2023	Zinc	0.904	mg/L
Station 150	6/4/2023	Zinc	1.5	mg/L
Station 150	6/9/2023	Zinc	0.649	mg/L
Station 150	6/18/2023	Zinc	0.803	mg/L
Station 150	7/2/2023	Zinc	1.06	mg/L
Station 150	7/9/2023	Zinc	1.09	mg/L
Station 150	7/16/2023	Zinc	1.4	mg/L
Station 150	7/21/2023	Zinc	1.21	mg/L
Station 150	8/5/2023	Zinc	0.653	mg/L
Station 150	8/6/2023	Zinc	1.82	mg/L

Table Appendix B-3 Station 150 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/11/2023	Zinc	1.88	mg/L
Station 150	8/20/2023	Zinc	1.76	mg/L
Station 150	8/25/2023	Zinc	2.18	mg/L
Station 150	9/3/2023	Zinc	2.13	mg/L
Station 150	9/8/2023	Zinc	2.41	mg/L
Station 150	9/18/2023	Zinc	2.73	mg/L
Station 150	5/21/2024	Zinc	2.1	mg/L
Station 150	5/23/2024	Zinc	0.661	mg/L
Station 150	5/27/2024	Zinc	1.1	mg/L
Station 150	5/31/2024	Zinc	0.717	mg/L
Station 150	6/3/2024	Zinc	0.71	mg/L
Station 150	6/7/2024	Zinc	0.701	mg/L
Station 150	6/14/2024	Zinc	0.85	mg/L
Station 150	6/16/2024	Zinc	0.934	mg/L
Station 150	6/28/2024	Zinc	0.24	mg/L
Station 150	7/1/2024	Zinc	1.54	mg/L
Station 150	7/14/2024	Zinc	1.73	mg/L
Station 150	7/17/2024	Zinc	1.83	mg/L
Station 150	8/4/2024	Zinc	1.71	mg/L
Station 150	8/10/2024	Zinc	1.55	mg/L
Station 150	8/18/2024	Zinc	1.37	mg/L
Station 150	8/25/2024	Zinc	1.31	mg/L
Station 150	9/8/2024	Zinc	1.42	mg/L
Station 150	9/13/2024	Zinc	1.96	mg/L
Station 150	9/15/2024	Zinc	2.07	mg/L
Station 150	9/27/2024	Zinc	2.35	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix B-4 Station 160 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Zinc	0.114	mg/L
Station 160	5/16/2016	Zinc	0.148	mg/L
Station 160	6/6/2016	Zinc	0.0955	mg/L
Station 160	6/20/2016	Zinc	0.065	mg/L
Station 160	7/4/2016	Zinc	0.0537	mg/L
Station 160	7/18/2016	Zinc	0.055	mg/L
Station 160	8/1/2016	Zinc	0.0546	mg/L
Station 160	8/15/2016	Zinc	0.047	mg/L

Table Appendix B-4
Station 160 Zinc Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	9/5/2016	Zinc	0.0885	mg/L
Station 160	9/19/2016	Zinc	0.094	mg/L
Station 160	10/3/2016	Zinc	0.121	mg/L
Station 160	10/17/2016	Zinc	0.058	mg/L
Station 160	5/14/2017	Zinc	0.177	mg/L
Station 160	5/22/2017	Zinc	0.198	mg/L
Station 160	6/4/2017	Zinc	0.132	mg/L
Station 160	6/19/2017	Zinc	0.099	mg/L
Station 160	7/9/2017	Zinc	0.0992	mg/L
Station 160	7/17/2017	Zinc	0.086	mg/L
Station 160	8/8/2017	Zinc	0.103	mg/L
Station 160	8/21/2017	Zinc	0.108	mg/L
Station 160	9/3/2017	Zinc	0.103	mg/L
Station 160	9/18/2017	Zinc	0.152	mg/L
Station 160	9/25/2017	Zinc	0.141	mg/L
Station 160	5/14/2018	Zinc	0.094	mg/L
Station 160	5/21/2018	Zinc	0.208	mg/L
Station 160	6/4/2018	Zinc	0.246	mg/L
Station 160	6/18/2018	Zinc	0.26	mg/L
Station 160	7/8/2018	Zinc	0.219	mg/L
Station 160	7/16/2018	Zinc	0.222	mg/L
Station 160	8/6/2018	Zinc	0.283	mg/L
Station 160	8/20/2018	Zinc	0.262	mg/L
Station 160	9/9/2018	Zinc	0.268	mg/L
Station 160	9/17/2018	Zinc	0.317	mg/L
Station 160	9/25/2018	Zinc	0.346	mg/L
Station 160	5/14/2019	Zinc	0.404	mg/L
Station 160	5/19/2019	Zinc	0.435	mg/L
Station 160	6/2/2019	Zinc	0.383	mg/L
Station 160	6/9/2019	Zinc	0.422	mg/L
Station 160	6/17/2019	Zinc	0.544	mg/L
Station 160	6/30/2019	Zinc	0.575	mg/L
Station 160	7/14/2019	Zinc	0.345	mg/L
Station 160	7/14/2019	Zinc	*0.022*	mg/L
Station 160	7/14/2019	Zinc	0.341	mg/L
Station 160	8/4/2019	Zinc	0.48	mg/L
Station 160	8/18/2019	Zinc	0.704	mg/L
Station 160	9/8/2019	Zinc	0.928	mg/L

Table Appendix B-4 Station 160 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/16/2019	Zinc	1.07	mg/L
Station 160	5/12/2020	Zinc	*0.0222*	mg/L
Station 160	5/12/2020	Zinc	0.28	mg/L
Station 160	5/12/2020	Zinc	0.288	mg/L
Station 160	5/19/2020	Zinc	0.655	mg/L
Station 160	6/3/2020	Zinc	1.17	mg/L
Station 160	6/14/2020	Zinc	1.77	mg/L
Station 160	6/26/2020	Zinc	2.03	mg/L
Station 160	7/5/2020	Zinc	2.16	mg/L
Station 160	7/19/2020	Zinc	1.73	mg/L
Station 160	8/3/2020	Zinc	2.97	mg/L
Station 160	8/16/2020	Zinc	2.77	mg/L
Station 160	8/28/2020	Zinc	3.16	mg/L
Station 160	9/4/2020	Zinc	5.86	mg/L
Station 160	9/4/2020	Zinc	2.69	mg/L
Station 160	9/15/2020	Zinc	3.51	mg/L
Station 160	9/18/2020	Zinc	2.94	mg/L
Station 160	9/20/2020	Zinc	2.53	mg/L
Station 160	9/25/2020	Zinc	3.22	mg/L
Station 160	9/27/2020	Zinc	3.37	mg/L
Station 160	10/2/2020	Zinc	3.64	mg/L
Station 160	10/9/2020	Zinc	3.14	mg/L
Station 160	5/7/2021	Zinc	0.646	mg/L
Station 160	5/9/2021	Zinc	0.942	mg/L
Station 160	5/14/2021	Zinc	0.448	mg/L
Station 160	5/23/2021	Zinc	0.718	mg/L
Station 160	5/24/2021	Zinc	0.997	mg/L
Station 160	5/28/2021	Zinc	0.707	mg/L
Station 160	6/4/2021	Zinc	0.915	mg/L
Station 160	6/6/2021	Zinc	1.14	mg/L
Station 160	6/11/2021	Zinc	0.659	mg/L
Station 160	6/18/2021	Zinc	0.623	mg/L
Station 160	6/20/2021	Zinc	0.663	mg/L
Station 160	6/25/2021	Zinc	0.843	mg/L
Station 160	7/3/2021	Zinc	0.627	mg/L
Station 160	7/4/2021	Zinc	0.691	mg/L
Station 160	7/9/2021	Zinc	0.709	mg/L
Station 160	7/18/2021	Zinc	0.766	mg/L

Table Appendix B-4
Station 160 Zinc Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	7/23/2021	Zinc	0.869	mg/L
Station 160	7/25/2021	Zinc	0.81	mg/L
Station 160	8/6/2021	Zinc	0.6	mg/L
Station 160	8/8/2021	Zinc	0.72	mg/L
Station 160	8/15/2021	Zinc	0.934	mg/L
Station 160	8/16/2021	Zinc	0.879	mg/L
Station 160	8/20/2021	Zinc	1.05	mg/L
Station 160	8/27/2021	Zinc	1.07	mg/L
Station 160	9/3/2021	Zinc	0.958	mg/L
Station 160	9/6/2021	Zinc	1.13	mg/L
Station 160	9/11/2021	Zinc	0.923	mg/L
Station 160	9/17/2021	Zinc	1.18	mg/L
Station 160	9/19/2021	Zinc	1.19	mg/L
Station 160	9/24/2021	Zinc	0.994	mg/L
Station 160	9/28/2021	Zinc	1	mg/L
Station 160	10/1/2021	Zinc	1.01	mg/L
Station 160	10/8/2021	Zinc	1.04	mg/L
Station 160	5/9/2022	Zinc	0.45	mg/L
Station 160	5/20/2022	Zinc	0.556	mg/L
Station 160	5/22/2022	Zinc	0.425	mg/L
Station 160	6/3/2022	Zinc	0.494	mg/L
Station 160	6/5/2022	Zinc	0.46	mg/L
Station 160	6/10/2022	Zinc	0.613	mg/L
Station 160	6/17/2022	Zinc	0.929	mg/L
Station 160	6/19/2022	Zinc	0.962	mg/L
Station 160	6/25/2022	Zinc	0.568	mg/L
Station 160	7/10/2022	Zinc	1.14	mg/L
Station 160	7/15/2022	Zinc	1.03	mg/L
Station 160	7/17/2022	Zinc	1.09	mg/L
Station 160	7/22/2022	Zinc	1.24	mg/L
Station 160	7/29/2022	Zinc	1.24	mg/L
Station 160	8/1/2022	Zinc	1.55	mg/L
Station 160	8/6/2022	Zinc	1.35	mg/L
Station 160	8/13/2022	Zinc	1.28	mg/L
Station 160	8/14/2022	Zinc	1.2	mg/L
Station 160	9/2/2022	Zinc	1.45	mg/L
Station 160	9/4/2022	Zinc	1.57	mg/L
Station 160	9/9/2022	Zinc	1.45	mg/L

Table Appendix B-4 Station 160 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/20/2022	Zinc	0.73	mg/L
Station 160	9/26/2022	Zinc	0.841	mg/L
Station 160	10/1/2022	Zinc	0.766	mg/L
Station 160	5/23/2023	Zinc	0.623	mg/L
Station 160	5/28/2023	Zinc	0.502	mg/L
Station 160	5/30/2023	Zinc	0.393	mg/L
Station 160	6/4/2023	Zinc	0.832	mg/L
Station 160	6/9/2023	Zinc	0.608	mg/L
Station 160	6/18/2023	Zinc	0.441	mg/L
Station 160	7/2/2023	Zinc	0.578	mg/L
Station 160	7/9/2023	Zinc	0.581	mg/L
Station 160	7/16/2023	Zinc	0.771	mg/L
Station 160	7/21/2023	Zinc	0.825	mg/L
Station 160	8/5/2023	Zinc	1.42	mg/L
Station 160	8/6/2023	Zinc	1.01	mg/L
Station 160	8/11/2023	Zinc	1.04	mg/L
Station 160	8/20/2023	Zinc	1.02	mg/L
Station 160	8/25/2023	Zinc	1.31	mg/L
Station 160	9/3/2023	Zinc	1.44	mg/L
Station 160	9/8/2023	Zinc	1.36	mg/L
Station 160	9/18/2023	Zinc	1.52	mg/L
Station 160	9/26/2023	Zinc	1.46	mg/L
Station 160	5/21/2024	Zinc	0.922	mg/L
Station 160	5/23/2024	Zinc	0.48	mg/L
Station 160	5/27/2024	Zinc	0.545	mg/L
Station 160	5/31/2024	Zinc	0.516	mg/L
Station 160	6/3/2024	Zinc	0.495	mg/L
Station 160	6/7/2024	Zinc	0.355	mg/L
Station 160	6/14/2024	Zinc	0.41	mg/L
Station 160	6/16/2024	Zinc	0.492	mg/L
Station 160	6/28/2024	Zinc	0.0587	mg/L
Station 160	7/1/2024	Zinc	0.785	mg/L
Station 160	7/14/2024	Zinc	0.753	mg/L
Station 160	7/17/2024	Zinc	0.857	mg/L
Station 160	8/4/2024	Zinc	2.32	mg/L
Station 160	8/10/2024	Zinc	0.702	mg/L
Station 160	8/18/2024	Zinc	0.594	mg/L
Station 160	8/25/2024	Zinc	0.547	mg/L

Table Appendix B-4 Station 160 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/8/2024	Zinc	1.03	mg/L
Station 160	9/13/2024	Zinc	0.971	mg/L
Station 160	9/15/2024	Zinc	0.91	mg/L
Station 160	9/23/2024	Zinc	0.95	mg/L
Station 160	9/27/2024	Zinc	0.957	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix B-5 Station 140 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Zinc	0.972	mg/L
Station 140	5/16/2016	Zinc	2	mg/L
Station 140	6/6/2016	Zinc	0.632	mg/L
Station 140	6/20/2016	Zinc	0.847	mg/L
Station 140	7/4/2016	Zinc	0.68	mg/L
Station 140	7/18/2016	Zinc	0.695	mg/L
Station 140	8/1/2016	Zinc	0.989	mg/L
Station 140	8/15/2016	Zinc	0.963	mg/L
Station 140	8/15/2016	Zinc	*0.028*	mg/L
Station 140	8/15/2016	Zinc	0.945	mg/L
Station 140	9/5/2016	Zinc	1.35	mg/L
Station 140	9/19/2016	Zinc	1.48	mg/L
Station 140	10/3/2016	Zinc	2.78	mg/L
Station 140	10/17/2016	Zinc	3.71	mg/L
Station 140	5/14/2017	Zinc	0.87	mg/L
Station 140	5/22/2017	Zinc	0.536	mg/L
Station 140	6/4/2017	Zinc	0.371	mg/L
Station 140	6/19/2017	Zinc	0.698	mg/L
Station 140	7/9/2017	Zinc	1.63	mg/L
Station 140	7/17/2017	Zinc	1.28	mg/L
Station 140	8/8/2017	Zinc	1.96	mg/L
Station 140	8/21/2017	Zinc	1.58	mg/L
Station 140	9/3/2017	Zinc	1.81	mg/L
Station 140	9/18/2017	Zinc	3.89	mg/L
Station 140	9/25/2017	Zinc	2.23	mg/L
Station 140	5/14/2018	Zinc	5.54	mg/L
Station 140	5/21/2018	Zinc	4.76	mg/L
Station 140	6/4/2018	Zinc	3.6	mg/L
Station 140	6/18/2018	Zinc	5.39	mg/L

Table Appendix B-5 Station 140 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	7/8/2018	Zinc	6.07	mg/L
Station 140	7/16/2018	Zinc	7.25	mg/L
Station 140	8/6/2018	Zinc	18.4	mg/L
Station 140	8/20/2018	Zinc	24.5	mg/L
Station 140	9/9/2018	Zinc	25.7	mg/L
Station 140	9/17/2018	Zinc	35.8	mg/L
Station 140	9/25/2018	Zinc	32.3	mg/L
Station 140	5/14/2019	Zinc	18.7	mg/L
Station 140	5/14/2019	Zinc	*0.024*	mg/L
Station 140	5/14/2019	Zinc	19.2	mg/L
Station 140	5/19/2019	Zinc	11.7	mg/L
Station 140	6/2/2019	Zinc	8.51	mg/L
Station 140	6/9/2019	Zinc	10.2	mg/L
Station 140	6/17/2019	Zinc	12.1	mg/L
Station 140	6/30/2019	Zinc	16.6	mg/L
Station 140	7/14/2019	Zinc	21.5	mg/L
Station 140	8/4/2019	Zinc	11.2	mg/L
Station 140	8/18/2019	Zinc	20.3	mg/L
Station 140	9/8/2019	Zinc	18.8	mg/L
Station 140	9/16/2019	Zinc	28.2	mg/L
Station 140	5/12/2020	Zinc	3.11	mg/L
Station 140	5/18/2020	Zinc	8.44	mg/L
Station 140	6/2/2020	Zinc	22.6	mg/L
Station 140	6/14/2020	Zinc	43	mg/L
Station 140	6/26/2020	Zinc	72.1	mg/L
Station 140	7/5/2020	Zinc	53.7	mg/L
Station 140	7/19/2020	Zinc	80	mg/L
Station 140	8/3/2020	Zinc	96.9	mg/L
Station 140	8/16/2020	Zinc	84	mg/L
Station 140	8/28/2020	Zinc	96.1	mg/L
Station 140	9/15/2020	Zinc	91.1	mg/L
Station 140	9/20/2020	Zinc	83	mg/L
Station 140	9/27/2020	Zinc	85.9	mg/L
Station 140	5/9/2021	Zinc	9.87	mg/L
Station 140	5/24/2021	Zinc	10.5	mg/L
Station 140	6/6/2021	Zinc	15.1	mg/L
Station 140	6/20/2021	Zinc	9.06	mg/L
Station 140	7/4/2021	Zinc	18.3	mg/L

Table Appendix B-5
Station 140 Zinc Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 140	7/25/2021	Zinc	19.4	mg/L
Station 140	8/8/2021	Zinc	20.8	mg/L
Station 140	8/15/2021	Zinc	23.5	mg/L
Station 140	9/6/2021	Zinc	23.9	mg/L
Station 140	9/19/2021	Zinc	23.8	mg/L
Station 140	9/27/2021	Zinc	31.1	mg/L
Station 140	5/9/2022	Zinc	8.27	mg/L
Station 140	5/22/2022	Zinc	2.46	mg/L
Station 140	6/5/2022	Zinc	6.49	mg/L
Station 140	6/19/2022	Zinc	15.7	mg/L
Station 140	7/10/2022	Zinc	39.7	mg/L
Station 140	7/17/2022	Zinc	43.2	mg/L
Station 140	8/1/2022	Zinc	41	mg/L
Station 140	8/14/2022	Zinc	40	mg/L
Station 140	9/4/2022	Zinc	41.1	mg/L
Station 140	9/20/2022	Zinc	16.1	mg/L
Station 140	9/26/2022	Zinc	24.8	mg/L
Station 140	5/23/2023	Zinc	7.24	mg/L
Station 140	5/28/2023	Zinc	5.56	mg/L
Station 140	6/4/2023	Zinc	15.9	mg/L
Station 140	6/18/2023	Zinc	6.64	mg/L
Station 140	7/9/2023	Zinc	12.4	mg/L
Station 140	7/16/2023	Zinc	17.7	mg/L
Station 140	8/6/2023	Zinc	23.2	mg/L
Station 140	8/20/2023	Zinc	33.9	mg/L
Station 140	9/3/2023	Zinc	33	mg/L
Station 140	9/18/2023	Zinc	31.8	mg/L
Station 140	9/27/2023	Zinc	38.5	mg/L
Station 140	5/21/2024	Zinc	9.81	mg/L
Station 140	5/27/2024	Zinc	3.7	mg/L
Station 140	6/3/2024	Zinc	5.2	mg/L
Station 140	6/16/2024	Zinc	6.66	mg/L
Station 140	7/1/2024	Zinc	15.8	mg/L
Station 140	7/14/2024	Zinc	28.4	mg/L
Station 140	8/4/2024	Zinc	20.5	mg/L
Station 140	8/18/2024	Zinc	18.1	mg/L
Station 140	9/8/2024	Zinc	25.9	mg/L
Station 140	9/15/2024	Zinc	22.9	mg/L

Table Appendix B-5 Station 140 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	9/23/2024	Zinc	33.9	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix B-6 Station 12 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Zinc	0.0333	mg/L
Station 12	5/16/2016	Zinc	0.011	mg/L
Station 12	6/6/2016	Zinc	0.0098	mg/L
Station 12	6/20/2016	Zinc	0.008	mg/L
Station 12	7/4/2016	Zinc	0.0079	mg/L
Station 12	7/18/2016	Zinc	0.006	mg/L
Station 12	8/1/2016	Zinc	0.0076	mg/L
Station 12	8/15/2016	Zinc	0.01	mg/L
Station 12	9/5/2016	Zinc	0.0138	mg/L
Station 12	9/19/2016	Zinc	0.017	mg/L
Station 12	10/3/2016	Zinc	0.0129	mg/L
Station 12	10/17/2016	Zinc	0.017	mg/L
Station 12	5/14/2017	Zinc	0.0456	mg/L
Station 12	5/22/2017	Zinc	0.024	mg/L
Station 12	6/4/2017	Zinc	0.0181	mg/L
Station 12	6/19/2017	Zinc	0.008	mg/L
Station 12	7/9/2017	Zinc	0.0109	mg/L
Station 12	7/17/2017	Zinc	0.013	mg/L
Station 12	8/8/2017	Zinc	0.0177	mg/L
Station 12	8/21/2017	Zinc	0.017	mg/L
Station 12	9/3/2017	Zinc	0.0165	mg/L
Station 12	9/18/2017	Zinc	0.018	mg/L
Station 12	9/25/2017	Zinc	0.02	mg/L
Station 12	5/14/2018	Zinc	0.106	mg/L
Station 12	5/21/2018	Zinc	0.089	mg/L
Station 12	6/4/2018	Zinc	0.0265	mg/L
Station 12	6/18/2018	Zinc	0.014	mg/L
Station 12	7/8/2018	Zinc	0.0109	mg/L
Station 12	7/16/2018	Zinc	0.01	mg/L
Station 12	8/6/2018	Zinc	0.0146	mg/L
Station 12	8/20/2018	Zinc	0.015	mg/L
Station 12	9/9/2018	Zinc	0.0136	mg/L
Station 12	9/17/2018	Zinc	0.011	mg/L

Table Appendix B-6 Station 12 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	9/25/2018	Zinc	0.014	mg/L
Station 12	5/14/2019	Zinc	0.121	mg/L
Station 12	5/19/2019	Zinc	0.0605	mg/L
Station 12	6/2/2019	Zinc	0.065	mg/L
Station 12	6/9/2019	Zinc	0.0964	mg/L
Station 12	6/17/2019	Zinc	0.014	mg/L
Station 12	6/30/2019	Zinc	0.0115	mg/L
Station 12	7/14/2019	Zinc	0.016	mg/L
Station 12	8/4/2019	Zinc	0.0455	mg/L
Station 12	8/18/2019	Zinc	0.084	mg/L
Station 12	9/8/2019	Zinc	0.0561	mg/L
Station 12	9/16/2019	Zinc	0.146	mg/L
Station 12	5/12/2020	Zinc	0.0778	mg/L
Station 12	5/18/2020	Zinc	0.104	mg/L
Station 12	6/2/2020	Zinc	0.122	mg/L
Station 12	6/14/2020	Zinc	0.111	mg/L
Station 12	6/26/2020	Zinc	0.145	mg/L
Station 12	7/5/2020	Zinc	0.129	mg/L
Station 12	7/19/2020	Zinc	0.101	mg/L
Station 12	8/3/2020	Zinc	0.112	mg/L
Station 12	8/16/2020	Zinc	0.119	mg/L
Station 12	8/28/2020	Zinc	0.104	mg/L
Station 12	9/15/2020	Zinc	0.139	mg/L
Station 12	9/20/2020	Zinc	0.112	mg/L
Station 12	9/20/2020	Zinc	*0.038*	mg/L
Station 12	9/20/2020	Zinc	0.104	mg/L
Station 12	9/27/2020	Zinc	0.205	mg/L
Station 12	5/9/2021	Zinc	0.156	mg/L
Station 12	5/24/2021	Zinc	0.0918	mg/L
Station 12	6/6/2021	Zinc	0.106	mg/L
Station 12	6/20/2021	Zinc	0.0777	mg/L
Station 12	7/4/2021	Zinc	0.119	mg/L
Station 12	7/25/2021	Zinc	0.119	mg/L
Station 12	8/8/2021	Zinc	0.137	mg/L
Station 12	8/15/2021	Zinc	0.129	mg/L
Station 12	9/6/2021	Zinc	0.183	mg/L
Station 12	9/19/2021	Zinc	0.195	mg/L
Station 12	9/27/2021	Zinc	0.181	mg/L

Table Appendix B-6 Station 12 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/9/2022	Zinc	0.209	mg/L
Station 12	5/22/2022	Zinc	0.0849	mg/L
Station 12	6/5/2022	Zinc	0.11	mg/L
Station 12	6/19/2022	Zinc	0.0969	mg/L
Station 12	7/10/2022	Zinc	0.118	mg/L
Station 12	7/17/2022	Zinc	0.13	mg/L
Station 12	8/1/2022	Zinc	0.179	mg/L
Station 12	8/14/2022	Zinc	0.125	mg/L
Station 12	9/4/2022	Zinc	0.132	mg/L
Station 12	9/20/2022	Zinc	0.108	mg/L
Station 12	9/26/2022	Zinc	0.169	mg/L
Station 12	5/23/2023	Zinc	0.127	mg/L
Station 12	5/28/2023	Zinc	0.0872	mg/L
Station 12	6/4/2023	Zinc	0.146	mg/L
Station 12	6/18/2023	Zinc	0.0778	mg/L
Station 12	7/9/2023	Zinc	0.146	mg/L
Station 12	7/16/2023	Zinc	0.139	mg/L
Station 12	8/6/2023	Zinc	0.141	mg/L
Station 12	8/20/2023	Zinc	0.137	mg/L
Station 12	9/3/2023	Zinc	0.173	mg/L
Station 12	9/18/2023	Zinc	0.139	mg/L
Station 12	9/26/2023	Zinc	0.146	mg/L
Station 12	5/21/2024	Zinc	0.131	mg/L
Station 12	5/27/2024	Zinc	0.115	mg/L
Station 12	6/3/2024	Zinc	0.103	mg/L
Station 12	6/16/2024	Zinc	0.105	mg/L
Station 12	7/1/2024	Zinc	0.0918	mg/L
Station 12	7/14/2024	Zinc	0.126	mg/L
Station 12	8/4/2024	Zinc	0.0815	mg/L
Station 12	8/18/2024	Zinc	0.136	mg/L
Station 12	9/8/2024	Zinc	0.159	mg/L
Station 12	9/15/2024	Zinc	0.221	mg/L
Station 12	9/23/2024	Zinc	0.235	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	Zinc	0.282	mg/L

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/16/2016	Zinc	0.272	mg/L
Station 9	6/2/2016	Zinc	0.178	mg/L
Station 9	6/17/2016	Zinc	0.143	mg/L
Station 9	7/1/2016	Zinc	0.145	mg/L
Station 9	7/15/2016	Zinc	0.138	mg/L
Station 9	8/5/2016	Zinc	0.14	mg/L
Station 9	8/19/2016	Zinc	0.335	mg/L
Station 9	9/8/2016	Zinc	0.253	mg/L
Station 9	9/23/2016	Zinc	0.204	mg/L
Station 9	10/6/2016	Zinc	0.301	mg/L
Station 9	10/17/2016	Zinc	0.313	mg/L
Station 9	5/5/2017	Zinc	0.258	mg/L
Station 9	5/19/2017	Zinc	0.335	mg/L
Station 9	6/8/2017	Zinc	0.188	mg/L
Station 9	6/23/2017	Zinc	0.144	mg/L
Station 9	7/7/2017	Zinc	0.148	mg/L
Station 9	7/20/2017	Zinc	0.144	mg/L
Station 9	8/4/2017	Zinc	0.172	mg/L
Station 9	8/25/2017	Zinc	0.211	mg/L
Station 9	9/8/2017	Zinc	0.269	mg/L
Station 9	9/18/2017	Zinc	0.276	mg/L
Station 9	10/5/2017	Zinc	0.198	mg/L
Station 9	10/9/2017	Zinc	0.314	mg/L
Station 9	5/23/2018	Zinc	0.664	mg/L
Station 9	6/8/2018	Zinc	0.224	mg/L
Station 9	6/29/2018	Zinc	0.179	mg/L
Station 9	7/13/2018	Zinc	0.287	mg/L
Station 9	7/27/2018	Zinc	0.387	mg/L
Station 9	8/3/2018	Zinc	0.329	mg/L
Station 9	8/18/2018	Zinc	0.47	mg/L
Station 9	9/7/2018	Zinc	0.269	mg/L
Station 9	9/28/2018	Zinc	0.553	mg/L
Station 9	10/5/2018	Zinc	0.633	mg/L
Station 9	10/12/2018	Zinc	*0.026*	mg/L
Station 9	10/12/2018	Zinc	0.762	mg/L
Station 9	10/12/2018	Zinc	0.727	mg/L
Station 9	5/25/2019	Zinc	0.536	mg/L
Station 9	5/30/2019	Zinc	0.492	mg/L

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/7/2019	Zinc	0.259	mg/L
Station 9	6/21/2019	Zinc	0.283	mg/L
Station 9	7/12/2019	Zinc	*0.03*	mg/L
Station 9	7/12/2019	Zinc	0.404	mg/L
Station 9	7/12/2019	Zinc	0.406	mg/L
Station 9	7/21/2019	Zinc	0.354	mg/L
Station 9	8/3/2019	Zinc	0.418	mg/L
Station 9	8/25/2019	Zinc	0.965	mg/L
Station 9	9/1/2019	Zinc	1.05	mg/L
Station 9	9/16/2019	Zinc	1.51	mg/L
Station 9	10/7/2019	Zinc	2.78	mg/L
Station 9	5/19/2020	Zinc	0.916	mg/L
Station 9	5/29/2020	Zinc	1.06	mg/L
Station 9	6/6/2020	Zinc	1.22	mg/L
Station 9	6/19/2020	Zinc	1.85	mg/L
Station 9	6/23/2020	Zinc	3.7	mg/L
Station 9	7/4/2020	Zinc	1.58	mg/L
Station 9	7/18/2020	Zinc	2.76	mg/L
Station 9	8/3/2020	Zinc	3.01	mg/L
Station 9	8/16/2020	Zinc	3.73	mg/L
Station 9	9/4/2020	Zinc	4.53	mg/L
Station 9	9/4/2020	Zinc	3.19	mg/L
Station 9	9/5/2020	Zinc	4.46	mg/L
Station 9	9/18/2020	Zinc	2.53	mg/L
Station 9	9/25/2020	Zinc	2.59	mg/L
Station 9	9/26/2020	Zinc	2.87	mg/L
Station 9	10/2/2020	Zinc	3.73	mg/L
Station 9	10/3/2020	Zinc	3.61	mg/L
Station 9	10/9/2020	Zinc	2.92	mg/L
Station 9	10/10/2020	Zinc	2.3	mg/L
Station 9	5/7/2021	Zinc	2.71	mg/L
Station 9	5/14/2021	Zinc	0.804	mg/L
Station 9	5/16/2021	Zinc	0.979	mg/L
Station 9	5/23/2021	Zinc	1.24	mg/L
Station 9	5/26/2021	Zinc	0.819	mg/L
Station 9	5/28/2021	Zinc	0.951	mg/L
Station 9	6/4/2021	Zinc	1.26	mg/L
Station 9	6/5/2021	Zinc	1.45	mg/L

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/11/2021	Zinc	0.88	mg/L
Station 9	6/18/2021	Zinc	0.681	mg/L
Station 9	6/19/2021	Zinc	0.827	mg/L
Station 9	6/20/2021	Zinc	0.765	mg/L
Station 9	6/25/2021	Zinc	0.857	mg/L
Station 9	7/3/2021	Zinc	0.797	mg/L
Station 9	7/9/2021	Zinc	0.751	mg/L
Station 9	7/12/2021	Zinc	0.936	mg/L
Station 9	7/18/2021	Zinc	0.684	mg/L
Station 9	7/23/2021	Zinc	0.845	mg/L
Station 9	7/26/2021	Zinc	0.606	mg/L
Station 9	8/6/2021	Zinc	0.929	mg/L
Station 9	8/8/2021	Zinc	1.12	mg/L
Station 9	8/15/2021	Zinc	1.09	mg/L
Station 9	8/16/2021	Zinc	1.29	mg/L
Station 9	8/20/2021	Zinc	1.53	mg/L
Station 9	8/27/2021	Zinc	1.23	mg/L
Station 9	9/3/2021	Zinc	1.17	mg/L
Station 9	9/6/2021	Zinc	1.15	mg/L
Station 9	9/11/2021	Zinc	1	mg/L
Station 9	9/17/2021	Zinc	1.4	mg/L
Station 9	9/19/2021	Zinc	1.62	mg/L
Station 9	9/24/2021	Zinc	1.84	mg/L
Station 9	9/28/2021	Zinc	2.04	mg/L
Station 9	10/1/2021	Zinc	2.23	mg/L
Station 9	10/2/2021	Zinc	2.03	mg/L
Station 9	10/8/2021	Zinc	2.18	mg/L
Station 9	5/9/2022	Zinc	4.19	mg/L
Station 9	5/20/2022	Zinc	2.48	mg/L
Station 9	5/22/2022	Zinc	1.16	mg/L
Station 9	6/3/2022	Zinc	0.905	mg/L
Station 9	6/5/2022	Zinc	0.962	mg/L
Station 9	6/10/2022	Zinc	0.807	mg/L
Station 9	6/17/2022	Zinc	0.909	mg/L
Station 9	6/19/2022	Zinc	0.973	mg/L
Station 9	6/25/2022	Zinc	0.672	mg/L
Station 9	7/10/2022	Zinc	1.32	mg/L
Station 9	7/15/2022	Zinc	1.67	mg/L

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/17/2022	Zinc	1.72	mg/L
Station 9	7/22/2022	Zinc	1.01	mg/L
Station 9	7/29/2022	Zinc	0.793	mg/L
Station 9	8/1/2022	Zinc	2	mg/L
Station 9	8/6/2022	Zinc	1.37	mg/L
Station 9	8/13/2022	Zinc	0.966	mg/L
Station 9	8/14/2022	Zinc	0.957	mg/L
Station 9	9/2/2022	Zinc	1.18	mg/L
Station 9	9/4/2022	Zinc	1.12	mg/L
Station 9	9/9/2022	Zinc	1.31	mg/L
Station 9	9/20/2022	Zinc	0.502	mg/L
Station 9	9/26/2022	Zinc	0.898	mg/L
Station 9	10/1/2022	Zinc	1.58	mg/L
Station 9	10/1/2022	Zinc	1.37	mg/L
Station 9	10/5/2022	Zinc	1.37	mg/L
Station 9	5/23/2023	Zinc	1.05	mg/L
Station 9	5/28/2023	Zinc	0.633	mg/L
Station 9	6/4/2023	Zinc	1.31	mg/L
Station 9	6/9/2023	Zinc	0.495	mg/L
Station 9	6/18/2023	Zinc	0.485	mg/L
Station 9	7/2/2023	Zinc	0.588	mg/L
Station 9	7/9/2023	Zinc	0.503	mg/L
Station 9	7/16/2023	Zinc	0.731	mg/L
Station 9	7/21/2023	Zinc	0.675	mg/L
Station 9	8/5/2023	Zinc	0.95	mg/L
Station 9	8/6/2023	Zinc	42.4	mg/L
Station 9	8/11/2023	Zinc	1.13	mg/L
Station 9	8/20/2023	Zinc	0.864	mg/L
Station 9	8/25/2023	Zinc	1.17	mg/L
Station 9	9/3/2023	Zinc	1.58	mg/L
Station 9	9/8/2023	Zinc	0.915	mg/L
Station 9	9/18/2023	Zinc	1.02	mg/L
Station 9	5/21/2024	Zinc	1.8	mg/L
Station 9	5/23/2024	Zinc	0.618	mg/L
Station 9	5/27/2024	Zinc	1.14	mg/L
Station 9	5/31/2024	Zinc	0.661	mg/L
Station 9	6/3/2024	Zinc	0.571	mg/L
Station 9	6/3/2024	Zinc	0.006	mg/L

Table Appendix B-7 Station 9 Zinc Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/3/2024	Zinc	0.584	mg/L
Station 9	6/7/2024	Zinc	0.523	mg/L
Station 9	6/14/2024	Zinc	0.452	mg/L
Station 9	6/16/2024	Zinc	0.535	mg/L
Station 9	6/28/2024	Zinc	26.1	mg/L
Station 9	7/1/2024	Zinc	0.672	mg/L
Station 9	7/14/2024	Zinc	0.763	mg/L
Station 9	7/17/2024	Zinc	0.771	mg/L
Station 9	8/4/2024	Zinc	0.629	mg/L
Station 9	8/10/2024	Zinc	0.523	mg/L
Station 9	8/18/2024	Zinc	0.529	mg/L
Station 9	8/25/2024	Zinc	0.734	mg/L
Station 9	9/8/2024	Zinc	0.713	mg/L
Station 9	9/13/2024	Zinc	0.745	mg/L
Station 9	9/15/2024	Zinc	0.885	mg/L
Station 9	9/27/2024	Zinc	1.79	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix C – Cadmium Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix C-1
Outfall 001 Cadmium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Outfall 001	5/3/2016	Cadmium	0.00025	mg/L
Outfall 001	5/10/2016	Cadmium	0.00026	mg/L
Outfall 001	5/17/2016	Cadmium	<0.0005	mg/L
Outfall 001	5/17/2016	Cadmium	0.0003	mg/L
Outfall 001	5/20/2016	Cadmium	*0.000017*	mg/L
Outfall 001	5/20/2016	Cadmium	*0.000041*	mg/L
Outfall 001	5/24/2016	Cadmium	0.0004	mg/L
Outfall 001	6/1/2016	Cadmium	0.0003	mg/L
Outfall 001	6/7/2016	Cadmium	0.00046	mg/L
Outfall 001	6/14/2016	Cadmium	*0.000038*	mg/L
Outfall 001	6/14/2016	Cadmium	0.00016	mg/L
Outfall 001	6/14/2016	Cadmium	0.00018	mg/L
Outfall 001	6/21/2016	Cadmium	0.0002	mg/L
Outfall 001	6/28/2016	Cadmium	0.0001	mg/L
Outfall 001	7/2/2016	Cadmium	0.0002	mg/L
Outfall 001	7/5/2016	Cadmium	0.00023	mg/L
Outfall 001	7/12/2016	Cadmium	0.00015	mg/L
Outfall 001	7/19/2016	Cadmium	0.0001	mg/L
Outfall 001	7/26/2016	Cadmium	0.0002	mg/L
Outfall 001	8/2/2016	Cadmium	0.00038	mg/L
Outfall 001	8/9/2016	Cadmium	0.00014	mg/L
Outfall 001	8/16/2016	Cadmium	0.0003	mg/L
Outfall 001	8/23/2016	Cadmium	0.0002	mg/L
Outfall 001	8/31/2016	Cadmium	0.0003	mg/L
Outfall 001	9/6/2016	Cadmium	0.00021	mg/L
Outfall 001	9/13/2016	Cadmium	0.00019	mg/L
Outfall 001	9/20/2016	Cadmium	0.0002	mg/L
Outfall 001	9/26/2016	Cadmium	*<0.0001*	mg/L
Outfall 001	9/26/2016	Cadmium	*<0.0001*	mg/L
Outfall 001	5/1/2017	Cadmium	*<0.000013*	mg/L
Outfall 001	5/1/2017	Cadmium	*<0.000013*	mg/L
Outfall 001	5/9/2017	Cadmium	0.00049	mg/L
Outfall 001	5/9/2017	Cadmium	0.00057	mg/L
Outfall 001	5/9/2017	Cadmium	*0.000025*	mg/L
Outfall 001	5/9/2017	Cadmium	0.0005	mg/L
Outfall 001	5/15/2017	Cadmium	0.0012	mg/L
Outfall 001	5/23/2017	Cadmium	0.0005	mg/L
Outfall 001	5/30/2017	Cadmium	0.0003	mg/L

Table Appendix C-1 Outfall 001 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/5/2017	Cadmium	0.00045	mg/L
Outfall 001	6/13/2017	Cadmium	0.00023	mg/L
Outfall 001	6/20/2017	Cadmium	0.0004	mg/L
Outfall 001	6/27/2017	Cadmium	0.0003	mg/L
Outfall 001	7/4/2017	Cadmium	0.00038	mg/L
Outfall 001	7/10/2017	Cadmium	0.00025	mg/L
Outfall 001	7/18/2017	Cadmium	0.0003	mg/L
Outfall 001	7/26/2017	Cadmium	0.0004	mg/L
Outfall 001	8/2/2017	Cadmium	0.0004	mg/L
Outfall 001	8/9/2017	Cadmium	0.00038	mg/L
Outfall 001	8/9/2017	Cadmium	0.00039	mg/L
Outfall 001	8/16/2017	Cadmium	0.00029	mg/L
Outfall 001	8/22/2017	Cadmium	0.0003	mg/L
Outfall 001	8/31/2017	Cadmium	0.0004	mg/L
Outfall 001	9/4/2017	Cadmium	0.00028	mg/L
Outfall 001	9/12/2017	Cadmium	0.00054	mg/L
Outfall 001	9/19/2017	Cadmium	0.0003	mg/L
Outfall 001	9/27/2017	Cadmium	*<0.000028*	mg/L
Outfall 001	9/27/2017	Cadmium	*<0.000028*	mg/L
Outfall 001	5/4/2018	Cadmium	*<0.000028*	mg/L
Outfall 001	5/4/2018	Cadmium	*<0.000028*	mg/L
Outfall 001	5/14/2018	Cadmium	0.00069	mg/L
Outfall 001	5/22/2018	Cadmium	0.0007	mg/L
Outfall 001	5/29/2018	Cadmium	0.0007	mg/L
Outfall 001	6/5/2018	Cadmium	0.0011	mg/L
Outfall 001	6/12/2018	Cadmium	0.0013	mg/L
Outfall 001	6/19/2018	Cadmium	0.0019	mg/L
Outfall 001	6/26/2018	Cadmium	0.0021	mg/L
Outfall 001	7/2/2018	Cadmium	0.0029	mg/L
Outfall 001	7/2/2018	Cadmium	0.0031	mg/L
Outfall 001	7/9/2018	Cadmium	0.00085	mg/L
Outfall 001	7/17/2018	Cadmium	0.0004	mg/L
Outfall 001	7/21/2018	Cadmium	0.0003	mg/L
Outfall 001	7/24/2018	Cadmium	0.0004	mg/L
Outfall 001	7/24/2018	Cadmium	0.0003	mg/L
Outfall 001	7/26/2018	Cadmium	0.0004	mg/L
Outfall 001	7/28/2018	Cadmium	<0.0005	mg/L
Outfall 001	7/31/2018	Cadmium	0.0003	mg/L

Table Appendix C-1 Outfall 001 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/7/2018	Cadmium	0.00054	mg/L
Outfall 001	8/14/2018	Cadmium	0.00033	mg/L
Outfall 001	8/21/2018	Cadmium	0.0004	mg/L
Outfall 001	8/28/2018	Cadmium	0.0004	mg/L
Outfall 001	9/4/2018	Cadmium	0.00033	mg/L
Outfall 001	9/10/2018	Cadmium	0.00034	mg/L
Outfall 001	9/18/2018	Cadmium	0.0004	mg/L
Outfall 001	5/15/2019	Cadmium	0.00084	mg/L
Outfall 001	5/18/2019	Cadmium	0.00073	mg/L
Outfall 001	5/19/2019	Cadmium	0.0006	mg/L
Outfall 001	5/28/2019	Cadmium	0.00047	mg/L
Outfall 001	6/3/2019	Cadmium	0.00034	mg/L
Outfall 001	6/10/2019	Cadmium	0.00068	mg/L
Outfall 001	6/18/2019	Cadmium	0.00054	mg/L
Outfall 001	6/26/2019	Cadmium	0.0007	mg/L
Outfall 001	6/26/2019	Cadmium	*<0.0005*	mg/L
Outfall 001	6/26/2019	Cadmium	0.0008	mg/L
Outfall 001	7/1/2019	Cadmium	0.00079	mg/L
Outfall 001	7/8/2019	Cadmium	0.00064	mg/L
Outfall 001	7/15/2019	Cadmium	0.00055	mg/L
Outfall 001	7/22/2019	Cadmium	0.00064	mg/L
Outfall 001	7/29/2019	Cadmium	0.00059	mg/L
Outfall 001	8/5/2019	Cadmium	0.00051	mg/L
Outfall 001	8/12/2019	Cadmium	0.0005	mg/L
Outfall 001	8/17/2019	Cadmium	0.00049	mg/L
Outfall 001	8/19/2019	Cadmium	0.00048	mg/L
Outfall 001	8/29/2019	Cadmium	0.00051	mg/L
Outfall 001	9/7/2019	Cadmium	0.00037	mg/L
Outfall 001	9/9/2019	Cadmium	0.00043	mg/L
Outfall 001	5/9/2020	Cadmium	*0.00012*	mg/L
Outfall 001	5/9/2020	Cadmium	*0.00014*	mg/L
Outfall 001	5/13/2020	Cadmium	0.00055	mg/L
Outfall 001	5/19/2020	Cadmium	0.00055	mg/L
Outfall 001	5/26/2020	Cadmium	0.00048	mg/L
Outfall 001	6/3/2020	Cadmium	0.00035	mg/L
Outfall 001	6/8/2020	Cadmium	0.00057	mg/L
Outfall 001	6/15/2020	Cadmium	0.00042	mg/L
Outfall 001	6/22/2020	Cadmium	0.00039	mg/L

Table Appendix C-1 Outfall 001 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/29/2020	Cadmium	0.0008	mg/L
Outfall 001	7/6/2020	Cadmium	0.00063	mg/L
Outfall 001	*8/29/2020*	Cadmium	*<0.00003*	*mg/L*
Outfall 001	*8/31/2020*	Cadmium	*<0.00005*	*mg/L*
Outfall 001	*9/8/2020*	Cadmium	*<0.00003*	*mg/L*
Outfall 001	*9/15/2020*	Cadmium	*<0.00003*	*mg/L*
Outfall 001	*9/21/2020*	Cadmium	*<0.00005*	*mg/L*
Outfall 001	5/17/2021	Cadmium	0.00074	mg/L
Outfall 001	5/25/2021	Cadmium	0.00058	mg/L
Outfall 001	5/31/2021	Cadmium	0.001	mg/L
Outfall 001	6/7/2021	Cadmium	0.00094	mg/L
Outfall 001	6/14/2021	Cadmium	0.00089	mg/L
Outfall 001	6/21/2021	Cadmium	0.000624	mg/L
Outfall 001	6/28/2021	Cadmium	0.000358	mg/L
Outfall 001	7/5/2021	Cadmium	0.0005	mg/L
Outfall 001	7/12/2021	Cadmium	0.00038	mg/L
Outfall 001	7/19/2021	Cadmium	0.000505	mg/L
Outfall 001	7/26/2021	Cadmium	0.00256	mg/L
Outfall 001	8/3/2021	Cadmium	0.0061	mg/L
Outfall 001	8/3/2021	Cadmium	0.0027	mg/L
Outfall 001	8/9/2021	Cadmium	0.0016	mg/L
Outfall 001	8/16/2021	Cadmium	0.000341	mg/L
Outfall 001	8/23/2021	Cadmium	0.00069	mg/L
Outfall 001	8/31/2021	Cadmium	0.00122	mg/L
Outfall 001	9/8/2021	Cadmium	0.0003	mg/L
Outfall 001	9/13/2021	Cadmium	0.00055	mg/L
Outfall 001	9/20/2021	Cadmium	0	mg/L
Outfall 001	10/4/2021	Cadmium	0.000022	mg/L
Outfall 001	5/10/2022	Cadmium	0.001	mg/L
Outfall 001	5/16/2022	Cadmium	0.0015	mg/L
Outfall 001	5/23/2022	Cadmium	0.000627	mg/L
Outfall 001	5/31/2022	Cadmium	0.000367	mg/L
Outfall 001	6/6/2022	Cadmium	0.0029	mg/L
Outfall 001	6/13/2022	Cadmium	0.00086	mg/L
Outfall 001	6/20/2022	Cadmium	0.00082	mg/L
Outfall 001	6/27/2022	Cadmium	0.000567	mg/L
Outfall 001	6/27/2022	Cadmium	0.000516	mg/L
Outfall 001	7/5/2022	Cadmium	0.00061	mg/L

Table Appendix C-1 Outfall 001 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/11/2022	Cadmium	0.00043	mg/L
Outfall 001	7/18/2022	Cadmium	0.000432	mg/L
Outfall 001	7/18/2022	Cadmium	0.000481	mg/L
Outfall 001	7/25/2022	Cadmium	0.000337	mg/L
Outfall 001	7/25/2022	Cadmium	0.000428	mg/L
Outfall 001	8/1/2022	Cadmium	0.00062	mg/L
Outfall 001	8/8/2022	Cadmium	0.00031	mg/L
Outfall 001	8/8/2022	Cadmium	0.00046	mg/L
Outfall 001	8/15/2022	Cadmium	0.000399	mg/L
Outfall 001	8/15/2022	Cadmium	0.000461	mg/L
Outfall 001	8/22/2022	Cadmium	0.000334	mg/L
Outfall 001	8/29/2022	Cadmium	0.000259	mg/L
Outfall 001	9/5/2022	Cadmium	0.00047	mg/L
Outfall 001	9/12/2022	Cadmium	0.0004	mg/L
Outfall 001	9/21/2022	Cadmium	0.000498	mg/L
Outfall 001	9/21/2022	Cadmium	0.000493	mg/L
Outfall 001	5/24/2023	Cadmium	0.00048	mg/L
Outfall 001	5/29/2023	Cadmium	0.000416	mg/L
Outfall 001	6/5/2023	Cadmium	0.00075	mg/L
Outfall 001	6/12/2023	Cadmium	0.0008	mg/L
Outfall 001	6/19/2023	Cadmium	0.000662	mg/L
Outfall 001	6/19/2023	Cadmium	0.00108	mg/L
Outfall 001	6/27/2023	Cadmium	0.000501	mg/L
Outfall 001	7/7/2023	Cadmium	0.0013	mg/L
Outfall 001	7/10/2023	Cadmium	0.00087	mg/L
Outfall 001	7/17/2023	Cadmium	0.000683	mg/L
Outfall 001	7/24/2023	Cadmium	0.000439	mg/L
Outfall 001	7/31/2023	Cadmium	0.000875	mg/L
Outfall 001	8/7/2023	Cadmium	0.00091	mg/L
Outfall 001	8/16/2023	Cadmium	0.00056	mg/L
Outfall 001	8/21/2023	Cadmium	0.000835	mg/L
Outfall 001	8/28/2023	Cadmium	0.000713	mg/L
Outfall 001	9/4/2023	Cadmium	0.00077	mg/L
Outfall 001	9/11/2023	Cadmium	0.00048	mg/L
Outfall 001	9/19/2023	Cadmium	0.000535	mg/L
Outfall 001	5/22/2024	Cadmium	0.00024	mg/L
Outfall 001	5/28/2024	Cadmium	0.000285	mg/L
Outfall 001	6/4/2024	Cadmium	0.00027	mg/L

Table Appendix C-1 Outfall 001 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/10/2024	Cadmium	0.0003	mg/L
Outfall 001	6/17/2024	Cadmium	0.000402	mg/L
Outfall 001	6/24/2024	Cadmium	0.000205	mg/L
Outfall 001	7/2/2024	Cadmium	0.00017	mg/L
Outfall 001	7/8/2024	Cadmium	0.00028	mg/L
Outfall 001	7/8/2024	Cadmium	0.00025	mg/L
Outfall 001	7/15/2024	Cadmium	0.000267	mg/L
Outfall 001	7/22/2024	Cadmium	0.000326	mg/L
Outfall 001	7/29/2024	Cadmium	0.000219	mg/L
Outfall 001	8/5/2024	Cadmium	0.0002	mg/L
Outfall 001	8/12/2024	Cadmium	0.00016	mg/L
Outfall 001	8/19/2024	Cadmium	0.000199	mg/L
Outfall 001	8/26/2024	Cadmium	0.000175	mg/L
Outfall 001	9/2/2024	Cadmium	0.00031	mg/L
Outfall 001	9/9/2024	Cadmium	0.00042	mg/L
Outfall 001	9/16/2024	Cadmium	0.000506	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-2 Station 151 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Cadmium	0.0027	mg/L
Station 151	5/16/2016	Cadmium	0.0052	mg/L
Station 151	6/6/2016	Cadmium	0.003	mg/L
Station 151	6/20/2016	Cadmium	0.0034	mg/L
Station 151	7/4/2016	Cadmium	0.0044	mg/L
Station 151	7/18/2016	Cadmium	0.0037	mg/L
Station 151	8/1/2016	Cadmium	0.0043	mg/L
Station 151	8/15/2016	Cadmium	0.0046	mg/L
Station 151	9/5/2016	Cadmium	0.0024	mg/L
Station 151	9/19/2016	Cadmium	0.0026	mg/L
Station 151	10/3/2016	Cadmium	0.002	mg/L
Station 151	10/17/2016	Cadmium	0.0023	mg/L
Station 151	5/14/2017	Cadmium	0.0015	mg/L
Station 151	5/22/2017	Cadmium	0.0009	mg/L
Station 151	6/4/2017	Cadmium	0.0011	mg/L
Station 151	6/19/2017	Cadmium	0.0028	mg/L
Station 151	7/9/2017	Cadmium	0.0022	mg/L

Table Appendix C-2
Station 151 Cadmium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 151	7/17/2017	Cadmium	0.0025	mg/L
Station 151	8/8/2017	Cadmium	0.0019	mg/L
Station 151	8/21/2017	Cadmium	0.0021	mg/L
Station 151	9/3/2017	Cadmium	0.0025	mg/L
Station 151	9/18/2017	Cadmium	0.0023	mg/L
Station 151	9/25/2017	Cadmium	0.002	mg/L
Station 151	5/14/2018	Cadmium	0.0168	mg/L
Station 151	5/21/2018	Cadmium	0.0033	mg/L
Station 151	6/4/2018	Cadmium	0.0032	mg/L
Station 151	6/18/2018	Cadmium	0.0064	mg/L
Station 151	7/8/2018	Cadmium	0.0061	mg/L
Station 151	7/16/2018	Cadmium	0.007	mg/L
Station 151	8/6/2018	Cadmium	0.0155	mg/L
Station 151	8/20/2018	Cadmium	0.0152	mg/L
Station 151	9/9/2018	Cadmium	0.0311	mg/L
Station 151	9/17/2018	Cadmium	0.0312	mg/L
Station 151	9/25/2018	Cadmium	0.0328	mg/L
Station 151	5/14/2019	Cadmium	0.0218	mg/L
Station 151	5/19/2019	Cadmium	0.0092	mg/L
Station 151	6/2/2019	Cadmium	0.0102	mg/L
Station 151	6/9/2019	Cadmium	0.0136	mg/L
Station 151	6/17/2019	Cadmium	0.0189	mg/L
Station 151	6/30/2019	Cadmium	0.0231	mg/L
Station 151	7/14/2019	Cadmium	0.02	mg/L
Station 151	8/4/2019	Cadmium	0.0157	mg/L
Station 151	8/18/2019	Cadmium	0.022	mg/L
Station 151	9/8/2019	Cadmium	0.0313	mg/L
Station 151	9/16/2019	Cadmium	0.0213	mg/L
Station 151	5/12/2020	Cadmium	0.0058	mg/L
Station 151	5/18/2020	Cadmium	0.00777	mg/L
Station 151	6/2/2020	Cadmium	0.027	mg/L
Station 151	6/14/2020	Cadmium	0.0649	mg/L
Station 151	6/26/2020	Cadmium	0.0681	mg/L
Station 151	7/5/2020	Cadmium	0.0727	mg/L
Station 151	7/19/2020	Cadmium	0.0711	mg/L
Station 151	8/3/2020	Cadmium	0.133	mg/L
Station 151	8/16/2020	Cadmium	0.0908	mg/L
Station 151	8/28/2020	Cadmium	0.087	mg/L

Table Appendix C-2 Station 151 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/15/2020	Cadmium	0.0703	mg/L
Station 151	9/20/2020	Cadmium	0.06	mg/L
Station 151	9/27/2020	Cadmium	0.138	mg/L
Station 151	5/9/2021	Cadmium	0.0144	mg/L
Station 151	5/24/2021	Cadmium	0.00908	mg/L
Station 151	6/6/2021	Cadmium	0.017	mg/L
Station 151	6/20/2021	Cadmium	0.0143	mg/L
Station 151	7/4/2021	Cadmium	0.0162	mg/L
Station 151	7/25/2021	Cadmium	0.0154	mg/L
Station 151	8/8/2021	Cadmium	0.0116	mg/L
Station 151	8/15/2021	Cadmium	0.0134	mg/L
Station 151	9/6/2021	Cadmium	0.0173	mg/L
Station 151	9/19/2021	Cadmium	0.0176	mg/L
Station 151	9/27/2021	Cadmium	0.0203	mg/L
Station 151	5/9/2022	Cadmium	0.0209	mg/L
Station 151	5/22/2022	Cadmium	0.00248	mg/L
Station 151	6/5/2022	Cadmium	0.0061	mg/L
Station 151	6/19/2022	Cadmium	0.0141	mg/L
Station 151	7/10/2022	Cadmium	0.0166	mg/L
Station 151	7/17/2022	Cadmium	0.0197	mg/L
Station 151	8/1/2022	Cadmium	0.0313	mg/L
Station 151	8/14/2022	Cadmium	0.0246	mg/L
Station 151	9/4/2022	Cadmium	0.0246	mg/L
Station 151	9/20/2022	Cadmium	0.0145	mg/L
Station 151	9/26/2022	Cadmium	0.0154	mg/L
Station 151	5/23/2023	Cadmium	0.0072	mg/L
Station 151	5/28/2023	Cadmium	0.00524	mg/L
Station 151	6/4/2023	Cadmium	0.0079	mg/L
Station 151	6/18/2023	Cadmium	0.00587	mg/L
Station 151	7/9/2023	Cadmium	0.0095	mg/L
Station 151	7/16/2023	Cadmium	0.0133	mg/L
Station 151	8/6/2023	Cadmium	0.0154	mg/L
Station 151	8/20/2023	Cadmium	0.0158	mg/L
Station 151	9/3/2023	Cadmium	0.0157	mg/L
Station 151	9/18/2023	Cadmium	0.0263	mg/L
Station 151	9/26/2023	Cadmium	0.0272	mg/L
Station 151	5/21/2024	Cadmium	0.0142	mg/L
Station 151	5/27/2024	Cadmium	0.00437	mg/L

Table Appendix C-2 Station 151 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	6/3/2024	Cadmium	0.004	mg/L
Station 151	6/16/2024	Cadmium	0.00781	mg/L
Station 151	7/1/2024	Cadmium	0.0112	mg/L
Station 151	7/1/2024	Cadmium	0.0112	mg/L
Station 151	7/14/2024	Cadmium	0.019	mg/L
Station 151	8/4/2024	Cadmium	0.0189	mg/L
Station 151	8/18/2024	Cadmium	0.0115	mg/L
Station 151	9/8/2024	Cadmium	0.0173	mg/L
Station 151	9/15/2024	Cadmium	0.0186	mg/L
Station 151	9/23/2024	Cadmium	0.0202	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-3 Station 150 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	Cadmium	0.002	mg/L
Station 150	6/6/2016	Cadmium	0.0013	mg/L
Station 150	7/4/2016	Cadmium	0.0013	mg/L
Station 150	8/1/2016	Cadmium	0.0014	mg/L
Station 150	9/5/2016	Cadmium	0.0014	mg/L
Station 150	9/5/2016	Cadmium	*<0.0001*	mg/L
Station 150	9/5/2016	Cadmium	0.0014	mg/L
Station 150	10/3/2016	Cadmium	0.0012	mg/L
Station 150	5/14/2017	Cadmium	0.0016	mg/L
Station 150	6/4/2017	Cadmium	0.0009	mg/L
Station 150	6/4/2017	Cadmium	*<0.0001*	mg/L
Station 150	6/4/2017	Cadmium	0.0008	mg/L
Station 150	7/9/2017	Cadmium	0.0013	mg/L
Station 150	8/8/2017	Cadmium	0.0012	mg/L
Station 150	9/3/2017	Cadmium	0.0013	mg/L
Station 150	10/5/2017	Cadmium	0.001	mg/L
Station 150	5/14/2018	Cadmium	*<0.0001*	mg/L
Station 150	5/14/2018	Cadmium	0.0092	mg/L
Station 150	5/14/2018	Cadmium	0.0094	mg/L
Station 150	6/4/2018	Cadmium	0.0017	mg/L
Station 150	7/8/2018	Cadmium	0.0024	mg/L
Station 150	8/6/2018	Cadmium	0.0047	mg/L
Station 150	9/9/2018	Cadmium	0.0042	mg/L
Station 150	5/19/2019	Cadmium	0.00423	mg/L

Table Appendix C-3 Station 150 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	6/2/2019	Cadmium	0.00484	mg/L
Station 150	6/2/2019	Cadmium	*<0.00005*	mg/L
Station 150	6/2/2019	Cadmium	0.0048	mg/L
Station 150	6/9/2019	Cadmium	0.00591	mg/L
Station 150	6/30/2019	Cadmium	0.00812	mg/L
Station 150	8/4/2019	Cadmium	0.00689	mg/L
Station 150	8/4/2019	Cadmium	*<0.00005*	mg/L
Station 150	8/4/2019	Cadmium	0.00686	mg/L
Station 150	9/8/2019	Cadmium	0.00851	mg/L
Station 150	5/12/2020	Cadmium	0.0031	mg/L
Station 150	6/3/2020	Cadmium	0.00968	mg/L
Station 150	6/26/2020	Cadmium	0.0231	mg/L
Station 150	7/5/2020	Cadmium	0.0188	mg/L
Station 150	8/3/2020	Cadmium	0.0309	mg/L
Station 150	8/28/2020	Cadmium	0.0283	mg/L
Station 150	9/15/2020	Cadmium	0.0254	mg/L
Station 150	9/27/2020	Cadmium	0.0278	mg/L
Station 150	5/9/2021	Cadmium	0.0146	mg/L
Station 150	6/6/2021	Cadmium	0.00768	mg/L
Station 150	7/4/2021	Cadmium	0.00801	mg/L
Station 150	8/8/2021	Cadmium	0.00659	mg/L
Station 150	9/28/2021	Cadmium	0.00961	mg/L
Station 150	5/9/2022	Cadmium	0.0102	mg/L
Station 150	6/5/2022	Cadmium	0.00453	mg/L
Station 150	7/10/2022	Cadmium	0.00783	mg/L
Station 150	8/1/2022	Cadmium	0.012	mg/L
Station 150	9/4/2022	Cadmium	0.0104	mg/L
Station 150	5/23/2023	Cadmium	0.00592	mg/L
Station 150	6/4/2023	Cadmium	0.00617	mg/L
Station 150	6/18/2023	Cadmium	0.00339	mg/L
Station 150	7/9/2023	Cadmium	0.00464	mg/L
Station 150	7/9/2023	Cadmium	0.00467	mg/L
Station 150	7/16/2023	Cadmium	0.00624	mg/L
Station 150	8/6/2023	Cadmium	0.00663	mg/L
Station 150	8/20/2023	Cadmium	0.00709	mg/L
Station 150	9/3/2023	Cadmium	0.00893	mg/L
Station 150	9/18/2023	Cadmium	0.00988	mg/L
Station 150	5/21/2024	Cadmium	0.0102	mg/L

Table Appendix C-3 Station 150 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/27/2024	Cadmium	0.00441	mg/L
Station 150	6/3/2024	Cadmium	0.00273	mg/L
Station 150	6/16/2024	Cadmium	0.00403	mg/L
Station 150	7/1/2024	Cadmium	0.00541	mg/L
Station 150	7/14/2024	Cadmium	0.00732	mg/L
Station 150	8/4/2024	Cadmium	0.00825	mg/L
Station 150	8/18/2024	Cadmium	0.00607	mg/L
Station 150	9/8/2024	Cadmium	0.00633	mg/L
Station 150	9/15/2024	Cadmium	0.00932	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-4 Station 160 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Cadmium	0.00081	mg/L
Station 160	5/16/2016	Cadmium	0.001	mg/L
Station 160	6/6/2016	Cadmium	0.00069	mg/L
Station 160	6/20/2016	Cadmium	0.0006	mg/L
Station 160	7/4/2016	Cadmium	0.00048	mg/L
Station 160	7/18/2016	Cadmium	0.0006	mg/L
Station 160	8/1/2016	Cadmium	0.00054	mg/L
Station 160	8/15/2016	Cadmium	0.0005	mg/L
Station 160	9/5/2016	Cadmium	0.00066	mg/L
Station 160	9/19/2016	Cadmium	0.0006	mg/L
Station 160	10/3/2016	Cadmium	0.00063	mg/L
Station 160	10/17/2016	Cadmium	0.0003	mg/L
Station 160	5/14/2017	Cadmium	0.0012	mg/L
Station 160	5/22/2017	Cadmium	0.0013	mg/L
Station 160	6/4/2017	Cadmium	0.00073	mg/L
Station 160	6/19/2017	Cadmium	0.0006	mg/L
Station 160	7/9/2017	Cadmium	0.00055	mg/L
Station 160	7/17/2017	Cadmium	0.0007	mg/L
Station 160	8/8/2017	Cadmium	0.00063	mg/L
Station 160	8/21/2017	Cadmium	0.0006	mg/L
Station 160	9/3/2017	Cadmium	0.00061	mg/L
Station 160	9/18/2017	Cadmium	0.0008	mg/L
Station 160	9/25/2017	Cadmium	0.0006	mg/L
Station 160	5/14/2018	Cadmium	0.0013	mg/L
Station 160	5/21/2018	Cadmium	0.0012	mg/L

Table Appendix C-4 Station 160 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/4/2018	Cadmium	0.0011	mg/L
Station 160	6/18/2018	Cadmium	0.0013	mg/L
Station 160	7/8/2018	Cadmium	0.0012	mg/L
Station 160	7/16/2018	Cadmium	0.0014	mg/L
Station 160	8/6/2018	Cadmium	0.0018	mg/L
Station 160	8/20/2018	Cadmium	0.0016	mg/L
Station 160	9/9/2018	Cadmium	0.0014	mg/L
Station 160	9/17/2018	Cadmium	0.0016	mg/L
Station 160	9/25/2018	Cadmium	0.00142	mg/L
Station 160	5/14/2019	Cadmium	0.00207	mg/L
Station 160	5/19/2019	Cadmium	0.0023	mg/L
Station 160	6/2/2019	Cadmium	0.002	mg/L
Station 160	6/9/2019	Cadmium	0.0025	mg/L
Station 160	6/17/2019	Cadmium	0.00293	mg/L
Station 160	6/30/2019	Cadmium	0.0035	mg/L
Station 160	7/14/2019	Cadmium	0.00215	mg/L
Station 160	7/14/2019	Cadmium	*<0.00005*	mg/L
Station 160	7/14/2019	Cadmium	0.00211	mg/L
Station 160	8/4/2019	Cadmium	0.0026	mg/L
Station 160	8/18/2019	Cadmium	0.00391	mg/L
Station 160	9/8/2019	Cadmium	0.0058	mg/L
Station 160	9/16/2019	Cadmium	0.00608	mg/L
Station 160	5/12/2020	Cadmium	*<0.00003*	mg/L
Station 160	5/12/2020	Cadmium	0.0015	mg/L
Station 160	5/12/2020	Cadmium	0.0016	mg/L
Station 160	5/19/2020	Cadmium	0.00352	mg/L
Station 160	6/3/2020	Cadmium	0.0061	mg/L
Station 160	6/14/2020	Cadmium	0.0104	mg/L
Station 160	6/26/2020	Cadmium	0.0089	mg/L
Station 160	7/5/2020	Cadmium	0.0112	mg/L
Station 160	7/19/2020	Cadmium	0.00994	mg/L
Station 160	8/3/2020	Cadmium	0.0162	mg/L
Station 160	8/16/2020	Cadmium	0.0156	mg/L
Station 160	8/28/2020	Cadmium	0.0174	mg/L
Station 160	9/15/2020	Cadmium	0.0155	mg/L
Station 160	9/20/2020	Cadmium	0.0105	mg/L
Station 160	9/27/2020	Cadmium	0.017	mg/L
Station 160	5/9/2021	Cadmium	0.0047	mg/L

Table Appendix C-4
Station 160 Cadmium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	5/24/2021	Cadmium	0.00424	mg/L
Station 160	6/6/2021	Cadmium	0.0047	mg/L
Station 160	6/20/2021	Cadmium	0.00328	mg/L
Station 160	7/4/2021	Cadmium	0.0034	mg/L
Station 160	7/25/2021	Cadmium	0.00393	mg/L
Station 160	8/8/2021	Cadmium	0.0037	mg/L
Station 160	8/15/2021	Cadmium	0.00386	mg/L
Station 160	9/6/2021	Cadmium	0.0054	mg/L
Station 160	9/19/2021	Cadmium	0.00584	mg/L
Station 160	9/28/2021	Cadmium	0.00477	mg/L
Station 160	5/9/2022	Cadmium	0.0025	mg/L
Station 160	5/22/2022	Cadmium	0.00203	mg/L
Station 160	6/5/2022	Cadmium	0.0023	mg/L
Station 160	6/19/2022	Cadmium	0.00399	mg/L
Station 160	7/10/2022	Cadmium	0.0041	mg/L
Station 160	7/17/2022	Cadmium	0.00474	mg/L
Station 160	8/1/2022	Cadmium	0.0066	mg/L
Station 160	8/14/2022	Cadmium	0.00526	mg/L
Station 160	9/4/2022	Cadmium	0.0068	mg/L
Station 160	9/20/2022	Cadmium	0.00367	mg/L
Station 160	9/26/2022	Cadmium	0.00387	mg/L
Station 160	5/23/2023	Cadmium	0.0027	mg/L
Station 160	5/28/2023	Cadmium	0.00299	mg/L
Station 160	6/4/2023	Cadmium	0.0033	mg/L
Station 160	6/18/2023	Cadmium	0.00202	mg/L
Station 160	7/9/2023	Cadmium	0.0021	mg/L
Station 160	7/16/2023	Cadmium	0.00358	mg/L
Station 160	8/6/2023	Cadmium	0.0037	mg/L
Station 160	8/20/2023	Cadmium	0.0041	mg/L
Station 160	9/3/2023	Cadmium	0.0053	mg/L
Station 160	9/18/2023	Cadmium	0.00589	mg/L
Station 160	9/26/2023	Cadmium	0.00604	mg/L
Station 160	5/21/2024	Cadmium	0.0039	mg/L
Station 160	5/27/2024	Cadmium	0.00253	mg/L
Station 160	6/3/2024	Cadmium	0.002	mg/L
Station 160	6/16/2024	Cadmium	0.00215	mg/L
Station 160	7/1/2024	Cadmium	0.0026	mg/L
Station 160	7/14/2024	Cadmium	0.00311	mg/L

Table Appendix C-4 Station 160 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	8/4/2024	Cadmium	0.0064	mg/L
Station 160	8/18/2024	Cadmium	0.00282	mg/L
Station 160	9/8/2024	Cadmium	0.0036	mg/L
Station 160	9/15/2024	Cadmium	0.00412	mg/L
Station 160	9/23/2024	Cadmium	0.00413	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-5 Station 140 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Cadmium	0.0075	mg/L
Station 140	5/16/2016	Cadmium	0.026	mg/L
Station 140	6/6/2016	Cadmium	0.0036	mg/L
Station 140	6/20/2016	Cadmium	0.0061	mg/L
Station 140	7/4/2016	Cadmium	0.004	mg/L
Station 140	7/18/2016	Cadmium	0.0039	mg/L
Station 140	8/1/2016	Cadmium	0.0052	mg/L
Station 140	8/15/2016	Cadmium	0.0059	mg/L
Station 140	8/15/2016	Cadmium	*<0.0001*	mg/L
Station 140	8/15/2016	Cadmium	0.0057	mg/L
Station 140	9/5/2016	Cadmium	0.0061	mg/L
Station 140	9/19/2016	Cadmium	0.0071	mg/L
Station 140	10/3/2016	Cadmium	0.0165	mg/L
Station 140	10/17/2016	Cadmium	0.0266	mg/L
Station 140	5/14/2017	Cadmium	0.0068	mg/L
Station 140	5/22/2017	Cadmium	0.0038	mg/L
Station 140	6/4/2017	Cadmium	0.0023	mg/L
Station 140	6/19/2017	Cadmium	0.0036	mg/L
Station 140	7/9/2017	Cadmium	0.0077	mg/L
Station 140	7/17/2017	Cadmium	0.0064	mg/L
Station 140	8/8/2017	Cadmium	0.0119	mg/L
Station 140	8/21/2017	Cadmium	0.0068	mg/L
Station 140	9/3/2017	Cadmium	0.0074	mg/L
Station 140	9/18/2017	Cadmium	0.0238	mg/L
Station 140	9/25/2017	Cadmium	0.0083	mg/L
Station 140	5/14/2018	Cadmium	0.0271	mg/L
Station 140	5/21/2018	Cadmium	0.0237	mg/L
Station 140	6/4/2018	Cadmium	0.0194	mg/L
Station 140	6/18/2018	Cadmium	0.0317	mg/L

Table Appendix C-5 Station 140 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	7/8/2018	Cadmium	0.0266	mg/L
Station 140	7/16/2018	Cadmium	0.0479	mg/L
Station 140	8/6/2018	Cadmium	0.104	mg/L
Station 140	8/20/2018	Cadmium	0.12	mg/L
Station 140	9/9/2018	Cadmium	0.144	mg/L
Station 140	9/17/2018	Cadmium	0.204	mg/L
Station 140	9/25/2018	Cadmium	0.18	mg/L
Station 140	5/14/2019	Cadmium	0.0978	mg/L
Station 140	5/14/2019	Cadmium	*<0.00005*	mg/L
Station 140	5/14/2019	Cadmium	0.1	mg/L
Station 140	5/19/2019	Cadmium	0.0645	mg/L
Station 140	6/2/2019	Cadmium	0.0545	mg/L
Station 140	6/9/2019	Cadmium	0.0653	mg/L
Station 140	6/17/2019	Cadmium	0.0783	mg/L
Station 140	6/30/2019	Cadmium	0.104	mg/L
Station 140	7/14/2019	Cadmium	0.113	mg/L
Station 140	8/4/2019	Cadmium	0.064	mg/L
Station 140	8/18/2019	Cadmium	0.118	mg/L
Station 140	9/8/2019	Cadmium	0.116	mg/L
Station 140	9/16/2019	Cadmium	0.135	mg/L
Station 140	5/12/2020	Cadmium	0.0154	mg/L
Station 140	5/18/2020	Cadmium	0.0431	mg/L
Station 140	6/2/2020	Cadmium	0.128	mg/L
Station 140	6/14/2020	Cadmium	0.267	mg/L
Station 140	6/26/2020	Cadmium	0.351	mg/L
Station 140	7/5/2020	Cadmium	0.324	mg/L
Station 140	7/19/2020	Cadmium	0.437	mg/L
Station 140	8/3/2020	Cadmium	0.584	mg/L
Station 140	8/16/2020	Cadmium	0.485	mg/L
Station 140	8/28/2020	Cadmium	0.581	mg/L
Station 140	9/15/2020	Cadmium	0.474	mg/L
Station 140	9/20/2020	Cadmium	0.348	mg/L
Station 140	9/27/2020	Cadmium	0.402	mg/L
Station 140	5/9/2021	Cadmium	0.0448	mg/L
Station 140	5/24/2021	Cadmium	0.0409	mg/L
Station 140	6/6/2021	Cadmium	0.0671	mg/L
Station 140	6/20/2021	Cadmium	0.0411	mg/L
Station 140	7/4/2021	Cadmium	0.0912	mg/L

Table Appendix C-5 Station 140 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	7/25/2021	Cadmium	0.0903	mg/L
Station 140	8/8/2021	Cadmium	0.0872	mg/L
Station 140	8/15/2021	Cadmium	0.0991	mg/L
Station 140	9/6/2021	Cadmium	0.11	mg/L
Station 140	9/19/2021	Cadmium	0.0985	mg/L
Station 140	9/27/2021	Cadmium	0.143	mg/L
Station 140	5/9/2022	Cadmium	0.0272	mg/L
Station 140	5/22/2022	Cadmium	0.00984	mg/L
Station 140	6/5/2022	Cadmium	0.0257	mg/L
Station 140	6/19/2022	Cadmium	0.0547	mg/L
Station 140	7/10/2022	Cadmium	0.129	mg/L
Station 140	7/17/2022	Cadmium	0.15	mg/L
Station 140	8/1/2022	Cadmium	0.151	mg/L
Station 140	8/14/2022	Cadmium	0.164	mg/L
Station 140	9/4/2022	Cadmium	0.151	mg/L
Station 140	9/20/2022	Cadmium	0.0668	mg/L
Station 140	9/26/2022	Cadmium	0.0971	mg/L
Station 140	9/26/2022	Cadmium	0.0971	mg/L
Station 140	5/23/2023	Cadmium	0.0282	mg/L
Station 140	5/28/2023	Cadmium	0.0249	mg/L
Station 140	6/4/2023	Cadmium	0.0527	mg/L
Station 140	6/18/2023	Cadmium	0.0261	mg/L
Station 140	7/9/2023	Cadmium	0.0411	mg/L
Station 140	7/16/2023	Cadmium	0.0666	mg/L
Station 140	8/6/2023	Cadmium	0.0814	mg/L
Station 140	8/20/2023	Cadmium	0.115	mg/L
Station 140	9/3/2023	Cadmium	0.109	mg/L
Station 140	9/18/2023	Cadmium	0.123	mg/L
Station 140	9/27/2023	Cadmium	0.128	mg/L
Station 140	5/21/2024	Cadmium	0.056	mg/L
Station 140	5/27/2024	Cadmium	0.0126	mg/L
Station 140	6/3/2024	Cadmium	0.0163	mg/L
Station 140	6/16/2024	Cadmium	0.0263	mg/L
Station 140	7/1/2024	Cadmium	0.0479	mg/L
Station 140	7/14/2024	Cadmium	0.097	mg/L
Station 140	8/4/2024	Cadmium	0.0766	mg/L
Station 140	8/18/2024	Cadmium	0.0756	mg/L
Station 140	9/8/2024	Cadmium	0.099	mg/L

Table Appendix C-5 Station 140 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	9/8/2024	Cadmium	0	mg/L
Station 140	9/15/2024	Cadmium	0.106	mg/L
Station 140	9/23/2024	Cadmium	0.139	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-6 Station 12 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Cadmium	0.00021	mg/L
Station 12	5/16/2016	Cadmium	<0.0001	mg/L
Station 12	6/6/2016	Cadmium	0.000053	mg/L
Station 12	6/20/2016	Cadmium	<0.0001	mg/L
Station 12	7/4/2016	Cadmium	0.000036	mg/L
Station 12	7/18/2016	Cadmium	<0.0001	mg/L
Station 12	8/1/2016	Cadmium	0.00004	mg/L
Station 12	8/15/2016	Cadmium	<0.0001	mg/L
Station 12	9/5/2016	Cadmium	0.00007	mg/L
Station 12	9/19/2016	Cadmium	<0.0001	mg/L
Station 12	10/3/2016	Cadmium	0.000049	mg/L
Station 12	10/17/2016	Cadmium	<0.0001	mg/L
Station 12	5/14/2017	Cadmium	0.0003	mg/L
Station 12	5/22/2017	Cadmium	0.0001	mg/L
Station 12	6/4/2017	Cadmium	0.00012	mg/L
Station 12	6/19/2017	Cadmium	<0.0001	mg/L
Station 12	7/9/2017	Cadmium	0.000047	mg/L
Station 12	7/17/2017	Cadmium	<0.0001	mg/L
Station 12	8/8/2017	Cadmium	0.000087	mg/L
Station 12	8/21/2017	Cadmium	<0.0001	mg/L
Station 12	9/3/2017	Cadmium	0.000052	mg/L
Station 12	9/18/2017	Cadmium	<0.0001	mg/L
Station 12	9/25/2017	Cadmium	<0.0001	mg/L
Station 12	5/14/2018	Cadmium	0.00077	mg/L
Station 12	5/21/2018	Cadmium	0.0005	mg/L
Station 12	6/4/2018	Cadmium	0.00015	mg/L
Station 12	6/18/2018	Cadmium	<0.0001	mg/L
Station 12	7/8/2018	Cadmium	0.000034	mg/L
Station 12	7/16/2018	Cadmium	<0.0001	mg/L
Station 12	8/6/2018	Cadmium	0.000053	mg/L
Station 12	8/20/2018	Cadmium	<0.0001	mg/L

Table Appendix C-6 Station 12 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	9/9/2018	Cadmium	0.000044	mg/L
Station 12	9/17/2018	Cadmium	<0.0001	mg/L
Station 12	9/25/2018	Cadmium	0.00006	mg/L
Station 12	5/14/2019	Cadmium	0.00069	mg/L
Station 12	5/19/2019	Cadmium	0.00037	mg/L
Station 12	6/2/2019	Cadmium	0.00014	mg/L
Station 12	6/9/2019	Cadmium	0.00071	mg/L
Station 12	6/17/2019	Cadmium	0.00007	mg/L
Station 12	6/30/2019	Cadmium	0.00005	mg/L
Station 12	7/14/2019	Cadmium	0.00008	mg/L
Station 12	8/4/2019	Cadmium	0.00016	mg/L
Station 12	8/18/2019	Cadmium	0.00042	mg/L
Station 12	9/8/2019	Cadmium	0.00033	mg/L
Station 12	9/16/2019	Cadmium	0.0013	mg/L
Station 12	5/12/2020	Cadmium	0.00071	mg/L
Station 12	5/18/2020	Cadmium	0.00072	mg/L
Station 12	6/2/2020	Cadmium	0.00082	mg/L
Station 12	6/14/2020	Cadmium	0.00083	mg/L
Station 12	6/26/2020	Cadmium	0.00096	mg/L
Station 12	7/5/2020	Cadmium	0.00085	mg/L
Station 12	7/19/2020	Cadmium	0.00077	mg/L
Station 12	8/3/2020	Cadmium	0.00083	mg/L
Station 12	8/16/2020	Cadmium	0.00087	mg/L
Station 12	8/28/2020	Cadmium	0.00077	mg/L
Station 12	9/15/2020	Cadmium	0.00094	mg/L
Station 12	9/20/2020	Cadmium	0.00072	mg/L
Station 12	9/20/2020	Cadmium	*<0.00005*	mg/L
Station 12	9/20/2020	Cadmium	0.000672	mg/L
Station 12	9/27/2020	Cadmium	0.0012	mg/L
Station 12	5/9/2021	Cadmium	0.001	mg/L
Station 12	5/24/2021	Cadmium	0.000673	mg/L
Station 12	6/6/2021	Cadmium	0.00084	mg/L
Station 12	6/20/2021	Cadmium	0.000636	mg/L
Station 12	7/4/2021	Cadmium	0.00087	mg/L
Station 12	7/25/2021	Cadmium	0.000885	mg/L
Station 12	8/8/2021	Cadmium	0.00098	mg/L
Station 12	8/15/2021	Cadmium	0.000841	mg/L
Station 12	9/6/2021	Cadmium	0.0011	mg/L

Table Appendix C-6 Station 12 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	9/19/2021	Cadmium	0.00137	mg/L
Station 12	9/27/2021	Cadmium	0.00121	mg/L
Station 12	5/9/2022	Cadmium	0.0016	mg/L
Station 12	5/22/2022	Cadmium	0.000628	mg/L
Station 12	6/5/2022	Cadmium	0.00068	mg/L
Station 12	6/19/2022	Cadmium	0.000773	mg/L
Station 12	7/10/2022	Cadmium	0.00089	mg/L
Station 12	7/10/2022	Cadmium	0.00094	mg/L
Station 12	7/17/2022	Cadmium	0.00105	mg/L
Station 12	8/1/2022	Cadmium	0.0012	mg/L
Station 12	8/14/2022	Cadmium	0.00111	mg/L
Station 12	9/4/2022	Cadmium	0.0009	mg/L
Station 12	9/20/2022	Cadmium	0.00077	mg/L
Station 12	9/26/2022	Cadmium	0.00116	mg/L
Station 12	5/23/2023	Cadmium	0.00081	mg/L
Station 12	5/28/2023	Cadmium	0.000622	mg/L
Station 12	6/4/2023	Cadmium	0.00086	mg/L
Station 12	6/18/2023	Cadmium	0.000479	mg/L
Station 12	7/9/2023	Cadmium	0.00085	mg/L
Station 12	7/16/2023	Cadmium	0.000955	mg/L
Station 12	8/6/2023	Cadmium	0.00082	mg/L
Station 12	8/20/2023	Cadmium	0.000921	mg/L
Station 12	9/3/2023	Cadmium	0.00098	mg/L
Station 12	9/18/2023	Cadmium	0.000771	mg/L
Station 12	9/26/2023	Cadmium	0.000871	mg/L
Station 12	5/21/2024	Cadmium	0.00084	mg/L
Station 12	5/27/2024	Cadmium	0.000686	mg/L
Station 12	6/3/2024	Cadmium	0.0005	mg/L
Station 12	6/16/2024	Cadmium	0.000621	mg/L
Station 12	7/1/2024	Cadmium	0.00059	mg/L
Station 12	7/14/2024	Cadmium	0.000851	mg/L
Station 12	8/4/2024	Cadmium	0.00051	mg/L
Station 12	8/18/2024	Cadmium	0.000871	mg/L
Station 12	8/18/2024	Cadmium	0.000852	mg/L
Station 12	9/8/2024	Cadmium	0.0011	mg/L
Station 12	9/15/2024	Cadmium	0.00187	mg/L
Station 12	9/23/2024	Cadmium	0.00193	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix C-7 Station 9 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	Cadmium	0.0009	mg/L
Station 9	5/16/2016	Cadmium	0.001	mg/L
Station 9	6/2/2016	Cadmium	0.0005	mg/L
Station 9	6/17/2016	Cadmium	0.0005	mg/L
Station 9	7/1/2016	Cadmium	0.0005	mg/L
Station 9	7/15/2016	Cadmium	0.0004	mg/L
Station 9	8/5/2016	Cadmium	0.0005	mg/L
Station 9	8/19/2016	Cadmium	0.001	mg/L
Station 9	9/8/2016	Cadmium	0.0007	mg/L
Station 9	9/23/2016	Cadmium	0.0006	mg/L
Station 9	10/6/2016	Cadmium	0.0009	mg/L
Station 9	10/17/2016	Cadmium	0.0009	mg/L
Station 9	5/5/2017	Cadmium	0.001	mg/L
Station 9	5/19/2017	Cadmium	0.0011	mg/L
Station 9	6/8/2017	Cadmium	0.0007	mg/L
Station 9	6/23/2017	Cadmium	0.0005	mg/L
Station 9	7/7/2017	Cadmium	0.0006	mg/L
Station 9	7/20/2017	Cadmium	0.0005	mg/L
Station 9	8/4/2017	Cadmium	0.0006	mg/L
Station 9	8/25/2017	Cadmium	0.0007	mg/L
Station 9	9/8/2017	Cadmium	0.0009	mg/L
Station 9	9/18/2017	Cadmium	0.0009	mg/L
Station 9	10/5/2017	Cadmium	0.0007	mg/L
Station 9	10/9/2017	Cadmium	0.0011	mg/L
Station 9	5/23/2018	Cadmium	0.0024	mg/L
Station 9	6/8/2018	Cadmium	0.0009	mg/L
Station 9	6/29/2018	Cadmium	0.0006	mg/L
Station 9	7/13/2018	Cadmium	0.0011	mg/L
Station 9	7/27/2018	Cadmium	0.0014	mg/L
Station 9	8/3/2018	Cadmium	0.0012	mg/L
Station 9	8/18/2018	Cadmium	0.0015	mg/L
Station 9	9/7/2018	Cadmium	0.0009	mg/L
Station 9	9/28/2018	Cadmium	0.00181	mg/L
Station 9	10/5/2018	Cadmium	0.00208	mg/L
Station 9	10/12/2018	Cadmium	*<0.00005*	mg/L
Station 9	10/12/2018	Cadmium	0.00235	mg/L
Station 9	10/12/2018	Cadmium	0.00219	mg/L
Station 9	5/25/2019	Cadmium	0.0021	mg/L

Table Appendix C-7 Station 9 Cadmium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/30/2019	Cadmium	0.00193	mg/L
Station 9	6/7/2019	Cadmium	0.00101	mg/L
Station 9	6/21/2019	Cadmium	0.00102	mg/L
Station 9	7/12/2019	Cadmium	*<0.00005*	mg/L
Station 9	7/12/2019	Cadmium	0.00153	mg/L
Station 9	7/12/2019	Cadmium	0.00154	mg/L
Station 9	7/21/2019	Cadmium	0.00139	mg/L
Station 9	8/3/2019	Cadmium	0.0016	mg/L
Station 9	8/25/2019	Cadmium	0.00414	mg/L
Station 9	9/1/2019	Cadmium	0.00459	mg/L
Station 9	9/16/2019	Cadmium	0.00797	mg/L
Station 9	10/7/2019	Cadmium	0.02	mg/L
Station 9	5/19/2020	Cadmium	0.00392	mg/L
Station 9	5/29/2020	Cadmium	0.00503	mg/L
Station 9	6/6/2020	Cadmium	0.00606	mg/L
Station 9	6/19/2020	Cadmium	0.00927	mg/L
Station 9	6/23/2020	Cadmium	0.017	mg/L
Station 9	7/4/2020	Cadmium	0.00785	mg/L
Station 9	7/18/2020	Cadmium	0.0135	mg/L
Station 9	8/3/2020	Cadmium	0.0144	mg/L
Station 9	8/16/2020	Cadmium	0.0183	mg/L
Station 9	9/5/2020	Cadmium	0.0198	mg/L
Station 9	9/26/2020	Cadmium	0.0134	mg/L
Station 9	10/3/2020	Cadmium	0.015	mg/L
Station 9	10/10/2020	Cadmium	0.0106	mg/L
Station 9	5/16/2021	Cadmium	0.00431	mg/L
Station 9	5/26/2021	Cadmium	0.00349	mg/L
Station 9	6/5/2021	Cadmium	0.00519	mg/L
Station 9	6/19/2021	Cadmium	0.00352	mg/L
Station 9	6/20/2021	Cadmium	0.00343	mg/L
Station 9	7/12/2021	Cadmium	0.00429	mg/L
Station 9	7/26/2021	Cadmium	0.00278	mg/L
Station 9	8/8/2021	Cadmium	0.0049	mg/L
Station 9	8/15/2021	Cadmium	0.00523	mg/L
Station 9	9/6/2021	Cadmium	0.0058	mg/L
Station 9	9/19/2021	Cadmium	0.00791	mg/L
Station 9	9/28/2021	Cadmium	0.0103	mg/L
Station 9	10/2/2021	Cadmium	0.0106	mg/L

Table Appendix C-7
Station 9 Cadmium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 9	5/9/2022	Cadmium	0.0143	mg/L
Station 9	5/22/2022	Cadmium	0.00524	mg/L
Station 9	6/5/2022	Cadmium	0.00419	mg/L
Station 9	6/19/2022	Cadmium	0.00367	mg/L
Station 9	7/10/2022	Cadmium	0.0052	mg/L
Station 9	7/17/2022	Cadmium	0.00651	mg/L
Station 9	8/1/2022	Cadmium	0.0135	mg/L
Station 9	8/14/2022	Cadmium	0.00408	mg/L
Station 9	9/4/2022	Cadmium	0.00502	mg/L
Station 9	9/20/2022	Cadmium	0.00249	mg/L
Station 9	9/26/2022	Cadmium	0.00399	mg/L
Station 9	10/1/2022	Cadmium	0.00584	mg/L
Station 9	10/5/2022	Cadmium	0.00566	mg/L
Station 9	5/23/2023	Cadmium	0.00403	mg/L
Station 9	5/28/2023	Cadmium	0.00307	mg/L
Station 9	6/4/2023	Cadmium	0.00574	mg/L
Station 9	6/18/2023	Cadmium	0.00208	mg/L
Station 9	7/9/2023	Cadmium	0.00221	mg/L
Station 9	7/16/2023	Cadmium	0.00325	mg/L
Station 9	8/6/2023	Cadmium	0.00333	mg/L
Station 9	8/20/2023	Cadmium	0.00354	mg/L
Station 9	9/3/2023	Cadmium	0.00583	mg/L
Station 9	9/18/2023	Cadmium	0.00404	mg/L
Station 9	5/21/2024	Cadmium	0.00623	mg/L
Station 9	5/27/2024	Cadmium	0.00425	mg/L
Station 9	6/3/2024	Cadmium	0.00222	mg/L
Station 9	6/3/2024	Cadmium	0.00005	mg/L
Station 9	6/3/2024	Cadmium	0.00225	mg/L
Station 9	6/16/2024	Cadmium	0.00215	mg/L
Station 9	7/1/2024	Cadmium	0.00242	mg/L
Station 9	7/14/2024	Cadmium	0.00299	mg/L
Station 9	8/4/2024	Cadmium	0.00368	mg/L
Station 9	8/18/2024	Cadmium	0.00249	mg/L
Station 9	9/8/2024	Cadmium	0.00323	mg/L
Station 9	9/15/2024	Cadmium	0.00405	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix D – Iron Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix D-1 Outfall 001 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Iron	<0.0185	mg/L
Outfall 001	5/20/2016	Iron	*<0.0185*	mg/L
Outfall 001	5/20/2016	Iron	*<0.0185*	mg/L
Outfall 001	6/7/2016	Iron	<0.0185	mg/L
Outfall 001	7/5/2016	Iron	<0.0185	mg/L
Outfall 001	8/2/2016	Iron	<0.0185	mg/L
Outfall 001	9/6/2016	Iron	<0.0185	mg/L
Outfall 001	5/1/2017	Iron	*<0.0185*	mg/L
Outfall 001	5/1/2017	Iron	*5.27*	mg/L
Outfall 001	5/15/2017	Iron	<0.0185	mg/L
Outfall 001	6/5/2017	Iron	<0.0185	mg/L
Outfall 001	7/10/2017	Iron	<0.0185	mg/L
Outfall 001	8/9/2017	Iron	<0.0068	mg/L
Outfall 001	9/4/2017	Iron	<0.0068	mg/L
Outfall 001	9/27/2017	Iron	*<0.0068*	mg/L
Outfall 001	9/27/2017	Iron	*<0.0068*	mg/L
Outfall 001	5/4/2018	Iron	*<0.0068*	mg/L
Outfall 001	5/4/2018	Iron	*<0.0068*	mg/L
Outfall 001	5/14/2018	Iron	0.0165	mg/L
Outfall 001	6/5/2018	Iron	<0.0068	mg/L
Outfall 001	7/9/2018	Iron	<0.0054	mg/L
Outfall 001	8/7/2018	Iron	<0.0054	mg/L
Outfall 001	9/10/2018	Iron	<0.0054	mg/L
Outfall 001	5/19/2019	Iron	0.0075	mg/L
Outfall 001	6/3/2019	Iron	0.0102	mg/L
Outfall 001	6/10/2019	Iron	0.0161	mg/L
Outfall 001	7/1/2019	Iron	<0.0115	mg/L
Outfall 001	8/5/2019	Iron	<0.0115	mg/L
Outfall 001	9/9/2019	Iron	<0.0115	mg/L
Outfall 001	5/9/2020	Iron	*0.0117*	mg/L
Outfall 001	5/9/2020	Iron	*<0.0115*	mg/L
Outfall 001	5/13/2020	Iron	<0.0115	mg/L
Outfall 001	6/3/2020	Iron	<0.0115	mg/L
Outfall 001	7/6/2020	Iron	<0.0115	mg/L
Outfall 001	8/29/2020	Iron	0.0304	mg/L
Outfall 001	9/15/2020	Iron	0.0339	mg/L
Outfall 001	5/18/2021	Iron	<0.012	mg/L
Outfall 001	5/18/2021	Iron	0.154	mg/L

Table Appendix D-1 Outfall 001 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/7/2021	Iron	<0.012	mg/L
Outfall 001	6/21/2021	Iron	<0.012	mg/L
Outfall 001	7/5/2021	Iron	<0.012	mg/L
Outfall 001	7/26/2021	Iron	0.0165	mg/L
Outfall 001	8/9/2021	Iron	<0.012	mg/L
Outfall 001	8/16/2021	Iron	<0.012	mg/L
Outfall 001	9/8/2021	Iron	<0.012	mg/L
Outfall 001	9/20/2021	Iron	<0.012	mg/L
Outfall 001	10/4/2021	Iron	<0.012	mg/L
Outfall 001	5/10/2022	Iron	0.0165	mg/L
Outfall 001	5/23/2022	Iron	0.0143	mg/L
Outfall 001	6/6/2022	Iron	0.0246	mg/L
Outfall 001	6/20/2022	Iron	<0.012	mg/L
Outfall 001	7/11/2022	Iron	<0.012	mg/L
Outfall 001	7/18/2022	Iron	<0.012	mg/L
Outfall 001	8/1/2022	Iron	0.0179	mg/L
Outfall 001	9/5/2022	Iron	<0.012	mg/L
Outfall 001	5/24/2023	Iron	<0.012	mg/L
Outfall 001	5/29/2023	Iron	0.014	mg/L
Outfall 001	6/5/2023	Iron	<0.012	mg/L
Outfall 001	6/19/2023	Iron	<0.012	mg/L
Outfall 001	7/10/2023	Iron	<0.012	mg/L
Outfall 001	7/17/2023	Iron	<0.012	mg/L
Outfall 001	8/7/2023	Iron	<0.012	mg/L
Outfall 001	8/21/2023	Iron	<0.012	mg/L
Outfall 001	9/4/2023	Iron	<0.012	mg/L
Outfall 001	9/19/2023	Iron	0.185	mg/L
Outfall 001	5/22/2024	Iron	<0.012	mg/L
Outfall 001	5/28/2024	Iron	<0.012	mg/L
Outfall 001	6/4/2024	Iron	<0.012	mg/L
Outfall 001	6/17/2024	Iron	<0.012	mg/L
Outfall 001	7/2/2024	Iron	<0.012	mg/L
Outfall 001	7/15/2024	Iron	<0.012	mg/L
Outfall 001	8/5/2024	Iron	<0.012	mg/L
Outfall 001	8/19/2024	Iron	<0.012	mg/L
Outfall 001	9/9/2024	Iron	<0.012	mg/L
Outfall 001	9/16/2024	Iron	0.0166	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-2 Station 151 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Iron	0.305	mg/L
Station 151	5/16/2016	Iron	0.284	mg/L
Station 151	6/6/2016	Iron	0.060	mg/L
Station 151	6/20/2016	Iron	0.037	mg/L
Station 151	7/4/2016	Iron	0.0426	mg/L
Station 151	7/18/2016	Iron	0.05	mg/L
Station 151	8/1/2016	Iron	0.0242	mg/L
Station 151	8/15/2016	Iron	0.019	mg/L
Station 151	9/5/2016	Iron	0.0411	mg/L
Station 151	9/19/2016	Iron	0.026	mg/L
Station 151	10/3/2016	Iron	0.098	mg/L
Station 151	10/17/2016	Iron	0.041	mg/L
Station 151	5/14/2017	Iron	0.617	mg/L
Station 151	5/22/2017	Iron	0.616	mg/L
Station 151	6/4/2017	Iron	0.268	mg/L
Station 151	6/19/2017	Iron	0.041	mg/L
Station 151	7/9/2017	Iron	0.121	mg/L
Station 151	7/17/2017	Iron	0.177	mg/L
Station 151	8/8/2017	Iron	0.125	mg/L
Station 151	8/21/2017	Iron	0.088	mg/L
Station 151	9/3/2017	Iron	0.0644	mg/L
Station 151	9/18/2017	Iron	0.14	mg/L
Station 151	9/25/2017	Iron	0.233	mg/L
Station 151	5/14/2018	Iron	0.139	mg/L
Station 151	5/21/2018	Iron	0.741	mg/L
Station 151	6/4/2018	Iron	1.04	mg/L
Station 151	6/18/2018	Iron	0.261	mg/L
Station 151	7/8/2018	Iron	0.0975	mg/L
Station 151	7/16/2018	Iron	0.164	mg/L
Station 151	8/6/2018	Iron	0.415	mg/L
Station 151	8/20/2018	Iron	0.32	mg/L
Station 151	9/9/2018	Iron	1.72	mg/L
Station 151	9/17/2018	Iron	1.19	mg/L
Station 151	9/25/2018	Iron	1.84	mg/L

Table Appendix D-2 Station 151 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/14/2019	Iron	0.384	mg/L
Station 151	5/19/2019	Iron	1.11	mg/L
Station 151	6/2/2019	Iron	0.972	mg/L
Station 151	6/9/2019	Iron	0.764	mg/L
Station 151	6/17/2019	Iron	0.959	mg/L
Station 151	6/30/2019	Iron	0.868	mg/L
Station 151	7/14/2019	Iron	0.44	mg/L
Station 151	8/4/2019	Iron	1.5	mg/L
Station 151	8/18/2019	Iron	0.801	mg/L
Station 151	9/8/2019	Iron	1.11	mg/L
Station 151	9/16/2019	Iron	1.24	mg/L
Station 151	5/12/2020	Iron	0.886	mg/L
Station 151	5/18/2020	Iron	2.51	mg/L
Station 151	6/2/2020	Iron	3.120	mg/L
Station 151	6/14/2020	Iron	3.56	mg/L
Station 151	6/26/2020	Iron	3.57	mg/L
Station 151	7/5/2020	Iron	4.47	mg/L
Station 151	7/19/2020	Iron	2.9	mg/L
Station 151	8/3/2020	Iron	6.69	mg/L
Station 151	8/16/2020	Iron	4.15	mg/L
Station 151	8/28/2020	Iron	3.95	mg/L
Station 151	9/15/2020	Iron	3.87	mg/L
Station 151	9/20/2020	Iron	3.61	mg/L
Station 151	9/27/2020	Iron	12	mg/L
Stations 151	5/9/2021	Iron	1.25	mg/L
Stations 151	5/24/2021	Iron	0.899	mg/L
Stations 151	6/6/2021	Iron	1.64	mg/L
Stations 151	6/20/2021	Iron	1.24	mg/L
Stations 151	7/4/2021	Iron	1.08	mg/L
Stations 151	7/25/2021	Iron	1.52	mg/L
Stations 151	8/8/2021	Iron	1.03	mg/L
Stations 151	8/15/2021	Iron	1.21	mg/L
Stations 151	9/6/2021	Iron	1.64	mg/L
Stations 151	9/19/2021	Iron	3.35	mg/L
Stations 151	9/27/2021	Iron	2.33	mg/L
Stations 151	5/9/2022	Iron	0.251	mg/L
Stations 151	5/22/2022	Iron	2.51	mg/L
Stations 151	6/5/2022	Iron	0.656	mg/L

Table Appendix D-2 Station 151 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Stations 151	6/19/2022	Iron	0.923	mg/L
Stations 151	7/10/2022	Iron	1.08	mg/L
Stations 151	7/17/2022	Iron	1.07	mg/L
Stations 151	8/1/2022	Iron	1.99	mg/L
Stations 151	8/14/2022	Iron	1.76	mg/L
Stations 151	9/4/2022	Iron	1.94	mg/L
Stations 151	9/20/2022	Iron	1.36	mg/L
Stations 151	9/26/2022	Iron	1.57	mg/L
Stations 151	5/23/2023	Iron	0.591	mg/L
Stations 151	5/28/2023	Iron	0.937	mg/L
Stations 151	6/4/2023	Iron	0.563	mg/L
Stations 151	6/18/2023	Iron	0.684	mg/L
Stations 151	7/9/2023	Iron	1.13	mg/L
Stations 151	7/16/2023	Iron	1.37	mg/L
Stations 151	8/6/2023	Iron	1.7	mg/L
Stations 151	8/20/2023	Iron	1.39	mg/L
Stations 151	9/3/2023	Iron	1.63	mg/L
Stations 151	9/18/2023	Iron	2.1	mg/L
Stations 151	9/26/2023	Iron	2.46	mg/L
Stations 151	5/21/2024	Iron	0.868	mg/L
Stations 151	5/27/2024	Iron	0.589	mg/L
Stations 151	6/3/2024	Iron	0.648	mg/L
Stations 151	6/16/2024	Iron	0.833	mg/L
Stations 151	7/1/2024	Iron	1.1	mg/L
Stations 151	7/14/2024	Iron	1.6	mg/L
Stations 151	8/4/2024	Iron	2.51	mg/L
Stations 151	8/18/2024	Iron	1.34	mg/L
Stations 151	9/8/2024	Iron	2.54	mg/L
Stations 151	9/15/2024	Iron	1.98	mg/L
Stations 151	9/23/2024	Iron	2.51	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-3 Station 150 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	Iron	0.546	mg/L
Station 150	6/6/2016	Iron	0.228	mg/L
Station 150	7/4/2016	Iron	0.136	mg/L

Table Appendix D-3 Station 150 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/1/2016	Iron	0.313	mg/L
Station 150	9/5/2016	Iron	*<0.004*	mg/L
Station 150	9/5/2016	Iron	0.313	mg/L
Station 150	9/5/2016	Iron	0.195	mg/L
Station 150	10/3/2016	Iron	0.312	mg/L
Station 150	5/14/2017	Iron	1.19	mg/L
Station 150	6/4/2017	Iron	0.956	mg/L
Station 150	6/4/2017	Iron	*0.06*	mg/L
Station 150	6/4/2017	Iron	0.826	mg/L
Station 150	7/9/2017	Iron	0.194	mg/L
Station 150	8/8/2017	Iron	0.236	mg/L
Station 150	9/3/2017	Iron	0.299	mg/L
Station 150	10/5/2017	Iron	0.456	mg/L
Station 150	5/14/2018	Iron	*<0.004*	mg/L
Station 150	5/14/2018	Iron	0.242	mg/L
Station 150	5/14/2018	Iron	0.245	mg/L
Station 150	6/4/2018	Iron	1.18	mg/L
Station 150	7/8/2018	Iron	0.32	mg/L
Station 150	8/6/2018	Iron	0.596	mg/L
Station 150	9/9/2018	Iron	0.576	mg/L
Station 150	5/19/2019	Iron	2.55	mg/L
Station 150	6/2/2019	Iron	0.805	mg/L
Station 150	6/2/2019	Iron	*<0.005*	mg/L
Station 150	6/2/2019	Iron	0.812	mg/L
Station 150	6/9/2019	Iron	0.601	mg/L
Station 150	6/30/2019	Iron	0.669	mg/L
Station 150	8/4/2019	Iron	0.845	mg/L
Station 150	8/4/2019	Iron	*<0.005*	mg/L
Station 150	8/4/2019	Iron	0.824	mg/L
Station 150	9/8/2019	Iron	1.35	mg/L
Station 150	5/12/2020	Iron	0.869	mg/L
Station 150	6/3/2020	Iron	2.28	mg/L
Station 150	6/26/2020	Iron	3.83	mg/L
Station 150	7/5/2020	Iron	3.3	mg/L
Station 150	8/3/2020	Iron	4.78	mg/L
Station 150	8/28/2020	Iron	5.85	mg/L
Station 150	9/15/2020	Iron	7.29	mg/L
Station 150	9/27/2020	Iron	6.43	mg/L

Table Appendix D-3 Station 150 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/9/2021	Iron	0.854	mg/L
Station 150	6/6/2021	Iron	2.22	mg/L
Station 150	7/4/2021	Iron	1.28	mg/L
Station 150	8/8/2021	Iron	2.42	mg/L
Station 150	9/28/2021	Iron	4.36	mg/L
Station 150	5/9/2022	Iron	1.27	mg/L
Station 150	6/5/2022	Iron	7.47	mg/L
Station 150	7/10/2022	Iron	2.46	mg/L
Station 150	8/1/2022	Iron	2.29	mg/L
Station 150	9/4/2022	Iron	2.95	mg/L
Station 150	5/23/2023	Iron	1.09	mg/L
Station 150	6/4/2023	Iron	5.2	mg/L
Station 150	6/18/2023	Iron	1.17	mg/L
Station 150	7/9/2023	Iron	1.47	mg/L
Station 150	7/16/2023	Iron	2	mg/L
Station 150	8/6/2023	Iron	2.31	mg/L
Station 150	8/20/2023	Iron	2.48	mg/L
Station 150	9/3/2023	Iron	3.6	mg/L
Station 150	9/18/2023	Iron	4.37	mg/L
Station 150	5/21/2024	Iron	1.21	mg/L
Station 150	5/27/2024	Iron	2.36	mg/L
Station 150	6/3/2024	Iron	1.24	mg/L
Station 150	6/16/2024	Iron	1.08	mg/L
Station 150	7/1/2024	Iron	1.48	mg/L
Station 150	7/14/2024	Iron	1.69	mg/L
Station 150	8/4/2024	Iron	6.84	mg/L
Station 150	8/18/2024	Iron	1.45	mg/L
Station 150	9/8/2024	Iron	2.51	mg/L
Station 150	9/15/2024	Iron	4.12	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-4 Station 160 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Iron	0.544	mg/L
Station 160	5/16/2016	Iron	0.216	mg/L
Station 160	6/6/2016	Iron	0.0353	mg/L

Table Appendix D-4 Station 160 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/20/2016	Iron	0.018	mg/L
Station 160	7/4/2016	Iron	0.0567	mg/L
Station 160	7/18/2016	Iron	0.025	mg/L
Station 160	8/1/2016	Iron	0.028	mg/L
Station 160	8/15/2016	Iron	0.0613	mg/L
Station 160	9/5/2016	Iron	0.012	mg/L
Station 160	9/19/2016	Iron	<0.0185	mg/L
Station 160	10/3/2016	Iron	0.016	mg/L
Station 160	10/17/2016	Iron	0.0912	mg/L
Station 160	5/14/2017	Iron	1.22	mg/L
Station 160	5/22/2017	Iron	1.53	mg/L
Station 160	6/4/2017	Iron	0.543	mg/L
Station 160	6/19/2017	Iron	0.049	mg/L
Station 160	7/9/2017	Iron	0.024	mg/L
Station 160	7/17/2017	Iron	0.0642	mg/L
Station 160	8/8/2017	Iron	0.053	mg/L
Station 160	8/21/2017	Iron	0.0731	mg/L
Station 160	9/3/2017	Iron	0.0327	mg/L
Station 160	9/18/2017	Iron	0.091	mg/L
Station 160	9/25/2017	Iron	0.187	mg/L
Station 160	5/14/2018	Iron	0.898	mg/L
Station 160	5/21/2018	Iron	0.162	mg/L
Station 160	6/4/2018	Iron	1.73	mg/L
Station 160	6/18/2018	Iron	0.286	mg/L
Station 160	7/8/2018	Iron	0.11	mg/L
Station 160	7/16/2018	Iron	0.121	mg/L
Station 160	8/6/2018	Iron	0.022	mg/L
Station 160	8/20/2018	Iron	0.0597	mg/L
Station 160	9/9/2018	Iron	0.032	mg/L
Station 160	9/17/2018	Iron	0.086	mg/L
Station 160	9/25/2018	Iron	0.063	mg/L
Station 160	5/14/2019	Iron	0.354	mg/L
Station 160	5/19/2019	Iron	1.98	mg/L
Station 160	6/2/2019	Iron	0.891	mg/L
Station 160	6/9/2019	Iron	0.459	mg/L
Station 160	6/17/2019	Iron	0.378	mg/L
Station 160	6/30/2019	Iron	0.12	mg/L
Station 160	7/14/2019	Iron	*<0.005*	mg/L

Table Appendix D-4 Station 160 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/14/2019	Iron	0.142	mg/L
Station 160	7/14/2019	Iron	0.198	mg/L
Station 160	8/4/2019	Iron	0.779	mg/L
Station 160	8/18/2019	Iron	0.857	mg/L
Station 160	9/8/2019	Iron	1.8	mg/L
Station 160	9/16/2019	Iron	0.933	mg/L
Station 160	5/12/2020	Iron	1.32	mg/L
Station 160	5/12/2020	Iron	*<0.0115*	mg/L
Station 160	5/12/2020	Iron	0.645	mg/L
Station 160	5/19/2020	Iron	0.626	mg/L
Station 160	6/3/2020	Iron	1.49	mg/L
Station 160	6/14/2020	Iron	2.06	mg/L
Station 160	6/26/2020	Iron	1.74	mg/L
Station 160	7/5/2020	Iron	2.02	mg/L
Station 160	7/19/2020	Iron	1.8	mg/L
Station 160	8/3/2020	Iron	3.04	mg/L
Station 160	8/16/2020	Iron	3.17	mg/L
Station 160	8/28/2020	Iron	4.35	mg/L
Station 160	9/15/2020	Iron	4.71	mg/L
Station 160	9/20/2020	Iron	4.27	mg/L
Station 160	9/27/2020	Iron	4	mg/L
Station 160	5/9/2021	Iron	0.197	mg/L
Station 160	5/24/2021	Iron	1.56	mg/L
Station 160	6/6/2021	Iron	1.63	mg/L
Station 160	6/20/2021	Iron	0.692	mg/L
Station 160	7/4/2021	Iron	0.635	mg/L
Station 160	7/25/2021	Iron	2.05	mg/L
Station 160	8/8/2021	Iron	1.06	mg/L
Station 160	8/15/2021	Iron	1.59	mg/L
Station 160	9/6/2021	Iron	1.87	mg/L
Station 160	9/19/2021	Iron	2.42	mg/L
Station 160	9/28/2021	Iron	1.71	mg/L
Station 160	5/9/2022	Iron	0.127	mg/L
Station 160	5/22/2022	Iron	1.37	mg/L
Station 160	6/5/2022	Iron	1	mg/L
Station 160	6/19/2022	Iron	1.23	mg/L
Station 160	7/10/2022	Iron	1.06	mg/L
Station 160	7/17/2022	Iron	1.21	mg/L

Table Appendix D-4 Station 160 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	8/1/2022	Iron	1.21	mg/L
Station 160	8/14/2022	Iron	1.38	mg/L
Station 160	9/4/2022	Iron	1.8	mg/L
Station 160	9/26/2022	Iron	0.99	mg/L
Station 160	5/23/2023	Iron	0.696	mg/L
Station 160	5/28/2023	Iron	2.91	mg/L
Station 160	6/4/2023	Iron	1.18	mg/L
Station 160	6/18/2023	Iron	0.985	mg/L
Station 160	7/9/2023	Iron	0.923	mg/L
Station 160	7/16/2023	Iron	1.28	mg/L
Station 160	8/6/2023	Iron	1.39	mg/L
Station 160	8/20/2023	Iron	1.62	mg/L
Station 160	9/3/2023	Iron	2.21	mg/L
Station 160	9/18/2023	Iron	1.93	mg/L
Station 160	9/26/2023	Iron	2.09	mg/L
Station 160	5/21/2024	Iron	0.958	mg/L
Station 160	5/27/2024	Iron	0.979	mg/L
Station 160	6/3/2024	Iron	1.03	mg/L
Station 160	6/16/2024	Iron	0.58	mg/L
Station 160	7/1/2024	Iron	0.768	mg/L
Station 160	7/14/2024	Iron	0.719	mg/L
Station 160	8/4/2024	Iron	9.7	mg/L
Station 160	8/18/2024	Iron	0.891	mg/L
Station 160	9/8/2024	Iron	1.41	mg/L
Station 160	9/15/2024	Iron	1.44	mg/L
Station 160	9/23/2024	Iron	1.74	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-5 Station 140 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Iron	1.42	mg/L
Station 140	5/16/2016	Iron	1.46	mg/L
Station 140	6/6/2016	Iron	0.288	mg/L
Station 140	6/20/2016	Iron	0.165	mg/L
Station 140	7/4/2016	Iron	0.185	mg/L
Station 140	7/18/2016	Iron	0.218	mg/L
Station 140	8/1/2016	Iron	0.563	mg/L

Table Appendix D-5 Station 140 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/15/2016	Iron	0.57	mg/L
Station 140	8/15/2016	Iron	0.129	mg/L
Station 140	8/15/2016	Iron	*<0.004*	mg/L
Station 140	9/5/2016	Iron	0.128	mg/L
Station 140	9/19/2016	Iron	0.184	mg/L
Station 140	10/3/2016	Iron	0.891	mg/L
Station 140	10/17/2016	Iron	0.409	mg/L
Station 140	5/14/2017	Iron	1.22	mg/L
Station 140	5/22/2017	Iron	0.254	mg/L
Station 140	6/4/2017	Iron	0.225	mg/L
Station 140	6/19/2017	Iron	0.099	mg/L
Station 140	7/9/2017	Iron	0.246	mg/L
Station 140	7/17/2017	Iron	0.146	mg/L
Station 140	8/8/2017	Iron	0.823	mg/L
Station 140	8/21/2017	Iron	0.585	mg/L
Station 140	9/3/2017	Iron	1.07	mg/L
Station 140	9/18/2017	Iron	0.756	mg/L
Station 140	9/25/2017	Iron	1.25	mg/L
Station 140	5/14/2018	Iron	1.08	mg/L
Station 140	5/21/2018	Iron	2.31	mg/L
Station 140	6/4/2018	Iron	3.79	mg/L
Station 140	6/18/2018	Iron	1.12	mg/L
Station 140	7/8/2018	Iron	0.739	mg/L
Station 140	7/16/2018	Iron	0.43	mg/L
Station 140	8/6/2018	Iron	3.2	mg/L
Station 140	8/20/2018	Iron	2.7	mg/L
Station 140	9/9/2018	Iron	6.75	mg/L
Station 140	9/17/2018	Iron	5.77	mg/L
Station 140	9/25/2018	Iron	4.81	mg/L
Station 140	5/14/2019	Iron	5.27	mg/L
Station 140	5/14/2019	Iron	*<0.005*	mg/L
Station 140	5/14/2019	Iron	6.19	mg/L
Station 140	5/19/2019	Iron	4.79	mg/L
Station 140	6/2/2019	Iron	3.62	mg/L
Station 140	6/9/2019	Iron	4.14	mg/L
Station 140	6/17/2019	Iron	3.3	mg/L
Station 140	6/30/2019	Iron	3.53	mg/L
Station 140	7/14/2019	Iron	3.65	mg/L

Table Appendix D-5
Station 140 Iron Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 140	8/4/2019	Iron	4.12	mg/L
Station 140	8/18/2019	Iron	2.18	mg/L
Station 140	9/8/2019	Iron	5.13	mg/L
Station 140	9/16/2019	Iron	3.52	mg/L
Station 140	5/12/2020	Iron	14.7	mg/L
Station 140	5/18/2020	Iron	2.86	mg/L
Station 140	6/2/2020	Iron	16.1	mg/L
Station 140	6/14/2020	Iron	13.1	mg/L
Station 140	6/26/2020	Iron	25.1	mg/L
Station 140	7/5/2020	Iron	26	mg/L
Station 140	7/19/2020	Iron	22.7	mg/L
Station 140	8/3/2020	Iron	25	mg/L
Station 140	8/16/2020	Iron	31.3	mg/L
Station 140	8/28/2020	Iron	30.3	mg/L
Station 140	9/15/2020	Iron	31.4	mg/L
Station 140	9/20/2020	Iron	21.1	mg/L
Station 140	9/27/2020	Iron	27	mg/L
Station 140	5/9/2021	Iron	5.92	mg/L
Station 140	5/24/2021	Iron	4.09	mg/L
Station 140	6/6/2021	Iron	7.97	mg/L
Station 140	6/20/2021	Iron	3.8	mg/L
Station 140	7/4/2021	Iron	5.63	mg/L
Station 140	7/25/2021	Iron	6.25	mg/L
Station 140	8/8/2021	Iron	5.82	mg/L
Station 140	8/15/2021	Iron	6.8	mg/L
Station 140	9/6/2021	Iron	6.8	mg/L
Station 140	9/19/2021	Iron	6.3	mg/L
Station 140	9/27/2021	Iron	7.47	mg/L
Station 140	5/9/2022	Iron	2.87	mg/L
Station 140	5/22/2022	Iron	1.79	mg/L
Station 140	6/5/2022	Iron	2.95	mg/L
Station 140	6/19/2022	Iron	4.29	mg/L
Station 140	7/10/2022	Iron	7.54	mg/L
Station 140	7/17/2022	Iron	9.05	mg/L
Station 140	8/1/2022	Iron	8.91	mg/L
Station 140	8/14/2022	Iron	9.29	mg/L
Station 140	9/4/2022	Iron	10.6	mg/L
Station 140	9/26/2022	Iron	6.82	mg/L

Table Appendix D-5 Station 140 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/23/2023	Iron	1.91	mg/L
Station 140	5/28/2023	Iron	1.21	mg/L
Station 140	6/4/2023	Iron	1.24	mg/L
Station 140	6/18/2023	Iron	1.7	mg/L
Station 140	7/9/2023	Iron	2.9	mg/L
Station 140	7/16/2023	Iron	4.72	mg/L
Station 140	8/6/2023	Iron	6.59	mg/L
Station 140	8/20/2023	Iron	7.41	mg/L
Station 140	9/3/2023	Iron	6.99	mg/L
Station 140	9/18/2023	Iron	7.78	mg/L
Station 140	9/27/2023	Iron	8.01	mg/L
Station 140	5/21/2024	Iron	9.2	mg/L
Station 140	5/27/2024	Iron	1.2	mg/L
Station 140	6/3/2024	Iron	1.42	mg/L
Station 140	6/16/2024	Iron	2.8	mg/L
Station 140	7/1/2024	Iron	4.43	mg/L
Station 140	7/14/2024	Iron	7.03	mg/L
Station 140	8/4/2024	Iron	5.78	mg/L
Station 140	8/18/2024	Iron	6.02	mg/L
Station 140	9/8/2024	Iron	7.59	mg/L
Station 140	9/15/2024	Iron	7.1	mg/L
Station 140	9/23/2024	Iron	8.15	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-6 Station 12 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Iron	0.152	mg/L
Station 12	5/16/2016	Iron	0.082	mg/L
Station 12	6/6/2016	Iron	0.0355	mg/L
Station 12	6/20/2016	Iron	0.025	mg/L
Station 12	7/4/2016	Iron	0.0287	mg/L
Station 12	7/18/2016	Iron	0.047	mg/L
Station 12	8/1/2016	Iron	0.025	mg/L
Station 12	8/15/2016	Iron	0.0297	mg/L
Station 12	9/5/2016	Iron	0.021	mg/L
Station 12	9/19/2016	Iron	0.0198	mg/L
Station 12	10/3/2016	Iron	0.091	mg/L

Table Appendix D-6 Station 12 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	10/17/2016	Iron	0.036	mg/L
Station 12	5/14/2017	Iron	0.0503	mg/L
Station 12	5/22/2017	Iron	0.647	mg/L
Station 12	6/4/2017	Iron	0.534	mg/L
Station 12	6/19/2017	Iron	0.378	mg/L
Station 12	7/9/2017	Iron	0.035	mg/L
Station 12	7/17/2017	Iron	0.425	mg/L
Station 12	8/8/2017	Iron	0.246	mg/L
Station 12	8/21/2017	Iron	0.158	mg/L
Station 12	9/3/2017	Iron	0.0554	mg/L
Station 12	9/18/2017	Iron	0.096	mg/L
Station 12	9/25/2017	Iron	0.069	mg/L
Station 12	5/14/2018	Iron	1.38	mg/L
Station 12	5/21/2018	Iron	0.0885	mg/L
Station 12	6/4/2018	Iron	0.72	mg/L
Station 12	6/18/2018	Iron	0.198	mg/L
Station 12	7/8/2018	Iron	0.2	mg/L
Station 12	7/16/2018	Iron	0.0808	mg/L
Station 12	8/6/2018	Iron	0.057	mg/L
Station 12	8/20/2018	Iron	0.0816	mg/L
Station 12	9/9/2018	Iron	0.036	mg/L
Station 12	9/17/2018	Iron	0.067	mg/L
Station 12	9/25/2018	Iron	0.041	mg/L
Station 12	5/14/2019	Iron	0.092	mg/L
Station 12	5/19/2019	Iron	0.843	mg/L
Station 12	6/2/2019	Iron	0.657	mg/L
Station 12	6/9/2019	Iron	0.083	mg/L
Station 12	6/17/2019	Iron	<0.0115	mg/L
Station 12	6/30/2019	Iron	0.053	mg/L
Station 12	7/14/2019	Iron	0.0461	mg/L
Station 12	8/4/2019	Iron	0.135	mg/L
Station 12	8/18/2019	Iron	0.242	mg/L
Station 12	9/8/2019	Iron	0.79	mg/L
Station 12	9/16/2019	Iron	0.37	mg/L
Station 12	5/12/2020	Iron	0.874	mg/L
Station 12	5/18/2020	Iron	0.42	mg/L
Station 12	6/2/2020	Iron	0.578	mg/L
Station 12	6/14/2020	Iron	1.48	mg/L

Table Appendix D-6 Station 12 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	6/26/2020	Iron	0.621	mg/L
Station 12	7/5/2020	Iron	0.44	mg/L
Station 12	7/19/2020	Iron	0.733	mg/L
Station 12	8/3/2020	Iron	0.543	mg/L
Station 12	8/16/2020	Iron	0.529	mg/L
Station 12	8/28/2020	Iron	0.506	mg/L
Station 12	9/15/2020	Iron	0.76	mg/L
Station 12	9/20/2020	Iron	0.61	mg/L
Station 12	9/20/2020	Iron	*<0.007*	mg/L
Station 12	9/20/2020	Iron	0.562	mg/L
Station 12	9/27/2020	Iron	1.72	mg/L
Station 12	5/9/2021	Iron	0.183	mg/L
Station 12	5/24/2021	Iron	0.818	mg/L
Station 12	6/6/2021	Iron	0.497	mg/L
Station 12	6/20/2021	Iron	0.553	mg/L
Station 12	7/4/2021	Iron	0.559	mg/L
Station 12	7/25/2021	Iron	1.07	mg/L
Station 12	8/8/2021	Iron	0.891	mg/L
Station 12	8/15/2021	Iron	1.08	mg/L
Station 12	9/6/2021	Iron	1.41	mg/L
Station 12	9/19/2021	Iron	2.05	mg/L
Station 12	9/27/2021	Iron	1.74	mg/L
Station 12	5/9/2022	Iron	0.23	mg/L
Station 12	5/22/2022	Iron	2.54	mg/L
Station 12	6/5/2022	Iron	0.69	mg/L
Station 12	6/19/2022	Iron	0.584	mg/L
Station 12	7/10/2022	Iron	0.994	mg/L
Station 12	7/17/2022	Iron	1.16	mg/L
Station 12	8/1/2022	Iron	1.9	mg/L
Station 12	8/14/2022	Iron	1.49	mg/L
Station 12	9/4/2022	Iron	1.29	mg/L
Station 12	9/26/2022	Iron	1.07	mg/L
Station 12	5/23/2023	Iron	0.159	mg/L
Station 12	5/28/2023	Iron	1.02	mg/L
Station 12	6/4/2023	Iron	0.97	mg/L
Station 12	6/18/2023	Iron	0.68	mg/L
Station 12	7/9/2023	Iron	1.38	mg/L
Station 12	7/16/2023	Iron	1.23	mg/L

Table Appendix D-6 Station 12 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/6/2023	Iron	1.47	mg/L
Station 12	8/20/2023	Iron	1.6	mg/L
Station 12	9/3/2023	Iron	2.13	mg/L
Station 12	9/18/2023	Iron	1.3	mg/L
Station 12	9/26/2023	Iron	1.59	mg/L
Station 12	5/21/2024	Iron	0.203	mg/L
Station 12	5/27/2024	Iron	0.883	mg/L
Station 12	6/3/2024	Iron	0.835	mg/L
Station 12	6/16/2024	Iron	0.535	mg/L
Station 12	7/1/2024	Iron	0.774	mg/L
Station 12	7/14/2024	Iron	0.871	mg/L
Station 12	8/4/2024	Iron	1.57	mg/L
Station 12	8/18/2024	Iron	0.774	mg/L
Station 12	9/8/2024	Iron	1.61	mg/L
Station 12	9/15/2024	Iron	1.66	mg/L
Station 12	9/23/2024	Iron	2.11	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix D-7 Station 9 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	Iron	0.706	mg/L
Station 9	5/16/2016	Iron	1.8	mg/L
Station 9	6/2/2016	Iron	0.315	mg/L
Station 9	6/17/2016	Iron	0.27	mg/L
Station 9	7/1/2016	Iron	0.212	mg/L
Station 9	7/15/2016	Iron	0.252	mg/L
Station 9	8/5/2016	Iron	0.361	mg/L
Station 9	8/19/2016	Iron	0.481	mg/L
Station 9	9/8/2016	Iron	0.27	mg/L
Station 9	9/23/2016	Iron	1.3	mg/L
Station 9	10/6/2016	Iron	0.49	mg/L
Station 9	10/17/2016	Iron	0.516	mg/L
Station 9	5/5/2017	Iron	1.76	mg/L
Station 9	5/19/2017	Iron	1.43	mg/L
Station 9	6/8/2017	Iron	0.789	mg/L
Station 9	6/23/2017	Iron	0.691	mg/L
Station 9	7/7/2017	Iron	1.09	mg/L

Table Appendix D-7 Station 9 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/20/2017	Iron	0.251	mg/L
Station 9	8/4/2017	Iron	0.41	mg/L
Station 9	8/25/2017	Iron	0.408	mg/L
Station 9	9/8/2017	Iron	0.499	mg/L
Station 9	9/18/2017	Iron	0.467	mg/L
Station 9	10/5/2017	Iron	0.53	mg/L
Station 9	10/9/2017	Iron	0.653	mg/L
Station 9	5/23/2018	Iron	3.98	mg/L
Station 9	6/8/2018	Iron	1.53	mg/L
Station 9	6/29/2018	Iron	0.348	mg/L
Station 9	7/13/2018	Iron	0.564	mg/L
Station 9	7/27/2018	Iron	0.748	mg/L
Station 9	8/3/2018	Iron	0.68	mg/L
Station 9	8/18/2018	Iron	0.808	mg/L
Station 9	9/7/2018	Iron	0.462	mg/L
Station 9	9/28/2018	Iron	1.15	mg/L
Station 9	10/5/2018	Iron	1.22	mg/L
Station 9	10/12/2018	Iron	*<0.004*	mg/L
Station 9	10/12/2018	Iron	1.5	mg/L
Station 9	10/12/2018	Iron	1.52	mg/L
Station 9	5/25/2019	Iron	3.6	mg/L
Station 9	5/30/2019	Iron	3.77	mg/L
Station 9	6/7/2019	Iron	0.63	mg/L
Station 9	6/21/2019	Iron	0.496	mg/L
Station 9	7/12/2019	Iron	*0.013*	mg/L
Station 9	7/12/2019	Iron	0.899	mg/L
Station 9	7/12/2019	Iron	0.901	mg/L
Station 9	7/21/2019	Iron	0.819	mg/L
Station 9	8/3/2019	Iron	2.1	mg/L
Station 9	8/25/2019	Iron	2.62	mg/L
Station 9	9/1/2019	Iron	2.57	mg/L
Station 9	9/16/2019	Iron	4.59	mg/L
Station 9	10/7/2019	Iron	8.71	mg/L
Station 9	5/19/2020	Iron	3.18	mg/L
Station 9	5/29/2020	Iron	5.05	mg/L
Station 9	6/6/2020	Iron	3.19	mg/L
Station 9	6/19/2020	Iron	2.99	mg/L
Station 9	6/23/2020	Iron	7	mg/L

Table Appendix D-7 Station 9 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/4/2020	Iron	3.2	mg/L
Station 9	7/18/2020	Iron	4.96	mg/L
Station 9	8/3/2020	Iron	5.13	mg/L
Station 9	8/16/2020	Iron	6.73	mg/L
Station 9	9/5/2020	Iron	8.12	mg/L
Station 9	9/26/2020	Iron	7.99	mg/L
Station 9	10/3/2020	Iron	7.6	mg/L
Station 9	10/10/2020	Iron	4.85	mg/L
Station 9	5/16/2021	Iron	4.22	mg/L
Station 9	5/26/2021	Iron	3.38	mg/L
Station 9	6/5/2021	Iron	2.85	mg/L
Station 9	6/19/2021	Iron	1.61	mg/L
Station 9	6/20/2021	Iron	1.58	mg/L
Station 9	7/12/2021	Iron	2.16	mg/L
Station 9	7/26/2021	Iron	1.75	mg/L
Station 9	8/8/2021	Iron	3.33	mg/L
Station 9	8/15/2021	Iron	3.63	mg/L
Station 9	9/6/2021	Iron	4.04	mg/L
Station 9	9/19/2021	Iron	5.92	mg/L
Station 9	9/28/2021	Iron	7.98	mg/L
Station 9	10/2/2021	Iron	8.03	mg/L
Station 9	5/9/2022	Iron	4.36	mg/L
Station 9	5/22/2022	Iron	2.27	mg/L
Station 9	6/5/2022	Iron	8.99	mg/L
Station 9	6/19/2022	Iron	2.01	mg/L
Station 9	7/10/2022	Iron	3.62	mg/L
Station 9	7/17/2022	Iron	4.48	mg/L
Station 9	8/1/2022	Iron	2.71	mg/L
Station 9	8/14/2022	Iron	2.75	mg/L
Station 9	9/4/2022	Iron	3.65	mg/L
Station 9	9/20/2022	Iron	2.15	mg/L
Station 9	9/26/2022	Iron	2.44	mg/L
Station 9	10/1/2022	Iron	4.43	mg/L
Station 9	10/5/2022	Iron	3.8	mg/L
Station 9	5/23/2023	Iron	3.06	mg/L
Station 9	5/28/2023	Iron	4.2	mg/L
Station 9	6/4/2023	Iron	6.94	mg/L
Station 9	6/18/2023	Iron	1.65	mg/L

Table Appendix D-7 Station 9 Iron Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/9/2023	Iron	1.75	mg/L
Station 9	7/16/2023	Iron	2.49	mg/L
Station 9	8/6/2023	Iron	2.9	mg/L
Station 9	8/20/2023	Iron	2.96	mg/L
Station 9	9/3/2023	Iron	5.35	mg/L
Station 9	9/18/2023	Iron	3.7	mg/L
Station 9	5/21/2024	Iron	2.61	mg/L
Station 9	5/27/2024	Iron	3.71	mg/L
Station 9	6/3/2024	Iron	1.95	mg/L
Station 9	6/3/2024	Iron	0.007	mg/L
Station 9	6/3/2024	Iron	1.96	mg/L
Station 9	6/16/2024	Iron	1.26	mg/L
Station 9	7/1/2024	Iron	1.59	mg/L
Station 9	7/14/2024	Iron	2.05	mg/L
Station 9	8/4/2024	Iron	8.64	mg/L
Station 9	8/18/2024	Iron	1.7	mg/L
Station 9	9/8/2024	Iron	2.99	mg/L
Station 9	9/15/2024	Iron	3.4	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix E – pH Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix E-1 Outfall 001 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/2/2016	pH	9.89	pH Units
Outfall 001	5/9/2016	pH	9.94	pH Units
Outfall 001	5/16/2016	pH	9.77	pH Units
Outfall 001	5/23/2016	pH	9.96	pH Units
Outfall 001	6/1/2016	pH	10.24	pH Units
Outfall 001	6/6/2016	pH	10.11	pH Units
Outfall 001	6/13/2016	pH	10.02	pH Units
Outfall 001	6/20/2016	pH	10.06	pH Units
Outfall 001	6/27/2016	pH	9.76	pH Units
Outfall 001	7/1/2016	pH	10.06	pH Units
Outfall 001	7/4/2016	pH	10.05	pH Units
Outfall 001	7/11/2016	pH	10.01	pH Units
Outfall 001	7/18/2016	pH	10.08	pH Units
Outfall 001	7/25/2016	pH	10.01	pH Units
Outfall 001	8/1/2016	pH	9.96	pH Units
Outfall 001	8/8/2016	pH	7.74	pH Units
Outfall 001	8/15/2016	pH	9.96	pH Units
Outfall 001	8/22/2016	pH	10.00	pH Units
Outfall 001	8/30/2016	pH	9.92	pH Units
Outfall 001	9/5/2016	pH	10.03	pH Units
Outfall 001	9/12/2016	pH	9.52	pH Units
Outfall 001	9/19/2016	pH	9.94	pH Units
Outfall 001	5/8/2017	pH	9.53	pH Units
Outfall 001	5/14/2017	pH	10.25	pH Units
Outfall 001	5/29/2017	pH	10.03	pH Units
Outfall 001	5/29/2017	pH	9.84	pH Units
Outfall 001	6/4/2017	pH	9.36	pH Units
Outfall 001	6/12/2017	pH	9.76	pH Units
Outfall 001	6/19/2017	pH	9.98	pH Units
Outfall 001	6/26/2017	pH	9.84	pH Units
Outfall 001	7/3/2017	pH	9.89	pH Units
Outfall 001	7/9/2017	pH	9.91	pH Units
Outfall 001	7/17/2017	pH	9.88	pH Units
Outfall 001	7/25/2017	pH	10.08	pH Units
Outfall 001	8/1/2017	pH	9.82	pH Units
Outfall 001	8/8/2017	pH	9.75	pH Units
Outfall 001	8/15/2017	pH	9.94	pH Units
Outfall 001	8/21/2017	pH	9.58	pH Units

Table Appendix E-1 Outfall 001 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/30/2017	pH	9.41	pH Units
Outfall 001	9/3/2017	pH	9.80	pH Units
Outfall 001	9/11/2017	pH	9.84	pH Units
Outfall 001	9/18/2017	pH	9.71	pH Units
Outfall 001	5/14/2018	pH	10.25	pH Units
Outfall 001	5/21/2018	pH	10.01	pH Units
Outfall 001	5/28/2018	pH	10.12	pH Units
Outfall 001	6/4/2018	pH	10.15	pH Units
Outfall 001	6/12/2018	pH	10.11	pH Units
Outfall 001	6/12/2018	pH	10.11	pH Units
Outfall 001	6/18/2018	pH	10.00	pH Units
Outfall 001	6/25/2018	pH	9.99	pH Units
Outfall 001	7/1/2018	pH	9.77	pH Units
Outfall 001	7/8/2018	pH	9.95	pH Units
Outfall 001	7/16/2018	pH	10.26	pH Units
Outfall 001	7/23/2018	pH	10.18	pH Units
Outfall 001	7/30/2018	pH	10.13	pH Units
Outfall 001	8/6/2018	pH	9.89	pH Units
Outfall 001	8/13/2018	pH	9.99	pH Units
Outfall 001	8/20/2018	pH	10.10	pH Units
Outfall 001	8/27/2018	pH	9.75	pH Units
Outfall 001	9/3/2018	pH	9.84	pH Units
Outfall 001	9/9/2018	pH	10.18	pH Units
Outfall 001	9/17/2018	pH	9.92	pH Units
Outfall 001	5/14/2019	pH	9.99	pH Units
Outfall 001	5/18/2019	pH	9.90	pH Units
Outfall 001	5/19/2019	pH	10.14	pH Units
Outfall 001	5/27/2019	pH	10.25	pH Units
Outfall 001	6/2/2019	pH	10.34	pH Units
Outfall 001	6/9/2019	pH	10.04	pH Units
Outfall 001	6/17/2019	pH	10.14	pH Units
Outfall 001	6/25/2019	pH	9.90	pH Units
Outfall 001	6/30/2019	pH	9.91	pH Units
Outfall 001	7/7/2019	pH	9.95	pH Units
Outfall 001	7/14/2019	pH	9.95	pH Units
Outfall 001	7/22/2019	pH	9.32	pH Units
Outfall 001	7/29/2019	pH	9.64	pH Units
Outfall 001	8/4/2019	pH	9.99	pH Units

Table Appendix E-1 Outfall 001 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/11/2019	pH	9.86	pH Units
Outfall 001	8/16/2019	pH	9.84	pH Units
Outfall 001	8/18/2019	pH	9.86	pH Units
Outfall 001	8/28/2019	pH	8.77	pH Units
Outfall 001	9/7/2019	pH	7.32	pH Units
Outfall 001	9/8/2019	pH	9.78	pH Units
Outfall 001	5/12/2020	pH	9.65	pH Units
Outfall 001	5/18/2020	pH	9.49	pH Units
Outfall 001	5/25/2020	pH	6.26	pH Units
Outfall 001	6/2/2020	pH	9.53	pH Units
Outfall 001	6/7/2020	pH	9.28	pH Units
Outfall 001	6/15/2020	pH	9.71	pH Units
Outfall 001	6/21/2020	pH	8.90	pH Units
Outfall 001	6/28/2020	pH	9.87	pH Units
Outfall 001	7/5/2020	pH	9.66	pH Units
Outfall 001	8/28/2020	pH	8.63	pH Units
Outfall 001	8/30/2020	pH	8.92	pH Units
Outfall 001	9/8/2020	pH	8.15	pH Units
Outfall 001	9/14/2020	pH	8.17	pH Units
Outfall 001	9/20/2020	pH	8.49	pH Units
Outfall 001	5/16/2021	pH	9.99	pH Units
Outfall 001	5/18/2021	pH	9.7	pH Units
Outfall 001	5/24/2021	pH	9.7	pH Units
Outfall 001	5/30/2021	pH	9.38	pH Units
Outfall 001	6/6/2021	pH	9.68	pH Units
Outfall 001	6/13/2021	pH	9.71	pH Units
Outfall 001	6/20/2021	pH	9.67	pH Units
Outfall 001	6/27/2021	pH	9.88	pH Units
Outfall 001	7/4/2021	pH	6.46	pH Units
Outfall 001	7/12/2021	pH	9.74	pH Units
Outfall 001	7/18/2021	pH	9.57	pH Units
Outfall 001	7/25/2021	pH	9.54	pH Units
Outfall 001	8/2/2021	pH	9.65	pH Units
Outfall 001	8/8/2021	pH	9.54	pH Units
Outfall 001	8/15/2021	pH	9.7	pH Units
Outfall 001	8/23/2021	pH	9.56	pH Units
Outfall 001	8/31/2021	pH	9.68	pH Units
Outfall 001	9/7/2021	pH	9.54	pH Units

Table Appendix E-1 Outfall 001 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	9/8/2021	pH	9.59	pH Units
Outfall 001	9/12/2021	pH	9.52	pH Units
Outfall 001	9/20/2021	pH	9.68	pH Units
Outfall 001	5/9/2022	pH	9.71	pH Units
Outfall 001	5/15/2022	pH	9.67	pH Units
Outfall 001	5/22/2022	pH	9.83	pH Units
Outfall 001	5/30/2022	pH	9.88	pH Units
Outfall 001	6/5/2022	pH	9.74	pH Units
Outfall 001	6/12/2022	pH	9.71	pH Units
Outfall 001	6/19/2022	pH	9.62	pH Units
Outfall 001	6/26/2022	pH	9.58	pH Units
Outfall 001	7/4/2022	pH	9.8	pH Units
Outfall 001	7/11/2022	pH	9.46	pH Units
Outfall 001	7/17/2022	pH	9.67	pH Units
Outfall 001	7/24/2022	pH	9.9	pH Units
Outfall 001	8/1/2022	pH	9.58	pH Units
Outfall 001	8/7/2022	pH	9.6	pH Units
Outfall 001	8/14/2022	pH	9.77	pH Units
Outfall 001	8/21/2022	pH	9.64	pH Units
Outfall 001	8/28/2022	pH	9.64	pH Units
Outfall 001	9/4/2022	pH	9.76	pH Units
Outfall 001	9/11/2022	pH	9.03	pH Units
Outfall 001	9/20/2022	pH	9.75	pH Units
Outfall 001	5/23/2023	pH	9.56	pH Units
Outfall 001	5/28/2023	pH	9.59	pH Units
Outfall 001	6/4/2023	pH	9.08	pH Units
Outfall 001	6/11/2023	pH	8.98	pH Units
Outfall 001	6/18/2023	pH	8.43	pH Units
Outfall 001	6/26/2023	pH	9.47	pH Units
Outfall 001	7/7/2023	pH	9.78	pH Units
Outfall 001	7/9/2023	pH	9.86	pH Units
Outfall 001	7/16/2023	pH	9.86	pH Units
Outfall 001	7/23/2023	pH	9.68	pH Units
Outfall 001	7/30/2023	pH	9.92	pH Units
Outfall 001	8/6/2023	pH	8.39	pH Units
Outfall 001	8/15/2023	pH	9.82	pH Units
Outfall 001	8/20/2023	pH	9.8	pH Units
Outfall 001	8/27/2023	pH	9.8	pH Units

Table Appendix E-1 Outfall 001 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	9/3/2023	pH	9.7	pH Units
Outfall 001	9/10/2023	pH	9.44	pH Units
Outfall 001	9/18/2023	pH	9.66	pH Units
Outfall 001	5/21/2024	pH	9.39	pH Units
Outfall 001	5/27/2024	pH	9.07	pH Units
Outfall 001	6/3/2024	pH	8.95	pH Units
Outfall 001	6/9/2024	pH	9.51	pH Units
Outfall 001	6/17/2024	pH	7.42	pH Units
Outfall 001	6/23/2024	pH	9.77	pH Units
Outfall 001	7/7/2024	pH	8.12	pH Units
Outfall 001	7/14/2024	pH	9.25	pH Units
Outfall 001	7/21/2024	pH	9.78	pH Units
Outfall 001	7/28/2024	pH	9.51	pH Units
Outfall 001	8/4/2024	pH	9.3	pH Units
Outfall 001	8/11/2024	pH	9.22	pH Units
Outfall 001	8/18/2024	pH	8.32	pH Units
Outfall 001	8/25/2024	pH	8.86	pH Units
Outfall 001	9/1/2024	pH	9.47	pH Units
Outfall 001	9/8/2024	pH	9.02	pH Units
Outfall 001	9/15/2024	pH	8.6	pH Units

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	pH	7.87	pH Units
Station 151	5/9/2016	pH	7.42	pH Units
Station 151	5/16/2016	pH	6.12	pH Units
Station 151	5/23/2016	pH	7.87	pH Units
Station 151	6/1/2016	pH	8.17	pH Units
Station 151	6/6/2016	pH	7.86	pH Units
Station 151	6/13/2016	pH	7.81	pH Units
Station 151	6/20/2016	pH	7.82	pH Units
Station 151	6/27/2016	pH	7.82	pH Units
Station 151	7/1/2016	pH	7.94	pH Units
Station 151	7/4/2016	pH	7.74	pH Units
Station 151	7/11/2016	pH	7.79	pH Units

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/18/2016	pH	7.9	pH Units
Station 151	7/25/2016	pH	7.85	pH Units
Station 151	8/1/2016	pH	7.87	pH Units
Station 151	8/8/2016	pH	7.76	pH Units
Station 151	8/15/2016	pH	7.87	pH Units
Station 151	8/22/2016	pH	7.8	pH Units
Station 151	8/29/2016	pH	7.97	pH Units
Station 151	9/5/2016	pH	8.05	pH Units
Station 151	9/12/2016	pH	7.79	pH Units
Station 151	9/19/2016	pH	6.36	pH Units
Station 151	9/26/2016	pH	7.94	pH Units
Station 151	10/3/2016	pH	8	pH Units
Station 151	10/10/2016	pH	7.26	pH Units
Station 151	10/17/2016	pH	8.16	pH Units
Station 151	5/8/2017	pH	7.29	pH Units
Station 151	5/14/2017	pH	7.75	pH Units
Station 151	5/22/2017	pH	7.77	pH Units
Station 151	5/29/2017	pH	7.85	pH Units
Station 151	6/4/2017	pH	7.5	pH Units
Station 151	6/12/2017	pH	7.86	pH Units
Station 151	6/19/2017	pH	7.71	pH Units
Station 151	6/26/2017	pH	7.55	pH Units
Station 151	7/3/2017	pH	7.54	pH Units
Station 151	7/9/2017	pH	7.99	pH Units
Station 151	7/17/2017	pH	7.79	pH Units
Station 151	7/25/2017	pH	8.07	pH Units
Station 151	8/1/2017	pH	7.39	pH Units
Station 151	8/8/2017	pH	7.81	pH Units
Station 151	8/15/2017	pH	8.05	pH Units
Station 151	8/21/2017	pH	7.88	pH Units
Station 151	8/30/2017	pH	7.61	pH Units
Station 151	8/30/2017	pH	*7.61*	pH Units
Station 151	8/30/2017	pH	7.61	pH Units
Station 151	9/3/2017	pH	7.38	pH Units
Station 151	9/11/2017	pH	7.73	pH Units
Station 151	9/18/2017	pH	7.87	pH Units
Station 151	9/25/2017	pH	7.86	pH Units
Station 151	5/14/2018	pH	7.84	pH Units

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/21/2018	pH	7.38	pH Units
Station 151	5/28/2018	pH	6.52	pH Units
Station 151	6/4/2018	pH	7.6	pH Units
Station 151	6/11/2018	pH	7.32	pH Units
Station 151	6/18/2018	pH	7.97	pH Units
Station 151	6/25/2018	pH	7.71	pH Units
Station 151	7/1/2018	pH	7.72	pH Units
Station 151	7/8/2018	pH	8.04	pH Units
Station 151	7/16/2018	pH	8.39	pH Units
Station 151	7/23/2018	pH	7.96	pH Units
Station 151	7/30/2018	pH	7.98	pH Units
Station 151	8/6/2018	pH	7.84	pH Units
Station 151	8/13/2018	pH	7.99	pH Units
Station 151	8/13/2018	pH	7.99	pH Units
Station 151	8/20/2018	pH	7.96	pH Units
Station 151	8/27/2018	pH	7.16	pH Units
Station 151	9/3/2018	pH	7.64	pH Units
Station 151	9/9/2018	pH	7.83	pH Units
Station 151	9/17/2018	pH	7.88	pH Units
Station 151	9/25/2018	pH	7.95	pH Units
Station 151	5/14/2019	pH	7.21	pH Units
Station 151	5/27/2019	pH	7.43	pH Units
Station 151	6/2/2019	pH	7.61	pH Units
Station 151	6/9/2019	pH	7.77	pH Units
Station 151	6/17/2019	pH	7.92	pH Units
Station 151	6/24/2019	pH	7.7	pH Units
Station 151	6/30/2019	pH	7.79	pH Units
Station 151	7/7/2019	pH	8.02	pH Units
Station 151	7/14/2019	pH	8.06	pH Units
Station 151	7/21/2019	pH	7.73	pH Units
Station 151	7/28/2019	pH	7.81	pH Units
Station 151	8/4/2019	pH	7.8	pH Units
Station 151	8/11/2019	pH	8.05	pH Units
Station 151	8/16/2019	pH	7.53	pH Units
Station 151	8/18/2019	pH	7.48	pH Units
Station 151	8/28/2019	pH	7.81	pH Units
Station 151	9/6/2019	pH	7.63	pH Units
Station 151	9/8/2019	pH	7.55	pH Units

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/16/2019	pH	7.43	pH Units
Station 151	5/12/2020	pH	7.05	pH Units
Station 151	5/18/2020	pH	6.9	pH Units
Station 151	5/25/2020	pH	6.48	pH Units
Station 151	6/2/2020	pH	7.11	pH Units
Station 151	6/7/2020	pH	7.35	pH Units
Station 151	6/14/2020	pH	7.21	pH Units
Station 151	6/21/2020	pH	6.52	pH Units
Station 151	6/26/2020	pH	7.32	pH Units
Station 151	6/28/2020	pH	7.4	pH Units
Station 151	7/5/2020	pH	7.17	pH Units
Station 151	7/12/2020	pH	7.16	pH Units
Station 151	7/19/2020	pH	7.29	pH Units
Station 151	7/28/2020	pH	7.4	pH Units
Station 151	8/3/2020	pH	7.22	pH Units
Station 151	8/16/2020	pH	7.21	pH Units
Station 151	8/23/2020	pH	7.57	pH Units
Station 151	8/28/2020	pH	7.32	pH Units
Station 151	8/30/2020	pH	7.16	pH Units
Station 151	9/7/2020	pH	7.13	pH Units
Station 151	9/15/2020	pH	7.16	pH Units
Station 151	9/20/2020	pH	7	pH Units
Station 151	9/27/2020	pH	7.06	pH Units
Station 151	5/9/2021	pH	6.93	pH Units
Station 151	5/16/2021	pH	7.13	pH Units
Station 151	5/24/2021	pH	7.45	pH Units
Station 151	5/30/2021	pH	7.47	pH Units
Station 151	6/6/2021	pH	6.62	pH Units
Station 151	6/13/2021	pH	7.58	pH Units
Station 151	6/20/2021	pH	7.56	pH Units
Station 151	6/27/2021	pH	7.69	pH Units
Station 151	7/4/2021	pH	7.62	pH Units
Station 151	7/12/2021	pH	7.72	pH Units
Station 151	7/18/2021	pH	7.41	pH Units
Station 151	7/25/2021	pH	7.44	pH Units
Station 151	8/2/2021	pH	7.53	pH Units
Station 151	8/8/2021	pH	7.57	pH Units
Station 151	8/15/2021	pH	7.78	pH Units

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	8/23/2021	pH	7.42	pH Units
Station 151	8/31/2021	pH	7.51	pH Units
Station 151	9/6/2021	pH	7.79	pH Units
Station 151	9/12/2021	pH	7.5	pH Units
Station 151	9/19/2021	pH	7.64	pH Units
Station 151	9/27/2021	pH	7.7	pH Units
Station 151	5/9/2022	pH	7.33	pH Units
Station 151	5/15/2022	pH	7.38	pH Units
Station 151	5/22/2022	pH	7.46	pH Units
Station 151	5/30/2022	pH	7.35	pH Units
Station 151	6/5/2022	pH	7.57	pH Units
Station 151	6/12/2022	pH	7.65	pH Units
Station 151	6/19/2022	pH	7.7	pH Units
Station 151	6/26/2022	pH	7.47	pH Units
Station 151	7/4/2022	pH	7.83	pH Units
Station 151	7/10/2022	pH	7.62	pH Units
Station 151	7/17/2022	pH	7.66	pH Units
Station 151	7/24/2022	pH	7.81	pH Units
Station 151	8/1/2022	pH	7.76	pH Units
Station 151	8/7/2022	pH	7.87	pH Units
Station 151	8/14/2022	pH	7.78	pH Units
Station 151	8/21/2022	pH	7.49	pH Units
Station 151	8/28/2022	pH	7.75	pH Units
Station 151	9/4/2022	pH	7.55	pH Units
Station 151	9/11/2022	pH	7.41	pH Units
Station 151	9/20/2022	pH	7.42	pH Units
Station 151	9/26/2022	pH	7.72	pH Units
Station 151	5/23/2023	pH	7.12	pH Units
Station 151	5/28/2023	pH	7.3	pH Units
Station 151	6/4/2023	pH	7.72	pH Units
Station 151	6/11/2023	pH	7.17	pH Units
Station 151	6/18/2023	pH	7.19	pH Units
Station 151	6/26/2023	pH	7.53	pH Units
Station 151	7/7/2023	pH	7.7	pH Units
Station 151	7/9/2023	pH	7.66	pH Units
Station 151	7/16/2023	pH	7.75	pH Units
Station 151	7/23/2023	pH	7.56	pH Units
Station 151	7/30/2023	pH	7.69	pH Units

Table Appendix E-2 Station 151 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	8/6/2023	pH	7.8	pH Units
Station 151	8/15/2023	pH	7.76	pH Units
Station 151	8/20/2023	pH	7.76	pH Units
Station 151	8/27/2023	pH	7.56	pH Units
Station 151	9/3/2023	pH	7.62	pH Units
Station 151	9/10/2023	pH	7.41	pH Units
Station 151	9/18/2023	pH	7.47	pH Units
Station 151	9/26/2023	pH	7.07	pH Units
Station 151	5/21/2024	pH	7.22	pH Units
Station 151	5/27/2024	pH	7.6	pH Units
Station 151	6/3/2024	pH	7.36	pH Units
Station 151	6/9/2024	pH	7	pH Units
Station 151	6/16/2024	pH	7.54	pH Units
Station 151	6/23/2024	pH	7.68	pH Units
Station 151	7/1/2024	pH	7.76	pH Units
Station 151	7/7/2024	pH	7.11	pH Units
Station 151	7/14/2024	pH	7.84	pH Units
Station 151	7/21/2024	pH	7.57	pH Units
Station 151	7/28/2024	pH	6.99	pH Units
Station 151	8/4/2024	pH	7.22	pH Units
Station 151	8/11/2024	pH	7.63	pH Units
Station 151	8/18/2024	pH	7.37	pH Units
Station 151	8/25/2024	pH	7.88	pH Units
Station 151	9/1/2024	pH	7.1	pH Units
Station 151	9/8/2024	pH	7.39	pH Units
Station 151	9/15/2024	pH	7.4	pH Units
Station 151	9/23/2024	pH	7.84	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	pH	8.15	pH Units
Station 150	5/9/2016	pH	7.19	pH Units
Station 150	5/16/2016	pH	7.54	pH Units
Station 150	5/23/2016	pH	7.82	pH Units
Station 150	6/1/2016	pH	7.93	pH Units
Station 150	6/6/2016	pH	7.92	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	6/13/2016	pH	7.98	pH Units
Station 150	6/20/2016	pH	8.04	pH Units
Station 150	6/27/2016	pH	7.99	pH Units
Station 150	7/4/2016	pH	8.09	pH Units
Station 150	7/4/2016	pH	8.09	pH Units
Station 150	7/11/2016	pH	7.98	pH Units
Station 150	7/18/2016	pH	8.01	pH Units
Station 150	7/25/2016	pH	8.03	pH Units
Station 150	8/1/2016	pH	7.97	pH Units
Station 150	8/8/2016	pH	8.10	pH Units
Station 150	8/15/2016	pH	8.01	pH Units
Station 150	8/22/2016	pH	7.80	pH Units
Station 150	8/29/2016	pH	7.92	pH Units
Station 150	9/5/2016	pH	8.04	pH Units
Station 150	9/12/2016	pH	7.82	pH Units
Station 150	9/19/2016	pH	7.76	pH Units
Station 150	9/26/2016	pH	7.98	pH Units
Station 150	10/3/2016	pH	8.02	pH Units
Station 150	10/10/2016	pH	5.21	pH Units
Station 150	10/17/2016	pH	7.84	pH Units
Station 150	5/8/2017	pH	7.14	pH Units
Station 150	5/14/2017	pH	7.69	pH Units
Station 150	5/22/2017	pH	7.87	pH Units
Station 150	5/31/2017	pH	7.87	pH Units
Station 150	6/4/2017	pH	7.52	pH Units
Station 150	6/12/2017	pH	6.72	pH Units
Station 150	6/19/2017	pH	7.89	pH Units
Station 150	6/26/2017	pH	7.72	pH Units
Station 150	7/3/2017	pH	7.74	pH Units
Station 150	7/9/2017	pH	7.79	pH Units
Station 150	7/17/2017	pH	7.89	pH Units
Station 150	7/25/2017	pH	7.87	pH Units
Station 150	8/1/2017	pH	7.10	pH Units
Station 150	8/8/2017	pH	7.89	pH Units
Station 150	8/15/2017	pH	7.58	pH Units
Station 150	8/21/2017	pH	7.39	pH Units
Station 150	8/30/2017	pH	7.91	pH Units
Station 150	9/3/2017	pH	7.84	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	9/11/2017	pH	7.97	pH Units
Station 150	9/18/2017	pH	7.93	pH Units
Station 150	9/25/2017	pH	7.97	pH Units
Station 150	10/5/2017	pH	7.89	pH Units
Station 150	5/14/2018	pH	7.41	pH Units
Station 150	5/21/2018	pH	7.20	pH Units
Station 150	5/28/2018	pH	7.60	pH Units
Station 150	6/4/2018	pH	7.70	pH Units
Station 150	6/11/2018	pH	7.77	pH Units
Station 150	6/18/2018	pH	7.86	pH Units
Station 150	6/25/2018	pH	7.15	pH Units
Station 150	7/1/2018	pH	7.95	pH Units
Station 150	7/8/2018	pH	7.84	pH Units
Station 150	7/16/2018	pH	7.96	pH Units
Station 150	7/23/2018	pH	7.78	pH Units
Station 150	7/30/2018	pH	7.87	pH Units
Station 150	8/6/2018	pH	7.78	pH Units
Station 150	8/13/2018	pH	8.09	pH Units
Station 150	8/20/2018	pH	7.86	pH Units
Station 150	8/27/2018	pH	7.86	pH Units
Station 150	9/3/2018	pH	7.74	pH Units
Station 150	9/9/2018	pH	8.04	pH Units
Station 150	9/17/2018	pH	7.98	pH Units
Station 150	9/25/2018	pH	8.01	pH Units
Station 150	5/14/2019	pH	7.36	pH Units
Station 150	5/27/2019	pH	7.51	pH Units
Station 150	6/2/2019	pH	7.59	pH Units
Station 150	6/9/2019	pH	7.82	pH Units
Station 150	6/17/2019	pH	7.79	pH Units
Station 150	6/24/2019	pH	7.64	pH Units
Station 150	6/30/2019	pH	7.90	pH Units
Station 150	7/7/2019	pH	7.88	pH Units
Station 150	7/14/2019	pH	8.02	pH Units
Station 150	7/21/2019	pH	7.88	pH Units
Station 150	7/28/2019	pH	7.15	pH Units
Station 150	8/4/2019	pH	7.70	pH Units
Station 150	8/11/2019	pH	7.85	pH Units
Station 150	8/16/2019	pH	7.46	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/18/2019	pH	6.85	pH Units
Station 150	8/28/2019	pH	7.60	pH Units
Station 150	9/6/2019	pH	7.38	pH Units
Station 150	9/8/2019	pH	7.12	pH Units
Station 150	9/16/2019	pH	7.32	pH Units
Station 150	5/12/2020	pH	7.05	pH Units
Station 150	5/19/2020	pH	7.51	pH Units
Station 150	5/26/2020	pH	5.62	pH Units
Station 150	6/3/2020	pH	7.46	pH Units
Station 150	6/7/2020	pH	7.03	pH Units
Station 150	6/14/2020	pH	7.51	pH Units
Station 150	6/21/2020	pH	7.31	pH Units
Station 150	6/23/2020	pH	6.86	pH Units
Station 150	6/26/2020	pH	7.36	pH Units
Station 150	6/26/2020	pH	7.36	pH Units
Station 150	6/28/2020	pH	7.44	pH Units
Station 150	7/3/2020	pH	7.41	pH Units
Station 150	7/5/2020	pH	7.40	pH Units
Station 150	7/10/2020	pH	7.41	pH Units
Station 150	7/12/2020	pH	7.28	pH Units
Station 150	7/18/2020	pH	7.36	pH Units
Station 150	7/19/2020	pH	7.35	pH Units
Station 150	7/24/2020	pH	6.55	pH Units
Station 150	7/28/2020	pH	7.73	pH Units
Station 150	7/31/2020	pH	6.83	pH Units
Station 150	8/3/2020	pH	7.41	pH Units
Station 150	8/9/2020	pH	7.15	pH Units
Station 150	8/16/2020	pH	7.54	pH Units
Station 150	8/16/2020	pH	7.54	pH Units
Station 150	8/21/2020	pH	6.92	pH Units
Station 150	8/23/2020	pH	7.43	pH Units
Station 150	8/28/2020	pH	7.27	pH Units
Station 150	8/29/2020	pH	7.47	pH Units
Station 150	8/30/2020	pH	7.40	pH Units
Station 150	9/4/2020	pH	7.30	pH Units
Station 150	9/7/2020	pH	7.26	pH Units
Station 150	9/11/2020	pH	7.35	pH Units
Station 150	9/15/2020	pH	7.42	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	9/18/2020	pH	7.51	pH Units
Station 150	9/20/2020	pH	7.71	pH Units
Station 150	9/25/2020	pH	7.42	pH Units
Station 150	9/27/2020	pH	7.16	pH Units
Station 150	10/2/2020	pH	7.22	pH Units
Station 150	10/9/2020	pH	7.32	pH Units
Station 150	5/7/2021	pH	7.43	pH Units
Station 150	5/9/2021	pH	7.11	pH Units
Station 150	5/14/2021	pH	7.1	pH Units
Station 150	5/16/2021	pH	6.71	pH Units
Station 150	5/23/2021	pH	7.18	pH Units
Station 150	5/24/2021	pH	7.39	pH Units
Station 150	5/28/2021	pH	6.95	pH Units
Station 150	5/30/2021	pH	6.3	pH Units
Station 150	6/4/2021	pH	7.44	pH Units
Station 150	6/6/2021	pH	6.18	pH Units
Station 150	6/11/2021	pH	7.37	pH Units
Station 150	6/13/2021	pH	7.5	pH Units
Station 150	6/18/2021	pH	7.42	pH Units
Station 150	6/20/2021	pH	7.44	pH Units
Station 150	6/25/2021	pH	7.46	pH Units
Station 150	6/27/2021	pH	7.55	pH Units
Station 150	7/3/2021	pH	7.53	pH Units
Station 150	7/4/2021	pH	7.47	pH Units
Station 150	7/9/2021	pH	7.62	pH Units
Station 150	7/12/2021	pH	7.57	pH Units
Station 150	7/18/2021	pH	7.66	pH Units
Station 150	7/18/2021	pH		pH Units
Station 150	7/23/2021	pH	7.54	pH Units
Station 150	7/25/2021	pH	7.58	pH Units
Station 150	8/2/2021	pH	7.63	pH Units
Station 150	8/6/2021	pH	7.6	pH Units
Station 150	8/8/2021	pH	7.96	pH Units
Station 150	8/15/2021	pH	7.65	pH Units
Station 150	8/16/2021	pH	7.55	pH Units
Station 150	8/20/2021	pH	7.2	pH Units
Station 150	8/23/2021	pH	7.48	pH Units
Station 150	8/27/2021	pH	7.36	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/31/2021	pH	7.5	pH Units
Station 150	9/3/2021	pH	7.53	pH Units
Station 150	9/6/2021	pH	7.4	pH Units
Station 150	9/11/2021	pH	7.5	pH Units
Station 150	9/12/2021	pH	7.59	pH Units
Station 150	9/17/2021	pH	7.49	pH Units
Station 150	9/19/2021	pH	7.53	pH Units
Station 150	9/24/2021	pH	7.64	pH Units
Station 150	9/28/2021	pH	7.63	pH Units
Station 150	10/1/2021	pH	7.3	pH Units
Station 150	5/9/2022	pH	7.5	pH Units
Station 150	5/15/2022	pH	7.32	pH Units
Station 150	5/20/2022	pH	7.08	pH Units
Station 150	5/22/2022	pH	7.27	pH Units
Station 150	5/30/2022	pH	7.24	pH Units
Station 150	6/3/2022	pH	7.47	pH Units
Station 150	6/5/2022	pH	7.31	pH Units
Station 150	6/10/2022	pH	7.22	pH Units
Station 150	6/12/2022	pH	7.59	pH Units
Station 150	6/17/2022	pH	7.39	pH Units
Station 150	6/19/2022	pH	7.49	pH Units
Station 150	6/25/2022	pH	7.47	pH Units
Station 150	6/26/2022	pH	7.52	pH Units
Station 150	7/4/2022	pH	7.68	pH Units
Station 150	7/10/2022	pH	7.6	pH Units
Station 150	7/15/2022	pH	7.64	pH Units
Station 150	7/17/2022	pH	7.61	pH Units
Station 150	7/22/2022	pH	7.83	pH Units
Station 150	7/24/2022	pH	7.81	pH Units
Station 150	7/29/2022	pH	7.52	pH Units
Station 150	8/1/2022	pH	7.86	pH Units
Station 150	8/6/2022	pH	7.73	pH Units
Station 150	8/7/2022	pH	7.85	pH Units
Station 150	8/13/2022	pH	7.84	pH Units
Station 150	8/14/2022	pH	7.82	pH Units
Station 150	8/21/2022	pH	7.52	pH Units
Station 150	8/28/2022	pH	7.67	pH Units
Station 150	9/2/2022	pH	7.73	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	9/4/2022	pH	7.62	pH Units
Station 150	9/9/2022	pH	7.68	pH Units
Station 150	9/11/2022	pH	7.67	pH Units
Station 150	9/20/2022	pH	7.54	pH Units
Station 150	9/26/2022	pH	7.73	pH Units
Station 150	10/1/2022	pH	7.64	pH Units
Station 150	5/23/2023	pH	9.05	pH Units
Station 150	5/28/2023	pH	8.32	pH Units
Station 150	6/4/2023	pH	7.47	pH Units
Station 150	6/9/2023	pH	6.9	pH Units
Station 150	6/11/2023	pH	7.23	pH Units
Station 150	6/18/2023	pH	7.07	pH Units
Station 150	6/26/2023	pH	7.91	pH Units
Station 150	7/2/2023	pH	8.75	pH Units
Station 150	7/7/2023	pH	7.54	pH Units
Station 150	7/9/2023	pH	7.44	pH Units
Station 150	7/16/2023	pH	7.46	pH Units
Station 150	7/21/2023	pH	7.69	pH Units
Station 150	7/23/2023	pH	7.72	pH Units
Station 150	7/30/2023	pH	6.69	pH Units
Station 150	8/5/2023	pH	6.81	pH Units
Station 150	8/6/2023	pH	7.78	pH Units
Station 150	8/11/2023	pH	7.09	pH Units
Station 150	8/15/2023	pH	7.75	pH Units
Station 150	8/20/2023	pH	7.51	pH Units
Station 150	8/25/2023	pH	6.69	pH Units
Station 150	8/27/2023	pH	7.49	pH Units
Station 150	9/3/2023	pH	7.21	pH Units
Station 150	9/8/2023	pH	7.75	pH Units
Station 150	9/10/2023	pH	7.6	pH Units
Station 150	9/18/2023	pH	7.68	pH Units
Station 150	9/26/2023	pH	7.7	pH Units
Station 150	5/21/2024	pH	7.54	pH Units
Station 150	5/23/2024	pH	7.08	pH Units
Station 150	5/27/2024	pH	7.46	pH Units
Station 150	5/31/2024	pH	7.19	pH Units
Station 150	6/3/2024	pH	7.48	pH Units
Station 150	6/7/2024	pH	7.06	pH Units

Table Appendix E-3 Station 150 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	6/9/2024	pH	6.66	pH Units
Station 150	6/14/2024	pH	7.2	pH Units
Station 150	6/16/2024	pH	7.59	pH Units
Station 150	6/23/2024	pH	7.73	pH Units
Station 150	6/28/2024	pH	6.9	pH Units
Station 150	7/1/2024	pH	7.34	pH Units
Station 150	7/7/2024	pH	7.18	pH Units
Station 150	7/14/2024	pH	7.7	pH Units
Station 150	7/17/2024	pH	7.45	pH Units
Station 150	7/21/2024	pH	7.47	pH Units
Station 150	7/28/2024	pH	7.16	pH Units
Station 150	8/4/2024	pH	7.75	pH Units
Station 150	8/10/2024	pH	6.27	pH Units
Station 150	8/11/2024	pH	7.36	pH Units
Station 150	8/18/2024	pH	7.72	pH Units
Station 150	8/25/2024	pH	6.25	pH Units
Station 150	8/25/2024	pH	6.25	pH Units
Station 150	9/1/2024	pH	7.46	pH Units
Station 150	9/8/2024	pH	7.49	pH Units
Station 150	9/13/2024	pH	6.16	pH Units
Station 150	9/15/2024	pH	7.59	pH Units
Station 150	9/23/2024	pH	7.68	pH Units
Station 150	9/27/2024	pH	7.73	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	pH	8.43	pH Units
Station 160	5/9/2016	pH	7.31	pH Units
Station 160	5/16/2016	pH	7.22	pH Units
Station 160	5/23/2016	pH	7.82	pH Units
Station 160	6/1/2016	pH	8.03	pH Units
Station 160	6/6/2016	pH	8.04	pH Units
Station 160	6/13/2016	pH	8.09	pH Units
Station 160	6/20/2016	pH	8.09	pH Units
Station 160	6/27/2016	pH	8.03	pH Units
Station 160	7/1/2016	pH	8.12	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/4/2016	pH	8.19	pH Units
Station 160	7/11/2016	pH	8.14	pH Units
Station 160	7/18/2016	pH	8.05	pH Units
Station 160	7/25/2016	pH	8.10	pH Units
Station 160	8/1/2016	pH	8.12	pH Units
Station 160	8/8/2016	pH	8.32	pH Units
Station 160	8/15/2016	pH	8.19	pH Units
Station 160	8/22/2016	pH	7.90	pH Units
Station 160	8/29/2016	pH	8.05	pH Units
Station 160	9/5/2016	pH	8.15	pH Units
Station 160	9/12/2016	pH	7.32	pH Units
Station 160	9/19/2016	pH	8.04	pH Units
Station 160	9/26/2016	pH	4.93	pH Units
Station 160	10/3/2016	pH	8.08	pH Units
Station 160	10/10/2016	pH	6.30	pH Units
Station 160	10/17/2016	pH	7.97	pH Units
Station 160	5/8/2017	pH	7.04	pH Units
Station 160	5/14/2017	pH	7.67	pH Units
Station 160	5/22/2017	pH	8.05	pH Units
Station 160	5/29/2017	pH	7.85	pH Units
Station 160	6/4/2017	pH	7.68	pH Units
Station 160	6/12/2017	pH	7.73	pH Units
Station 160	6/19/2017	pH	8.08	pH Units
Station 160	6/26/2017	pH	7.77	pH Units
Station 160	7/3/2017	pH	7.89	pH Units
Station 160	7/9/2017	pH	7.84	pH Units
Station 160	7/17/2017	pH	7.98	pH Units
Station 160	7/25/2017	pH	7.88	pH Units
Station 160	8/1/2017	pH	6.81	pH Units
Station 160	8/8/2017	pH	7.35	pH Units
Station 160	8/15/2017	pH	7.49	pH Units
Station 160	8/21/2017	pH	7.98	pH Units
Station 160	8/30/2017	pH	8.16	pH Units
Station 160	9/3/2017	pH	7.90	pH Units
Station 160	9/11/2017	pH	8.09	pH Units
Station 160	9/18/2017	pH	8.01	pH Units
Station 160	9/25/2017	pH	8.09	pH Units
Station 160	5/14/2018	pH	7.81	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/21/2018	pH	7.32	pH Units
Station 160	5/28/2018	pH	7.66	pH Units
Station 160	6/4/2018	pH	7.81	pH Units
Station 160	6/11/2018	pH	7.95	pH Units
Station 160	6/18/2018	pH	7.79	pH Units
Station 160	6/25/2018	pH	7.57	pH Units
Station 160	7/1/2018	pH	7.71	pH Units
Station 160	7/8/2018	pH	7.45	pH Units
Station 160	7/16/2018	pH	7.93	pH Units
Station 160	7/23/2018	pH	7.57	pH Units
Station 160	7/30/2018	pH	7.74	pH Units
Station 160	8/6/2018	pH	7.55	pH Units
Station 160	8/13/2018	pH	7.86	pH Units
Station 160	8/13/2018	pH	8.18	pH Units
Station 160	8/20/2018	pH	8.07	pH Units
Station 160	8/27/2018	pH	7.88	pH Units
Station 160	9/3/2018	pH	7.27	pH Units
Station 160	9/9/2018	pH	8.20	pH Units
Station 160	9/17/2018	pH	8.02	pH Units
Station 160	9/25/2018	pH	8.16	pH Units
Station 160	5/14/2019	pH	7.44	pH Units
Station 160	5/27/2019	pH	7.01	pH Units
Station 160	6/2/2019	pH	7.19	pH Units
Station 160	6/9/2019	pH	7.93	pH Units
Station 160	6/17/2019	pH	7.91	pH Units
Station 160	6/24/2019	pH	7.67	pH Units
Station 160	6/30/2019	pH	7.96	pH Units
Station 160	7/7/2019	pH	7.99	pH Units
Station 160	7/14/2019	pH	8.10	pH Units
Station 160	7/21/2019	pH	7.96	pH Units
Station 160	7/28/2019	pH	7.69	pH Units
Station 160	8/4/2019	pH	7.82	pH Units
Station 160	8/11/2019	pH	7.94	pH Units
Station 160	8/16/2019	pH	7.80	pH Units
Station 160	8/18/2019	pH	7.76	pH Units
Station 160	8/28/2019	pH	7.73	pH Units
Station 160	9/6/2019	pH	7.77	pH Units
Station 160	9/8/2019	pH	7.38	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/16/2019	pH	7.73	pH Units
Station 160	5/12/2020	pH	7.29	pH Units
Station 160	5/19/2020	pH	7.38	pH Units
Station 160	5/26/2020	pH	6.69	pH Units
Station 160	6/3/2020	pH	7.44	pH Units
Station 160	6/7/2020	pH	7.31	pH Units
Station 160	6/14/2020	pH	7.61	pH Units
Station 160	6/21/2020	pH	7.46	pH Units
Station 160	6/23/2020	pH	7.56	pH Units
Station 160	6/26/2020	pH	7.70	pH Units
Station 160	6/26/2020	pH	7.70	pH Units
Station 160	6/28/2020	pH	7.75	pH Units
Station 160	7/3/2020	pH	7.61	pH Units
Station 160	7/5/2020	pH	7.78	pH Units
Station 160	7/10/2020	pH	7.80	pH Units
Station 160	7/12/2020	pH	7.65	pH Units
Station 160	7/18/2020	pH	7.69	pH Units
Station 160	7/19/2020	pH	7.77	pH Units
Station 160	7/25/2020	pH	7.80	pH Units
Station 160	7/28/2020	pH	7.32	pH Units
Station 160	7/31/2020	pH	7.64	pH Units
Station 160	8/3/2020	pH	7.84	pH Units
Station 160	8/9/2020	pH	7.83	pH Units
Station 160	8/16/2020	pH	7.89	pH Units
Station 160	8/16/2020	pH	7.89	pH Units
Station 160	8/21/2020	pH	7.50	pH Units
Station 160	8/23/2020	pH	7.77	pH Units
Station 160	8/28/2020	pH	7.73	pH Units
Station 160	8/29/2020	pH	7.86	pH Units
Station 160	8/30/2020	pH	7.80	pH Units
Station 160	9/4/2020	pH	7.60	pH Units
Station 160	9/7/2020	pH	7.54	pH Units
Station 160	9/11/2020	pH	7.79	pH Units
Station 160	9/15/2020	pH	7.73	pH Units
Station 160	9/18/2020	pH	7.95	pH Units
Station 160	9/20/2020	pH	7.76	pH Units
Station 160	9/25/2020	pH	7.70	pH Units
Station 160	9/27/2020	pH	7.44	pH Units

Table Appendix E-4
Station 160 pH Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	10/2/2020	pH	7.57	pH Units
Station 160	10/9/2020	pH	7.61	pH Units
Station 160	5/7/2021	pH	7.75	pH Units
Station 160	5/9/2021	pH	7.38	pH Units
Station 160	5/14/2021	pH	7.28	pH Units
Station 160	5/16/2021	pH	7.24	pH Units
Station 160	5/23/2021	pH	7.49	pH Units
Station 160	5/24/2021	pH	7.63	pH Units
Station 160	5/28/2021	pH	6.87	pH Units
Station 160	5/30/2021	pH	6.61	pH Units
Station 160	6/4/2021	pH	7.75	pH Units
Station 160	6/6/2021	pH	5.86	pH Units
Station 160	6/11/2021	pH	7.64	pH Units
Station 160	6/13/2021	pH	7.81	pH Units
Station 160	6/18/2021	pH	7.76	pH Units
Station 160	6/20/2021	pH	7.77	pH Units
Station 160	6/25/2021	pH	7.75	pH Units
Station 160	6/27/2021	pH	7.88	pH Units
Station 160	7/3/2021	pH	7.82	pH Units
Station 160	7/4/2021	pH	7.78	pH Units
Station 160	7/9/2021	pH	7.89	pH Units
Station 160	7/12/2021	pH	7.84	pH Units
Station 160	7/18/2021	pH	7.93	pH Units
Station 160	7/18/2021	pH		pH Units
Station 160	7/23/2021	pH	7.87	pH Units
Station 160	7/25/2021	pH	7.81	pH Units
Station 160	8/2/2021	pH	7.89	pH Units
Station 160	8/6/2021	pH	7.93	pH Units
Station 160	8/8/2021	pH	7.96	pH Units
Station 160	8/15/2021	pH	8.01	pH Units
Station 160	8/16/2021	pH	7.9	pH Units
Station 160	8/20/2021	pH	7.61	pH Units
Station 160	8/23/2021	pH	7.63	pH Units
Station 160	8/27/2021	pH	7.7	pH Units
Station 160	8/31/2021	pH	7.85	pH Units
Station 160	9/3/2021	pH	7.89	pH Units
Station 160	9/6/2021	pH	7.78	pH Units
Station 160	9/11/2021	pH	7.8	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/12/2021	pH	7.75	pH Units
Station 160	9/17/2021	pH	7.59	pH Units
Station 160	9/19/2021	pH	7.79	pH Units
Station 160	9/24/2021	pH	7.98	pH Units
Station 160	9/28/2021	pH	8.09	pH Units
Station 160	10/1/2021	pH	7.96	pH Units
Station 160	10/8/2021	pH	7.74	pH Units
Station 160	5/9/2022	pH	7.76	pH Units
Station 160	5/15/2022	pH	7.53	pH Units
Station 160	5/20/2022	pH	7.42	pH Units
Station 160	5/22/2022	pH	7.59	pH Units
Station 160	5/30/2022	pH	7.52	pH Units
Station 160	6/3/2022	pH	7.48	pH Units
Station 160	6/5/2022	pH	7.51	pH Units
Station 160	6/10/2022	pH	7.37	pH Units
Station 160	6/12/2022	pH	7.91	pH Units
Station 160	6/17/2022	pH	7.73	pH Units
Station 160	6/19/2022	pH	7.59	pH Units
Station 160	6/25/2022	pH	7.84	pH Units
Station 160	6/26/2022	pH	7.84	pH Units
Station 160	7/4/2022	pH	8.1	pH Units
Station 160	7/10/2022	pH	7.89	pH Units
Station 160	7/15/2022	pH	7.99	pH Units
Station 160	7/17/2022	pH	7.98	pH Units
Station 160	7/22/2022	pH	8.1	pH Units
Station 160	7/24/2022	pH	8.07	pH Units
Station 160	7/29/2022	pH	8	pH Units
Station 160	8/1/2022	pH	8.12	pH Units
Station 160	8/6/2022	pH	7.59	pH Units
Station 160	8/7/2022	pH	8.14	pH Units
Station 160	8/13/2022	pH	8.14	pH Units
Station 160	8/14/2022	pH	8.13	pH Units
Station 160	8/21/2022	pH	7.83	pH Units
Station 160	8/28/2022	pH	8	pH Units
Station 160	9/2/2022	pH	8.12	pH Units
Station 160	9/4/2022	pH	7.91	pH Units
Station 160	9/9/2022	pH	8.03	pH Units
Station 160	9/11/2022	pH	7.98	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/20/2022	pH	7.53	pH Units
Station 160	9/26/2022	pH	8.07	pH Units
Station 160	10/1/2022	pH	7.84	pH Units
Station 160	5/23/2023	pH	7.42	pH Units
Station 160	5/28/2023	pH	7.82	pH Units
Station 160	6/4/2023	pH	7.55	pH Units
Station 160	6/9/2023	pH	6.46	pH Units
Station 160	6/11/2023	pH	7.2	pH Units
Station 160	6/18/2023	pH	6.65	pH Units
Station 160	6/26/2023	pH	7.82	pH Units
Station 160	7/2/2023	pH	9.37	pH Units
Station 160	7/7/2023	pH	7.85	pH Units
Station 160	7/9/2023	pH	7.85	pH Units
Station 160	7/16/2023	pH	7.83	pH Units
Station 160	7/21/2023	pH	7.94	pH Units
Station 160	7/23/2023	pH	7.95	pH Units
Station 160	7/30/2023	pH	7.82	pH Units
Station 160	8/5/2023	pH	7.8	pH Units
Station 160	8/6/2023	pH	8.03	pH Units
Station 160	8/11/2023	pH	7.74	pH Units
Station 160	8/15/2023	pH	8.04	pH Units
Station 160	8/20/2023	pH	7.82	pH Units
Station 160	8/25/2023	pH	7.59	pH Units
Station 160	8/27/2023	pH	7.82	pH Units
Station 160	9/3/2023	pH	7.7	pH Units
Station 160	9/8/2023	pH	7.93	pH Units
Station 160	9/10/2023	pH	7.84	pH Units
Station 160	9/18/2023	pH	7.73	pH Units
Station 160	9/26/2023	pH	8.04	pH Units
Station 160	5/21/2024	pH	7.77	pH Units
Station 160	5/23/2024	pH	7.16	pH Units
Station 160	5/27/2024	pH	7.56	pH Units
Station 160	5/31/2024	pH	7.34	pH Units
Station 160	6/3/2024	pH	7.51	pH Units
Station 160	6/7/2024	pH	7.03	pH Units
Station 160	6/9/2024	pH	6.65	pH Units
Station 160	6/14/2024	pH	7.2	pH Units
Station 160	6/16/2024	pH	7.7	pH Units

Table Appendix E-4 Station 160 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/23/2024	pH	7.88	pH Units
Station 160	6/28/2024	pH	7.48	pH Units
Station 160	7/1/2024	pH	7.73	pH Units
Station 160	7/7/2024	pH	7.19	pH Units
Station 160	7/14/2024	pH	6.86	pH Units
Station 160	7/17/2024	pH	7.71	pH Units
Station 160	7/21/2024	pH	7.78	pH Units
Station 160	7/28/2024	pH	7.37	pH Units
Station 160	8/4/2024	pH	7.93	pH Units
Station 160	8/10/2024	pH	6.8	pH Units
Station 160	8/11/2024	pH	7.49	pH Units
Station 160	8/18/2024	pH	7.78	pH Units
Station 160	8/25/2024	pH	6.54	pH Units
Station 160	8/25/2024	pH	6.54	pH Units
Station 160	9/1/2024	pH	7.54	pH Units
Station 160	9/8/2024	pH	7.62	pH Units
Station 160	9/13/2024	pH	6.68	pH Units
Station 160	9/15/2024	pH	7.61	pH Units
Station 160	9/23/2024	pH	7.99	pH Units
Station 160	9/27/2024	pH	8.04	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-5 Station 140 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	pH	8.25	pH Units
Station 140	5/16/2016	pH	6.64	pH Units
Station 140	6/6/2016	pH	7.78	pH Units
Station 140	6/20/2016	pH	7.65	pH Units
Station 140	7/4/2016	pH	7.84	pH Units
Station 140	7/18/2016	pH	7.8	pH Units
Station 140	8/1/2016	pH	7.81	pH Units
Station 140	8/15/2016	pH	7.48	pH Units
Station 140	8/15/2016	pH	*7.48*	pH Units
Station 140	8/15/2016	pH	7.48	pH Units
Station 140	9/5/2016	pH	7.7	pH Units
Station 140	9/19/2016	pH	7.66	pH Units
Station 140	10/3/2016	pH	7.57	pH Units

Table Appendix E-5 Station 140 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	10/7/2016	pH	7.47	pH Units
Station 140	10/17/2016	pH	7.42	pH Units
Station 140	5/14/2017	pH	7.28	pH Units
Station 140	5/22/2017	pH	8.02	pH Units
Station 140	6/4/2017	pH	7.31	pH Units
Station 140	6/19/2017	pH	7.68	pH Units
Station 140	7/9/2017	pH	6.87	pH Units
Station 140	7/17/2017	pH	7.46	pH Units
Station 140	8/8/2017	pH	6.24	pH Units
Station 140	8/21/2017	pH	7.39	pH Units
Station 140	9/3/2017	pH	7.48	pH Units
Station 140	9/18/2017	pH	7.62	pH Units
Station 140	9/25/2017	pH	7.85	pH Units
Station 140	5/14/2018	pH	7.7	pH Units
Station 140	5/21/2018	pH	6.99	pH Units
Station 140	6/4/2018	pH	6.65	pH Units
Station 140	6/18/2018	pH	7.42	pH Units
Station 140	7/8/2018	pH	7.43	pH Units
Station 140	7/16/2018	pH	6.83	pH Units
Station 140	8/6/2018	pH	7.16	pH Units
Station 140	8/13/2018	pH	7.5	pH Units
Station 140	8/20/2018	pH	7.42	pH Units
Station 140	9/9/2018	pH	7.1	pH Units
Station 140	9/17/2018	pH	7.1	pH Units
Station 140	9/25/2018	pH	7.36	pH Units
Station 140	5/14/2019	pH	6.94	pH Units
Station 140	5/14/2019	pH	6.94	pH Units
Station 140	6/2/2019	pH	7.08	pH Units
Station 140	6/9/2019	pH	7.13	pH Units
Station 140	6/17/2019	pH	7.28	pH Units
Station 140	6/30/2019	pH	6.01	pH Units
Station 140	7/14/2019	pH	7.33	pH Units
Station 140	8/4/2019	pH	7.62	pH Units
Station 140	8/18/2019	pH	7.2	pH Units
Station 140	9/8/2019	pH	7.11	pH Units
Station 140	9/16/2019	pH	6.9	pH Units
Station 140	5/12/2020	pH	6.21	pH Units
Station 140	5/18/2020	pH	5.24	pH Units

Table Appendix E-5 Station 140 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	6/2/2020	pH	5.25	pH Units
Station 140	6/14/2020	pH	4.98	pH Units
Station 140	6/26/2020	pH	4.87	pH Units
Station 140	7/5/2020	pH	5.16	pH Units
Station 140	7/19/2020	pH	5.18	pH Units
Station 140	8/3/2020	pH	4.94	pH Units
Station 140	8/16/2020	pH	5.15	pH Units
Station 140	8/28/2020	pH	5.02	pH Units
Station 140	9/15/2020	pH	5.07	pH Units
Station 140	9/20/2020	pH	5.21	pH Units
Station 140	9/27/2020	pH	5.43	pH Units
Station 140	5/9/2021	pH	6.73	pH Units
Station 140	5/24/2021	pH	6.33	pH Units
Station 140	6/6/2021	pH	6.3	pH Units
Station 140	6/20/2021	pH	6.73	pH Units
Station 140	7/4/2021	pH	6.84	pH Units
Station 140	7/25/2021	pH	7.37	pH Units
Station 140	8/8/2021	pH	6.91	pH Units
Station 140	8/15/2021	pH	7.03	pH Units
Station 140	9/6/2021	pH	7.19	pH Units
Station 140	9/19/2021	pH	7.25	pH Units
Station 140	9/27/2021	pH	7.12	pH Units
Station 140	5/9/2022	pH	7.3	pH Units
Station 140	5/22/2022	pH	7.55	pH Units
Station 140	6/5/2022	pH	7.08	pH Units
Station 140	6/19/2022	pH	7.2	pH Units
Station 140	7/10/2022	pH	6.95	pH Units
Station 140	7/17/2022	pH	6.74	pH Units
Station 140	8/1/2022	pH	7.16	pH Units
Station 140	8/14/2022	pH	7.02	pH Units
Station 140	9/4/2022	pH	7.08	pH Units
Station 140	9/20/2022	pH	6.97	pH Units
Station 140	9/26/2022	pH	7.22	pH Units
Station 140	5/23/2023	pH	6.96	pH Units
Station 140	5/28/2023	pH	7.66	pH Units
Station 140	6/4/2023	pH	4.12	pH Units
Station 140	6/18/2023	pH	7.42	pH Units
Station 140	7/9/2023	pH	7.17	pH Units

Table Appendix E-5 Station 140 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	7/16/2023	pH	7.12	pH Units
Station 140	8/6/2023	pH	6.92	pH Units
Station 140	8/20/2023	pH	7.21	pH Units
Station 140	9/3/2023	pH	7.11	pH Units
Station 140	9/18/2023	pH	7.15	pH Units
Station 140	9/27/2023	pH	6.45	pH Units
Station 140	5/21/2024	pH	7.02	pH Units
Station 140	5/27/2024	pH	7.59	pH Units
Station 140	6/3/2024	pH	7.19	pH Units
Station 140	6/16/2024	pH	6.72	pH Units
Station 140	7/1/2024	pH	7.06	pH Units
Station 140	7/14/2024	pH	6.94	pH Units
Station 140	8/4/2024	pH	6.71	pH Units
Station 140	8/18/2024	pH	6.73	pH Units
Station 140	9/8/2024	pH	7.46	pH Units
Station 140	9/15/2024	pH	7.07	pH Units
Station 140	9/23/2024	pH	7.19	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-6 Station 12 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	pH	8.31	pH Units
Station 12	5/16/2016	pH	7.68	pH Units
Station 12	6/6/2016	pH	8.08	pH Units
Station 12	6/20/2016	pH	8.09	pH Units
Station 12	7/4/2016	pH	8.16	pH Units
Station 12	7/18/2016	pH	8.13	pH Units
Station 12	8/1/2016	pH	8.18	pH Units
Station 12	8/15/2016	pH	8.00	pH Units
Station 12	9/5/2016	pH	8.22	pH Units
Station 12	9/19/2016	pH	7.86	pH Units
Station 12	10/3/2016	pH	8.07	pH Units
Station 12	10/17/2016	pH	7.94	pH Units
Station 12	5/14/2017	pH	7.20	pH Units
Station 12	5/22/2017	pH	7.55	pH Units
Station 12	6/4/2017	pH	7.53	pH Units
Station 12	6/19/2017	pH	8.04	pH Units

Table Appendix E-6 Station 12 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	7/9/2017	pH	7.62	pH Units
Station 12	7/17/2017	pH	8.09	pH Units
Station 12	8/8/2017	pH	7.63	pH Units
Station 12	8/21/2017	pH	8.09	pH Units
Station 12	9/3/2017	pH	7.77	pH Units
Station 12	9/18/2017	pH	8.04	pH Units
Station 12	9/25/2017	pH	7.58	pH Units
Station 12	5/14/2018	pH	8.33	pH Units
Station 12	5/21/2018	pH	7.18	pH Units
Station 12	6/4/2018	pH	7.53	pH Units
Station 12	6/18/2018	pH	8.06	pH Units
Station 12	7/8/2018	pH	8.10	pH Units
Station 12	7/16/2018	pH	8.09	pH Units
Station 12	8/6/2018	pH	8.03	pH Units
Station 12	8/13/2018	pH	8.27	pH Units
Station 12	8/20/2018	pH	8.18	pH Units
Station 12	9/9/2018	pH	8.08	pH Units
Station 12	9/17/2018	pH	8.10	pH Units
Station 12	9/25/2018	pH	8.01	pH Units
Station 12	5/14/2019	pH	7.05	pH Units
Station 12	6/2/2019	pH	7.95	pH Units
Station 12	6/9/2019	pH	7.85	pH Units
Station 12	6/17/2019	pH	8.14	pH Units
Station 12	6/30/2019	pH	8.01	pH Units
Station 12	7/14/2019	pH	8.16	pH Units
Station 12	8/4/2019	pH	7.94	pH Units
Station 12	8/18/2019	pH	7.93	pH Units
Station 12	9/8/2019	pH	7.90	pH Units
Station 12	9/16/2019	pH	7.66	pH Units
Station 12	5/12/2020	pH	7.54	pH Units
Station 12	5/18/2020	pH	7.00	pH Units
Station 12	6/2/2020	pH	7.13	pH Units
Station 12	6/14/2020	pH	7.63	pH Units
Station 12	6/26/2020	pH	6.76	pH Units
Station 12	7/5/2020	pH	7.89	pH Units
Station 12	7/19/2020	pH	7.74	pH Units
Station 12	8/3/2020	pH	7.99	pH Units
Station 12	8/16/2020	pH	7.52	pH Units

Table Appendix E-6 Station 12 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/28/2020	pH	8.02	pH Units
Station 12	9/15/2020	pH	7.81	pH Units
Station 12	9/20/2020	pH	7.47	pH Units
Station 12	9/27/2020	pH	7.87	pH Units
Station 12	5/9/2021	pH	6.88	pH Units
Station 12	5/24/2021	pH	7.61	pH Units
Station 12	6/6/2021	pH	7.41	pH Units
Station 12	6/20/2021	pH	7.91	pH Units
Station 12	7/4/2021	pH	7.8	pH Units
Station 12	7/25/2021	pH	7.69	pH Units
Station 12	8/8/2021	pH	7.85	pH Units
Station 12	8/15/2021	pH	7.95	pH Units
Station 12	9/6/2021	pH	7.96	pH Units
Station 12	9/19/2021	pH	8.07	pH Units
Station 12	9/27/2021	pH	7.73	pH Units
Station 12	5/9/2022	pH	7.74	pH Units
Station 12	5/22/2022	pH	7.34	pH Units
Station 12	6/5/2022	pH	7.64	pH Units
Station 12	6/19/2022	pH	8.06	pH Units
Station 12	7/10/2022	pH	8	pH Units
Station 12	7/17/2022	pH	8.02	pH Units
Station 12	8/1/2022	pH	8.13	pH Units
Station 12	8/14/2022	pH	8.14	pH Units
Station 12	9/4/2022	pH	8.09	pH Units
Station 12	9/20/2022	pH	7.67	pH Units
Station 12	9/26/2022	pH	7.91	pH Units
Station 12	5/23/2023	pH	7.17	pH Units
Station 12	5/28/2023	pH	7.89	pH Units
Station 12	6/4/2023	pH	8.69	pH Units
Station 12	6/18/2023	pH	7.67	pH Units
Station 12	7/9/2023	pH	7.83	pH Units
Station 12	7/16/2023	pH	7.92	pH Units
Station 12	8/6/2023	pH	7.96	pH Units
Station 12	8/20/2023	pH	8.02	pH Units
Station 12	9/3/2023	pH	8.12	pH Units
Station 12	9/18/2023	pH	8.08	pH Units
Station 12	9/26/2023	pH	7.71	pH Units
Station 12	5/21/2024	pH	8.35	pH Units

Table Appendix E-6 Station 12 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/27/2024	pH	7.95	pH Units
Station 12	6/3/2024	pH	7.73	pH Units
Station 12	6/16/2024	pH	7.61	pH Units
Station 12	7/1/2024	pH	8.09	pH Units
Station 12	7/14/2024	pH	7.91	pH Units
Station 12	8/4/2024	pH	7.57	pH Units
Station 12	8/18/2024	pH	7.3	pH Units
Station 12	9/8/2024	pH	7.65	pH Units
Station 12	9/15/2024	pH	7.96	pH Units
Station 12	9/23/2024	pH	7.84	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix E-7 Station 9 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	pH	8.02	pH Units
Station 9	5/16/2016	pH	7.68	pH Units
Station 9	6/2/2016	pH	7.9	pH Units
Station 9	6/17/2016	pH	8.09	pH Units
Station 9	7/1/2016	pH	8.21	pH Units
Station 9	7/15/2016	pH	8.06	pH Units
Station 9	8/5/2016	pH	8.17	pH Units
Station 9	8/19/2016	pH	8.07	pH Units
Station 9	9/8/2016	pH	8.1	pH Units
Station 9	9/23/2016	pH	8.1	pH Units
Station 9	10/6/2016	pH	7.95	pH Units
Station 9	10/17/2016	pH	7.83	pH Units
Station 9	5/5/2017	pH	7.54	pH Units
Station 9	5/19/2017	pH	7.62	pH Units
Station 9	6/8/2017	pH	7.52	pH Units
Station 9	6/23/2017	pH	7.88	pH Units
Station 9	7/7/2017	pH	7.2	pH Units
Station 9	7/20/2017	pH	7.9	pH Units
Station 9	8/4/2017	pH	7.74	pH Units
Station 9	8/25/2017	pH	8.03	pH Units
Station 9	9/8/2017	pH	7.97	pH Units
Station 9	9/18/2017	pH	7.88	pH Units
Station 9	10/5/2017	pH	7.81	pH Units

Table Appendix E-7 Station 9 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	10/9/2017	pH	7.72	pH Units
Station 9	5/23/2018	pH	7.43	pH Units
Station 9	6/8/2018	pH	7.15	pH Units
Station 9	6/29/2018	pH	7.94	pH Units
Station 9	7/13/2018	pH	7.82	pH Units
Station 9	7/27/2018	pH	7.84	pH Units
Station 9	8/3/2018	pH	7.85	pH Units
Station 9	8/18/2018	pH	8.01	pH Units
Station 9	9/7/2018	pH	7.96	pH Units
Station 9	9/28/2018	pH	7.96	pH Units
Station 9	10/5/2018	pH	7.87	pH Units
Station 9	10/12/2018	pH	7.89	pH Units
Station 9	5/25/2019	pH	7.55	pH Units
Station 9	5/30/2019	pH	7.63	pH Units
Station 9	6/7/2019	pH	7.76	pH Units
Station 9	6/21/2019	pH	7.8	pH Units
Station 9	7/12/2019	pH	7.98	pH Units
Station 9	7/12/2019	pH	*7.98*	pH Units
Station 9	7/12/2019	pH	7.98	pH Units
Station 9	7/21/2019	pH	7.91	pH Units
Station 9	8/3/2019	pH	7.82	pH Units
Station 9	8/25/2019	pH	7.57	pH Units
Station 9	9/1/2019	pH	7.56	pH Units
Station 9	9/16/2019	pH	7.1	pH Units
Station 9	10/7/2019	pH	6.75	pH Units
Station 9	5/19/2020	pH	7.63	pH Units
Station 9	5/29/2020	pH	6.62	pH Units
Station 9	6/6/2020	pH	7.34	pH Units
Station 9	6/19/2020	pH	7.13	pH Units
Station 9	6/23/2020	pH	6.84	pH Units
Station 9	6/23/2020	pH	6.84	pH Units
Station 9	6/26/2020	pH	7.21	pH Units
Station 9	7/3/2020	pH	7.3	pH Units
Station 9	7/4/2020	pH	7.2	pH Units
Station 9	7/10/2020	pH	7.31	pH Units
Station 9	7/18/2020	pH	7.14	pH Units
Station 9	7/18/2020	pH	7.13	pH Units
Station 9	7/24/2020	pH	5.48	pH Units

Table Appendix E-7 Station 9 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/31/2020	pH	6.07	pH Units
Station 9	8/3/2020	pH	7.27	pH Units
Station 9	8/9/2020	pH	6.75	pH Units
Station 9	8/16/2020	pH	7.15	pH Units
Station 9	8/16/2020	pH	7.15	pH Units
Station 9	8/21/2020	pH	6.51	pH Units
Station 9	8/29/2020	pH	7.25	pH Units
Station 9	9/4/2020	pH	7.1	pH Units
Station 9	9/5/2020	pH	7.39	pH Units
Station 9	9/11/2020	pH	6.99	pH Units
Station 9	9/18/2020	pH	7.38	pH Units
Station 9	9/25/2020	pH	7.32	pH Units
Station 9	9/26/2020	pH	7.11	pH Units
Station 9	10/2/2020	pH	7.15	pH Units
Station 9	10/3/2020	pH	7.3	pH Units
Station 9	10/9/2020	pH	7.29	pH Units
Station 9	10/10/2020	pH	7.32	pH Units
Station 9	5/7/2021	pH	7	pH Units
Station 9	5/14/2021	pH	7.07	pH Units
Station 9	5/16/2021	pH	7.06	pH Units
Station 9	5/23/2021	pH	7.12	pH Units
Station 9	5/26/2021	pH	7.04	pH Units
Station 9	5/28/2021	pH	6.93	pH Units
Station 9	6/4/2021	pH	7.3	pH Units
Station 9	6/5/2021	pH	7.1	pH Units
Station 9	6/11/2021	pH	7.31	pH Units
Station 9	6/18/2021	pH	7.4	pH Units
Station 9	6/19/2021	pH	7.37	pH Units
Station 9	6/20/2021	pH	7.38	pH Units
Station 9	6/25/2021	pH	7.33	pH Units
Station 9	7/3/2021	pH	7.4	pH Units
Station 9	7/9/2021	pH	7.54	pH Units
Station 9	7/12/2021	pH	7.45	pH Units
Station 9	7/18/2021	pH	7.63	pH Units
Station 9	7/23/2021	pH	7.47	pH Units
Station 9	8/6/2021	pH	7.5	pH Units
Station 9	8/8/2021	pH	7.59	pH Units
Station 9	8/15/2021	pH	7.53	pH Units

Table Appendix E-7 Station 9 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	8/16/2021	pH	7.47	pH Units
Station 9	8/20/2021	pH	7.08	pH Units
Station 9	8/27/2021	pH	7.21	pH Units
Station 9	9/3/2021	pH	7.43	pH Units
Station 9	9/6/2021	pH	7.41	pH Units
Station 9	9/11/2021	pH	7.38	pH Units
Station 9	9/17/2021	pH	7.36	pH Units
Station 9	9/19/2021	pH	7.33	pH Units
Station 9	9/24/2021	pH	7.55	pH Units
Station 9	9/28/2021	pH	7.37	pH Units
Station 9	10/1/2021	pH	7.13	pH Units
Station 9	10/2/2021	pH	7.24	pH Units
Station 9	10/8/2021	pH	6.74	pH Units
Station 9	5/9/2022	pH	7.14	pH Units
Station 9	5/20/2022	pH	6.84	pH Units
Station 9	5/22/2022	pH	7.1	pH Units
Station 9	6/3/2022	pH	7.24	pH Units
Station 9	6/5/2022	pH	7.16	pH Units
Station 9	6/10/2022	pH	7.27	pH Units
Station 9	6/17/2022	pH	7.48	pH Units
Station 9	6/19/2022	pH	7.5	pH Units
Station 9	7/10/2022	pH	7.41	pH Units
Station 9	7/15/2022	pH	7.47	pH Units
Station 9	7/17/2022	pH	7.4	pH Units
Station 9	7/22/2022	pH	7.74	pH Units
Station 9	7/29/2022	pH	7.55	pH Units
Station 9	8/1/2022	pH	7.77	pH Units
Station 9	8/6/2022	pH	7.66	pH Units
Station 9	8/13/2022	pH	7.78	pH Units
Station 9	8/14/2022	pH	7.77	pH Units
Station 9	9/2/2022	pH	7.53	pH Units
Station 9	9/4/2022	pH	7.53	pH Units
Station 9	9/9/2022	pH	7.68	pH Units
Station 9	9/20/2022	pH	7.5	pH Units
Station 9	9/26/2022	pH	7.5	pH Units
Station 9	10/1/2022	pH	7.38	pH Units
Station 9	10/1/2022	pH	7.38	pH Units
Station 9	10/5/2022	pH	7.44	pH Units

Table Appendix E-7 Station 9 pH Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/23/2023	pH	7.29	pH Units
Station 9	5/28/2023	pH	7.02	pH Units
Station 9	6/4/2023	pH	7.27	pH Units
Station 9	6/9/2023	pH	7.4	pH Units
Station 9	6/18/2023	pH	7.18	pH Units
Station 9	7/2/2023	pH	8.31	pH Units
Station 9	7/9/2023	pH	7.46	pH Units
Station 9	7/16/2023	pH	7.39	pH Units
Station 9	7/21/2023	pH	7.62	pH Units
Station 9	8/5/2023	pH	7.47	pH Units
Station 9	8/6/2023	pH	7.68	pH Units
Station 9	8/11/2023	pH	6.54	pH Units
Station 9	8/20/2023	pH	7.56	pH Units
Station 9	8/25/2023	pH	6.12	pH Units
Station 9	9/3/2023	pH	6.94	pH Units
Station 9	9/8/2023	pH	7.69	pH Units
Station 9	9/18/2023	pH	7.62	pH Units
Station 9	5/21/2024	pH	7.06	pH Units
Station 9	5/23/2024	pH	6.87	pH Units
Station 9	5/27/2024	pH	7.32	pH Units
Station 9	5/31/2024	pH	7.21	pH Units
Station 9	6/3/2024	pH	7.5	pH Units
Station 9	6/3/2024	pH	7.5	pH Units
Station 9	6/7/2024	pH	7.2	pH Units
Station 9	6/14/2024	pH	7.35	pH Units
Station 9	6/16/2024	pH	7.57	pH Units
Station 9	6/28/2024	pH	6.34	pH Units
Station 9	7/1/2024	pH	7.64	pH Units
Station 9	7/14/2024	pH	7.73	pH Units
Station 9	7/17/2024	pH	7.73	pH Units
Station 9	8/4/2024	pH	7.74	pH Units
Station 9	8/10/2024	pH	5.64	pH Units
Station 9	8/18/2024	pH	7.47	pH Units
Station 9	8/25/2024	pH	5.59	pH Units
Station 9	9/8/2024	pH	7.97	pH Units
Station 9	9/13/2024	pH	5.76	pH Units
Station 9	9/15/2024	pH	7.36	pH Units
Station 9	9/27/2024	pH	7.1	pH Units

Gray italicized indicates Field Blank or Equipment Blank

Appendix F – Selenium Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Selenium	0.0025	mg/L
Outfall 001	5/3/2016	Selenium	0.0019	mg/L
Outfall 001	5/10/2016	Selenium	0.0023	mg/L
Outfall 001	5/10/2016	Selenium	0.0031	mg/L
Outfall 001	5/17/2016	Selenium	0.0021	mg/L
Outfall 001	5/17/2016	Selenium	0.0022	mg/L
Outfall 001	5/17/2016	Selenium	0.0027	mg/L
Outfall 001	5/24/2016	Selenium	0.0017	mg/L
Outfall 001	5/24/2016	Selenium	0.0028	mg/L
Outfall 001	6/1/2016	Selenium	0.0023	mg/L
Outfall 001	6/1/2016	Selenium	0.0032	mg/L
Outfall 001	6/7/2016	Selenium	0.0021	mg/L
Outfall 001	6/7/2016	Selenium	0.0028	mg/L
Outfall 001	6/14/2016	Selenium	0.0017	mg/L
Outfall 001	6/14/2016	Selenium	0.0027	mg/L
Outfall 001	6/14/2016	Selenium	0.0031	mg/L
Outfall 001	6/14/2016	Selenium	0.0032	mg/L
Outfall 001	6/21/2016	Selenium	0.0028	mg/L
Outfall 001	6/21/2016	Selenium	0.0018	mg/L
Outfall 001	6/28/2016	Selenium	0.0032	mg/L
Outfall 001	6/28/2016	Selenium	0.0034	mg/L
Outfall 001	6/28/2016	Selenium	0.003	mg/L
Outfall 001	7/2/2016	Selenium	0.003	mg/L
Outfall 001	7/2/2016	Selenium	0.004	mg/L
Outfall 001	7/2/2016	Selenium	0.0028	mg/L
Outfall 001	7/5/2016	Selenium	0.0033	mg/L
Outfall 001	7/5/2016	Selenium	0.003	mg/L
Outfall 001	7/5/2016	Selenium	0.0025	mg/L
Outfall 001	7/12/2016	Selenium	0.0033	mg/L
Outfall 001	7/12/2016	Selenium	0.003	mg/L
Outfall 001	7/12/2016	Selenium	0.0025	mg/L
Outfall 001	7/19/2016	Selenium	0.0039	mg/L
Outfall 001	7/19/2016	Selenium	0.0031	mg/L
Outfall 001	7/19/2016	Selenium	0.0021	mg/L
Outfall 001	7/26/2016	Selenium	0.0034	mg/L
Outfall 001	7/26/2016	Selenium	0.0029	mg/L
Outfall 001	7/26/2016	Selenium	0.0028	mg/L
Outfall 001	8/2/2016	Selenium	0.0031	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/2/2016	Selenium	0.0037	mg/L
Outfall 001	8/2/2016	Selenium	0.0026	mg/L
Outfall 001	8/9/2016	Selenium	0.0034	mg/L
Outfall 001	8/9/2016	Selenium	0.0033	mg/L
Outfall 001	8/9/2016	Selenium	0.0026	mg/L
Outfall 001	8/9/2016	Selenium	0.0026	mg/L
Outfall 001	8/16/2016	Selenium	0.0036	mg/L
Outfall 001	8/16/2016	Selenium	0.0028	mg/L
Outfall 001	8/16/2016	Selenium	0.0026	mg/L
Outfall 001	8/23/2016	Selenium	0.0037	mg/L
Outfall 001	8/23/2016	Selenium	0.0029	mg/L
Outfall 001	8/23/2016	Selenium	0.0021	mg/L
Outfall 001	8/31/2016	Selenium	0.0035	mg/L
Outfall 001	8/31/2016	Selenium	0.003	mg/L
Outfall 001	8/31/2016	Selenium	0.0022	mg/L
Outfall 001	9/6/2016	Selenium	0.0035	mg/L
Outfall 001	9/6/2016	Selenium	0.0028	mg/L
Outfall 001	9/6/2016	Selenium	0.0024	mg/L
Outfall 001	9/13/2016	Selenium	0.0036	mg/L
Outfall 001	9/13/2016	Selenium	0.003	mg/L
Outfall 001	9/13/2016	Selenium	0.0023	mg/L
Outfall 001	9/20/2016	Selenium	0.0044	mg/L
Outfall 001	9/20/2016	Selenium	0.003	mg/L
Outfall 001	9/20/2016	Selenium	0.0024	mg/L
Outfall 001	5/9/2017	Selenium	0.0053	mg/L
Outfall 001	5/9/2017	Selenium	0.005	mg/L
Outfall 001	5/9/2017	Selenium	0.0036	mg/L
Outfall 001	5/9/2017	Selenium	0.0036	mg/L
Outfall 001	5/15/2017	Selenium	0.0033	mg/L
Outfall 001	5/15/2017	Selenium	0.0054	mg/L
Outfall 001	5/23/2017	Selenium	0.0033	mg/L
Outfall 001	5/23/2017	Selenium	0.0045	mg/L
Outfall 001	5/30/2017	Selenium	0.0055	mg/L
Outfall 001	5/30/2017	Selenium	0.0035	mg/L
Outfall 001	6/5/2017	Selenium	0.0018	mg/L
Outfall 001	6/5/2017	Selenium	0.0043	mg/L
Outfall 001	6/13/2017	Selenium	0.0035	mg/L
Outfall 001	6/13/2017	Selenium	0.0044	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/20/2017	Selenium	0.0032	mg/L
Outfall 001	6/20/2017	Selenium	0.0046	mg/L
Outfall 001	6/27/2017	Selenium	0.0042	mg/L
Outfall 001	6/27/2017	Selenium	0.0036	mg/L
Outfall 001	7/4/2017	Selenium	0.0041	mg/L
Outfall 001	7/4/2017	Selenium	0.0048	mg/L
Outfall 001	7/10/2017	Selenium	0.0031	mg/L
Outfall 001	7/10/2017	Selenium	0.0031	mg/L
Outfall 001	7/18/2017	Selenium	0.0041	mg/L
Outfall 001	7/18/2017	Selenium	0.003	mg/L
Outfall 001	7/26/2017	Selenium	0.0039	mg/L
Outfall 001	7/26/2017	Selenium	0.0046	mg/L
Outfall 001	8/2/2017	Selenium	0.0045	mg/L
Outfall 001	8/2/2017	Selenium	0.0035	mg/L
Outfall 001	8/9/2017	Selenium	0.0035	mg/L
Outfall 001	8/9/2017	Selenium	0.0027	mg/L
Outfall 001	8/16/2017	Selenium	0.0038	mg/L
Outfall 001	8/16/2017	Selenium	0.0046	mg/L
Outfall 001	8/22/2017	Selenium	0.0046	mg/L
Outfall 001	8/22/2017	Selenium	0.0046	mg/L
Outfall 001	8/31/2017	Selenium	0.0038	mg/L
Outfall 001	8/31/2017	Selenium	0.0044	mg/L
Outfall 001	9/4/2017	Selenium	0.0038	mg/L
Outfall 001	9/4/2017	Selenium	0.0045	mg/L
Outfall 001	9/12/2017	Selenium	0.0042	mg/L
Outfall 001	9/12/2017	Selenium	0.0046	mg/L
Outfall 001	9/19/2017	Selenium	0.0038	mg/L
Outfall 001	9/19/2017	Selenium	0.0044	mg/L
Outfall 001	5/14/2018	Selenium	0.0042	mg/L
Outfall 001	5/22/2018	Selenium	0.0039	mg/L
Outfall 001	5/22/2018	Selenium	0.0043	mg/L
Outfall 001	5/29/2018	Selenium	0.0034	mg/L
Outfall 001	5/29/2018	Selenium	0.0042	mg/L
Outfall 001	6/5/2018	Selenium	0.0037	mg/L
Outfall 001	6/5/2018	Selenium	0.0042	mg/L
Outfall 001	6/12/2018	Selenium	0.0045	mg/L
Outfall 001	6/12/2018	Selenium	0.0045	mg/L
Outfall 001	6/19/2018	Selenium	0.0046	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/26/2018	Selenium	0.0054	mg/L
Outfall 001	6/26/2018	Selenium	0.0043	mg/L
Outfall 001	7/2/2018	Selenium	0.0031	mg/L
Outfall 001	7/2/2018	Selenium	0.0047	mg/L
Outfall 001	7/9/2018	Selenium	0.0038	mg/L
Outfall 001	7/9/2018	Selenium	0.0045	mg/L
Outfall 001	7/17/2018	Selenium	0.004	mg/L
Outfall 001	7/17/2018	Selenium	0.0045	mg/L
Outfall 001	7/24/2018	Selenium	0.0044	mg/L
Outfall 001	7/24/2018	Selenium	0.0043	mg/L
Outfall 001	7/31/2018	Selenium	0.004	mg/L
Outfall 001	7/31/2018	Selenium	0.0046	mg/L
Outfall 001	8/7/2018	Selenium	0.0036	mg/L
Outfall 001	8/7/2018	Selenium	0.0041	mg/L
Outfall 001	8/14/2018	Selenium	0.0042	mg/L
Outfall 001	8/21/2018	Selenium	0.005	mg/L
Outfall 001	8/21/2018	Selenium	0.0042	mg/L
Outfall 001	8/28/2018	Selenium	0.0049	mg/L
Outfall 001	8/28/2018	Selenium	0.0041	mg/L
Outfall 001	9/4/2018	Selenium	0.0044	mg/L
Outfall 001	9/4/2018	Selenium	0.0042	mg/L
Outfall 001	9/10/2018	Selenium	0.0046	mg/L
Outfall 001	9/10/2018	Selenium	0.004	mg/L
Outfall 001	9/18/2018	Selenium	0.0048	mg/L
Outfall 001	5/15/2019	Selenium	0.0049	mg/L
Outfall 001	5/18/2019	Selenium	0.0044	mg/L
Outfall 001	5/18/2019	Selenium	0.0046	mg/L
Outfall 001	5/19/2019	Selenium	0.0043	mg/L
Outfall 001	5/19/2019	Selenium	0.0046	mg/L
Outfall 001	5/28/2019	Selenium	0.0052	mg/L
Outfall 001	5/28/2019	Selenium	0.0043	mg/L
Outfall 001	6/3/2019	Selenium	0.0042	mg/L
Outfall 001	6/3/2019	Selenium	0.0035	mg/L
Outfall 001	6/10/2019	Selenium	0.0039	mg/L
Outfall 001	6/10/2019	Selenium	0.0049	mg/L
Outfall 001	6/18/2019	Selenium	0.0045	mg/L
Outfall 001	6/18/2019	Selenium	0.0053	mg/L
Outfall 001	6/26/2019	Selenium	0.0049	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/26/2019	Selenium	0.0046	mg/L
Outfall 001	6/26/2019	Selenium	0.005	mg/L
Outfall 001	7/1/2019	Selenium	0.0049	mg/L
Outfall 001	7/1/2019	Selenium	0.0052	mg/L
Outfall 001	7/8/2019	Selenium	0.0053	mg/L
Outfall 001	7/8/2019	Selenium	0.0049	mg/L
Outfall 001	7/15/2019	Selenium	0.0036	mg/L
Outfall 001	7/15/2019	Selenium	0.005	mg/L
Outfall 001	7/22/2019	Selenium	0.0044	mg/L
Outfall 001	7/22/2019	Selenium	0.0047	mg/L
Outfall 001	7/29/2019	Selenium	0.0052	mg/L
Outfall 001	7/29/2019	Selenium	0.0047	mg/L
Outfall 001	8/5/2019	Selenium	0.0042	mg/L
Outfall 001	8/5/2019	Selenium	0.0048	mg/L
Outfall 001	8/12/2019	Selenium	0.0041	mg/L
Outfall 001	8/12/2019	Selenium	0.0047	mg/L
Outfall 001	8/17/2019	Selenium	0.004	mg/L
Outfall 001	8/17/2019	Selenium	0.0046	mg/L
Outfall 001	8/19/2019	Selenium	0.0041	mg/L
Outfall 001	8/19/2019	Selenium	0.0048	mg/L
Outfall 001	8/29/2019	Selenium	0.0035	mg/L
Outfall 001	8/29/2019	Selenium	0.0045	mg/L
Outfall 001	9/7/2019	Selenium	0.0043	mg/L
Outfall 001	9/7/2019	Selenium	0.0044	mg/L
Outfall 001	9/9/2019	Selenium	0.0046	mg/L
Outfall 001	9/9/2019	Selenium	0.0043	mg/L
Outfall 001	5/9/2020	Selenium	*0.00023*	mg/L
Outfall 001	5/9/2020	Selenium	*0.00026*	mg/L
Outfall 001	5/13/2020	Selenium	0.0039	mg/L
Outfall 001	5/13/2020	Selenium	0.0045	mg/L
Outfall 001	5/19/2020	Selenium	0.003	mg/L
Outfall 001	5/19/2020	Selenium	0.0041	mg/L
Outfall 001	5/26/2020	Selenium	0.0025	mg/L
Outfall 001	5/26/2020	Selenium	0.004	mg/L
Outfall 001	6/3/2020	Selenium	0.0034	mg/L
Outfall 001	6/3/2020	Selenium	0.0028	mg/L
Outfall 001	6/8/2020	Selenium	0.0031	mg/L
Outfall 001	6/8/2020	Selenium	0.0034	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/15/2020	Selenium	0.003	mg/L
Outfall 001	6/15/2020	Selenium	0.0041	mg/L
Outfall 001	6/22/2020	Selenium	0.0042	mg/L
Outfall 001	6/22/2020	Selenium	0.0044	mg/L
Outfall 001	6/29/2020	Selenium	0.0042	mg/L
Outfall 001	6/29/2020	Selenium	0.0053	mg/L
Outfall 001	7/6/2020	Selenium	0.0053	mg/L
Outfall 001	7/6/2020	Selenium	0.0047	mg/L
Outfall 001	*8/29/2020*	*Selenium*	*0.00074*	*mg/L*
Outfall 001	*8/31/2020*	*Selenium*	*0.00076*	*mg/L*
Outfall 001	*9/8/2020*	*Selenium*	*0.00059*	*mg/L*
Outfall 001	*9/15/2020*	*Selenium*	*0.00083*	*mg/L*
Outfall 001	*9/21/2020*	*Selenium*	*0.00077*	*mg/L*
Outfall 001	5/17/2021	Selenium	0.0051	mg/L
Outfall 001	5/17/2021	Selenium	0.005	mg/L
Outfall 001	5/18/2021	Selenium	0.0058	mg/L
Outfall 001	5/25/2021	Selenium	0.0053	mg/L
Outfall 001	5/25/2021	Selenium	0.0037	mg/L
Outfall 001	5/31/2021	Selenium	0.0043	mg/L
Outfall 001	5/31/2021	Selenium	0.0043	mg/L
Outfall 001	6/7/2021	Selenium	0.0047	mg/L
Outfall 001	6/7/2021	Selenium	0.0051	mg/L
Outfall 001	6/14/2021	Selenium	0.0053	mg/L
Outfall 001	6/14/2021	Selenium	0.005	mg/L
Outfall 001	6/21/2021	Selenium	0.0058	mg/L
Outfall 001	6/21/2021	Selenium	0.0047	mg/L
Outfall 001	6/28/2021	Selenium	0.0046	mg/L
Outfall 001	6/28/2021	Selenium	0.0052	mg/L
Outfall 001	7/5/2021	Selenium	0.0047	mg/L
Outfall 001	7/5/2021	Selenium	0.0048	mg/L
Outfall 001	7/12/2021	Selenium	0.0051	mg/L
Outfall 001	7/12/2021	Selenium	0.0048	mg/L
Outfall 001	7/19/2021	Selenium	0.0048	mg/L
Outfall 001	7/19/2021	Selenium	0.004	mg/L
Outfall 001	7/26/2021	Selenium	0.0051	mg/L
Outfall 001	7/26/2021	Selenium	0.0048	mg/L
Outfall 001	8/3/2021	Selenium	0.0046	mg/L
Outfall 001	8/3/2021	Selenium	0.0041	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/9/2021	Selenium	0.0045	mg/L
Outfall 001	8/9/2021	Selenium	0.0044	mg/L
Outfall 001	8/16/2021	Selenium	0.0039	mg/L
Outfall 001	8/16/2021	Selenium	0.0039	mg/L
Outfall 001	8/23/2021	Selenium	0.0047	mg/L
Outfall 001	8/23/2021	Selenium	0.0051	mg/L
Outfall 001	8/31/2021	Selenium	0.0045	mg/L
Outfall 001	9/8/2021	Selenium	0.0044	mg/L
Outfall 001	9/8/2021	Selenium	0.0039	mg/L
Outfall 001	9/13/2021	Selenium	0.0045	mg/L
Outfall 001	9/13/2021	Selenium	0.0041	mg/L
Outfall 001	9/20/2021	Selenium	0.00057	mg/L
Outfall 001	9/20/2021	Selenium	0	mg/L
Outfall 001	10/4/2021	Selenium	0	mg/L
Outfall 001	5/10/2022	Selenium	0.0049	mg/L
Outfall 001	5/10/2022	Selenium	0.0035	mg/L
Outfall 001	5/16/2022	Selenium	0.0051	mg/L
Outfall 001	5/16/2022	Selenium	0.0058	mg/L
Outfall 001	5/23/2022	Selenium	0.0048	mg/L
Outfall 001	5/23/2022	Selenium	0.0042	mg/L
Outfall 001	5/31/2022	Selenium	0.0041	mg/L
Outfall 001	5/31/2022	Selenium	0.004	mg/L
Outfall 001	6/6/2022	Selenium	0.0039	mg/L
Outfall 001	6/6/2022	Selenium	0.0044	mg/L
Outfall 001	6/13/2022	Selenium	0.0048	mg/L
Outfall 001	6/13/2022	Selenium	0.0023	mg/L
Outfall 001	6/20/2022	Selenium	0.0049	mg/L
Outfall 001	6/20/2022	Selenium	0.0033	mg/L
Outfall 001	6/27/2022	Selenium	0.0056	mg/L
Outfall 001	6/27/2022	Selenium	0.004	mg/L
Outfall 001	7/5/2022	Selenium	0.0053	mg/L
Outfall 001	7/5/2022	Selenium	0.0032	mg/L
Outfall 001	7/11/2022	Selenium	0.0039	mg/L
Outfall 001	7/11/2022	Selenium	0.0043	mg/L
Outfall 001	7/18/2022	Selenium	0.0053	mg/L
Outfall 001	7/18/2022	Selenium	0.0032	mg/L
Outfall 001	7/18/2022	Selenium	0.0042	mg/L
Outfall 001	7/25/2022	Selenium	0.0047	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/25/2022	Selenium	0.0045	mg/L
Outfall 001	8/1/2022	Selenium	0.0046	mg/L
Outfall 001	8/1/2022	Selenium	0.003	mg/L
Outfall 001	8/8/2022	Selenium	0.0057	mg/L
Outfall 001	8/8/2022	Selenium	0.0043	mg/L
Outfall 001	8/15/2022	Selenium	0.0032	mg/L
Outfall 001	8/15/2022	Selenium	0.0058	mg/L
Outfall 001	8/22/2022	Selenium	0.0049	mg/L
Outfall 001	8/22/2022	Selenium	0.0042	mg/L
Outfall 001	8/29/2022	Selenium	0.0051	mg/L
Outfall 001	8/29/2022	Selenium	0.0046	mg/L
Outfall 001	9/5/2022	Selenium	0.0047	mg/L
Outfall 001	9/5/2022	Selenium	0.0044	mg/L
Outfall 001	9/12/2022	Selenium	0.0045	mg/L
Outfall 001	9/12/2022	Selenium	0.0045	mg/L
Outfall 001	9/12/2022	Selenium	0.0038	mg/L
Outfall 001	9/21/2022	Selenium	0.0044	mg/L
Outfall 001	9/21/2022	Selenium	0.004	mg/L
Outfall 001	5/24/2023	Selenium	0.0035	mg/L
Outfall 001	5/24/2023	Selenium	0.005	mg/L
Outfall 001	5/29/2023	Selenium	0.0042	mg/L
Outfall 001	5/29/2023	Selenium	0.0045	mg/L
Outfall 001	6/5/2023	Selenium	0.0047	mg/L
Outfall 001	6/5/2023	Selenium	0.0054	mg/L
Outfall 001	6/12/2023	Selenium	0.0043	mg/L
Outfall 001	6/12/2023	Selenium	0.0036	mg/L
Outfall 001	6/19/2023	Selenium	0.0041	mg/L
Outfall 001	6/19/2023	Selenium	0.0047	mg/L
Outfall 001	6/27/2023	Selenium	0.0047	mg/L
Outfall 001	6/27/2023	Selenium	0.005	mg/L
Outfall 001	7/7/2023	Selenium	0.0039	mg/L
Outfall 001	7/7/2023	Selenium	0.0047	mg/L
Outfall 001	7/10/2023	Selenium	0.0022	mg/L
Outfall 001	7/10/2023	Selenium	0.0057	mg/L
Outfall 001	7/17/2023	Selenium	0.0049	mg/L
Outfall 001	7/17/2023	Selenium	0.0048	mg/L
Outfall 001	7/24/2023	Selenium	0.0047	mg/L
Outfall 001	7/24/2023	Selenium	0.0047	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/31/2023	Selenium	0.0049	mg/L
Outfall 001	7/31/2023	Selenium	0.0021	mg/L
Outfall 001	8/7/2023	Selenium	0.0047	mg/L
Outfall 001	8/7/2023	Selenium	0.0036	mg/L
Outfall 001	8/16/2023	Selenium	0.0046	mg/L
Outfall 001	8/16/2023	Selenium	0.0051	mg/L
Outfall 001	8/21/2023	Selenium	0.0044	mg/L
Outfall 001	8/21/2023	Selenium	0.0048	mg/L
Outfall 001	8/28/2023	Selenium	0.0055	mg/L
Outfall 001	8/28/2023	Selenium	0.0045	mg/L
Outfall 001	9/4/2023	Selenium	0.0052	mg/L
Outfall 001	9/4/2023	Selenium	0.0032	mg/L
Outfall 001	9/11/2023	Selenium	0.0045	mg/L
Outfall 001	9/11/2023	Selenium	0.005	mg/L
Outfall 001	9/19/2023	Selenium	0.0019	mg/L
Outfall 001	9/19/2023	Selenium	0.0048	mg/L
Outfall 001	5/22/2024	Selenium	0.0051	mg/L
Outfall 001	5/22/2024	Selenium	0.0073	mg/L
Outfall 001	5/28/2024	Selenium	0.005	mg/L
Outfall 001	5/28/2024	Selenium	0.0066	mg/L
Outfall 001	6/4/2024	Selenium	0.0045	mg/L
Outfall 001	6/4/2024	Selenium	0.0068	mg/L
Outfall 001	6/10/2024	Selenium	0.0052	mg/L
Outfall 001	6/10/2024	Selenium	0.0015	mg/L
Outfall 001	6/17/2024	Selenium	0.0054	mg/L
Outfall 001	6/17/2024	Selenium	0.006	mg/L
Outfall 001	6/24/2024	Selenium	0.0047	mg/L
Outfall 001	6/24/2024	Selenium	0.0051	mg/L
Outfall 001	7/2/2024	Selenium	0.005	mg/L
Outfall 001	7/2/2024	Selenium	0.0058	mg/L
Outfall 001	7/8/2024	Selenium	0.0058	mg/L
Outfall 001	7/8/2024	Selenium	0.0054	mg/L
Outfall 001	7/15/2024	Selenium	0.006	mg/L
Outfall 001	7/15/2024	Selenium	0.005	mg/L
Outfall 001	7/22/2024	Selenium	0.0054	mg/L
Outfall 001	7/22/2024	Selenium	0	mg/L
Outfall 001	7/29/2024	Selenium	0.0062	mg/L
Outfall 001	7/29/2024	Selenium	0.0058	mg/L

Table Appendix F-1 Outfall 001 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/5/2024	Selenium	0.0047	mg/L
Outfall 001	8/5/2024	Selenium	0.0058	mg/L
Outfall 001	8/12/2024	Selenium	0.0056	mg/L
Outfall 001	8/12/2024	Selenium	0.006	mg/L
Outfall 001	8/19/2024	Selenium	0.0051	mg/L
Outfall 001	8/19/2024	Selenium	0.0052	mg/L
Outfall 001	8/26/2024	Selenium	0.0063	mg/L
Outfall 001	8/26/2024	Selenium	0.0051	mg/L
Outfall 001	9/2/2024	Selenium	0.0049	mg/L
Outfall 001	9/2/2024	Selenium	0.0063	mg/L
Outfall 001	9/9/2024	Selenium	0.0048	mg/L
Outfall 001	9/9/2024	Selenium	0.0056	mg/L
Outfall 001	9/16/2024	Selenium	0.0065	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-2 Station 151 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Selenium	0.0012	mg/L
Station 151	5/16/2016	Selenium	0.0013	mg/L
Station 151	6/6/2016	Selenium	0.0022	mg/L
Station 151	7/4/2016	Selenium	0.0017	mg/L
Station 151	7/18/2016	Selenium	0.0018	mg/L
Station 151	8/1/2016	Selenium	0.0017	mg/L
Station 151	8/15/2016	Selenium	0.0017	mg/L
Station 151	8/15/2016	Selenium	0.0016	mg/L
Station 151	9/5/2016	Selenium	0.0024	mg/L
Station 151	9/19/2016	Selenium	0.0023	mg/L
Station 151	9/19/2016	Selenium	0.0018	mg/L
Station 151	10/3/2016	Selenium	0.0026	mg/L
Station 151	10/17/2016	Selenium	0.0027	mg/L
Station 151	10/17/2016	Selenium	0.0021	mg/L
Station 151	5/14/2017	Selenium	0.0012	mg/L
Station 151	5/22/2017	Selenium	0.0010	mg/L
Station 151	6/4/2017	Selenium	0.0015	mg/L
Station 151	6/19/2017	Selenium	0.0013	mg/L
Station 151	7/9/2017	Selenium	0.0023	mg/L

Table Appendix F-2 Station 151 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/17/2017	Selenium	0.0016	mg/L
Station 151	8/8/2017	Selenium	0.0013	mg/L
Station 151	8/21/2017	Selenium	0.0036	mg/L
Station 151	9/3/2017	Selenium	0.0027	mg/L
Station 151	9/18/2017	Selenium	0.0026	mg/L
Station 151	9/25/2017	Selenium	0.0030	mg/L
Station 151	5/14/2018	Selenium	0.0010	mg/L
Station 151	5/21/2018	Selenium	0.0018	mg/L
Station 151	6/4/2018	Selenium	0.0017	mg/L
Station 151	6/18/2018	Selenium	0.0031	mg/L
Station 151	7/8/2018	Selenium	0.0030	mg/L
Station 151	7/16/2018	Selenium	0.0024	mg/L
Station 151	8/20/2018	Selenium	0.0029	mg/L
Station 151	9/9/2018	Selenium	0.0018	mg/L
Station 151	9/17/2018	Selenium	0.0028	mg/L
Station 151	9/25/2018	Selenium	0.0029	mg/L
Station 151	5/14/2019	Selenium	0.0017	mg/L
Station 151	6/2/2019	Selenium	0.0019	mg/L
Station 151	6/9/2019	Selenium	0.0025	mg/L
Station 151	6/17/2019	Selenium	0.0022	mg/L
Station 151	6/30/2019	Selenium	0.0029	mg/L
Station 151	7/14/2019	Selenium	0.0023	mg/L
Station 151	8/4/2019	Selenium	0.0035	mg/L
Station 151	8/18/2019	Selenium	0.0032	mg/L
Station 151	9/8/2019	Selenium	0.0040	mg/L
Station 151	9/16/2019	Selenium	0.0041	mg/L
Station 151	5/12/2020	Selenium	0.0006	mg/L
Station 151	6/2/2020	Selenium	0.0020	mg/L
Station 151	6/14/2020	Selenium	0.0022	mg/L
Station 151	6/26/2020	Selenium	0.0029	mg/L
Station 151	7/5/2020	Selenium	0.0038	mg/L
Station 151	7/19/2020	Selenium	0.0034	mg/L
Station 151	8/3/2020	Selenium	0.0042	mg/L
Station 151	8/16/2020	Selenium	0.0038	mg/L
Station 151	8/28/2020	Selenium	0.0032	mg/L
Station 151	9/15/2020	Selenium	0.0030	mg/L
Station 151	9/20/2020	Selenium	0.0037	mg/L
Station 151	9/27/2020	Selenium	0.0059	mg/L

Table Appendix F-2 Station 151 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/27/2020	Selenium	0.0044	mg/L
Station 151	5/9/2021	Selenium	0.0012	mg/L
Station 151	5/24/2021	Selenium	0.0024	mg/L
Station 151	6/6/2021	Selenium	0.0031	mg/L
Station 151	6/20/2021	Selenium	0.0029	mg/L
Station 151	7/4/2021	Selenium	0.0033	mg/L
Station 151	7/25/2021	Selenium	0.0031	mg/L
Station 151	8/8/2021	Selenium	0.0034	mg/L
Station 151	8/15/2021	Selenium	0.0034	mg/L
Station 151	9/6/2021	Selenium	0.0032	mg/L
Station 151	9/19/2021	Selenium	0.0037	mg/L
Station 151	9/27/2021	Selenium	0.0029	mg/L
Station 151	5/9/2022	Selenium	0.0023	mg/L
Station 151	5/22/2022	Selenium	0	mg/L
Station 151	6/5/2022	Selenium	0.0015	mg/L
Station 151	6/19/2022	Selenium	0.0022	mg/L
Station 151	7/10/2022	Selenium	0.0026	mg/L
Station 151	7/17/2022	Selenium	0.0029	mg/L
Station 151	8/1/2022	Selenium	0.0023	mg/L
Station 151	8/14/2022	Selenium	0.0037	mg/L
Station 151	9/4/2022	Selenium	0.0027	mg/L
Station 151	9/20/2022	Selenium	0.0025	mg/L
Station 151	9/26/2022	Selenium	0.0037	mg/L
Station 151	5/23/2023	Selenium	0.0012	mg/L
Station 151	5/28/2023	Selenium	0	mg/L
Station 151	6/4/2023	Selenium	0.0038	mg/L
Station 151	6/18/2023	Selenium	0	mg/L
Station 151	7/9/2023	Selenium	0.0012	mg/L
Station 151	7/16/2023	Selenium	0	mg/L
Station 151	8/6/2023	Selenium	0.0029	mg/L
Station 151	8/20/2023	Selenium	0.0032	mg/L
Station 151	9/3/2023	Selenium	0.0014	mg/L
Station 151	9/18/2023	Selenium	0.0026	mg/L
Station 151	9/26/2023	Selenium	0.0031	mg/L
Station 151	5/21/2024	Selenium	0.0022	mg/L
Station 151	5/27/2024	Selenium	0	mg/L
Station 151	6/3/2024	Selenium	0.0023	mg/L
Station 151	6/16/2024	Selenium	0.0025	mg/L

Table Appendix F-2 Station 151 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/1/2024	Selenium	0.003	mg/L
Station 151	7/14/2024	Selenium	0.0031	mg/L
Station 151	8/4/2024	Selenium	0.0016	mg/L
Station 151	8/18/2024	Selenium	0.0034	mg/L
Station 151	9/8/2024	Selenium	0.0029	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-3 Station 150 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	7/4/2016	Selenium	0.0016	mg/L
Station 150	7/4/2016	Selenium	0.0016	mg/L
Station 150	8/1/2016	Selenium	0.0018	mg/L
Station 150	8/1/2016	Selenium	0.0018	mg/L
Station 150	9/5/2016	Selenium	0.0026	mg/L
Station 150	9/5/2016	Selenium	0.0025	mg/L
Station 150	9/5/2016	Selenium	0.0021	mg/L
Station 150	9/5/2016	Selenium	0.0023	mg/L
Station 150	10/3/2016	Selenium	0.0026	mg/L
Station 150	10/3/2016	Selenium	0.0027	mg/L
Station 150	8/8/2017	Selenium	0.002	mg/L
Station 150	9/3/2017	Selenium	0.0019	mg/L
Station 150	10/5/2017	Selenium	0.0021	mg/L
Station 150	6/4/2018	Selenium	0.0012	mg/L
Station 150	7/8/2018	Selenium	0.0014	mg/L
Station 150	8/6/2018	Selenium	0.0019	mg/L
Station 150	8/6/2018	Selenium	0.0025	mg/L
Station 150	9/9/2018	Selenium	0.0026	mg/L
Station 150	5/19/2019	Selenium	0.0014	mg/L
Station 150	6/2/2019	Selenium	0.0019	mg/L
Station 150	6/2/2019	Selenium	*0.0011*	mg/L
Station 150	6/2/2019	Selenium	0.0025	mg/L
Station 150	6/9/2019	Selenium	0.0016	mg/L
Station 150	6/30/2019	Selenium	0.0024	mg/L
Station 150	8/4/2019	Selenium	0.0032	mg/L
Station 150	8/4/2019	Selenium	0.0032	mg/L
Station 150	9/8/2019	Selenium	0.0044	mg/L
Station 150	6/26/2020	Selenium	0.0036	mg/L

Table Appendix F-3 Station 150 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	7/5/2020	Selenium	0.0034	mg/L
Station 150	8/3/2020	Selenium	0.0045	mg/L
Station 150	8/28/2020	Selenium	0.0047	mg/L
Station 150	9/15/2020	Selenium	0.0051	mg/L
Station 150	9/27/2020	Selenium	0.0046	mg/L
Station 150	5/9/2021	Selenium	0.002	mg/L
Station 150	6/6/2021	Selenium	0.0023	mg/L
Station 150	7/4/2021	Selenium	0.0032	mg/L
Station 150	8/8/2021	Selenium	0.0029	mg/L
Station 150	9/28/2021	Selenium	0.0029	mg/L
Station 150	5/9/2022	Selenium	0.002	mg/L
Station 150	6/5/2022	Selenium	0.002	mg/L
Station 150	7/10/2022	Selenium	0.0021	mg/L
Station 150	8/1/2022	Selenium	0.0029	mg/L
Station 150	9/4/2022	Selenium	0.003	mg/L
Station 150	5/23/2023	Selenium	0.002	mg/L
Station 150	6/4/2023	Selenium	0.0024	mg/L
Station 150	6/18/2023	Selenium	0.004	mg/L
Station 150	7/9/2023	Selenium	0.0025	mg/L
Station 150	7/16/2023	Selenium	0.004	mg/L
Station 150	8/6/2023	Selenium	0.0023	mg/L
Station 150	8/20/2023	Selenium	0.0026	mg/L
Station 150	9/3/2023	Selenium	0.0026	mg/L
Station 150	9/18/2023	Selenium	0.0023	mg/L
Station 150	5/21/2024	Selenium	0.002	mg/L
Station 150	5/27/2024	Selenium	0.002	mg/L
Station 150	6/3/2024	Selenium	0.002	mg/L
Station 150	6/16/2024	Selenium	0.002	mg/L
Station 150	7/1/2024	Selenium	0.002	mg/L
Station 150	7/14/2024	Selenium	0.0024	mg/L
Station 150	8/4/2024	Selenium	0.002	mg/L
Station 150	8/18/2024	Selenium	0.0031	mg/L
Station 150	9/8/2024	Selenium	0.0023	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-4 Station 160 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Selenium	0.00057	mg/L
Station 160	6/6/2016	Selenium	0.0017	mg/L
Station 160	7/4/2016	Selenium	0.0018	mg/L
Station 160	7/18/2016	Selenium	0.0016	mg/L
Station 160	7/18/2016	Selenium	0.0012	mg/L
Station 160	8/1/2016	Selenium	0.0018	mg/L
Station 160	8/15/2016	Selenium	0.0018	mg/L
Station 160	8/15/2016	Selenium	0.002	mg/L
Station 160	9/5/2016	Selenium	0.002	mg/L
Station 160	9/19/2016	Selenium	0.0021	mg/L
Station 160	9/19/2016	Selenium	0.0016	mg/L
Station 160	10/3/2016	Selenium	0.0023	mg/L
Station 160	10/17/2016	Selenium	0.0027	mg/L
Station 160	10/17/2016	Selenium	0.0019	mg/L
Station 160	5/14/2017	Selenium	0.00057	mg/L
Station 160	6/4/2017	Selenium	0.00081	mg/L
Station 160	7/9/2017	Selenium	0.0015	mg/L
Station 160	8/8/2017	Selenium	0.0017	mg/L
Station 160	8/21/2017	Selenium	0.0025	mg/L
Station 160	9/3/2017	Selenium	0.0019	mg/L
Station 160	9/18/2017	Selenium	0.0021	mg/L
Station 160	9/25/2017	Selenium	0.0025	mg/L
Station 160	6/4/2018	Selenium	0.0011	mg/L
Station 160	6/18/2018	Selenium	0.002	mg/L
Station 160	7/8/2018	Selenium	0.0016	mg/L
Station 160	7/16/2018	Selenium	0.0011	mg/L
Station 160	8/6/2018	Selenium	0.0019	mg/L
Station 160	8/20/2018	Selenium	0.0025	mg/L
Station 160	9/9/2018	Selenium	0.0016	mg/L
Station 160	9/17/2018	Selenium	0.0026	mg/L
Station 160	9/25/2018	Selenium	0.0032	mg/L
Station 160	6/2/2019	Selenium	0.0014	mg/L
Station 160	6/9/2019	Selenium	0.0018	mg/L
Station 160	6/17/2019	Selenium	0.0014	mg/L
Station 160	6/30/2019	Selenium	0.0021	mg/L
Station 160	7/14/2019	Selenium	0.0021	mg/L
Station 160	7/14/2019	Selenium	0.0019	mg/L
Station 160	8/4/2019	Selenium	0.0031	mg/L

Table Appendix F-4 Station 160 Selenium Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 160	8/18/2019	Selenium	0.0031	mg/L
Station 160	9/8/2019	Selenium	0.0041	mg/L
Station 160	9/16/2019	Selenium	0.0042	mg/L
Station 160	5/12/2020	Selenium	*0.00063*	mg/L
Station 160	5/12/2020	Selenium	0.0002	mg/L
Station 160	5/12/2020	Selenium	0.0013	mg/L
Station 160	6/3/2020	Selenium	0.0014	mg/L
Station 160	6/26/2020	Selenium	0.0028	mg/L
Station 160	7/5/2020	Selenium	0.0031	mg/L
Station 160	7/19/2020	Selenium	0.0031	mg/L
Station 160	8/3/2020	Selenium	0.0033	mg/L
Station 160	8/16/2020	Selenium	0.0037	mg/L
Station 160	8/28/2020	Selenium	0.0035	mg/L
Station 160	9/15/2020	Selenium	0.0037	mg/L
Station 160	9/20/2020	Selenium	0.0038	mg/L
Station 160	9/27/2020	Selenium	0.0046	mg/L
Station 160	9/27/2020	Selenium	0.0035	mg/L
Station 160	5/9/2021	Selenium	0.0012	ug/L
Station 160	5/24/2021	Selenium	0	mg/L
Station 160	6/6/2021	Selenium	0.002	ug/L
Station 160	6/20/2021	Selenium	0.002	mg/L
Station 160	7/4/2021	Selenium	0.002	ug/L
Station 160	7/25/2021	Selenium	0.0022	mg/L
Station 160	8/8/2021	Selenium	0.0024	ug/L
Station 160	8/15/2021	Selenium	0.0026	mg/L
Station 160	9/6/2021	Selenium	0.0036	ug/L
Station 160	9/19/2021	Selenium	0.0033	mg/L
Station 160	9/28/2021	Selenium	0.0024	mg/L
Station 160	5/9/2022	Selenium	0.0013	ug/L
Station 160	5/22/2022	Selenium	0	mg/L
Station 160	6/5/2022	Selenium	0.0011	ug/L
Station 160	6/19/2022	Selenium	0	mg/L
Station 160	7/10/2022	Selenium	0.0016	ug/L
Station 160	7/17/2022	Selenium	0	mg/L
Station 160	8/1/2022	Selenium	0.0042	ug/L
Station 160	8/14/2022	Selenium	0.0026	mg/L
Station 160	9/4/2022	Selenium	0.002	ug/L
Station 160	9/20/2022	Selenium	0	mg/L

Table Appendix F-4 Station 160 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/26/2022	Selenium	0.0029	mg/L
Station 160	5/23/2023	Selenium	0.00054	ug/L
Station 160	5/28/2023	Selenium	0	mg/L
Station 160	6/4/2023	Selenium	0.0025	ug/L
Station 160	6/18/2023	Selenium	0	mg/L
Station 160	7/9/2023	Selenium	0.00092	ug/L
Station 160	7/16/2023	Selenium	0	mg/L
Station 160	8/6/2023	Selenium	0.0017	ug/L
Station 160	8/20/2023	Selenium	0.0021	mg/L
Station 160	9/3/2023	Selenium	0.0014	ug/L
Station 160	9/18/2023	Selenium	0	mg/L
Station 160	9/26/2023	Selenium	0.0028	mg/L
Station 160	5/21/2024	Selenium	0.0012	ug/L
Station 160	5/27/2024	Selenium	0	mg/L
Station 160	6/3/2024	Selenium	0.0023	ug/L
Station 160	6/16/2024	Selenium	0	mg/L
Station 160	7/1/2024	Selenium	0.0016	ug/L
Station 160	7/14/2024	Selenium	0.0023	mg/L
Station 160	8/4/2024	Selenium	0.0015	ug/L
Station 160	8/18/2024	Selenium	0.0022	mg/L
Station 160	9/8/2024	Selenium	0.0024	ug/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-5 Station 140 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Selenium	0.0020	mg/L
Station 140	5/16/2016	Selenium	0.0011	mg/L
Station 140	6/6/2016	Selenium	0.0012	mg/L
Station 140	7/4/2016	Selenium	0.0015	mg/L
Station 140	7/18/2016	Selenium	0.0019	mg/L
Station 140	7/18/2016	Selenium	0.0017	mg/L
Station 140	8/1/2016	Selenium	0.0020	mg/L
Station 140	8/15/2016	Selenium	0.0019	mg/L
Station 140	8/15/2016	Selenium	0.0018	mg/L
Station 140	8/15/2016	Selenium	0.0016	mg/L
Station 140	8/15/2016	Selenium	0.0020	mg/L
Station 140	9/5/2016	Selenium	0.0023	mg/L

Table Appendix F-5 Station 140 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	9/19/2016	Selenium	0.0023	mg/L
Station 140	9/19/2016	Selenium	0.0018	mg/L
Station 140	10/3/2016	Selenium	0.0029	mg/L
Station 140	10/17/2016	Selenium	0.0031	mg/L
Station 140	10/17/2016	Selenium	0.0021	mg/L
Station 140	5/14/2017	Selenium	0.0008	mg/L
Station 140	6/4/2017	Selenium	0.0005	mg/L
Station 140	7/9/2017	Selenium	0.0016	mg/L
Station 140	7/17/2017	Selenium	0.0010	mg/L
Station 140	8/8/2017	Selenium	0.0018	mg/L
Station 140	8/21/2017	Selenium	0.0032	mg/L
Station 140	9/3/2017	Selenium	0.0025	mg/L
Station 140	9/18/2017	Selenium	0.0028	mg/L
Station 140	9/25/2017	Selenium	0.0030	mg/L
Station 140	6/4/2018	Selenium	0.0014	mg/L
Station 140	6/18/2018	Selenium	0.0016	mg/L
Station 140	7/8/2018	Selenium	0.0015	mg/L
Station 140	7/16/2018	Selenium	0.0014	mg/L
Station 140	8/6/2018	Selenium	0.0025	mg/L
Station 140	8/20/2018	Selenium	0.0028	mg/L
Station 140	9/9/2018	Selenium	0.0031	mg/L
Station 140	9/17/2018	Selenium	0.0034	mg/L
Station 140	9/25/2018	Selenium	0.0040	mg/L
Station 140	5/14/2019	Selenium	0.0012	mg/L
Station 140	5/14/2019	Selenium	0.0014	mg/L
Station 140	6/2/2019	Selenium	0.0014	mg/L
Station 140	6/9/2019	Selenium	0.0015	mg/L
Station 140	6/17/2019	Selenium	0.0012	mg/L
Station 140	6/30/2019	Selenium	0.0022	mg/L
Station 140	7/14/2019	Selenium	0.0022	mg/L
Station 140	8/4/2019	Selenium	0.0039	mg/L
Station 140	8/18/2019	Selenium	0.0043	mg/L
Station 140	9/8/2019	Selenium	0.0060	mg/L
Station 140	9/16/2019	Selenium	0.0080	mg/L
Station 140	5/12/2020	Selenium	0.0014	mg/L
Station 140	5/18/2020	Selenium	0.0033	mg/L
Station 140	6/2/2020	Selenium	0.0030	mg/L
Station 140	6/14/2020	Selenium	0.0054	mg/L

Table Appendix F-5 Station 140 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	6/26/2020	Selenium	0.0055	mg/L
Station 140	7/5/2020	Selenium	0.0083	mg/L
Station 140	7/19/2020	Selenium	0.0106	mg/L
Station 140	8/3/2020	Selenium	0.0127	mg/L
Station 140	8/16/2020	Selenium	0.0111	mg/L
Station 140	8/28/2020	Selenium	0.0107	mg/L
Station 140	9/15/2020	Selenium	0.0128	mg/L
Station 140	9/20/2020	Selenium	0.0125	mg/L
Station 140	9/27/2020	Selenium	0.0142	mg/L
Station 140	9/27/2020	Selenium	0.0103	mg/L
Station 140	5/9/2021	Selenium	0.0013	mg/L
Station 140	5/24/2021	Selenium	0.0024	mg/L
Station 140	6/6/2021	Selenium	0.0024	mg/L
Station 140	6/20/2021	Selenium	0.0023	mg/L
Station 140	7/4/2021	Selenium	0.0033	mg/L
Station 140	7/25/2021	Selenium	0.0043	mg/L
Station 140	8/8/2021	Selenium	0.0035	mg/L
Station 140	8/15/2021	Selenium	0.0042	mg/L
Station 140	9/6/2021	Selenium	0.0046	mg/L
Station 140	9/19/2021	Selenium	0.005	mg/L
Station 140	9/27/2021	Selenium	0.0041	mg/L
Station 140	5/9/2022	Selenium	0.0012	mg/L
Station 140	5/22/2022	Selenium	0	mg/L
Station 140	6/5/2022	Selenium	0.0011	mg/L
Station 140	6/19/2022	Selenium	0	mg/L
Station 140	7/10/2022	Selenium	0.0024	mg/L
Station 140	7/17/2022	Selenium	0.0026	mg/L
Station 140	8/1/2022	Selenium	0.0033	mg/L
Station 140	8/14/2022	Selenium	0.0045	mg/L
Station 140	9/4/2022	Selenium	0.0034	mg/L
Station 140	9/20/2022	Selenium	0.0027	mg/L
Station 140	9/26/2022	Selenium	0.0041	mg/L
Station 140	5/23/2023	Selenium	0.00046	mg/L
Station 140	5/28/2023	Selenium	0	mg/L
Station 140	6/4/2023	Selenium	0.0015	mg/L
Station 140	6/18/2023	Selenium	0	mg/L
Station 140	7/9/2023	Selenium	0	mg/L
Station 140	7/16/2023	Selenium	0.0022	mg/L

Table Appendix F-5 Station 140 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/6/2023	Selenium	0.0021	mg/L
Station 140	8/20/2023	Selenium	0.0026	mg/L
Station 140	9/3/2023	Selenium	0.0029	mg/L
Station 140	9/18/2023	Selenium	0.0031	mg/L
Station 140	9/27/2023	Selenium	0.0043	mg/L
Station 140	5/21/2024	Selenium	0.0016	mg/L
Station 140	5/27/2024	Selenium	0	mg/L
Station 140	6/3/2024	Selenium	0.0015	mg/L
Station 140	6/16/2024	Selenium	0	mg/L
Station 140	7/1/2024	Selenium	0.0016	mg/L
Station 140	7/14/2024	Selenium	0.0025	mg/L
Station 140	8/4/2024	Selenium	0.0018	mg/L
Station 140	8/18/2024	Selenium	0.003	mg/L
Station 140	9/8/2024	Selenium	3	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-6 Station 12 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Selenium	0.0005	mg/L
Station 12	5/16/2016	Selenium	0.0011	mg/L
Station 12	6/6/2016	Selenium	0.0021	mg/L
Station 12	6/20/2016	Selenium	0.0011	mg/L
Station 12	7/4/2016	Selenium	0.0017	mg/L
Station 12	7/18/2016	Selenium	0.0013	mg/L
Station 12	8/1/2016	Selenium	0.0017	mg/L
Station 12	8/15/2016	Selenium	0.0016	mg/L
Station 12	8/15/2016	Selenium	0.0017	mg/L
Station 12	9/5/2016	Selenium	0.0024	mg/L
Station 12	9/19/2016	Selenium	0.0025	mg/L
Station 12	9/19/2016	Selenium	0.0020	mg/L
Station 12	10/3/2016	Selenium	0.0028	mg/L
Station 12	10/17/2016	Selenium	0.0029	mg/L
Station 12	10/17/2016	Selenium	0.0021	mg/L
Station 12	5/14/2017	Selenium	0.0004	mg/L
Station 12	6/4/2017	Selenium	0.0008	mg/L
Station 12	7/9/2017	Selenium	0.0017	mg/L
Station 12	7/17/2017	Selenium	0.0011	mg/L

Table Appendix F-6 Station 12 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/8/2017	Selenium	0.0027	mg/L
Station 12	8/21/2017	Selenium	0.0033	mg/L
Station 12	9/3/2017	Selenium	0.0018	mg/L
Station 12	9/18/2017	Selenium	0.0025	mg/L
Station 12	9/25/2017	Selenium	0.0032	mg/L
Station 12	5/21/2018	Selenium	0.0013	mg/L
Station 12	6/4/2018	Selenium	0.0014	mg/L
Station 12	6/18/2018	Selenium	0.0027	mg/L
Station 12	7/8/2018	Selenium	0.0020	mg/L
Station 12	7/16/2018	Selenium	0.0015	mg/L
Station 12	8/6/2018	Selenium	0.0020	mg/L
Station 12	8/20/2018	Selenium	0.0026	mg/L
Station 12	9/9/2018	Selenium	0.0013	mg/L
Station 12	9/17/2018	Selenium	0.0023	mg/L
Station 12	9/25/2018	Selenium	0.0029	mg/L
Station 12	5/14/2019	Selenium	0.0011	mg/L
Station 12	6/2/2019	Selenium	0.0018	mg/L
Station 12	6/9/2019	Selenium	0.0024	mg/L
Station 12	6/17/2019	Selenium	0.0022	mg/L
Station 12	6/30/2019	Selenium	0.0024	mg/L
Station 12	7/14/2019	Selenium	0.0021	mg/L
Station 12	8/4/2019	Selenium	0.0032	mg/L
Station 12	8/18/2019	Selenium	0.0032	mg/L
Station 12	9/8/2019	Selenium	0.0032	mg/L
Station 12	9/16/2019	Selenium	0.0037	mg/L
Station 12	5/12/2020	Selenium	0.0006	mg/L
Station 12	6/2/2020	Selenium	0.0012	mg/L
Station 12	6/26/2020	Selenium	0.0053	mg/L
Station 12	7/5/2020	Selenium	0.0027	mg/L
Station 12	7/19/2020	Selenium	0.0022	mg/L
Station 12	8/3/2020	Selenium	0.0019	mg/L
Station 12	8/16/2020	Selenium	0.0027	mg/L
Station 12	8/28/2020	Selenium	0.0021	mg/L
Station 12	9/15/2020	Selenium	0.0022	mg/L
Station 12	9/20/2020	Selenium	0.0022	mg/L
Station 12	9/20/2020	Selenium	0.0023	mg/L
Station 12	9/27/2020	Selenium	0.0024	mg/L
Station 12	9/27/2020	Selenium	0.0021	mg/L

Table Appendix F-6
Station 12 Selenium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 12	5/9/2021	Selenium	0.00078	mg/L
Station 12	5/24/2021	Selenium	0	mg/L
Station 12	6/6/2021	Selenium	0.0017	mg/L
Station 12	6/20/2021	Selenium	0.0025	mg/L
Station 12	7/4/2021	Selenium	0.0031	mg/L
Station 12	7/25/2021	Selenium	0.003	mg/L
Station 12	8/8/2021	Selenium	0.0033	mg/L
Station 12	8/15/2021	Selenium	0.003	mg/L
Station 12	9/6/2021	Selenium	0.003	mg/L
Station 12	9/19/2021	Selenium	0.0035	mg/L
Station 12	9/27/2021	Selenium	0.0029	mg/L
Station 12	5/9/2022	Selenium	0.0012	mg/L
Station 12	5/22/2022	Selenium	0	mg/L
Station 12	6/5/2022	Selenium	0.001	mg/L
Station 12	6/19/2022	Selenium	0	mg/L
Station 12	7/10/2022	Selenium	0.0018	mg/L
Station 12	7/17/2022	Selenium	0	mg/L
Station 12	8/1/2022	Selenium	0.0035	mg/L
Station 12	8/14/2022	Selenium	0.0028	mg/L
Station 12	9/4/2022	Selenium	0.0021	mg/L
Station 12	9/20/2022	Selenium	0.0042	mg/L
Station 12	9/26/2022	Selenium	0.0038	mg/L
Station 12	5/23/2023	Selenium	0.00069	mg/L
Station 12	5/28/2023	Selenium	0	mg/L
Station 12	6/4/2023	Selenium	0.003	mg/L
Station 12	6/18/2023	Selenium	0	mg/L
Station 12	7/9/2023	Selenium	0.0018	mg/L
Station 12	7/16/2023	Selenium	0.0027	mg/L
Station 12	8/6/2023	Selenium	0.00066	mg/L
Station 12	8/20/2023	Selenium	0.0021	mg/L
Station 12	9/3/2023	Selenium	0	mg/L
Station 12	9/18/2023	Selenium	0	mg/L
Station 12	9/26/2023	Selenium	0.003	mg/L
Station 12	5/21/2024	Selenium	0.00078	mg/L
Station 12	5/27/2024	Selenium	0	mg/L
Station 12	6/3/2024	Selenium	0.0017	mg/L
Station 12	6/16/2024	Selenium	0	mg/L
Station 12	7/1/2024	Selenium	0.0016	mg/L

Table Appendix F-6 Station 12 Selenium Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 12	7/14/2024	Selenium	0.0025	mg/L
Station 12	8/4/2024	Selenium	0.0013	mg/L
Station 12	8/18/2024	Selenium	0.0034	mg/L
Station 12	9/8/2024	Selenium	0.0024	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix F-7 Station 9 Selenium Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 9	5/6/2016	Selenium	0.0007	mg/L
Station 9	5/16/2016	Selenium	0.0015	mg/L
Station 9	6/2/2016	Selenium	0.0013	mg/L
Station 9	6/17/2016	Selenium	0.0013	mg/L
Station 9	7/1/2016	Selenium	0.0015	mg/L
Station 9	7/1/2016	Selenium	0.0017	mg/L
Station 9	7/15/2016	Selenium	0.0015	mg/L
Station 9	7/15/2016	Selenium	0.0012	mg/L
Station 9	8/5/2016	Selenium	0.0018	mg/L
Station 9	8/5/2016	Selenium	0.0017	mg/L
Station 9	8/19/2016	Selenium	0.0015	mg/L
Station 9	8/19/2016	Selenium	0.0011	mg/L
Station 9	9/8/2016	Selenium	0.0024	mg/L
Station 9	9/8/2016	Selenium	0.0019	mg/L
Station 9	9/23/2016	Selenium	0.0025	mg/L
Station 9	9/23/2016	Selenium	0.0021	mg/L
Station 9	10/6/2016	Selenium	0.0028	mg/L
Station 9	10/6/2016	Selenium	0.0025	mg/L
Station 9	10/17/2016	Selenium	0.0033	mg/L
Station 9	10/17/2016	Selenium	0.0025	mg/L
Station 9	5/5/2017	Selenium	0.0012	mg/L
Station 9	5/19/2017	Selenium	0.0008	mg/L
Station 9	6/8/2017	Selenium	0.0007	mg/L
Station 9	6/23/2017	Selenium	0.0008	mg/L
Station 9	7/7/2017	Selenium	0.0011	mg/L
Station 9	7/20/2017	Selenium	0.0018	mg/L
Station 9	7/20/2017	Selenium	0.0011	mg/L
Station 9	8/4/2017	Selenium	0.0021	mg/L
Station 9	8/4/2017	Selenium	0.0016	mg/L

Table Appendix F-7
Station 9 Selenium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 9	8/25/2017	Selenium	0.0022	mg/L
Station 9	8/25/2017	Selenium	0.0021	mg/L
Station 9	9/8/2017	Selenium	0.0024	mg/L
Station 9	9/8/2017	Selenium	0.0023	mg/L
Station 9	9/18/2017	Selenium	0.0024	mg/L
Station 9	9/18/2017	Selenium	0.0019	mg/L
Station 9	10/5/2017	Selenium	0.0021	mg/L
Station 9	10/5/2017	Selenium	0.0022	mg/L
Station 9	10/9/2017	Selenium	0.0027	mg/L
Station 9	10/9/2017	Selenium	0.0021	mg/L
Station 9	5/23/2018	Selenium	0.0013	mg/L
Station 9	5/23/2018	Selenium	0.0013	mg/L
Station 9	6/8/2018	Selenium	0.0011	mg/L
Station 9	6/8/2018	Selenium	0.0011	mg/L
Station 9	6/29/2018	Selenium	0.0009	mg/L
Station 9	6/29/2018	Selenium	0.0022	mg/L
Station 9	7/13/2018	Selenium	0.0013	mg/L
Station 9	7/13/2018	Selenium	0.0014	mg/L
Station 9	7/27/2018	Selenium	0.0019	mg/L
Station 9	7/27/2018	Selenium	0.0023	mg/L
Station 9	8/3/2018	Selenium	0.0017	mg/L
Station 9	8/3/2018	Selenium	0.0017	mg/L
Station 9	8/18/2018	Selenium	0.0018	mg/L
Station 9	8/18/2018	Selenium	0.0019	mg/L
Station 9	9/7/2018	Selenium	0.0018	mg/L
Station 9	9/7/2018	Selenium	0.0017	mg/L
Station 9	9/28/2018	Selenium	0.0025	mg/L
Station 9	9/28/2018	Selenium	0.0033	mg/L
Station 9	10/5/2018	Selenium	0.0026	mg/L
Station 9	10/5/2018	Selenium	0.0034	mg/L
Station 9	10/12/2018	Selenium	0.0022	mg/L
Station 9	10/12/2018	Selenium	0.0021	mg/L
Station 9	10/12/2018	Selenium	0.0024	mg/L
Station 9	10/12/2018	Selenium	0.0035	mg/L
Station 9	5/25/2019	Selenium	0.0015	mg/L
Station 9	5/25/2019	Selenium	0.0011	mg/L
Station 9	5/30/2019	Selenium	0.0012	mg/L
Station 9	5/30/2019	Selenium	0.0026	mg/L

Table Appendix F-7
Station 9 Selenium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 9	6/7/2019	Selenium	0.0013	mg/L
Station 9	6/7/2019	Selenium	0.0013	mg/L
Station 9	6/21/2019	Selenium	0.0013	mg/L
Station 9	6/21/2019	Selenium	0.0017	mg/L
Station 9	7/12/2019	Selenium	0.0023	mg/L
Station 9	7/12/2019	Selenium	0.0022	mg/L
Station 9	7/12/2019	Selenium	0.0022	mg/L
Station 9	7/12/2019	Selenium	0.0021	mg/L
Station 9	7/21/2019	Selenium	0.0019	mg/L
Station 9	7/21/2019	Selenium	0.0025	mg/L
Station 9	8/3/2019	Selenium	0.0024	mg/L
Station 9	8/3/2019	Selenium	0.0028	mg/L
Station 9	8/25/2019	Selenium	0.0039	mg/L
Station 9	8/25/2019	Selenium	0.0032	mg/L
Station 9	9/1/2019	Selenium	0.0042	mg/L
Station 9	9/1/2019	Selenium	0.0043	mg/L
Station 9	9/16/2019	Selenium	0.0060	mg/L
Station 9	9/16/2019	Selenium	0.0056	mg/L
Station 9	10/7/2019	Selenium	0.0094	mg/L
Station 9	10/7/2019	Selenium	0.0079	mg/L
Station 9	5/19/2020	Selenium	0.0016	mg/L
Station 9	5/29/2020	Selenium	0.0020	mg/L
Station 9	6/6/2020	Selenium	0.0024	mg/L
Station 9	6/19/2020	Selenium	0.0034	mg/L
Station 9	6/19/2020	Selenium	0.0035	mg/L
Station 9	6/23/2020	Selenium	0.0060	mg/L
Station 9	6/23/2020	Selenium	0.0037	mg/L
Station 9	7/4/2020	Selenium	0.0036	mg/L
Station 9	7/4/2020	Selenium	0.0031	mg/L
Station 9	7/18/2020	Selenium	0.0045	mg/L
Station 9	7/18/2020	Selenium	0.0045	mg/L
Station 9	8/3/2020	Selenium	0.0049	mg/L
Station 9	8/3/2020	Selenium	0.0045	mg/L
Station 9	8/16/2020	Selenium	0.0062	mg/L
Station 9	8/16/2020	Selenium	0.0059	mg/L
Station 9	9/5/2020	Selenium	0.0057	mg/L
Station 9	9/5/2020	Selenium	0.0050	mg/L
Station 9	9/26/2020	Selenium	0.0054	mg/L

Table Appendix F-7 Station 9 Selenium Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	9/26/2020	Selenium	0.0052	mg/L
Station 9	10/3/2020	Selenium	0.0060	mg/L
Station 9	10/3/2020	Selenium	0.0064	mg/L
Station 9	10/10/2020	Selenium	0.0049	mg/L
Station 9	10/10/2020	Selenium	0.0050	mg/L
Station 9	5/16/2021	Selenium	0.002	mg/L
Station 9	5/26/2021	Selenium	0.002	mg/L
Station 9	6/5/2021	Selenium	0.0025	mg/L
Station 9	6/19/2021	Selenium	0.0021	mg/L
Station 9	6/20/2021	Selenium	0.002	mg/L
Station 9	7/12/2021	Selenium	0.0029	mg/L
Station 9	7/26/2021	Selenium	0.0024	mg/L
Station 9	8/8/2021	Selenium	0.0027	mg/L
Station 9	8/15/2021	Selenium	0.0032	mg/L
Station 9	9/6/2021	Selenium	0.0029	mg/L
Station 9	9/19/2021	Selenium	0.0038	mg/L
Station 9	9/28/2021	Selenium	0.0035	mg/L
Station 9	10/2/2021	Selenium	0.0034	mg/L
Station 9	5/9/2022	Selenium	0.002	mg/L
Station 9	5/22/2022	Selenium	0.002	mg/L
Station 9	6/5/2022	Selenium	0.002	mg/L
Station 9	6/19/2022	Selenium	0.002	mg/L
Station 9	7/10/2022	Selenium	0.0021	mg/L
Station 9	7/17/2022	Selenium	0.002	mg/L
Station 9	8/1/2022	Selenium	0.0028	mg/L
Station 9	8/14/2022	Selenium	0.0024	mg/L
Station 9	9/4/2022	Selenium	0.003	mg/L
Station 9	9/20/2022	Selenium	0.002	mg/L
Station 9	9/26/2022	Selenium	0.003	mg/L
Station 9	10/1/2022	Selenium	0.0027	mg/L
Station 9	10/5/2022	Selenium	0.0032	mg/L
Station 9	5/23/2023	Selenium	0.002	mg/L
Station 9	5/28/2023	Selenium	0.002	mg/L
Station 9	6/4/2023	Selenium	0.002	mg/L
Station 9	6/18/2023	Selenium	0.004	mg/L
Station 9	7/9/2023	Selenium	0.0024	mg/L
Station 9	7/16/2023	Selenium	0.004	mg/L
Station 9	8/6/2023	Selenium	0.002	mg/L

Table Appendix F-7
Station 9 Selenium Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 9	8/20/2023	Selenium	0.0022	mg/L
Station 9	9/3/2023	Selenium	0.0022	mg/L
Station 9	9/18/2023	Selenium	0.002	mg/L
Station 9	5/21/2024	Selenium	0.002	mg/L
Station 9	5/27/2024	Selenium	0.002	mg/L
Station 9	6/3/2024	Selenium	0.002	mg/L
Station 9	6/3/2024	Selenium	0.002	mg/L
Station 9	6/3/2024	Selenium	0.002	mg/L
Station 9	6/16/2024	Selenium	0.002	mg/L
Station 9	7/1/2024	Selenium	0.002	mg/L
Station 9	7/14/2024	Selenium	0.002	mg/L
Station 9	8/4/2024	Selenium	0.002	mg/L
Station 9	8/18/2024	Selenium	0.0023	mg/L
Station 9	9/8/2024	Selenium	0.0024	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix G– Lead Data for Outfall 001, Stations 151, 150, 160, 140, 12 & 9

Table Appendix G-1 Outfall 001 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Lead	0.00061	mg/L
Outfall 001	5/10/2016	Lead	0.00038	mg/L
Outfall 001	5/20/2016	Lead	*0.00096*	mg/L
Outfall 001	5/20/2016	Lead	*0.00096*	mg/L
Outfall 001	5/24/2016	Lead	0.0005	mg/L
Outfall 001	6/1/2016	Lead	0.0002	mg/L
Outfall 001	6/7/2016	Lead	0.00039	mg/L
Outfall 001	6/14/2016	Lead	0.00021	mg/L
Outfall 001	7/5/2016	Lead	0.00058	mg/L
Outfall 001	7/12/2016	Lead	0.0004	mg/L
Outfall 001	7/19/2016	Lead	0.0005	mg/L
Outfall 001	7/26/2016	Lead	0.0008	mg/L
Outfall 001	8/2/2016	Lead	0.00061	mg/L
Outfall 001	8/9/2016	Lead	0.00042	mg/L
Outfall 001	8/16/2016	Lead	0.0007	mg/L
Outfall 001	8/23/2016	Lead	0.0007	mg/L
Outfall 001	8/31/2016	Lead	0.0009	mg/L
Outfall 001	9/6/2016	Lead	0.00093	mg/L
Outfall 001	9/13/2016	Lead	0.00046	mg/L
Outfall 001	9/20/2016	Lead	0.0003	mg/L
Outfall 001	9/26/2016	Lead	*0.0008*	mg/L
Outfall 001	9/26/2016	Lead	*0.0008*	mg/L
Outfall 001	5/1/2017	Lead	*0.00063*	mg/L
Outfall 001	5/1/2017	Lead	*0.00079*	mg/L
Outfall 001	5/9/2017	Lead	0.00044	mg/L
Outfall 001	5/9/2017	Lead	*0.0013*	mg/L
Outfall 001	5/9/2017	Lead	0.00042	mg/L
Outfall 001	5/15/2017	Lead	0.00081	mg/L
Outfall 001	5/23/2017	Lead	0.0004	mg/L
Outfall 001	6/5/2017	Lead	0.00068	mg/L
Outfall 001	6/13/2017	Lead	0.00032	mg/L
Outfall 001	6/20/2017	Lead	0.0008	mg/L
Outfall 001	7/4/2017	Lead	0.00051	mg/L
Outfall 001	7/10/2017	Lead	0.00059	mg/L
Outfall 001	7/18/2017	Lead	0.0006	mg/L
Outfall 001	7/26/2017	Lead	0.0017	mg/L
Outfall 001	8/2/2017	Lead	0.0022	mg/L
Outfall 001	8/9/2017	Lead	0.00056	mg/L

Table Appendix G-1 Outfall 001 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/16/2017	Lead	0.00078	mg/L
Outfall 001	8/22/2017	Lead	0.0007	mg/L
Outfall 001	8/31/2017	Lead	0.0007	mg/L
Outfall 001	9/4/2017	Lead	0.00054	mg/L
Outfall 001	9/12/2017	Lead	0.00058	mg/L
Outfall 001	9/19/2017	Lead	0.0012	mg/L
Outfall 001	9/27/2017	Lead	*0.00092*	mg/L
Outfall 001	9/27/2017	Lead	*0.00092*	mg/L
Outfall 001	5/4/2018	Lead	*0.00039*	mg/L
Outfall 001	5/4/2018	Lead	*0.00027*	mg/L
Outfall 001	5/14/2018	Lead	0.00058	mg/L
Outfall 001	6/5/2018	Lead	0.00064	mg/L
Outfall 001	6/12/2018	Lead	0.00029	mg/L
Outfall 001	6/26/2018	Lead	0.0005	mg/L
Outfall 001	7/2/2018	Lead	0.00041	mg/L
Outfall 001	7/9/2018	Lead	0.00062	mg/L
Outfall 001	7/17/2018	Lead	0.0013	mg/L
Outfall 001	7/24/2018	Lead	0.002	mg/L
Outfall 001	7/31/2018	Lead	0.0015	mg/L
Outfall 001	8/7/2018	Lead	0.0011	mg/L
Outfall 001	8/14/2018	Lead	0.0013	mg/L
Outfall 001	8/21/2018	Lead	0.0009	mg/L
Outfall 001	8/28/2018	Lead	0.0005	mg/L
Outfall 001	9/4/2018	Lead	0.00048	mg/L
Outfall 001	9/10/2018	Lead	0.00032	mg/L
Outfall 001	9/18/2018	Lead	0.0008	mg/L
Outfall 001	5/15/2019	Lead	0.0006	mg/L
Outfall 001	5/19/2019	Lead	0.0002	mg/L
Outfall 001	5/28/2019	Lead	0.0002	mg/L
Outfall 001	6/3/2019	Lead	0.00029	mg/L
Outfall 001	6/10/2019	Lead	0.00036	mg/L
Outfall 001	6/18/2019	Lead	0.0008	mg/L
Outfall 001	6/26/2019	Lead	*0.0012*	mg/L
Outfall 001	6/26/2019	Lead	0.0042	mg/L
Outfall 001	7/1/2019	Lead	0.00075	mg/L
Outfall 001	7/8/2019	Lead	0.00055	mg/L
Outfall 001	7/15/2019	Lead	0.0009	mg/L
Outfall 001	7/22/2019	Lead	0.0009	mg/L

Table Appendix G-1 Outfall 001 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/29/2019	Lead	0.0008	mg/L
Outfall 001	8/5/2019	Lead	0.00057	mg/L
Outfall 001	8/12/2019	Lead	0.00034	mg/L
Outfall 001	8/17/2019	Lead	0.00058	mg/L
Outfall 001	8/19/2019	Lead	0.0005	mg/L
Outfall 001	8/29/2019	Lead	0.0007	mg/L
Outfall 001	9/7/2019	Lead	0.00097	mg/L
Outfall 001	9/9/2019	Lead	0.00048	mg/L
Outfall 001	5/9/2020	Lead	*0.0082*	mg/L
Outfall 001	5/9/2020	Lead	*0.008*	mg/L
Outfall 001	5/13/2020	Lead	0.00039	mg/L
Outfall 001	5/19/2020	Lead	0.0005	mg/L
Outfall 001	5/26/2020	Lead	0.0003	mg/L
Outfall 001	6/3/2020	Lead	0.00023	mg/L
Outfall 001	6/8/2020	Lead	0.00019	mg/L
Outfall 001	6/15/2020	Lead	0.0002	mg/L
Outfall 001	6/22/2020	Lead	0.0004	mg/L
Outfall 001	6/29/2020	Lead	0.0006	mg/L
Outfall 001	7/6/2020	Lead	0.00047	mg/L
Outfall 001	*8/29/2020*	*Lead*	*0.00024*	*mg/L*
Outfall 001	*9/8/2020*	*Lead*	*0.0002*	*mg/L*
Outfall 001	*9/15/2020*	*Lead*	*0.000074*	*mg/L*
Outfall 001	*9/21/2020*	*Lead*	*0.0001*	*mg/L*
Outfall 001	5/17/2021	Lead	0.00021	mg/L
Outfall 001	5/18/2021	Lead	0.00021	mg/L
Outfall 001	5/18/2021	Lead	0.00056	mg/L
Outfall 001	5/25/2021	Lead	0.00046	mg/L
Outfall 001	5/31/2021	Lead	0	mg/L
Outfall 001	6/7/2021	Lead	0.00027	mg/L
Outfall 001	6/14/2021	Lead	0.00018	mg/L
Outfall 001	6/21/2021	Lead	0.00028	mg/L
Outfall 001	6/28/2021	Lead	0.00017	mg/L
Outfall 001	7/5/2021	Lead	0	mg/L
Outfall 001	7/12/2021	Lead	0.00012	mg/L
Outfall 001	7/19/2021	Lead	0	mg/L
Outfall 001	7/26/2021	Lead	0.00277	mg/L
Outfall 001	8/3/2021	Lead	0.0012	mg/L
Outfall 001	8/9/2021	Lead	0.00082	mg/L

Table Appendix G-1 Outfall 001 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	8/16/2021	Lead	0.00029	mg/L
Outfall 001	8/23/2021	Lead	0.00039	mg/L
Outfall 001	8/31/2021	Lead	0.00052	mg/L
Outfall 001	9/8/2021	Lead	0.00031	mg/L
Outfall 001	9/13/2021	Lead	0.00019	mg/L
Outfall 001	9/20/2021	Lead	0	mg/L
Outfall 001	10/4/2021	Lead	0.00023	mg/L
Outfall 001	5/10/2022	Lead	0.00046	mg/L
Outfall 001	5/16/2022	Lead	0.00081	mg/L
Outfall 001	5/23/2022	Lead	0.00028	mg/L
Outfall 001	5/31/2022	Lead	0.00028	mg/L
Outfall 001	6/6/2022	Lead	0.00078	mg/L
Outfall 001	6/13/2022	Lead	0.00027	mg/L
Outfall 001	6/20/2022	Lead	0.00023	mg/L
Outfall 001	6/27/2022	Lead	0.00011	mg/L
Outfall 001	7/5/2022	Lead	0.00022	mg/L
Outfall 001	7/11/2022	Lead	0.00016	mg/L
Outfall 001	7/18/2022	Lead	0	mg/L
Outfall 001	7/25/2022	Lead	0	mg/L
Outfall 001	7/25/2022	Lead	0.00013	mg/L
Outfall 001	8/1/2022	Lead	0.00023	mg/L
Outfall 001	8/8/2022	Lead	0.00014	mg/L
Outfall 001	8/15/2022	Lead	0	mg/L
Outfall 001	8/22/2022	Lead	0.00011	mg/L
Outfall 001	8/29/2022	Lead	0	mg/L
Outfall 001	9/5/2022	Lead	0.00032	mg/L
Outfall 001	9/12/2022	Lead	0.00022	mg/L
Outfall 001	9/21/2022	Lead	0.00032	mg/L
Outfall 001	5/24/2023	Lead	0.00015	mg/L
Outfall 001	5/29/2023	Lead	0	mg/L
Outfall 001	6/5/2023	Lead	0.00044	mg/L
Outfall 001	6/12/2023	Lead	0	mg/L
Outfall 001	6/19/2023	Lead	0	mg/L
Outfall 001	6/27/2023	Lead	0.00014	mg/L
Outfall 001	7/7/2023	Lead	0.00015	mg/L
Outfall 001	7/10/2023	Lead	0.00009	mg/L
Outfall 001	7/17/2023	Lead	0	mg/L
Outfall 001	7/24/2023	Lead	0	mg/L

Table Appendix G-1 Outfall 001 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/31/2023	Lead	0	mg/L
Outfall 001	8/7/2023	Lead	0.00082	mg/L
Outfall 001	8/16/2023	Lead	0.00022	mg/L
Outfall 001	8/21/2023	Lead	0.00034	mg/L
Outfall 001	8/28/2023	Lead	0.00038	mg/L
Outfall 001	9/4/2023	Lead	0.00029	mg/L
Outfall 001	9/11/2023	Lead	0.00012	mg/L
Outfall 001	9/19/2023	Lead	0.00025	mg/L
Outfall 001	5/22/2024	Lead	0.00029	mg/L
Outfall 001	5/28/2024	Lead	0.00027	mg/L
Outfall 001	6/4/2024	Lead	0.00022	mg/L
Outfall 001	6/10/2024	Lead	0.0002	mg/L
Outfall 001	6/17/2024	Lead	0	mg/L
Outfall 001	6/24/2024	Lead	0	mg/L
Outfall 001	7/2/2024	Lead	0	mg/L
Outfall 001	7/8/2024	Lead	0.00018	mg/L
Outfall 001	7/15/2024	Lead	0.00015	mg/L
Outfall 001	7/22/2024	Lead	0.00019	mg/L
Outfall 001	7/29/2024	Lead	0.00016	mg/L
Outfall 001	8/5/2024	Lead	0	mg/L
Outfall 001	8/12/2024	Lead	0.00028	mg/L
Outfall 001	8/19/2024	Lead	0.0001	mg/L
Outfall 001	8/26/2024	Lead	0.00012	mg/L
Outfall 001	9/2/2024	Lead	0.0003	mg/L
Outfall 001	9/9/2024	Lead	0.00044	mg/L
Outfall 001	9/16/2024	Lead	0.00041	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-2 Station 151 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Lead	0.0363	mg/L
Station 151	5/16/2016	Lead	0.0067	mg/L
Station 151	6/6/2016	Lead	0.0029	mg/L
Station 151	6/20/2016	Lead	0.0027	mg/L
Station 151	7/4/2016	Lead	0.0035	mg/L
Station 151	7/18/2016	Lead	0.0028	mg/L

Table Appendix G-2 Station 151 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	8/1/2016	Lead	0.0022	mg/L
Station 151	8/15/2016	Lead	0.0019	mg/L
Station 151	9/5/2016	Lead	0.0014	mg/L
Station 151	9/19/2016	Lead	0.0011	mg/L
Station 151	10/3/2016	Lead	0.0028	mg/L
Station 151	10/17/2016	Lead	0.0013	mg/L
Station 151	5/14/2017	Lead	0.0383	mg/L
Station 151	5/22/2017	Lead	0.0087	mg/L
Station 151	6/4/2017	Lead	0.009	mg/L
Station 151	6/19/2017	Lead	0.0036	mg/L
Station 151	7/9/2017	Lead	0.0035	mg/L
Station 151	7/17/2017	Lead	0.0029	mg/L
Station 151	8/8/2017	Lead	0.0018	mg/L
Station 151	8/21/2017	Lead	0.0014	mg/L
Station 151	9/3/2017	Lead	0.00098	mg/L
Station 151	9/18/2017	Lead	0.0019	mg/L
Station 151	9/25/2017	Lead	0.0022	mg/L
Station 151	5/14/2018	Lead	0.105	mg/L
Station 151	5/21/2018	Lead	0.0185	mg/L
Station 151	6/4/2018	Lead	0.0117	mg/L
Station 151	6/18/2018	Lead	0.0043	mg/L
Station 151	7/8/2018	Lead	0.0024	mg/L
Station 151	7/16/2018	Lead	0.003	mg/L
Station 151	8/6/2018	Lead	0.004	mg/L
Station 151	8/20/2018	Lead	0.0029	mg/L
Station 151	9/9/2018	Lead	0.0098	mg/L
Station 151	9/17/2018	Lead	0.0067	mg/L
Station 151	9/25/2018	Lead	0.0094	mg/L
Station 151	5/14/2019	Lead	0.0872	mg/L
Station 151	5/19/2019	Lead	0.0453	mg/L
Station 151	6/2/2019	Lead	0.0111	mg/L
Station 151	6/9/2019	Lead	0.0054	mg/L
Station 151	6/17/2019	Lead	0.0047	mg/L
Station 151	6/30/2019	Lead	0.0053	mg/L
Station 151	7/14/2019	Lead	0.0037	mg/L
Station 151	8/4/2019	Lead	0.048	mg/L
Station 151	8/18/2019	Lead	0.0074	mg/L
Station 151	9/8/2019	Lead	0.0109	mg/L

Table Appendix G-2 Station 151 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/16/2019	Lead	0.0058	mg/L
Station 151	5/12/2020	Lead	0.1	mg/L
Station 151	5/18/2020	Lead	0.0527	mg/L
Station 151	6/2/2020	Lead	0.0152	mg/L
Station 151	6/14/2020	Lead	0.0164	mg/L
Station 151	6/26/2020	Lead	0.0171	mg/L
Station 151	7/5/2020	Lead	0.0153	mg/L
Station 151	7/19/2020	Lead	0.018	mg/L
Station 151	8/3/2020	Lead	0.0271	mg/L
Station 151	8/16/2020	Lead	0.0229	mg/L
Station 151	8/28/2020	Lead	0.0193	mg/L
Station 151	9/15/2020	Lead	0.0148	mg/L
Station 151	9/20/2020	Lead	0.0158	mg/L
Station 151	9/27/2020	Lead	0.0482	mg/L
Station 151	5/9/2021	Lead	0.113	ug/L
Station 151	5/24/2021	Lead	0.0109	mg/L
Station 151	6/6/2021	Lead	0.0078	ug/L
Station 151	6/20/2021	Lead	0.00716	mg/L
Station 151	7/4/2021	Lead	0.0081	ug/L
Station 151	7/25/2021	Lead	0.00662	mg/L
Station 151	8/8/2021	Lead	0.0054	ug/L
Station 151	8/15/2021	Lead	0.00533	mg/L
Station 151	9/6/2021	Lead	0.0058	ug/L
Station 151	9/19/2021	Lead	0.0074	mg/L
Station 151	9/27/2021	Lead	0.00532	mg/L
Station 151	5/9/2022	Lead	0.015	ug/L
Station 151	5/22/2022	Lead	0.0187	mg/L
Station 151	6/5/2022	Lead	0.0043	ug/L
Station 151	6/19/2022	Lead	0.00535	mg/L
Station 151	7/10/2022	Lead	0.0053	ug/L
Station 151	7/17/2022	Lead	0.00633	mg/L
Station 151	8/1/2022	Lead	0.0077	ug/L
Station 151	8/14/2022	Lead	0.00807	mg/L
Station 151	9/4/2022	Lead	0.0061	ug/L
Station 151	9/20/2022	Lead	0.00924	mg/L
Station 151	9/26/2022	Lead	0.00377	mg/L
Station 151	5/23/2023	Lead	0.0557	ug/L
Station 151	5/28/2023	Lead	0.0185	mg/L

Table Appendix G-2 Station 151 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	6/4/2023	Lead	0.0057	ug/L
Station 151	6/18/2023	Lead	0.00709	mg/L
Station 151	7/9/2023	Lead	0.0056	ug/L
Station 151	7/16/2023	Lead	0.00413	mg/L
Station 151	8/6/2023	Lead	0.0053	ug/L
Station 151	8/20/2023	Lead	0.00567	mg/L
Station 151	9/3/2023	Lead	0.0051	ug/L
Station 151	9/18/2023	Lead	0.00716	mg/L
Station 151	9/26/2023	Lead	0.00703	mg/L
Station 151	5/21/2024	Lead	0.16	ug/L
Station 151	5/27/2024	Lead	0.0104	mg/L
Station 151	6/3/2024	Lead	0.0069	ug/L
Station 151	6/16/2024	Lead	0.00373	mg/L
Station 151	7/1/2024	Lead	0.0049	ug/L
Station 151	7/14/2024	Lead	0.0048	mg/L
Station 151	8/4/2024	Lead	0.0296	ug/L
Station 151	8/18/2024	Lead	0.00541	mg/L
Station 151	9/8/2024	Lead	0.0372	ug/L
Station 151	9/15/2024	Lead	0.00455	mg/L
Station 151	9/23/2024	Lead	0.00597	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-3 Station 150 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/2/2016	Lead	0.0099	mg/L
Station 150	6/6/2016	Lead	0.0007	mg/L
Station 150	7/4/2016	Lead	0.0003	mg/L
Station 150	8/1/2016	Lead	0.0002	mg/L
Station 150	9/5/2016	Lead	0.0006	mg/L
Station 150	9/5/2016	Lead	*0.0006*	mg/L
Station 150	9/5/2016	Lead	0.0006	mg/L
Station 150	10/3/2016	Lead	0.0012	mg/L
Station 150	5/14/2017	Lead	0.0266	mg/L
Station 150	6/4/2017	Lead	0.0037	mg/L
Station 150	6/4/2017	Lead	*0.0009*	mg/L
Station 150	6/4/2017	Lead	0.0033	mg/L
Station 150	7/9/2017	Lead	0.001	mg/L

Table Appendix G-3 Station 150 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	8/8/2017	Lead	0.0009	mg/L
Station 150	9/3/2017	Lead	0.0004	mg/L
Station 150	10/5/2017	Lead	0.0015	mg/L
Station 150	5/14/2018	Lead	*0.0006*	mg/L
Station 150	5/14/2018	Lead	0.0617	mg/L
Station 150	5/14/2018	Lead	0.0626	mg/L
Station 150	6/4/2018	Lead	0.0065	mg/L
Station 150	7/8/2018	Lead	0.0009	mg/L
Station 150	8/6/2018	Lead	0.0014	mg/L
Station 150	9/9/2018	Lead	0.0011	mg/L
Station 150	5/19/2019	Lead	0.0302	mg/L
Station 150	6/2/2019	Lead	0.0043	mg/L
Station 150	6/2/2019	Lead	*0.001*	mg/L
Station 150	6/2/2019	Lead	0.0045	mg/L
Station 150	6/9/2019	Lead	0.0028	mg/L
Station 150	6/30/2019	Lead	0.0022	mg/L
Station 150	8/4/2019	Lead	0.0046	mg/L
Station 150	8/4/2019	Lead	*0.0006*	mg/L
Station 150	8/4/2019	Lead	0.0049	mg/L
Station 150	9/8/2019	Lead	0.0031	mg/L
Station 150	5/12/2020	Lead	0.0271	mg/L
Station 150	6/3/2020	Lead	0.0046	mg/L
Station 150	6/26/2020	Lead	0.0042	mg/L
Station 150	7/5/2020	Lead	0.0041	mg/L
Station 150	8/3/2020	Lead	0.0073	mg/L
Station 150	8/28/2020	Lead	0.0069	mg/L
Station 150	9/4/2020	Lead	0.0069	mg/L
Station 150	9/4/2020	Lead	0.0044	mg/L
Station 150	9/15/2020	Lead	0.0051	mg/L
Station 150	9/18/2020	Lead	0.004	mg/L
Station 150	9/25/2020	Lead	0.0031	mg/L
Station 150	9/27/2020	Lead	0.0061	mg/L
Station 150	10/2/2020	Lead	0.00517	mg/L
Station 150	10/9/2020	Lead	0.00615	mg/L
Station 150	5/7/2021	Lead	0.0177	mg/L
Station 150	5/9/2021	Lead	0.0153	mg/L
Station 150	5/14/2021	Lead	0.0244	mg/L
Station 150	5/23/2021	Lead	0.00752	mg/L

Table Appendix G-3 Station 150 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	5/28/2021	Lead	0.00327	mg/L
Station 150	6/4/2021	Lead	0.00273	mg/L
Station 150	6/6/2021	Lead	0.00262	mg/L
Station 150	6/11/2021	Lead	0.00163	mg/L
Station 150	6/18/2021	Lead	0.00161	mg/L
Station 150	6/25/2021	Lead	0.00332	mg/L
Station 150	7/3/2021	Lead	0.00341	mg/L
Station 150	7/4/2021	Lead	0.00269	mg/L
Station 150	7/9/2021	Lead	0.00253	mg/L
Station 150	7/18/2021	Lead	0.00153	mg/L
Station 150	7/23/2021	Lead	0.00217	mg/L
Station 150	8/6/2021	Lead	0.00241	mg/L
Station 150	8/8/2021	Lead	0.00208	mg/L
Station 150	8/16/2021	Lead	0.0023	mg/L
Station 150	8/20/2021	Lead	0.00257	mg/L
Station 150	8/27/2021	Lead	0.0027	mg/L
Station 150	9/3/2021	Lead	0.00239	mg/L
Station 150	9/11/2021	Lead	0.00207	mg/L
Station 150	9/17/2021	Lead	0.00226	mg/L
Station 150	9/24/2021	Lead	0.00113	mg/L
Station 150	9/28/2021	Lead	0.00087	mg/L
Station 150	10/1/2021	Lead	0.00107	mg/L
Station 150	5/9/2022	Lead	0.00528	mg/L
Station 150	5/20/2022	Lead	0.0128	mg/L
Station 150	6/3/2022	Lead	0.00766	mg/L
Station 150	6/5/2022	Lead	0.00471	mg/L
Station 150	6/10/2022	Lead	0.00176	mg/L
Station 150	6/17/2022	Lead	0.0014	mg/L
Station 150	6/25/2022	Lead	0.00113	mg/L
Station 150	7/10/2022	Lead	0.00241	mg/L
Station 150	7/15/2022	Lead	0.00268	mg/L
Station 150	7/22/2022	Lead	0.00199	mg/L
Station 150	7/29/2022	Lead	0.00288	mg/L
Station 150	8/1/2022	Lead	0.00298	mg/L
Station 150	8/6/2022	Lead	0.00249	mg/L
Station 150	8/13/2022	Lead	0.00221	mg/L
Station 150	9/2/2022	Lead	0.00273	mg/L
Station 150	9/4/2022	Lead	0.00259	mg/L

Table Appendix G-3 Station 150 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 150	9/9/2022	Lead	0.00274	mg/L
Station 150	10/1/2022	Lead	0.00254	mg/L
Station 150	5/23/2023	Lead	0.0287	mg/L
Station 150	5/30/2023	Lead	0.0109	mg/L
Station 150	6/4/2023	Lead	0.0065	mg/L
Station 150	6/9/2023	Lead	0.0118	mg/L
Station 150	6/18/2023	Lead	0.00259	mg/L
Station 150	7/2/2023	Lead	0.00209	mg/L
Station 150	7/9/2023	Lead	0.00239	mg/L
Station 150	7/16/2023	Lead	0.0019	mg/L
Station 150	7/21/2023	Lead	0.00149	mg/L
Station 150	8/5/2023	Lead	0.00196	mg/L
Station 150	8/6/2023	Lead	0.00213	mg/L
Station 150	8/11/2023	Lead	0.00212	mg/L
Station 150	8/20/2023	Lead	0.00211	mg/L
Station 150	8/25/2023	Lead	0.00231	mg/L
Station 150	9/3/2023	Lead	0.00293	mg/L
Station 150	9/8/2023	Lead	0.00255	mg/L
Station 150	9/18/2023	Lead	0.00339	mg/L
Station 150	5/21/2024	Lead	0.0284	mg/L
Station 150	5/23/2024	Lead	0.023	mg/L
Station 150	5/27/2024	Lead	0.0107	mg/L
Station 150	5/31/2024	Lead	0.0145	mg/L
Station 150	6/3/2024	Lead	0.00334	mg/L
Station 150	6/7/2024	Lead	0.00595	mg/L
Station 150	6/14/2024	Lead	0.0018	mg/L
Station 150	6/16/2024	Lead	0.00236	mg/L
Station 150	6/28/2024	Lead	0.0001	mg/L
Station 150	7/1/2024	Lead	0.002	mg/L
Station 150	7/14/2024	Lead	0.00183	mg/L
Station 150	7/17/2024	Lead	0.00183	mg/L
Station 150	8/4/2024	Lead	0.0282	mg/L
Station 150	8/10/2024	Lead	0.00228	mg/L
Station 150	8/18/2024	Lead	0.00227	mg/L
Station 150	8/25/2024	Lead	0.00198	mg/L
Station 150	9/8/2024	Lead	0.00421	mg/L
Station 150	9/13/2024	Lead	0.00246	mg/L
Station 150	9/15/2024	Lead	0.00454	mg/L

Table Appendix G-3 Station 150 Lead Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 150	9/27/2024	Lead	0.00213	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-4 Station 160 Lead Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 160	5/2/2016	Lead	0.0057	mg/L
Station 160	5/16/2016	Lead	0.0012	mg/L
Station 160	6/6/2016	Lead	0.0002	mg/L
Station 160	7/4/2016	Lead	0.00027	mg/L
Station 160	8/1/2016	Lead	0.0001	mg/L
Station 160	9/5/2016	Lead	0.00071	mg/L
Station 160	10/3/2016	Lead	0.00042	mg/L
Station 160	10/17/2016	Lead	0.0001	mg/L
Station 160	5/14/2017	Lead	0.0156	mg/L
Station 160	5/22/2017	Lead	0.0098	mg/L
Station 160	6/4/2017	Lead	0.0033	mg/L
Station 160	6/19/2017	Lead	0.0011	mg/L
Station 160	7/9/2017	Lead	0.00032	mg/L
Station 160	7/17/2017	Lead	0.0001	mg/L
Station 160	8/8/2017	Lead	0.00027	mg/L
Station 160	8/21/2017	Lead	0.0002	mg/L
Station 160	9/3/2017	Lead	0.000094	mg/L
Station 160	9/18/2017	Lead	0.0003	mg/L
Station 160	9/25/2017	Lead	0.0002	mg/L
Station 160	5/14/2018	Lead	0.0088	mg/L
Station 160	5/21/2018	Lead	0.0074	mg/L
Station 160	6/4/2018	Lead	0.0079	mg/L
Station 160	6/18/2018	Lead	0.0014	mg/L
Station 160	7/8/2018	Lead	0.00037	mg/L
Station 160	7/16/2018	Lead	0.0003	mg/L
Station 160	8/6/2018	Lead	0.00017	mg/L
Station 160	9/9/2018	Lead	0.00011	mg/L
Station 160	9/25/2018	Lead	0.0001	mg/L
Station 160	5/14/2019	Lead	0.0077	mg/L
Station 160	5/19/2019	Lead	0.0168	mg/L
Station 160	6/2/2019	Lead	0.0041	mg/L
Station 160	6/9/2019	Lead	0.0019	mg/L

Table Appendix G-4
Station 160 Lead Data 2016 through 2024

Location/Station	Date	Parameter	Concentration	Unit
Station 160	6/17/2019	Lead	0.0015	mg/L
Station 160	6/30/2019	Lead	0.00099	mg/L
Station 160	7/14/2019	Lead	0.0003	mg/L
Station 160	7/14/2019	Lead	*0.0011*	mg/L
Station 160	7/14/2019	Lead	0.0003	mg/L
Station 160	8/4/2019	Lead	0.0034	mg/L
Station 160	8/18/2019	Lead	0.0026	mg/L
Station 160	9/8/2019	Lead	0.0024	mg/L
Station 160	9/16/2019	Lead	0.0017	mg/L
Station 160	5/12/2020	Lead	*0.00072*	mg/L
Station 160	5/12/2020	Lead	0.0135	mg/L
Station 160	5/12/2020	Lead	0.0153	mg/L
Station 160	5/19/2020	Lead	0.0074	mg/L
Station 160	6/3/2020	Lead	0.037	mg/L
Station 160	6/14/2020	Lead	0.0025	mg/L
Station 160	6/26/2020	Lead	0.0021	mg/L
Station 160	7/5/2020	Lead	0.0028	mg/L
Station 160	7/19/2020	Lead	0.0026	mg/L
Station 160	8/3/2020	Lead	0.0042	mg/L
Station 160	8/16/2020	Lead	0.0043	mg/L
Station 160	8/28/2020	Lead	0.0041	mg/L
Station 160	9/4/2020	Lead	0.0094	mg/L
Station 160	9/4/2020	Lead	0.0032	mg/L
Station 160	9/15/2020	Lead	0.0032	mg/L
Station 160	9/18/2020	Lead	0.0035	mg/L
Station 160	9/20/2020	Lead	0.0034	mg/L
Station 160	9/25/2020	Lead	0.00524	mg/L
Station 160	9/27/2020	Lead	0.0042	mg/L
Station 160	10/2/2020	Lead	0.00364	mg/L
Station 160	10/9/2020	Lead	0.00267	mg/L
Station 160	5/7/2021	Lead	0.00183	mg/L
Station 160	5/9/2021	Lead	0.0042	mg/L
Station 160	5/14/2021	Lead	0.00803	mg/L
Station 160	5/23/2021	Lead	0.0041	mg/L
Station 160	5/24/2021	Lead	0.00575	mg/L
Station 160	5/28/2021	Lead	0.00342	mg/L
Station 160	6/4/2021	Lead	0.00155	mg/L
Station 160	6/6/2021	Lead	0.0018	mg/L

Table Appendix G-4 Station 160 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/11/2021	Lead	0.00125	mg/L
Station 160	6/18/2021	Lead	0.00159	mg/L
Station 160	6/20/2021	Lead	0.00119	mg/L
Station 160	6/25/2021	Lead	0.00246	mg/L
Station 160	7/3/2021	Lead	0.00161	mg/L
Station 160	7/4/2021	Lead	0.0012	mg/L
Station 160	7/9/2021	Lead	0.00123	mg/L
Station 160	7/18/2021	Lead	0.00131	mg/L
Station 160	7/23/2021	Lead	0.00147	mg/L
Station 160	7/25/2021	Lead	0.0033	mg/L
Station 160	8/6/2021	Lead	0.00159	mg/L
Station 160	8/8/2021	Lead	0.0013	mg/L
Station 160	8/15/2021	Lead	0.00138	mg/L
Station 160	8/16/2021	Lead	0.00119	mg/L
Station 160	8/20/2021	Lead	0.00149	mg/L
Station 160	8/27/2021	Lead	0.00146	mg/L
Station 160	9/3/2021	Lead	0.0014	mg/L
Station 160	9/6/2021	Lead	0.0015	mg/L
Station 160	9/11/2021	Lead	0.00203	mg/L
Station 160	9/17/2021	Lead	0.00147	mg/L
Station 160	9/19/2021	Lead	0.00155	mg/L
Station 160	9/24/2021	Lead	0.00084	mg/L
Station 160	9/28/2021	Lead	0.00074	mg/L
Station 160	10/1/2021	Lead	0.00049	mg/L
Station 160	10/8/2021	Lead	0.00102	mg/L
Station 160	5/9/2022	Lead	0.0017	mg/L
Station 160	5/20/2022	Lead	0.00764	mg/L
Station 160	5/22/2022	Lead	0.00719	mg/L
Station 160	6/3/2022	Lead	0.00194	mg/L
Station 160	6/5/2022	Lead	0.0019	mg/L
Station 160	6/10/2022	Lead	0.00112	mg/L
Station 160	6/17/2022	Lead	0.00186	mg/L
Station 160	6/19/2022	Lead	0.00128	mg/L
Station 160	6/25/2022	Lead	0.00085	mg/L
Station 160	7/10/2022	Lead	0.0012	mg/L
Station 160	7/15/2022	Lead	0.00119	mg/L
Station 160	7/17/2022	Lead	0.0012	mg/L
Station 160	7/22/2022	Lead	0.00136	mg/L

Table Appendix G-4 Station 160 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/29/2022	Lead	0.00143	mg/L
Station 160	8/1/2022	Lead	0.0016	mg/L
Station 160	8/6/2022	Lead	0.0015	mg/L
Station 160	8/13/2022	Lead	0.00188	mg/L
Station 160	8/14/2022	Lead	0.00141	mg/L
Station 160	9/2/2022	Lead	0.00163	mg/L
Station 160	9/4/2022	Lead	0.0017	mg/L
Station 160	9/9/2022	Lead	0.00193	mg/L
Station 160	9/20/2022	Lead	0.00578	mg/L
Station 160	9/26/2022	Lead	0.00096	mg/L
Station 160	10/1/2022	Lead	0.00094	mg/L
Station 160	5/23/2023	Lead	0.0109	mg/L
Station 160	5/28/2023	Lead	0.0168	mg/L
Station 160	5/30/2023	Lead	0.00565	mg/L
Station 160	6/4/2023	Lead	0.003	mg/L
Station 160	6/9/2023	Lead	0.0265	mg/L
Station 160	6/18/2023	Lead	0.00278	mg/L
Station 160	7/2/2023	Lead	0.00175	mg/L
Station 160	7/9/2023	Lead	0.0018	mg/L
Station 160	7/16/2023	Lead	0.00137	mg/L
Station 160	7/21/2023	Lead	0.00128	mg/L
Station 160	8/5/2023	Lead	0.00129	mg/L
Station 160	8/6/2023	Lead	0.0011	mg/L
Station 160	8/11/2023	Lead	0.00126	mg/L
Station 160	8/20/2023	Lead	0.00124	mg/L
Station 160	8/25/2023	Lead	0.00139	mg/L
Station 160	9/3/2023	Lead	0.0014	mg/L
Station 160	9/8/2023	Lead	0.00146	mg/L
Station 160	9/18/2023	Lead	0.0016	mg/L
Station 160	9/26/2023	Lead	0.00136	mg/L
Station 160	5/21/2024	Lead	0.0113	mg/L
Station 160	5/23/2024	Lead	0.0256	mg/L
Station 160	5/27/2024	Lead	0.00491	mg/L
Station 160	5/31/2024	Lead	0.0124	mg/L
Station 160	6/3/2024	Lead	0.0035	mg/L
Station 160	6/7/2024	Lead	0.00441	mg/L
Station 160	6/14/2024	Lead	0.00163	mg/L
Station 160	6/16/2024	Lead	0.00118	mg/L

Table Appendix G-4 Station 160 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	6/28/2024	Lead	0	mg/L
Station 160	7/1/2024	Lead	0.00099	mg/L
Station 160	7/14/2024	Lead	0.00083	mg/L
Station 160	7/17/2024	Lead	0.00085	mg/L
Station 160	8/4/2024	Lead	0.0221	mg/L
Station 160	8/10/2024	Lead	0.00198	mg/L
Station 160	8/18/2024	Lead	0.00201	mg/L
Station 160	8/25/2024	Lead	0.00096	mg/L
Station 160	9/8/2024	Lead	0.0022	mg/L
Station 160	9/13/2024	Lead	0.00134	mg/L
Station 160	9/15/2024	Lead	0.00105	mg/L
Station 160	9/23/2024	Lead	0.00106	mg/L
Station 160	9/27/2024	Lead	0.00101	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-5 Station 140 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Lead	0.318	mg/L
Station 140	5/16/2016	Lead	0.0145	mg/L
Station 140	6/6/2016	Lead	0.0055	mg/L
Station 140	6/20/2016	Lead	0.0052	mg/L
Station 140	7/4/2016	Lead	0.007	mg/L
Station 140	7/18/2016	Lead	0.0055	mg/L
Station 140	8/1/2016	Lead	0.0043	mg/L
Station 140	8/15/2016	Lead	0.004	mg/L
Station 140	8/15/2016	Lead	*0.0006*	mg/L
Station 140	8/15/2016	Lead	0.0039	mg/L
Station 140	9/5/2016	Lead	0.006	mg/L
Station 140	9/19/2016	Lead	0.0053	mg/L
Station 140	10/3/2016	Lead	0.0136	mg/L
Station 140	10/17/2016	Lead	0.0182	mg/L
Station 140	5/14/2017	Lead	0.437	mg/L
Station 140	5/22/2017	Lead	0.0473	mg/L
Station 140	6/4/2017	Lead	0.0299	mg/L
Station 140	6/19/2017	Lead	0.0057	mg/L
Station 140	7/9/2017	Lead	0.0103	mg/L
Station 140	7/17/2017	Lead	0.0186	mg/L

Table Appendix G-5 Station 140 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/8/2017	Lead	0.0093	mg/L
Station 140	8/21/2017	Lead	0.0107	mg/L
Station 140	9/3/2017	Lead	0.0051	mg/L
Station 140	9/18/2017	Lead	0.0121	mg/L
Station 140	9/25/2017	Lead	0.0085	mg/L
Station 140	5/14/2018	Lead	0.474	mg/L
Station 140	5/21/2018	Lead	0.11	mg/L
Station 140	6/4/2018	Lead	0.0602	mg/L
Station 140	6/18/2018	Lead	0.0229	mg/L
Station 140	7/8/2018	Lead	0.0142	mg/L
Station 140	7/16/2018	Lead	0.0137	mg/L
Station 140	8/6/2018	Lead	0.0198	mg/L
Station 140	8/20/2018	Lead	0.0187	mg/L
Station 140	9/9/2018	Lead	0.0196	mg/L
Station 140	9/17/2018	Lead	0.0296	mg/L
Station 140	9/25/2018	Lead	0.0244	mg/L
Station 140	5/14/2019	Lead	0.992	mg/L
Station 140	5/14/2019	Lead	*0.001*	mg/L
Station 140	5/14/2019	Lead	1.19	mg/L
Station 140	5/19/2019	Lead	0.276	mg/L
Station 140	6/2/2019	Lead	0.0596	mg/L
Station 140	6/9/2019	Lead	0.0171	mg/L
Station 140	6/17/2019	Lead	0.0167	mg/L
Station 140	6/30/2019	Lead	0.0151	mg/L
Station 140	7/14/2019	Lead	0.019	mg/L
Station 140	8/4/2019	Lead	0.0297	mg/L
Station 140	8/18/2019	Lead	0.0329	mg/L
Station 140	9/8/2019	Lead	0.035	mg/L
Station 140	9/16/2019	Lead	0.0378	mg/L
Station 140	5/12/2020	Lead	0.23	mg/L
Station 140	5/18/2020	Lead	0.23	mg/L
Station 140	6/2/2020	Lead	0.0506	mg/L
Station 140	6/14/2020	Lead	0.0563	mg/L
Station 140	6/26/2020	Lead	0.0782	mg/L
Station 140	7/5/2020	Lead	0.0611	mg/L
Station 140	7/19/2020	Lead	0.102	mg/L
Station 140	8/3/2020	Lead	0.108	mg/L
Station 140	8/16/2020	Lead	0.0982	mg/L

Table Appendix G-5 Station 140 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/28/2020	Lead	0.111	mg/L
Station 140	9/15/2020	Lead	0.0829	mg/L
Station 140	9/20/2020	Lead	0.0919	mg/L
Station 140	9/27/2020	Lead	0.0777	mg/L
Station 140	5/9/2021	Lead	0.947	mg/L
Station 140	5/24/2021	Lead	0.0824	mg/L
Station 140	6/6/2021	Lead	0.0299	mg/L
Station 140	6/20/2021	Lead	0.021	mg/L
Station 140	7/4/2021	Lead	0.0308	mg/L
Station 140	7/25/2021	Lead	0.0331	mg/L
Station 140	8/8/2021	Lead	0.0386	mg/L
Station 140	8/15/2021	Lead	0.0388	mg/L
Station 140	9/6/2021	Lead	0.036	mg/L
Station 140	9/19/2021	Lead	0.033	mg/L
Station 140	9/27/2021	Lead	0.0278	mg/L
Station 140	5/9/2022	Lead	0.102	mg/L
Station 140	5/22/2022	Lead	0.0675	mg/L
Station 140	6/5/2022	Lead	0.0176	mg/L
Station 140	6/19/2022	Lead	0.0178	mg/L
Station 140	7/10/2022	Lead	0.045	mg/L
Station 140	7/17/2022	Lead	0.0523	mg/L
Station 140	8/1/2022	Lead	0.0346	mg/L
Station 140	8/14/2022	Lead	0.0394	mg/L
Station 140	9/4/2022	Lead	0.0372	mg/L
Station 140	9/20/2022	Lead	0.029	mg/L
Station 140	9/26/2022	Lead	0.0253	mg/L
Station 140	5/23/2023	Lead	0.143	mg/L
Station 140	5/28/2023	Lead	0.0531	mg/L
Station 140	6/4/2023	Lead	0.0306	mg/L
Station 140	6/18/2023	Lead	0.0306	mg/L
Station 140	7/9/2023	Lead	0.0197	mg/L
Station 140	7/16/2023	Lead	0.0219	mg/L
Station 140	8/6/2023	Lead	0.0274	mg/L
Station 140	8/20/2023	Lead	0.0404	mg/L
Station 140	9/3/2023	Lead	0.0372	mg/L
Station 140	9/18/2023	Lead	0.0329	mg/L
Station 140	9/27/2023	Lead	0.0317	mg/L
Station 140	5/21/2024	Lead	2.53	mg/L

Table Appendix G-5 Station 140 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/27/2024	Lead	0.0614	mg/L
Station 140	6/3/2024	Lead	0.0214	mg/L
Station 140	6/16/2024	Lead	0.013	mg/L
Station 140	7/1/2024	Lead	0.022	mg/L
Station 140	7/14/2024	Lead	0.0236	mg/L
Station 140	8/4/2024	Lead	0.0992	mg/L
Station 140	8/18/2024	Lead	0.0257	mg/L
Station 140	9/8/2024	Lead	0.0317	mg/L
Station 140	9/15/2024	Lead	0.0261	mg/L
Station 140	9/23/2024	Lead	0.0499	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-6 Station 12 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Lead	0.0035	mg/L
Station 12	5/16/2016	Lead	0.0002	mg/L
Station 12	6/6/2016	Lead	0.00012	mg/L
Station 12	7/4/2016	Lead	0.000077	mg/L
Station 12	9/5/2016	Lead	0.00004	mg/L
Station 12	10/3/2016	Lead	0.00026	mg/L
Station 12	5/14/2017	Lead	0.0113	mg/L
Station 12	5/22/2017	Lead	0.0019	mg/L
Station 12	6/4/2017	Lead	0.0026	mg/L
Station 12	6/19/2017	Lead	0.0002	mg/L
Station 12	7/9/2017	Lead	0.00078	mg/L
Station 12	7/17/2017	Lead	0.0014	mg/L
Station 12	8/8/2017	Lead	0.00034	mg/L
Station 12	8/21/2017	Lead	0.0002	mg/L
Station 12	9/3/2017	Lead	0.000076	mg/L
Station 12	9/18/2017	Lead	0.0002	mg/L
Station 12	5/14/2018	Lead	0.0722	mg/L
Station 12	5/21/2018	Lead	0.0139	mg/L
Station 12	6/4/2018	Lead	0.0021	mg/L
Station 12	6/18/2018	Lead	0.0006	mg/L
Station 12	7/8/2018	Lead	0.00024	mg/L
Station 12	7/16/2018	Lead	0.0004	mg/L
Station 12	8/6/2018	Lead	0.00018	mg/L

Table Appendix G-6 Station 12 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/20/2018	Lead	0.0001	mg/L
Station 12	9/9/2018	Lead	0.000072	mg/L
Station 12	9/25/2018	Lead	0.0001	mg/L
Station 12	5/14/2019	Lead	0.0294	mg/L
Station 12	5/19/2019	Lead	0.0125	mg/L
Station 12	6/2/2019	Lead	0.0017	mg/L
Station 12	6/9/2019	Lead	0.0054	mg/L
Station 12	6/17/2019	Lead	0.0002	mg/L
Station 12	6/30/2019	Lead	0.00014	mg/L
Station 12	7/14/2019	Lead	0.0001	mg/L
Station 12	8/4/2019	Lead	0.00072	mg/L
Station 12	8/18/2019	Lead	0.0003	mg/L
Station 12	9/8/2019	Lead	0.00024	mg/L
Station 12	9/16/2019	Lead	0.0002	mg/L
Station 12	5/12/2020	Lead	0.0248	mg/L
Station 12	5/18/2020	Lead	0.0112	mg/L
Station 12	6/2/2020	Lead	0.0033	mg/L
Station 12	6/14/2020	Lead	0.0002	mg/L
Station 12	6/26/2020	Lead	0.00026	mg/L
Station 12	7/5/2020	Lead	0.00028	mg/L
Station 12	7/19/2020	Lead	0.0001	mg/L
Station 12	8/3/2020	Lead	0.000095	mg/L
Station 12	8/28/2020	Lead	0.00016	mg/L
Station 12	9/15/2020	Lead	0.000059	mg/L
Station 12	9/20/2020	Lead	*0.00139*	mg/L
Station 12	9/27/2020	Lead	0.00038	mg/L
Station 12	5/9/2021	Lead	0.0147	mg/L
Station 12	5/24/2021	Lead	0.00225	mg/L
Station 12	6/6/2021	Lead	0.00011	mg/L
Station 12	6/20/2021	Lead	0.00022	mg/L
Station 12	7/4/2021	Lead	0.00023	mg/L
Station 12	7/25/2021	Lead	0.00069	mg/L
Station 12	8/8/2021	Lead	0.00048	mg/L
Station 12	8/15/2021	Lead	0	mg/L
Station 12	9/6/2021	Lead	0.00026	mg/L
Station 12	9/19/2021	Lead	0.00014	mg/L
Station 12	9/27/2021	Lead	0.00015	mg/L
Station 12	5/9/2022	Lead	0.0027	mg/L

Table Appendix G-6 Station 12 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/22/2022	Lead	0.0063	mg/L
Station 12	6/5/2022	Lead	0.00034	mg/L
Station 12	6/19/2022	Lead	0	mg/L
Station 12	7/10/2022	Lead	0.00018	mg/L
Station 12	7/17/2022	Lead	0.00012	mg/L
Station 12	8/1/2022	Lead	0.00046	mg/L
Station 12	8/14/2022	Lead	0.0001	mg/L
Station 12	9/4/2022	Lead	0.000064	mg/L
Station 12	9/20/2022	Lead	0.00055	mg/L
Station 12	9/26/2022	Lead	0.00016	mg/L
Station 12	5/23/2023	Lead	0.0142	mg/L
Station 12	5/28/2023	Lead	0.00676	mg/L
Station 12	6/4/2023	Lead	0.0016	mg/L
Station 12	6/18/2023	Lead	0.00074	mg/L
Station 12	7/9/2023	Lead	0.0121	mg/L
Station 12	7/16/2023	Lead	0.00023	mg/L
Station 12	8/6/2023	Lead	0.00011	mg/L
Station 12	8/20/2023	Lead	0	mg/L
Station 12	9/3/2023	Lead	0.00022	mg/L
Station 12	9/18/2023	Lead	0.00018	mg/L
Station 12	9/26/2023	Lead	0	mg/L
Station 12	5/21/2024	Lead	0.0252	mg/L
Station 12	5/27/2024	Lead	0.00377	mg/L
Station 12	6/3/2024	Lead	0.0019	mg/L
Station 12	6/16/2024	Lead	0.00018	mg/L
Station 12	7/1/2024	Lead	0	mg/L
Station 12	7/14/2024	Lead	0.00036	mg/L
Station 12	8/4/2024	Lead	0.0018	mg/L
Station 12	8/18/2024	Lead	0.00035	mg/L
Station 12	9/8/2024	Lead	0.00045	mg/L
Station 12	9/15/2024	Lead	0.0002	mg/L
Station 12	9/23/2024	Lead	0.00015	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/6/2016	Lead	0.0008	mg/L

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	5/16/2016	Lead	0.0024	mg/L
Station 9	6/2/2016	Lead	0.0004	mg/L
Station 9	6/17/2016	Lead	0.0002	mg/L
Station 9	7/1/2016	Lead	0.0001	mg/L
Station 9	8/19/2016	Lead	0.0013	mg/L
Station 9	9/8/2016	Lead	0.0005	mg/L
Station 9	9/23/2016	Lead	0.0005	mg/L
Station 9	10/6/2016	Lead	0.0008	mg/L
Station 9	10/17/2016	Lead	0.0001	mg/L
Station 9	5/5/2017	Lead	0.0055	mg/L
Station 9	5/19/2017	Lead	0.0023	mg/L
Station 9	6/8/2017	Lead	0.0015	mg/L
Station 9	6/23/2017	Lead	0.0014	mg/L
Station 9	7/7/2017	Lead	0.0018	mg/L
Station 9	7/20/2017	Lead	0.0003	mg/L
Station 9	8/4/2017	Lead	0.0007	mg/L
Station 9	8/25/2017	Lead	0.0004	mg/L
Station 9	9/8/2017	Lead	0.0003	mg/L
Station 9	9/18/2017	Lead	0.0007	mg/L
Station 9	10/5/2017	Lead	0.0008	mg/L
Station 9	10/9/2017	Lead	0.0009	mg/L
Station 9	5/23/2018	Lead	0.0074	mg/L
Station 9	6/8/2018	Lead	0.0861	mg/L
Station 9	6/29/2018	Lead	0.0005	mg/L
Station 9	7/13/2018	Lead	0.0006	mg/L
Station 9	7/27/2018	Lead	0.0008	mg/L
Station 9	8/3/2018	Lead	0.0006	mg/L
Station 9	8/18/2018	Lead	0.0005	mg/L
Station 9	9/7/2018	Lead	0.0004	mg/L
Station 9	9/28/2018	Lead	0.0011	mg/L
Station 9	10/5/2018	Lead	0.0009	mg/L
Station 9	10/12/2018	Lead	*0.0013*	mg/L
Station 9	10/12/2018	Lead	0.0008	mg/L
Station 9	10/12/2018	Lead	0.0008	mg/L
Station 9	5/25/2019	Lead	0.0065	mg/L
Station 9	5/30/2019	Lead	0.0069	mg/L
Station 9	6/7/2019	Lead	0.0008	mg/L
Station 9	6/21/2019	Lead	0.0006	mg/L

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/12/2019	Lead	*0.0012*	mg/L
Station 9	7/12/2019	Lead	0.0007	mg/L
Station 9	7/12/2019	Lead	0.0007	mg/L
Station 9	7/21/2019	Lead	0.0009	mg/L
Station 9	8/3/2019	Lead	0.0027	mg/L
Station 9	8/25/2019	Lead	0.0015	mg/L
Station 9	9/1/2019	Lead	0.0016	mg/L
Station 9	9/16/2019	Lead	0.002	mg/L
Station 9	10/7/2019	Lead	0.0037	mg/L
Station 9	5/19/2020	Lead	0.0032	mg/L
Station 9	5/29/2020	Lead	0.0042	mg/L
Station 9	6/6/2020	Lead	0.0016	mg/L
Station 9	6/19/2020	Lead	0.0021	mg/L
Station 9	6/23/2020	Lead	0.005	mg/L
Station 9	7/4/2020	Lead	0.0018	mg/L
Station 9	7/18/2020	Lead	0.0026	mg/L
Station 9	8/3/2020	Lead	0.0031	mg/L
Station 9	8/16/2020	Lead	0.0038	mg/L
Station 9	9/4/2020	Lead	0.0035	mg/L
Station 9	9/4/2020	Lead	0.0022	mg/L
Station 9	9/5/2020	Lead	0.0039	mg/L
Station 9	9/18/2020	Lead	0.0023	mg/L
Station 9	9/25/2020	Lead	0.00303	mg/L
Station 9	9/26/2020	Lead	0.00312	mg/L
Station 9	10/2/2020	Lead	0.00266	mg/L
Station 9	10/3/2020	Lead	0.0027	mg/L
Station 9	10/9/2020	Lead	0.00176	mg/L
Station 9	10/10/2020	Lead	0.0014	mg/L
Station 9	5/7/2021	Lead	0.00288	mg/L
Station 9	5/14/2021	Lead	0.00262	mg/L
Station 9	5/16/2021	Lead	0.0044	mg/L
Station 9	5/23/2021	Lead	0.00531	mg/L
Station 9	5/26/2021	Lead	0.00296	mg/L
Station 9	5/28/2021	Lead	0.002	mg/L
Station 9	6/4/2021	Lead	0.00145	mg/L
Station 9	6/5/2021	Lead	0.00147	mg/L
Station 9	6/11/2021	Lead	0.00087	mg/L
Station 9	6/18/2021	Lead	0.00085	mg/L

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/19/2021	Lead	0.00094	mg/L
Station 9	6/20/2021	Lead	0.00105	mg/L
Station 9	6/25/2021	Lead	0.00133	mg/L
Station 9	7/3/2021	Lead	0.00123	mg/L
Station 9	7/9/2021	Lead	0.00087	mg/L
Station 9	7/12/2021	Lead	0.00108	mg/L
Station 9	7/18/2021	Lead	0.00076	mg/L
Station 9	7/23/2021	Lead	0.00109	mg/L
Station 9	7/26/2021	Lead	0.00113	mg/L
Station 9	8/6/2021	Lead	0.00105	mg/L
Station 9	8/8/2021	Lead	0.0011	mg/L
Station 9	8/15/2021	Lead	0.00096	mg/L
Station 9	8/16/2021	Lead	0.00102	mg/L
Station 9	8/20/2021	Lead	0.00128	mg/L
Station 9	8/27/2021	Lead	0.001	mg/L
Station 9	9/3/2021	Lead	0.00109	mg/L
Station 9	9/6/2021	Lead	0.01	mg/L
Station 9	9/11/2021	Lead	0.00095	mg/L
Station 9	9/17/2021	Lead	0.0012	mg/L
Station 9	9/19/2021	Lead	0.00157	mg/L
Station 9	9/24/2021	Lead	0.00091	mg/L
Station 9	9/28/2021	Lead	0.00074	mg/L
Station 9	10/1/2021	Lead	0.00095	mg/L
Station 9	10/2/2021	Lead	0.00122	mg/L
Station 9	10/8/2021	Lead	0.00104	mg/L
Station 9	5/9/2022	Lead	0.00186	mg/L
Station 9	5/20/2022	Lead	0.00197	mg/L
Station 9	5/22/2022	Lead	0.00214	mg/L
Station 9	6/3/2022	Lead	0.00847	mg/L
Station 9	6/5/2022	Lead	0.00481	mg/L
Station 9	6/10/2022	Lead	0.00092	mg/L
Station 9	6/17/2022	Lead	0.00075	mg/L
Station 9	6/19/2022	Lead	0.00077	mg/L
Station 9	6/25/2022	Lead	0.00067	mg/L
Station 9	7/10/2022	Lead	0.00134	mg/L
Station 9	7/15/2022	Lead	0.00193	mg/L
Station 9	7/17/2022	Lead	0.00142	mg/L
Station 9	7/22/2022	Lead	0.00074	mg/L

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	7/29/2022	Lead	0.00081	mg/L
Station 9	8/1/2022	Lead	0.005	mg/L
Station 9	8/6/2022	Lead	0.00129	mg/L
Station 9	8/13/2022	Lead	0.00097	mg/L
Station 9	8/14/2022	Lead	0.00082	mg/L
Station 9	9/2/2022	Lead	0.00125	mg/L
Station 9	9/4/2022	Lead	0.00119	mg/L
Station 9	9/9/2022	Lead	0.00103	mg/L
Station 9	9/20/2022	Lead	0.00154	mg/L
Station 9	9/26/2022	Lead	0.00096	mg/L
Station 9	10/1/2022	Lead	0.00162	mg/L
Station 9	10/1/2022	Lead	0.00158	mg/L
Station 9	10/5/2022	Lead	0.00122	mg/L
Station 9	5/23/2023	Lead	0.00581	mg/L
Station 9	5/28/2023	Lead	0.00689	mg/L
Station 9	6/4/2023	Lead	0.0064	mg/L
Station 9	6/9/2023	Lead	0.00633	mg/L
Station 9	6/18/2023	Lead	0.00133	mg/L
Station 9	7/2/2023	Lead	0.001	mg/L
Station 9	7/9/2023	Lead	0.00085	mg/L
Station 9	7/16/2023	Lead	0.00106	mg/L
Station 9	7/21/2023	Lead	0.00089	mg/L
Station 9	8/5/2023	Lead	0.00099	mg/L
Station 9	8/6/2023	Lead	0.00099	mg/L
Station 9	8/11/2023	Lead	0.00122	mg/L
Station 9	8/20/2023	Lead	0.00088	mg/L
Station 9	8/25/2023	Lead	0.00112	mg/L
Station 9	9/3/2023	Lead	0.00135	mg/L
Station 9	9/8/2023	Lead	0.00083	mg/L
Station 9	9/18/2023	Lead	0.00088	mg/L
Station 9	5/21/2024	Lead	0.00699	mg/L
Station 9	5/23/2024	Lead	0.00338	mg/L
Station 9	5/27/2024	Lead	0.00313	mg/L
Station 9	5/31/2024	Lead	0.00544	mg/L
Station 9	6/3/2024	Lead	0.00218	mg/L
Station 9	6/3/2024	Lead	0.0001	mg/L
Station 9	6/3/2024	Lead	0.00214	mg/L
Station 9	6/7/2024	Lead	0.00308	mg/L

Table Appendix G-7 Station 9 Lead Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 9	6/14/2024	Lead	0.00092	mg/L
Station 9	6/16/2024	Lead	0.002	mg/L
Station 9	6/28/2024	Lead	0.0694	mg/L
Station 9	7/1/2024	Lead	0.00068	mg/L
Station 9	7/14/2024	Lead	0.00089	mg/L
Station 9	7/17/2024	Lead	0.00076	mg/L
Station 9	8/4/2024	Lead	0.0063	mg/L
Station 9	8/10/2024	Lead	0.00099	mg/L
Station 9	8/18/2024	Lead	0.00098	mg/L
Station 9	8/25/2024	Lead	0.00124	mg/L
Station 9	9/8/2024	Lead	0.00106	mg/L
Station 9	9/13/2024	Lead	0.00109	mg/L
Station 9	9/15/2024	Lead	0.00114	mg/L
Station 9	9/27/2024	Lead	0.0018	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix H– Copper Data for Outfall 001, Stations 151, 160, 140 & 12

Table Appendix H-1 Outfall 001 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/3/2016	Copper	0.0004	mg/L
Outfall 001	5/10/2016	Copper	0.0004	mg/L
Outfall 001	5/17/2016	Copper	0.003	mg/L
Outfall 001	5/20/2016	Copper	*0.0245*	mg/L
Outfall 001	5/20/2016	Copper	*0.0249*	mg/L
Outfall 001	5/24/2016	Copper	0.001	mg/L
Outfall 001	6/1/2016	Copper	0.0005	mg/L
Outfall 001	6/7/2016	Copper	0.00075	mg/L
Outfall 001	6/14/2016	Copper	0.00046	mg/L
Outfall 001	6/21/2016	Copper	0.003	mg/L
Outfall 001	6/28/2016	Copper	0.003	mg/L
Outfall 001	7/2/2016	Copper	0.003	mg/L
Outfall 001	7/5/2016	Copper	0.0004	mg/L
Outfall 001	7/12/2016	Copper	0.0004	mg/L
Outfall 001	7/19/2016	Copper	0.003	mg/L
Outfall 001	7/26/2016	Copper	0.003	mg/L
Outfall 001	8/2/2016	Copper	0.0004	mg/L
Outfall 001	8/9/2016	Copper	0.0004	mg/L
Outfall 001	8/16/2016	Copper	0.003	mg/L
Outfall 001	8/23/2016	Copper	0.003	mg/L
Outfall 001	8/31/2016	Copper	0.003	mg/L
Outfall 001	9/6/2016	Copper	0.0004	mg/L
Outfall 001	9/13/2016	Copper	0.0004	mg/L
Outfall 001	9/20/2016	Copper	0.001	mg/L
Outfall 001	9/26/2016	Copper	*0.0335*	mg/L
Outfall 001	9/26/2016	Copper	*0.0327*	mg/L
Outfall 001	5/1/2017	Copper	*0.0233*	mg/L
Outfall 001	5/1/2017	Copper	*0.0293*	mg/L
Outfall 001	5/9/2017	Copper	0.00094	mg/L
Outfall 001	5/9/2017	Copper	*0.0311*	mg/L
Outfall 001	5/9/2017	Copper	0.0011	mg/L
Outfall 001	5/15/2017	Copper	0.00076	mg/L
Outfall 001	5/23/2017	Copper	0.0005	mg/L
Outfall 001	5/30/2017	Copper	0.002	mg/L
Outfall 001	6/5/2017	Copper	0.0004	mg/L
Outfall 001	6/13/2017	Copper	0.0004	mg/L
Outfall 001	6/20/2017	Copper	0.0008	mg/L
Outfall 001	6/27/2017	Copper	0.002	mg/L

Table Appendix H-1 Outfall 001 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	7/4/2017	Copper	0.0004	mg/L
Outfall 001	7/10/2017	Copper	0.0004	mg/L
Outfall 001	7/18/2017	Copper	0.002	mg/L
Outfall 001	7/26/2017	Copper	0.002	mg/L
Outfall 001	8/2/2017	Copper	0.002	mg/L
Outfall 001	8/9/2017	Copper	0.0002	mg/L
Outfall 001	8/16/2017	Copper	0.0002	mg/L
Outfall 001	8/22/2017	Copper	0.0008	mg/L
Outfall 001	8/31/2017	Copper	0.0014	mg/L
Outfall 001	9/4/2017	Copper	0.00022	mg/L
Outfall 001	9/12/2017	Copper	0.00021	mg/L
Outfall 001	9/19/2017	Copper	0.002	mg/L
Outfall 001	9/27/2017	Copper	*0.0327*	mg/L
Outfall 001	9/27/2017	Copper	*0.0325*	mg/L
Outfall 001	5/4/2018	Copper	*0.001*	mg/L
Outfall 001	5/4/2018	Copper	*0.00097*	mg/L
Outfall 001	5/14/2018	Copper	0.00026	mg/L
Outfall 001	5/22/2018	Copper	0.002	mg/L
Outfall 001	5/29/2018	Copper	0.004	mg/L
Outfall 001	6/5/2018	Copper	0.00027	mg/L
Outfall 001	6/12/2018	Copper	0.00037	mg/L
Outfall 001	6/19/2018	Copper	0.002	mg/L
Outfall 001	6/26/2018	Copper	0.0008	mg/L
Outfall 001	7/2/2018	Copper	0.00022	mg/L
Outfall 001	7/9/2018	Copper	0.00022	mg/L
Outfall 001	7/17/2018	Copper	0.002	mg/L
Outfall 001	7/24/2018	Copper	0.004	mg/L
Outfall 001	7/31/2018	Copper	0.0008	mg/L
Outfall 001	8/7/2018	Copper	0.0004	mg/L
Outfall 001	8/14/2018	Copper	0.00079	mg/L
Outfall 001	8/21/2018	Copper	0.0008	mg/L
Outfall 001	8/28/2018	Copper	0.0004	mg/L
Outfall 001	9/4/2018	Copper	0.00048	mg/L
Outfall 001	9/10/2018	Copper	0.00036	mg/L
Outfall 001	9/18/2018	Copper	0.0004	mg/L
Outfall 001	5/15/2019	Copper	0.004	mg/L
Outfall 001	5/18/2019	Copper	0.004	mg/L
Outfall 001	5/19/2019	Copper	0.00036	mg/L

Table Appendix H-1 Outfall 001 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/28/2019	Copper	0.002	mg/L
Outfall 001	6/3/2019	Copper	0.00022	mg/L
Outfall 001	6/10/2019	Copper	0.00043	mg/L
Outfall 001	6/18/2019	Copper	0.002	mg/L
Outfall 001	6/26/2019	Copper	0.008	mg/L
Outfall 001	6/26/2019	Copper	*0.0192*	mg/L
Outfall 001	6/26/2019	Copper	0.004	mg/L
Outfall 001	7/1/2019	Copper	0.00043	mg/L
Outfall 001	7/8/2019	Copper	0.00043	mg/L
Outfall 001	7/15/2019	Copper	0.002	mg/L
Outfall 001	7/22/2019	Copper	0.002	mg/L
Outfall 001	7/29/2019	Copper	0.0008	mg/L
Outfall 001	8/5/2019	Copper	0.00043	mg/L
Outfall 001	8/12/2019	Copper	0.00043	mg/L
Outfall 001	8/17/2019	Copper	0.00043	mg/L
Outfall 001	8/19/2019	Copper	0.002	mg/L
Outfall 001	8/29/2019	Copper	0.002	mg/L
Outfall 001	9/7/2019	Copper	0.00043	mg/L
Outfall 001	9/9/2019	Copper	0.00043	mg/L
Outfall 001	5/9/2020	Copper	*0.0246*	mg/L
Outfall 001	5/9/2020	Copper	*0.0247*	mg/L
Outfall 001	5/13/2020	Copper	0.00043	mg/L
Outfall 001	5/19/2020	Copper	0.0008	mg/L
Outfall 001	5/26/2020	Copper	0.002	mg/L
Outfall 001	6/3/2020	Copper	0.00043	mg/L
Outfall 001	6/8/2020	Copper	0.00043	mg/L
Outfall 001	6/15/2020	Copper	0.002	mg/L
Outfall 001	6/22/2020	Copper	0.002	mg/L
Outfall 001	6/29/2020	Copper	0.002	mg/L
Outfall 001	7/6/2020	Copper	0.00043	mg/L
Outfall 001	*8/29/2020*	*Copper*	*0.00047*	*mg/L*
Outfall 001	*8/31/2020*	*Copper*	*0.0008*	*mg/L*
Outfall 001	*9/8/2020*	*Copper*	*0.00074*	*mg/L*
Outfall 001	*9/15/2020*	*Copper*	*0.00055*	*mg/L*
Outfall 001	*9/21/2020*	*Copper*	*0.0008*	*mg/L*
Outfall 001	5/17/2021	Copper	0.00043	mg/L
Outfall 001	5/18/2021	Copper	0.00043	mg/L
Outfall 001	5/18/2021	Copper	0.00043	mg/L

Table Appendix H-1 Outfall 001 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	5/25/2021	Copper	0.0016	mg/L
Outfall 001	5/31/2021	Copper	0.0016	mg/L
Outfall 001	6/7/2021	Copper	0.00043	mg/L
Outfall 001	6/14/2021	Copper	0.00043	mg/L
Outfall 001	6/21/2021	Copper	0.0016	mg/L
Outfall 001	6/28/2021	Copper	0.0008	mg/L
Outfall 001	7/5/2021	Copper	0.0005	mg/L
Outfall 001	7/12/2021	Copper	0.0005	mg/L
Outfall 001	7/19/2021	Copper	0.0016	mg/L
Outfall 001	7/26/2021	Copper	0.0016	mg/L
Outfall 001	8/3/2021	Copper	0.0005	mg/L
Outfall 001	8/9/2021	Copper	0.0043	mg/L
Outfall 001	8/16/2021	Copper	0.0016	mg/L
Outfall 001	8/23/2021	Copper	0.0016	mg/L
Outfall 001	8/31/2021	Copper	0.0008	mg/L
Outfall 001	9/8/2021	Copper	0.0027	mg/L
Outfall 001	9/13/2021	Copper	0.0005	mg/L
Outfall 001	9/20/2021	Copper	0.0008	mg/L
Outfall 001	10/4/2021	Copper	0.0138	mg/L
Outfall 001	5/10/2022	Copper	0.0005	mg/L
Outfall 001	5/16/2022	Copper	0.0012	mg/L
Outfall 001	5/23/2022	Copper	0.0008	mg/L
Outfall 001	5/31/2022	Copper	0.0008	mg/L
Outfall 001	6/6/2022	Copper	0.0005	mg/L
Outfall 001	6/13/2022	Copper	0.0005	mg/L
Outfall 001	6/20/2022	Copper	0.0008	mg/L
Outfall 001	6/27/2022	Copper	0.0008	mg/L
Outfall 001	7/5/2022	Copper	0.0005	mg/L
Outfall 001	7/11/2022	Copper	0.0005	mg/L
Outfall 001	7/18/2022	Copper	0.0016	mg/L
Outfall 001	7/25/2022	Copper	0.0008	mg/L
Outfall 001	7/25/2022	Copper	0.0008	mg/L
Outfall 001	8/1/2022	Copper	0.00055	mg/L
Outfall 001	8/8/2022	Copper	0.00042	mg/L
Outfall 001	8/15/2022	Copper	0.0016	mg/L
Outfall 001	8/22/2022	Copper	0.0008	mg/L
Outfall 001	8/29/2022	Copper	0.0008	mg/L
Outfall 001	9/5/2022	Copper	0.0006	mg/L

Table Appendix H-1 Outfall 001 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	9/12/2022	Copper	0.00042	mg/L
Outfall 001	5/24/2023	Copper	0.00042	mg/L
Outfall 001	5/29/2023	Copper	0.0008	mg/L
Outfall 001	6/5/2023	Copper	0.00042	mg/L
Outfall 001	6/12/2023	Copper	0.0021	mg/L
Outfall 001	6/19/2023	Copper	0.0016	mg/L
Outfall 001	6/27/2023	Copper	0.0008	mg/L
Outfall 001	7/7/2023	Copper	0.00042	mg/L
Outfall 001	7/10/2023	Copper	0.00042	mg/L
Outfall 001	7/17/2023	Copper	0.0016	mg/L
Outfall 001	7/24/2023	Copper	0.0008	mg/L
Outfall 001	7/31/2023	Copper	0.0008	mg/L
Outfall 001	8/7/2023	Copper	0.0023	mg/L
Outfall 001	8/16/2023	Copper	0.00042	mg/L
Outfall 001	8/21/2023	Copper	0.0016	mg/L
Outfall 001	8/28/2023	Copper	0.0026	mg/L
Outfall 001	9/4/2023	Copper	0.00042	mg/L
Outfall 001	9/11/2023	Copper	0.00042	mg/L
Outfall 001	9/19/2023	Copper	0.0008	mg/L
Outfall 001	5/22/2024	Copper	0.00035	mg/L
Outfall 001	5/28/2024	Copper	0.0008	mg/L
Outfall 001	6/4/2024	Copper	0.00035	mg/L
Outfall 001	6/10/2024	Copper	0.00035	mg/L
Outfall 001	6/17/2024	Copper	0.0008	mg/L
Outfall 001	6/24/2024	Copper	0.0016	mg/L
Outfall 001	7/2/2024	Copper	0.00035	mg/L
Outfall 001	7/8/2024	Copper	0.00035	mg/L
Outfall 001	7/15/2024	Copper	0.0008	mg/L
Outfall 001	7/22/2024	Copper	0.0008	mg/L
Outfall 001	7/29/2024	Copper	0.0008	mg/L
Outfall 001	8/5/2024	Copper	0.00035	mg/L
Outfall 001	8/12/2024	Copper	0.00035	mg/L
Outfall 001	8/19/2024	Copper	0.0008	mg/L
Outfall 001	8/26/2024	Copper	0.0008	mg/L
Outfall 001	9/2/2024	Copper	0.00035	mg/L
Outfall 001	9/9/2024	Copper	0.0007	mg/L
Outfall 001	9/16/2024	Copper	0.0008	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix H-2 Station 151 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Copper	0.0022	mg/L
Station 151	5/16/2016	Copper	0.0014	mg/L
Station 151	6/6/2016	Copper	0.0013	mg/L
Station 151	6/20/2016	Copper	0.0014	mg/L
Station 151	7/4/2016	Copper	0.0006	mg/L
Station 151	7/18/2016	Copper	0.0005	mg/L
Station 151	8/1/2016	Copper	0.0005	mg/L
Station 151	8/15/2016	Copper	0.0007	mg/L
Station 151	9/5/2016	Copper	0.0007	mg/L
Station 151	9/19/2016	Copper	0.0006	mg/L
Station 151	10/3/2016	Copper	0.0015	mg/L
Station 151	10/17/2016	Copper	0.0041	mg/L
Station 151	5/14/2017	Copper	0.0028	mg/L
Station 151	5/22/2017	Copper	0.0023	mg/L
Station 151	6/4/2017	Copper	0.0017	mg/L
Station 151	6/19/2017	Copper	0.0008	mg/L
Station 151	7/9/2017	Copper	0.0012	mg/L
Station 151	7/17/2017	Copper	0.0008	mg/L
Station 151	8/8/2017	Copper	0.0009	mg/L
Station 151	8/21/2017	Copper	0.0009	mg/L
Station 151	9/3/2017	Copper	0.0008	mg/L
Station 151	9/18/2017	Copper	0.0013	mg/L
Station 151	9/25/2017	Copper	0.0013	mg/L
Station 151	5/14/2018	Copper	0.0041	mg/L
Station 151	5/21/2018	Copper	0.0023	mg/L
Station 151	6/4/2018	Copper	0.0028	mg/L
Station 151	6/18/2018	Copper	0.0018	mg/L
Station 151	7/8/2018	Copper	0.0017	mg/L
Station 151	7/16/2018	Copper	0.0021	mg/L
Station 151	8/6/2018	Copper	0.0025	mg/L
Station 151	8/20/2018	Copper	0.0020	mg/L
Station 151	9/9/2018	Copper	0.0085	mg/L
Station 151	9/17/2018	Copper	0.0052	mg/L
Station 151	9/25/2018	Copper	0.0083	mg/L
Station 151	5/14/2019	Copper	0.0035	mg/L
Station 151	5/19/2019	Copper	0.0038	mg/L

Table Appendix H-2 Station 151 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	6/2/2019	Copper	0.0038	mg/L
Station 151	6/9/2019	Copper	0.0040	mg/L
Station 151	6/17/2019	Copper	0.0037	mg/L
Station 151	6/30/2019	Copper	0.0050	mg/L
Station 151	7/14/2019	Copper	0.0023	mg/L
Station 151	8/4/2019	Copper	0.0088	mg/L
Station 151	8/18/2019	Copper	0.0068	mg/L
Station 151	9/8/2019	Copper	0.0128	mg/L
Station 151	9/16/2019	Copper	0.0159	mg/L
Station 151	5/12/2020	Copper	0.0050	mg/L
Station 151	5/18/2020	Copper	0.0135	mg/L
Station 151	6/2/2020	Copper	0.0150	mg/L
Station 151	6/14/2020	Copper	0.0271	mg/L
Station 151	6/26/2020	Copper	0.0268	mg/L
Station 151	7/5/2020	Copper	0.0336	mg/L
Station 151	7/19/2020	Copper	0.0195	mg/L
Station 151	8/3/2020	Copper	0.0552	mg/L
Station 151	8/16/2020	Copper	0.0308	mg/L
Station 151	8/28/2020	Copper	0.0277	mg/L
Station 151	9/15/2020	Copper	0.0237	mg/L
Station 151	9/20/2020	Copper	0.0245	mg/L
Station 151	9/27/2020	Copper	0.0832	mg/L
Station 151	5/9/2021	Copper	0.0090	mg/L
Station 151	5/24/2021	Copper	0.0063	mg/L
Station 151	6/6/2021	Copper	0.0100	mg/L
Station 151	6/20/2021	Copper	0.0097	mg/L
Station 151	7/4/2021	Copper	0.0102	mg/L
Station 151	7/25/2021	Copper	0.0121	mg/L
Station 151	8/8/2021	Copper	0.0106	mg/L
Station 151	8/15/2021	Copper	0.0092	mg/L
Station 151	9/6/2021	Copper	0.0205	mg/L
Station 151	9/19/2021	Copper	0.0263	mg/L
Station 151	9/27/2021	Copper	0.0167	mg/L
Station 151	5/9/2022	Copper	0.0044	mg/L
Station 151	5/22/2022	Copper	0.0099	mg/L
Station 151	6/5/2022	Copper	0.0051	mg/L
Station 151	6/19/2022	Copper	0.0053	mg/L
Station 151	7/10/2022	Copper	0.0092	mg/L

Table Appendix H-2 Station 151 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	7/17/2022	Copper	0.0077	mg/L
Station 151	8/1/2022	Copper	0.0209	mg/L
Station 151	8/14/2022	Copper	0.0171	mg/L
Station 151	9/4/2022	Copper	0.0161	mg/L
Station 151	9/20/2022	Copper	0.0108	mg/L
Station 151	9/26/2022	Copper	0.0133	mg/L
Station 151	5/23/2023	Copper	0.0041	mg/L
Station 151	5/28/2023	Copper	0.0053	mg/L
Station 151	6/4/2023	Copper	0.0047	mg/L
Station 151	6/18/2023	Copper	0.0046	mg/L
Station 151	7/9/2023	Copper	0.0109	mg/L
Station 151	7/16/2023	Copper	0.0116	mg/L
Station 151	8/6/2023	Copper	0.0170	mg/L
Station 151	8/20/2023	Copper	0.0101	mg/L
Station 151	9/3/2023	Copper	0.0143	mg/L
Station 151	9/18/2023	Copper	0.0162	mg/L
Station 151	9/26/2023	Copper	0.0190	mg/L
Station 151	5/21/2024	Copper	0.0075	mg/L
Station 151	5/27/2024	Copper	0.0045	mg/L
Station 151	6/3/2024	Copper	0.0043	mg/L
Station 151	6/16/2024	Copper	0.0049	mg/L
Station 151	7/1/2024	Copper	0.0076	mg/L
Station 151	7/14/2024	Copper	0.0144	mg/L
Station 151	8/4/2024	Copper	0.0184	mg/L
Station 151	8/18/2024	Copper	0.0152	mg/L
Station 151	9/8/2024	Copper	0.0280	mg/L
Station 151	9/15/2024	Copper	0.0253	mg/L
Station 151	9/23/2024	Copper	0.0281	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix H-3 Station 160 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/2/2016	Copper	0.002	mg/L
Station 160	5/16/2016	Copper	0.0012	mg/L
Station 160	6/6/2016	Copper	0.0014	mg/L
Station 160	6/20/2016	Copper	0.0005	mg/L
Station 160	7/4/2016	Copper	0.00063	mg/L

Table Appendix H-3 Station 160 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/18/2016	Copper	0.0005	mg/L
Station 160	8/1/2016	Copper	0.00052	mg/L
Station 160	8/15/2016	Copper	0.0006	mg/L
Station 160	9/5/2016	Copper	0.00079	mg/L
Station 160	9/19/2016	Copper	0.0007	mg/L
Station 160	10/3/2016	Copper	0.00095	mg/L
Station 160	10/17/2016	Copper	0.0039	mg/L
Station 160	5/14/2017	Copper	0.004	mg/L
Station 160	5/22/2017	Copper	0.0046	mg/L
Station 160	6/4/2017	Copper	0.0029	mg/L
Station 160	6/19/2017	Copper	0.0008	mg/L
Station 160	7/9/2017	Copper	0.0018	mg/L
Station 160	7/17/2017	Copper	0.0006	mg/L
Station 160	8/8/2017	Copper	0.0013	mg/L
Station 160	8/21/2017	Copper	0.0009	mg/L
Station 160	9/3/2017	Copper	0.00087	mg/L
Station 160	9/18/2017	Copper	0.001	mg/L
Station 160	9/25/2017	Copper	0.0007	mg/L
Station 160	5/14/2018	Copper	0.0013	mg/L
Station 160	5/21/2018	Copper	0.0028	mg/L
Station 160	6/4/2018	Copper	0.0047	mg/L
Station 160	6/18/2018	Copper	0.0018	mg/L
Station 160	7/8/2018	Copper	0.0011	mg/L
Station 160	7/16/2018	Copper	0.0013	mg/L
Station 160	8/6/2018	Copper	0.00098	mg/L
Station 160	8/20/2018	Copper	0.0008	mg/L
Station 160	9/9/2018	Copper	0.00082	mg/L
Station 160	9/17/2018	Copper	0.0005	mg/L
Station 160	9/25/2018	Copper	0.0008	mg/L
Station 160	5/14/2019	Copper	0.0024	mg/L
Station 160	5/19/2019	Copper	0.0062	mg/L
Station 160	6/2/2019	Copper	0.0041	mg/L
Station 160	6/9/2019	Copper	0.0026	mg/L
Station 160	6/17/2019	Copper	0.0023	mg/L
Station 160	6/30/2019	Copper	0.0018	mg/L
Station 160	7/14/2019	Copper	0.0014	mg/L
Station 160	7/14/2019	Copper	*0.02*	mg/L
Station 160	7/14/2019	Copper	0.0013	mg/L

Table Appendix H-3 Station 160 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	8/4/2019	Copper	0.0056	mg/L
Station 160	8/18/2019	Copper	0.0083	mg/L
Station 160	9/8/2019	Copper	0.0134	mg/L
Station 160	9/16/2019	Copper	0.0331	mg/L
Station 160	5/12/2020	Copper	*0.0206*	mg/L
Station 160	5/12/2020	Copper	0.0042	mg/L
Station 160	5/12/2020	Copper	0.0047	mg/L
Station 160	5/19/2020	Copper	0.0088	mg/L
Station 160	6/3/2020	Copper	0.0153	mg/L
Station 160	6/14/2020	Copper	0.0181	mg/L
Station 160	6/26/2020	Copper	0.0304	mg/L
Station 160	7/5/2020	Copper	0.0276	mg/L
Station 160	7/19/2020	Copper	0.0299	mg/L
Station 160	8/3/2020	Copper	0.0559	mg/L
Station 160	8/16/2020	Copper	0.0591	mg/L
Station 160	8/28/2020	Copper	0.0688	mg/L
Station 160	9/15/2020	Copper	0.061	mg/L
Station 160	9/20/2020	Copper	0.0497	mg/L
Station 160	9/27/2020	Copper	0.0561	mg/L
Station 160	5/9/2021	Copper	0.0032	mg/L
Station 160	5/24/2021	Copper	0.0106	mg/L
Station 160	6/6/2021	Copper	0.0136	mg/L
Station 160	6/20/2021	Copper	0.0073	mg/L
Station 160	7/4/2021	Copper	0.0071	mg/L
Station 160	7/25/2021	Copper	0.0195	mg/L
Station 160	8/8/2021	Copper	0.0091	mg/L
Station 160	8/15/2021	Copper	0.0107	mg/L
Station 160	9/6/2021	Copper	0.0192	mg/L
Station 160	9/19/2021	Copper	0.0189	mg/L
Station 160	9/28/2021	Copper	0.0103	mg/L
Station 160	5/9/2022	Copper	0.0016	mg/L
Station 160	5/22/2022	Copper	0.0054	mg/L
Station 160	6/5/2022	Copper	0.0061	mg/L
Station 160	6/19/2022	Copper	0.0081	mg/L
Station 160	7/10/2022	Copper	0.0093	mg/L
Station 160	7/17/2022	Copper	0.0095	mg/L
Station 160	8/1/2022	Copper	0.0138	mg/L
Station 160	8/14/2022	Copper	0.0135	mg/L

Table Appendix H-3 Station 160 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/4/2022	Copper	0.0165	mg/L
Station 160	9/26/2022	Copper	0.0088	mg/L
Station 160	5/23/2023	Copper	0.0040	mg/L
Station 160	5/28/2023	Copper	0.0096	mg/L
Station 160	6/4/2023	Copper	0.0059	mg/L
Station 160	6/18/2023	Copper	0.0047	mg/L
Station 160	7/9/2023	Copper	0.0060	mg/L
Station 160	7/16/2023	Copper	0.0082	mg/L
Station 160	8/6/2023	Copper	0.0108	mg/L
Station 160	8/20/2023	Copper	0.0090	mg/L
Station 160	9/3/2023	Copper	0.0132	mg/L
Station 160	9/18/2023	Copper	0.0106	mg/L
Station 160	9/26/2023	Copper	0.0116	mg/L
Station 160	5/21/2024	Copper	0.0051	mg/L
Station 160	5/27/2024	Copper	0.0054	mg/L
Station 160	6/3/2024	Copper	0.0054	mg/L
Station 160	6/16/2024	Copper	0.0037	mg/L
Station 160	7/1/2024	Copper	0.0057	mg/L
Station 160	7/14/2024	Copper	0.0058	mg/L
Station 160	8/4/2024	Copper	0.0487	mg/L
Station 160	8/18/2024	Copper	0.0065	mg/L
Station 160	9/8/2024	Copper	0.0131	mg/L
Station 160	9/15/2024	Copper	0.0113	mg/L
Station 160	9/23/2024	Copper	0.0118	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix H-4 Station 140 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Copper	0.0064	mg/L
Station 140	5/16/2016	Copper	0.0048	mg/L
Station 140	6/6/2016	Copper	0.003	mg/L
Station 140	6/20/2016	Copper	0.0018	mg/L
Station 140	7/4/2016	Copper	0.0018	mg/L
Station 140	7/18/2016	Copper	0.0013	mg/L
Station 140	8/1/2016	Copper	0.0017	mg/L
Station 140	8/15/2016	Copper	*0.0386*	mg/L

Table Appendix H-4 Station 140 Copper Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 140	8/15/2016	Copper	0.0012	mg/L
Station 140	8/15/2016	Copper	0.0011	mg/L
Station 140	9/5/2016	Copper	0.0038	mg/L
Station 140	9/19/2016	Copper	0.0022	mg/L
Station 140	10/3/2016	Copper	0.0061	mg/L
Station 140	10/17/2016	Copper	0.0047	mg/L
Station 140	5/14/2017	Copper	0.0097	mg/L
Station 140	5/22/2017	Copper	0.004	mg/L
Station 140	6/4/2017	Copper	0.0034	mg/L
Station 140	6/19/2017	Copper	0.0021	mg/L
Station 140	7/9/2017	Copper	0.0043	mg/L
Station 140	7/17/2017	Copper	0.0027	mg/L
Station 140	8/8/2017	Copper	0.0064	mg/L
Station 140	8/21/2017	Copper	0.0055	mg/L
Station 140	9/3/2017	Copper	0.0041	mg/L
Station 140	9/18/2017	Copper	0.007	mg/L
Station 140	9/25/2017	Copper	0.007	mg/L
Station 140	5/14/2018	Copper	0.0075	mg/L
Station 140	5/21/2018	Copper	0.0043	mg/L
Station 140	6/4/2018	Copper	0.0107	mg/L
Station 140	6/18/2018	Copper	0.0084	mg/L
Station 140	7/8/2018	Copper	0.0068	mg/L
Station 140	7/16/2018	Copper	0.0097	mg/L
Station 140	8/6/2018	Copper	0.0149	mg/L
Station 140	8/20/2018	Copper	0.02	mg/L
Station 140	9/9/2018	Copper	0.0229	mg/L
Station 140	9/17/2018	Copper	0.0299	mg/L
Station 140	9/25/2018	Copper	0.0268	mg/L
Station 140	5/14/2019	Copper	0.019	mg/L
Station 140	5/14/2019	Copper	*0.0216*	mg/L
Station 140	5/14/2019	Copper	0.0219	mg/L
Station 140	5/19/2019	Copper	0.0163	mg/L
Station 140	6/2/2019	Copper	0.0163	mg/L
Station 140	6/9/2019	Copper	0.0158	mg/L
Station 140	6/17/2019	Copper	0.0207	mg/L
Station 140	6/30/2019	Copper	0.0217	mg/L
Station 140	7/14/2019	Copper	0.0183	mg/L
Station 140	8/4/2019	Copper	0.0227	mg/L

Table Appendix H-4 Station 140 Copper Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 140	8/18/2019	Copper	0.0343	mg/L
Station 140	9/8/2019	Copper	0.0422	mg/L
Station 140	9/16/2019	Copper	0.0457	mg/L
Station 140	5/12/2020	Copper	0.01	mg/L
Station 140	5/18/2020	Copper	0.0657	mg/L
Station 140	6/2/2020	Copper	0.0643	mg/L
Station 140	6/14/2020	Copper	0.127	mg/L
Station 140	6/26/2020	Copper	0.125	mg/L
Station 140	7/5/2020	Copper	0.149	mg/L
Station 140	7/19/2020	Copper	0.115	mg/L
Station 140	8/3/2020	Copper	0.249	mg/L
Station 140	8/16/2020	Copper	0.163	mg/L
Station 140	8/28/2020	Copper	0.192	mg/L
Station 140	9/15/2020	Copper	0.151	mg/L
Station 140	9/20/2020	Copper	0.144	mg/L
Station 140	9/27/2020	Copper	0.198	mg/L
Station 140	5/9/2021	Copper	0.0336	mg/L
Station 140	5/24/2021	Copper	0.0332	mg/L
Station 140	6/6/2021	Copper	0.0455	mg/L
Station 140	6/20/2021	Copper	0.0349	mg/L
Station 140	7/4/2021	Copper	0.0642	mg/L
Station 140	7/25/2021	Copper	0.0635	mg/L
Station 140	8/8/2021	Copper	0.0685	mg/L
Station 140	8/15/2021	Copper	0.0505	mg/L
Station 140	9/6/2021	Copper	0.0878	mg/L
Station 140	9/19/2021	Copper	0.0559	mg/L
Station 140	9/27/2021	Copper	0.0348	mg/L
Station 140	5/9/2022	Copper	0.0166	mg/L
Station 140	5/22/2022	Copper	0.00906	mg/L
Station 140	6/5/2022	Copper	0.0209	mg/L
Station 140	6/19/2022	Copper	0.0253	mg/L
Station 140	7/10/2022	Copper	0.0706	mg/L
Station 140	7/17/2022	Copper	0.0588	mg/L
Station 140	8/1/2022	Copper	0.105	mg/L
Station 140	8/14/2022	Copper	0.0724	mg/L
Station 140	9/4/2022	Copper	0.0886	mg/L
Station 140	9/26/2022	Copper	0.0607	mg/L
Station 140	5/23/2023	Copper	0.0088	mg/L

Table Appendix H-4 Station 140 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/28/2023	Copper	0.0118	mg/L
Station 140	6/4/2023	Copper	0.015	mg/L
Station 140	6/18/2023	Copper	0.0167	mg/L
Station 140	7/9/2023	Copper	0.0317	mg/L
Station 140	7/16/2023	Copper	0.0412	mg/L
Station 140	8/6/2023	Copper	0.0568	mg/L
Station 140	8/20/2023	Copper	0.0424	mg/L
Station 140	9/3/2023	Copper	0.0411	mg/L
Station 140	9/18/2023	Copper	0.06	mg/L
Station 140	9/27/2023	Copper	0.0416	mg/L
Station 140	5/21/2024	Copper	0.0423	mg/L
Station 140	5/27/2024	Copper	0.00751	mg/L
Station 140	6/3/2024	Copper	0.0091	mg/L
Station 140	6/16/2024	Copper	0.013	mg/L
Station 140	7/1/2024	Copper	0.0282	mg/L
Station 140	7/14/2024	Copper	0.0632	mg/L
Station 140	8/4/2024	Copper	0.067	mg/L
Station 140	8/18/2024	Copper	0.0729	mg/L
Station 140	9/8/2024	Copper	0.0892	mg/L
Station 140	9/15/2024	Copper	0.0829	mg/L
Station 140	9/23/2024	Copper	0.0579	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix H-5 Station 12 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Copper	0.0016	mg/L
Station 12	5/16/2016	Copper	0.0008	mg/L
Station 12	6/6/2016	Copper	0.0014	mg/L
Station 12	6/20/2016	Copper	0.0005	mg/L
Station 12	7/4/2016	Copper	0.00059	mg/L
Station 12	7/18/2016	Copper	0.0005	mg/L
Station 12	8/1/2016	Copper	0.00046	mg/L
Station 12	8/15/2016	Copper	0.0006	mg/L
Station 12	9/5/2016	Copper	0.00063	mg/L
Station 12	9/19/2016	Copper	0.0007	mg/L
Station 12	10/3/2016	Copper	0.00053	mg/L
Station 12	10/17/2016	Copper	0.0038	mg/L

Table Appendix H-5 Station 12 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/14/2017	Copper	0.0022	mg/L
Station 12	5/22/2017	Copper	0.002	mg/L
Station 12	6/4/2017	Copper	0.0023	mg/L
Station 12	6/19/2017	Copper	0.0007	mg/L
Station 12	7/9/2017	Copper	0.0011	mg/L
Station 12	7/17/2017	Copper	0.0011	mg/L
Station 12	8/8/2017	Copper	0.0012	mg/L
Station 12	8/21/2017	Copper	0.0009	mg/L
Station 12	9/3/2017	Copper	0.00084	mg/L
Station 12	9/18/2017	Copper	0.0008	mg/L
Station 12	9/25/2017	Copper	0.0007	mg/L
Station 12	5/14/2018	Copper	0.0032	mg/L
Station 12	5/21/2018	Copper	0.003	mg/L
Station 12	6/4/2018	Copper	0.0018	mg/L
Station 12	6/18/2018	Copper	0.0011	mg/L
Station 12	7/8/2018	Copper	0.00054	mg/L
Station 12	7/16/2018	Copper	0.0012	mg/L
Station 12	8/6/2018	Copper	0.00081	mg/L
Station 12	8/20/2018	Copper	0.0007	mg/L
Station 12	9/9/2018	Copper	0.0005	mg/L
Station 12	9/17/2018	Copper	0.0004	mg/L
Station 12	9/25/2018	Copper	0.0008	mg/L
Station 12	5/14/2019	Copper	0.0018	mg/L
Station 12	5/19/2019	Copper	0.0022	mg/L
Station 12	6/2/2019	Copper	0.0056	mg/L
Station 12	6/9/2019	Copper	0.00069	mg/L
Station 12	6/17/2019	Copper	0.0008	mg/L
Station 12	6/30/2019	Copper	0.00053	mg/L
Station 12	7/14/2019	Copper	0.0011	mg/L
Station 12	8/4/2019	Copper	0.0011	mg/L
Station 12	8/18/2019	Copper	0.0011	mg/L
Station 12	9/8/2019	Copper	0.0029	mg/L
Station 12	9/16/2019	Copper	0.0127	mg/L
Station 12	5/12/2020	Copper	0.0035	mg/L
Station 12	5/18/2020	Copper	0.0052	mg/L
Station 12	6/2/2020	Copper	0.0084	mg/L
Station 12	6/14/2020	Copper	0.0087	mg/L
Station 12	6/26/2020	Copper	0.0136	mg/L

Table Appendix H-5 Station 12 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	7/5/2020	Copper	0.0129	mg/L
Station 12	7/19/2020	Copper	0.0081	mg/L
Station 12	8/3/2020	Copper	0.0093	mg/L
Station 12	8/16/2020	Copper	0.0101	mg/L
Station 12	8/28/2020	Copper	0.0082	mg/L
Station 12	9/15/2020	Copper	0.0112	mg/L
Station 12	9/20/2020	Copper	*0.0395*	mg/L
Station 12	9/20/2020	Copper	0.00837	mg/L
Station 12	9/20/2020	Copper	0.0079	mg/L
Station 12	9/27/2020	Copper	0.0223	mg/L
Station 12	5/9/2021	Copper	0.0041	mg/L
Station 12	5/24/2021	Copper	0.00426	mg/L
Station 12	6/6/2021	Copper	0.0038	mg/L
Station 12	6/20/2021	Copper	0.00392	mg/L
Station 12	7/4/2021	Copper	0.0045	mg/L
Station 12	7/25/2021	Copper	0.0064	mg/L
Station 12	8/8/2021	Copper	0.0082	mg/L
Station 12	8/15/2021	Copper	0.00923	mg/L
Station 12	9/6/2021	Copper	0.0164	mg/L
Station 12	9/19/2021	Copper	0.0162	mg/L
Station 12	9/27/2021	Copper	0.0139	mg/L
Station 12	5/9/2022	Copper	0.0051	mg/L
Station 12	5/22/2022	Copper	0.011	mg/L
Station 12	6/5/2022	Copper	0.0039	mg/L
Station 12	6/19/2022	Copper	0.00364	mg/L
Station 12	7/10/2022	Copper	0.0074	mg/L
Station 12	7/17/2022	Copper	0.00841	mg/L
Station 12	8/1/2022	Copper	0.0147	mg/L
Station 12	8/14/2022	Copper	0.0084	mg/L
Station 12	9/4/2022	Copper	0.0099	mg/L
Station 12	9/26/2022	Copper	0.00822	mg/L
Station 12	5/23/2023	Copper	0.002	mg/L
Station 12	5/28/2023	Copper	0.00499	mg/L
Station 12	6/4/2023	Copper	0.0067	mg/L
Station 12	6/18/2023	Copper	0.0033	mg/L
Station 12	7/9/2023	Copper	0.0106	mg/L
Station 12	7/16/2023	Copper	0.0125	mg/L
Station 12	8/6/2023	Copper	0.0183	mg/L

Table Appendix H-5 Station 12 Copper Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/20/2023	Copper	0.0152	mg/L
Station 12	9/3/2023	Copper	0.0268	mg/L
Station 12	9/18/2023	Copper	0.0137	mg/L
Station 12	9/26/2023	Copper	0.016	mg/L
Station 12	5/21/2024	Copper	0.007	mg/L
Station 12	5/27/2024	Copper	0.00679	mg/L
Station 12	6/3/2024	Copper	0.005	mg/L
Station 12	6/16/2024	Copper	0.00465	mg/L
Station 12	7/1/2024	Copper	0.0072	mg/L
Station 12	7/14/2024	Copper	0.00938	mg/L
Station 12	8/4/2024	Copper	0.0068	mg/L
Station 12	8/18/2024	Copper	0.00908	mg/L
Station 12	9/8/2024	Copper	0.0208	mg/L
Station 12	9/15/2024	Copper	0.0264	mg/L
Station 12	9/23/2024	Copper	0.0283	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Appendix I – Mercury Data for Outfall 001, Stations 151, 160, 140 & 12

Table Appendix I-1 Outfall 001 Mercury Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Outfall 001	5/3/2016	Mercury	0.000000133	mg/L
Outfall 001	5/3/2016	Mercury	*0.000000083*	mg/L
Outfall 001	5/20/2016	Mercury	*0.000000306*	mg/L
Outfall 001	5/20/2016	Mercury	*0.000000083*	mg/L
Outfall 001	5/20/2016	Mercury	*9.08E-08*	mg/L
Outfall 001	5/20/2016	Mercury	*0.000000228*	mg/L
Outfall 001	6/7/2016	Mercury	0.000000487	mg/L
Outfall 001	6/7/2016	Mercury	*0.000000083*	mg/L
Outfall 001	7/5/2016	Mercury	0.000000083	mg/L
Outfall 001	7/5/2016	Mercury	*0.000000083*	mg/L
Outfall 001	8/2/2016	Mercury	0.000000083	mg/L
Outfall 001	8/2/2016	Mercury	*0.000000149*	mg/L
Outfall 001	9/6/2016	Mercury	0.0000001	mg/L
Outfall 001	9/6/2016	Mercury	*9.02E-08*	mg/L
Outfall 001	5/1/2017	Mercury	*0.00000015*	mg/L
Outfall 001	5/1/2017	Mercury	*0.000000218*	mg/L
Outfall 001	5/23/2017	Mercury	*0.0000002*	mg/L
Outfall 001	5/23/2017	Mercury	0.0000002	mg/L
Outfall 001	6/5/2017	Mercury	0.00000015	mg/L
Outfall 001	6/5/2017	Mercury	*0.00000015*	mg/L
Outfall 001	7/10/2017	Mercury	0.00000015	mg/L
Outfall 001	7/10/2017	Mercury	0.000000222	mg/L
Outfall 001	8/9/2017	Mercury	*0.00000015*	mg/L
Outfall 001	8/9/2017	Mercury	0.000000372	mg/L
Outfall 001	9/4/2017	Mercury	*0.000000193*	mg/L
Outfall 001	9/4/2017	Mercury	0.000000507	mg/L
Outfall 001	9/27/2017	Mercury	*0.00000015*	mg/L
Outfall 001	9/27/2017	Mercury	*0.000000814*	mg/L
Outfall 001	9/27/2017	Mercury	*0.000000589*	mg/L
Outfall 001	9/27/2017	Mercury	*0.00000015*	mg/L
Outfall 001	5/4/2018	Mercury	*0.000000086*	mg/L
Outfall 001	5/4/2018	Mercury	*0.000000086*	mg/L
Outfall 001	5/4/2018	Mercury	*0.000000211*	mg/L
Outfall 001	5/4/2018	Mercury	*0.062*	mg/L
Outfall 001	5/4/2018	Mercury	*0.000000117*	mg/L
Outfall 001	5/14/2018	Mercury	0.00000121	mg/L
Outfall 001	5/14/2018	Mercury	*0.000000273*	mg/L
Outfall 001	6/5/2018	Mercury	0.000000386	mg/L

Table Appendix I-1 Outfall 001 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	6/6/2018	Mercury	*0.000000108*	mg/L
Outfall 001	7/9/2018	Mercury	*0.000000086*	mg/L
Outfall 001	7/9/2018	Mercury	0.000000493	mg/L
Outfall 001	7/9/2018	Mercury	*0.000000086*	mg/L
Outfall 001	8/13/2018	Mercury	*0.000000261*	mg/L
Outfall 001	8/13/2018	Mercury	0.000000523	mg/L
Outfall 001	9/10/2018	Mercury	0.000000288	mg/L
Outfall 001	9/11/2018	Mercury	*9.26E-08*	mg/L
Outfall 001	5/19/2019	Mercury	*0.000000184*	mg/L
Outfall 001	5/19/2019	Mercury	0.000000564	mg/L
Outfall 001	6/3/2019	Mercury	0.000000657	mg/L
Outfall 001	6/3/2019	Mercury	*0.00000016*	mg/L
Outfall 001	6/10/2019	Mercury	*0.000000506*	mg/L
Outfall 001	6/10/2019	Mercury	0.000000845	mg/L
Outfall 001	7/1/2019	Mercury	*0.000000128*	mg/L
Outfall 001	7/1/2019	Mercury	0.000000464	mg/L
Outfall 001	8/5/2019	Mercury	0.000000421	mg/L
Outfall 001	9/9/2019	Mercury	*0.000000201*	mg/L
Outfall 001	9/9/2019	Mercury	0.000000224	mg/L
Outfall 001	5/9/2020	Mercury	*0.000000556*	mg/L
Outfall 001	5/9/2020	Mercury	*0.000000727*	mg/L
Outfall 001	5/9/2020	Mercury	*0.0000001*	mg/L
Outfall 001	5/9/2020	Mercury	*0.0000001*	mg/L
Outfall 001	5/12/2020	Mercury	*0.0000001*	mg/L
Outfall 001	5/13/2020	Mercury	0.000000652	mg/L
Outfall 001	6/3/2020	Mercury	0.000000478	mg/L
Outfall 001	6/3/2020	Mercury	*0.0000001*	mg/L
Outfall 001	7/6/2020	Mercury	0.000000268	mg/L
Outfall 001	*8/29/2020*	*Mercury*	0.00000014	*mg/L*
Outfall 001	*8/29/2020*	*Mercury*	*0.000000375*	*mg/L*
Outfall 001	*9/15/2020*	*Mercury*	0.000000574	*mg/L*
Outfall 001	*9/15/2020*	*Mercury*	*0.00000014*	*mg/L*
Outfall 001	5/18/2021	Mercury	0.000000334	mg/L
Outfall 001	5/18/2021	Mercury	0.000000378	mg/L
Outfall 001	6/7/2021	Mercury	0.000000369	mg/L
Outfall 001	7/5/2021	Mercury	0.000000346	mg/L
Outfall 001	8/9/2021	Mercury	0.000000207	mg/L
Outfall 001	9/8/2021	Mercury	0	mg/L

Table Appendix I-1 Outfall 001 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Outfall 001	10/4/2021	Mercury	0	mg/L
Outfall 001	5/10/2022	Mercury	0.000000201	mg/L
Outfall 001	6/6/2022	Mercury	0.000000339	mg/L
Outfall 001	7/11/2022	Mercury	0	mg/L
Outfall 001	8/1/2022	Mercury	0.000000195	mg/L
Outfall 001	9/5/2022	Mercury	0	mg/L
Outfall 001	5/24/2023	Mercury	0.000000261	mg/L
Outfall 001	6/5/2023	Mercury	0.000000235	mg/L
Outfall 001	6/19/2023	Mercury	0	mg/L
Outfall 001	7/10/2023	Mercury	0.00000024	mg/L
Outfall 001	7/17/2023	Mercury	0	mg/L
Outfall 001	8/7/2023	Mercury	0.000000215	mg/L
Outfall 001	9/4/2023	Mercury	0.000000222	mg/L
Outfall 001	9/19/2023	Mercury	0	mg/L
Outfall 001	5/22/2024	Mercury	0.000000251	mg/L
Outfall 001	5/28/2024	Mercury	0	mg/L
Outfall 001	5/28/2024	Mercury	0	mg/L
Outfall 001	6/4/2024	Mercury	0.000000231	mg/L
Outfall 001	6/17/2024	Mercury	0	mg/L
Outfall 001	7/2/2024	Mercury	0.000000293	mg/L
Outfall 001	7/2/2024	Mercury	0	mg/L
Outfall 001	7/15/2024	Mercury	0	mg/L
Outfall 001	8/5/2024	Mercury	0.000000408	mg/L
Outfall 001	8/5/2024	Mercury	0	mg/L
Outfall 001	8/19/2024	Mercury	0	mg/L
Outfall 001	8/19/2024	Mercury	0	mg/L
Outfall 001	9/9/2024	Mercury	0.000000262	mg/L
Outfall 001	9/16/2024	Mercury	0.00000043	mg/L
Outfall 001	9/16/2024	Mercury	0	mg/L

**Italicized data is during operation of RO plant only in 2020*

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/2/2016	Mercury	*0.000000083*	mg/L
Station 151	5/2/2016	Mercury	0.0000231	mg/L
Station 151	5/16/2016	Mercury	0.0000018	mg/L

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 151	5/16/2016	Mercury	0.0000002	mg/L
Station 151	6/6/2016	Mercury	*0.000000083*	mg/L
Station 151	6/6/2016	Mercury	0.00000207	mg/L
Station 151	6/20/2016	Mercury	*0.0000002*	mg/L
Station 151	6/20/2016	Mercury	0.0000007	mg/L
Station 151	7/4/2016	Mercury	*0.000000083*	mg/L
Station 151	7/4/2016	Mercury	0.000000834	mg/L
Station 151	7/18/2016	Mercury	0.0000007	mg/L
Station 151	7/18/2016	Mercury	*0.0000002*	mg/L
Station 151	8/1/2016	Mercury	*0.000000083*	mg/L
Station 151	8/1/2016	Mercury	0.000000716	mg/L
Station 151	8/15/2016	Mercury	*0.0000002*	mg/L
Station 151	8/15/2016	Mercury	0.0000006	mg/L
Station 151	9/5/2016	Mercury	0.000000507	mg/L
Station 151	9/5/2016	Mercury	*0.000000083*	mg/L
Station 151	9/19/2016	Mercury	0.0000005	mg/L
Station 151	9/19/2016	Mercury	*0.0000002*	mg/L
Station 151	10/3/2016	Mercury	*0.000000083*	mg/L
Station 151	10/3/2016	Mercury	0.00000109	mg/L
Station 151	10/17/2016	Mercury	*0.0000002*	mg/L
Station 151	10/17/2016	Mercury	0.0000012	mg/L
Station 151	5/14/2017	Mercury	0.0000171	mg/L
Station 151	5/14/2017	Mercury	*0.00000015*	mg/L
Station 151	5/22/2017	Mercury	*0.0000002*	mg/L
Station 151	5/22/2017	Mercury	0.0000122	mg/L
Station 151	6/4/2017	Mercury	*0.00000015*	mg/L
Station 151	6/4/2017	Mercury	0.00000881	mg/L
Station 151	6/19/2017	Mercury	0.0000015	mg/L
Station 151	6/19/2017	Mercury	*0.0000002*	mg/L
Station 151	7/9/2017	Mercury	0.00000135	mg/L
Station 151	7/9/2017	Mercury	*0.00000015*	mg/L
Station 151	7/17/2017	Mercury	0.0000015	mg/L
Station 151	7/17/2017	Mercury	*0.0000002*	mg/L
Station 151	8/8/2017	Mercury	*0.00000015*	mg/L
Station 151	8/8/2017	Mercury	0.000000968	mg/L
Station 151	8/21/2017	Mercury	0.0000002	mg/L
Station 151	8/21/2017	Mercury	0.0000005	mg/L
Station 151	9/3/2017	Mercury	*0.000000254*	mg/L

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	9/3/2017	Mercury	0.000000684	mg/L
Station 151	9/18/2017	Mercury	0.0000005	mg/L
Station 151	9/18/2017	Mercury	0.0000002	mg/L
Station 151	9/25/2017	Mercury	0.0000002	mg/L
Station 151	9/25/2017	Mercury	0.0000065	mg/L
Station 151	5/14/2018	Mercury	0.0000201	mg/L
Station 151	5/14/2018	Mercury	*0.00000024*	mg/L
Station 151	5/21/2018	Mercury	*0.0000002*	mg/L
Station 151	5/21/2018	Mercury	0.0000096	mg/L
Station 151	6/4/2018	Mercury	0.0000146	mg/L
Station 151	6/6/2018	Mercury	*0.000000086*	mg/L
Station 151	6/18/2018	Mercury	*0.0000002*	mg/L
Station 151	6/18/2018	Mercury	0.0000012	mg/L
Station 151	7/8/2018	Mercury	*0.000000361*	mg/L
Station 151	7/8/2018	Mercury	*0.000000361*	mg/L
Station 151	7/8/2018	Mercury	0.00000136	mg/L
Station 151	7/16/2018	Mercury	0.000001	mg/L
Station 151	7/16/2018	Mercury	0.0000002	mg/L
Station 151	8/13/2018	Mercury	0.00000111	mg/L
Station 151	8/13/2018	Mercury	*0.000000235*	mg/L
Station 151	8/20/2018	Mercury	0.0000002	mg/L
Station 151	8/20/2018	Mercury	0.000001	mg/L
Station 151	9/9/2018	Mercury	0.00000211	mg/L
Station 151	9/9/2018	Mercury	*0.000000201*	mg/L
Station 151	9/17/2018	Mercury	*0.0000002*	mg/L
Station 151	9/17/2018	Mercury	0.0000011	mg/L
Station 151	9/25/2018	Mercury	*0.0000002*	mg/L
Station 151	9/25/2018	Mercury	0.0000011	mg/L
Station 151	5/14/2019	Mercury	0.0000002	mg/L
Station 151	5/14/2019	Mercury	0.000039	mg/L
Station 151	5/19/2019	Mercury	0.0000401	mg/L
Station 151	5/19/2019	Mercury	*0.000000373*	mg/L
Station 151	6/2/2019	Mercury	*0.000000175*	mg/L
Station 151	6/2/2019	Mercury	0.0000136	mg/L
Station 151	6/9/2019	Mercury	*0.000000336*	mg/L
Station 151	6/9/2019	Mercury	0.00000378	mg/L
Station 151	6/17/2019	Mercury	0.0000002	mg/L
Station 151	6/17/2019	Mercury	0.000002	mg/L

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	6/30/2019	Mercury	0.00000108	mg/L
Station 151	6/30/2019	Mercury	*0.000000206*	mg/L
Station 151	7/14/2019	Mercury	0.0000006	mg/L
Station 151	7/14/2019	Mercury	0.0000002	mg/L
Station 151	8/4/2019	Mercury	0.0000103	mg/L
Station 151	8/18/2019	Mercury	0.0000008	mg/L
Station 151	8/18/2019	Mercury	*0.0000002*	mg/L
Station 151	9/8/2019	Mercury	*0.0000001*	mg/L
Station 151	9/8/2019	Mercury	0.00000358	mg/L
Station 151	9/16/2019	Mercury	0.000000898	mg/L
Station 151	9/16/2019	Mercury	*0.0000001*	mg/L
Station 151	5/12/2020	Mercury	*0.0000001*	mg/L
Station 151	5/12/2020	Mercury	0.000064	mg/L
Station 151	5/18/2020	Mercury	0.0000299	mg/L
Station 151	5/18/2020	Mercury	*0.0000003*	mg/L
Station 151	6/2/2020	Mercury	0.0000107	mg/L
Station 151	6/2/2020	Mercury	*0.0000001*	mg/L
Station 151	6/14/2020	Mercury	0.000003	mg/L
Station 151	6/14/2020	Mercury	*0.0000003*	mg/L
Station 151	6/26/2020	Mercury	0.00000132	mg/L
Station 151	6/26/2020	Mercury	*0.0000001*	mg/L
Station 151	7/5/2020	Mercury	*0.0000001*	mg/L
Station 151	7/5/2020	Mercury	0.00000133	mg/L
Station 151	7/19/2020	Mercury	0.0000005	mg/L
Station 151	7/19/2020	Mercury	*0.0000003*	mg/L
Station 151	8/3/2020	Mercury	0.000000749	mg/L
Station 151	8/3/2020	Mercury	*0.0000001*	mg/L
Station 151	8/16/2020	Mercury	0.000006	mg/L
Station 151	8/16/2020	Mercury	*0.0000003*	mg/L
Station 151	8/28/2020	Mercury	*0.000000196*	mg/L
Station 151	8/28/2020	Mercury	0.000000568	mg/L
Station 151	9/15/2020	Mercury	0.000000517	mg/L
Station 151	9/15/2020	Mercury	*0.00000014*	mg/L
Station 151	9/20/2020	Mercury	0.000003	mg/L
Station 151	9/20/2020	Mercury	*0.0000003*	mg/L
Station 151	9/27/2020	Mercury	0.00000426	mg/L
Station 151	9/27/2020	Mercury	*0.00000014*	mg/L
Station 151	5/9/2021	Mercury	*0.0000636*	mg/L

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 151	5/24/2021	Mercury	0.00000473	mg/L
Station 151	6/6/2021	Mercury	0.00000185	mg/L
Station 151	6/20/2021	Mercury	0.00000035	mg/L
Station 151	6/20/2021	Mercury	*0*	mg/L
Station 151	7/4/2021	Mercury	0.00000155	mg/L
Station 151	7/25/2021	Mercury	0.0000017	mg/L
Station 151	7/25/2021	Mercury	*0*	mg/L
Station 151	8/8/2021	Mercury	0.00000144	mg/L
Station 151	8/15/2021	Mercury	0.00000045	mg/L
Station 151	9/6/2021	Mercury	0.000000593	mg/L
Station 151	9/19/2021	Mercury	0.00000135	mg/L
Station 151	9/27/2021	Mercury	0.00000053	mg/L
Station 151	5/9/2022	Mercury	0.0000193	mg/L
Station 151	5/22/2022	Mercury	0.0000175	mg/L
Station 151	6/5/2022	Mercury	0.00000221	mg/L
Station 151	6/19/2022	Mercury	0.00000092	mg/L
Station 151	7/10/2022	Mercury	0.00000065	mg/L
Station 151	7/17/2022	Mercury	0.00000047	mg/L
Station 151	8/1/2022	Mercury	0.000000698	mg/L
Station 151	8/14/2022	Mercury	*0*	mg/L
Station 151	9/4/2022	Mercury	0.000000378	mg/L
Station 151	9/20/2022	Mercury	0.00000547	mg/L
Station 151	9/26/2022	Mercury	*0*	mg/L
Station 151	5/23/2023	Mercury	0.0000351	mg/L
Station 151	5/28/2023	Mercury	0.00000924	mg/L
Station 151	5/28/2023	Mercury	*0*	mg/L
Station 151	6/4/2023	Mercury	0.00000258	mg/L
Station 151	6/18/2023	Mercury	0.00000303	mg/L
Station 151	7/9/2023	Mercury	0.00000262	mg/L
Station 151	7/16/2023	Mercury	0.00000064	mg/L
Station 151	8/6/2023	Mercury	0.000000664	mg/L
Station 151	8/20/2023	Mercury	*0*	mg/L
Station 151	8/20/2023	Mercury	*0*	mg/L
Station 151	9/3/2023	Mercury	0.000000437	mg/L
Station 151	9/18/2023	Mercury	*0*	mg/L
Station 151	9/26/2023	Mercury	*0.00000035*	mg/L
Station 151	9/26/2023	Mercury	*0*	mg/L
Station 151	5/21/2024	Mercury	0.000131	mg/L

Table Appendix I-2 Station 151 Mercury Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 151	5/27/2024	Mercury	0.0000065	mg/L
Station 151	5/27/2024	Mercury	*0*	mg/L
Station 151	6/3/2024	Mercury	0.00000514	mg/L
Station 151	6/16/2024	Mercury	0.0000079	mg/L
Station 151	7/1/2024	Mercury	0.00000205	mg/L
Station 151	7/1/2024	Mercury	0.000000221	mg/L
Station 151	7/14/2024	Mercury	0.00000098	mg/L
Station 151	8/4/2024	Mercury	0.0000239	mg/L
Station 151	8/4/2024	Mercury	*0*	mg/L
Station 151	8/18/2024	Mercury	0.00000256	mg/L
Station 151	8/18/2024	Mercury	*0*	mg/L
Station 151	9/8/2024	Mercury	0.0000198	mg/L
Station 151	9/15/2024	Mercury	*0*	mg/L
Station 151	9/15/2024	Mercury	0.00000068	mg/L
Station 151	9/23/2024	Mercury	0.00000041	mg/L
Station 151	9/23/2024	Mercury	*0*	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 160	5/2/2016	Mercury	0.00000761	mg/L
Station 160	5/2/2016	Mercury	*0.00000019*	mg/L
Station 160	5/16/2016	Mercury	0.0000017	mg/L
Station 160	5/16/2016	Mercury	0.0000002	mg/L
Station 160	6/6/2016	Mercury	0.000000668	mg/L
Station 160	6/6/2016	Mercury	*0.000000083*	mg/L
Station 160	6/20/2016	Mercury	*0.0000002*	mg/L
Station 160	6/20/2016	Mercury	0.0000003	mg/L
Station 160	7/4/2016	Mercury	0.000000313	mg/L
Station 160	7/4/2016	Mercury	*0.000000083*	mg/L
Station 160	7/18/2016	Mercury	0.0000004	mg/L
Station 160	7/18/2016	Mercury	*0.0000002*	mg/L
Station 160	8/1/2016	Mercury	0.000000293	mg/L
Station 160	8/1/2016	Mercury	0.031	mg/L
Station 160	8/1/2016	Mercury	*0.000000083*	mg/L
Station 160	8/15/2016	Mercury	0.0000003	mg/L
Station 160	8/15/2016	Mercury	*0.0000002*	mg/L

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/5/2016	Mercury	0.000000435	mg/L
Station 160	9/5/2016	Mercury	*0.000000083*	mg/L
Station 160	9/19/2016	Mercury	0.0000003	mg/L
Station 160	9/19/2016	Mercury	*0.0000002*	mg/L
Station 160	10/3/2016	Mercury	0.000000566	mg/L
Station 160	10/3/2016	Mercury	*0.000000083*	mg/L
Station 160	10/17/2016	Mercury	0.0000002	mg/L
Station 160	10/17/2016	Mercury	*0.0000002*	mg/L
Station 160	5/14/2017	Mercury	0.0000136	mg/L
Station 160	5/14/2017	Mercury	*0.00000015*	mg/L
Station 160	5/22/2017	Mercury	0.0000162	mg/L
Station 160	5/22/2017	Mercury	*0.0000002*	mg/L
Station 160	6/4/2017	Mercury	0.00000444	mg/L
Station 160	6/4/2017	Mercury	*0.00000015*	mg/L
Station 160	6/19/2017	Mercury	0.000001	mg/L
Station 160	6/19/2017	Mercury	*0.0000002*	mg/L
Station 160	7/9/2017	Mercury	0.000000649	mg/L
Station 160	7/9/2017	Mercury	*0.00000015*	mg/L
Station 160	7/17/2017	Mercury	0.0000004	mg/L
Station 160	7/17/2017	Mercury	*0.0000002*	mg/L
Station 160	8/8/2017	Mercury	0.000000572	mg/L
Station 160	8/8/2017	Mercury	*0.00000015*	mg/L
Station 160	8/21/2017	Mercury	0.0000003	mg/L
Station 160	8/21/2017	Mercury	0.0000002	mg/L
Station 160	9/3/2017	Mercury	0.000000706	mg/L
Station 160	9/3/2017	Mercury	*0.00000016*	mg/L
Station 160	9/18/2017	Mercury	0.0000003	mg/L
Station 160	9/18/2017	Mercury	0.0000002	mg/L
Station 160	9/25/2017	Mercury	0.0000002	mg/L
Station 160	9/25/2017	Mercury	0.0000003	mg/L
Station 160	5/14/2018	Mercury	0.00000581	mg/L
Station 160	5/14/2018	Mercury	*0.000000876*	mg/L
Station 160	5/21/2018	Mercury	0.0000071	mg/L
Station 160	5/21/2018	Mercury	*0.0000002*	mg/L
Station 160	6/4/2018	Mercury	0.00000745	mg/L
Station 160	6/6/2018	Mercury	*0.000000086*	mg/L
Station 160	6/18/2018	Mercury	0.000001	mg/L
Station 160	6/18/2018	Mercury	*0.0000002*	mg/L

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	7/8/2018	Mercury	0.000000945	mg/L
Station 160	7/8/2018	Mercury	*0.000000207*	mg/L
Station 160	7/8/2018	Mercury	*0.000000207*	mg/L
Station 160	7/16/2018	Mercury	0.0000002	mg/L
Station 160	7/16/2018	Mercury	0.0000005	mg/L
Station 160	8/13/2018	Mercury	*0.000000172*	mg/L
Station 160	8/13/2018	Mercury	0.00000103	mg/L
Station 160	8/20/2018	Mercury	0.0000002	mg/L
Station 160	8/20/2018	Mercury	0.0000005	mg/L
Station 160	9/9/2018	Mercury	0.000000352	mg/L
Station 160	9/9/2018	Mercury	*0.000000116*	mg/L
Station 160	9/17/2018	Mercury	*0.0000002*	mg/L
Station 160	9/17/2018	Mercury	0.0000002	mg/L
Station 160	9/25/2018	Mercury	0.0000002	mg/L
Station 160	9/25/2018	Mercury	*0.0000002*	mg/L
Station 160	5/14/2019	Mercury	0.0000059	mg/L
Station 160	5/14/2019	Mercury	0.0000002	mg/L
Station 160	5/19/2019	Mercury	0.0000185	mg/L
Station 160	5/19/2019	Mercury	*0.000000423*	mg/L
Station 160	6/2/2019	Mercury	0.00000542	mg/L
Station 160	6/2/2019	Mercury	*0.000000214*	mg/L
Station 160	6/9/2019	Mercury	0.00000297	mg/L
Station 160	6/9/2019	Mercury	*0.000000246*	mg/L
Station 160	6/17/2019	Mercury	0.0000002	mg/L
Station 160	6/17/2019	Mercury	0.0000015	mg/L
Station 160	6/30/2019	Mercury	0.000000792	mg/L
Station 160	6/30/2019	Mercury	*0.000000217*	mg/L
Station 160	7/14/2019	Mercury	0.0000004	mg/L
Station 160	7/14/2019	Mercury	0.0000002	mg/L
Station 160	7/14/2019	Mercury	0.0000005	mg/L
Station 160	8/4/2019	Mercury	0.0000046	mg/L
Station 160	8/18/2019	Mercury	0.0000008	mg/L
Station 160	8/18/2019	Mercury	*0.0000002*	mg/L
Station 160	9/8/2019	Mercury	*0.0000001*	mg/L
Station 160	9/8/2019	Mercury	0.000002	mg/L
Station 160	9/16/2019	Mercury	0.000000984	mg/L
Station 160	9/16/2019	Mercury	*0.0000001*	mg/L
Station 160	5/12/2020	Mercury	*0.000000247*	mg/L

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	5/12/2020	Mercury	0.0000109	mg/L
Station 160	5/12/2020	Mercury	0.0000158	mg/L
Station 160	5/12/2020	Mercury	*0.0000001*	mg/L
Station 160	5/19/2020	Mercury	*0.0000003*	mg/L
Station 160	5/19/2020	Mercury	0.000006	mg/L
Station 160	6/3/2020	Mercury	0.0000376	mg/L
Station 160	6/3/2020	Mercury	*0.0000001*	mg/L
Station 160	6/14/2020	Mercury	0.000002	mg/L
Station 160	6/14/2020	Mercury	*0.0000003*	mg/L
Station 160	6/26/2020	Mercury	0.000000711	mg/L
Station 160	6/26/2020	Mercury	*0.0000001*	mg/L
Station 160	7/5/2020	Mercury	0.000000885	mg/L
Station 160	7/5/2020	Mercury	*0.0000001*	mg/L
Station 160	7/19/2020	Mercury	*0.0000003*	mg/L
Station 160	7/19/2020	Mercury	0.0000005	mg/L
Station 160	8/3/2020	Mercury	0.000000685	mg/L
Station 160	8/3/2020	Mercury	*0.0000001*	mg/L
Station 160	8/16/2020	Mercury	0.000006	mg/L
Station 160	8/16/2020	Mercury	*0.0000003*	mg/L
Station 160	8/28/2020	Mercury	0.000000581	mg/L
Station 160	8/28/2020	Mercury	*0.000000263*	mg/L
Station 160	9/15/2020	Mercury	0.000000535	mg/L
Station 160	9/15/2020	Mercury	*0.00000014*	mg/L
Station 160	9/20/2020	Mercury	*0.0000003*	mg/L
Station 160	9/20/2020	Mercury	0.000003	mg/L
Station 160	9/27/2020	Mercury	*0.00000014*	mg/L
Station 160	9/27/2020	Mercury	0.000000835	mg/L
Station 160	5/9/2021	Mercury	0.00000526	mg/L
Station 160	5/24/2021	Mercury	0.00000760	mg/L
Station 160	6/6/2021	Mercury	0.00000108	mg/L
Station 160	6/20/2021	Mercury	0.00000000	mg/L
Station 160	6/20/2021	Mercury	0.00000000	mg/L
Station 160	7/4/2021	Mercury	0.00000138	mg/L
Station 160	7/25/2021	Mercury	0.00000246	mg/L
Station 160	7/25/2021	Mercury	0.00000000	mg/L
Station 160	8/8/2021	Mercury	0.00000133	mg/L
Station 160	8/15/2021	Mercury	0.00000067	mg/L
Station 160	9/6/2021	Mercury	0.00000086	mg/L

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	9/19/2021	Mercury	0.00000056	mg/L
Station 160	9/28/2021	Mercury	0.00000031	mg/L
Station 160	5/9/2022	Mercury	0.00000224	mg/L
Station 160	5/22/2022	Mercury	0.00001470	mg/L
Station 160	6/5/2022	Mercury	0.00000288	mg/L
Station 160	6/19/2022	Mercury	0.00000000	mg/L
Station 160	7/10/2022	Mercury	0.00000061	mg/L
Station 160	7/17/2022	Mercury	0.00000244	mg/L
Station 160	8/1/2022	Mercury	0.00000058	mg/L
Station 160	8/14/2022	Mercury	0.00000036	mg/L
Station 160	9/4/2022	Mercury	0.00000052	mg/L
Station 160	9/20/2022	Mercury	0.00000691	mg/L
Station 160	9/26/2022	Mercury	0.00000069	mg/L
Station 160	5/23/2023	Mercury	0.00000697	mg/L
Station 160	5/28/2023	Mercury	0.00001700	mg/L
Station 160	5/28/2023	Mercury	0.00000000	mg/L
Station 160	6/4/2023	Mercury	0.00000519	mg/L
Station 160	6/18/2023	Mercury	0.00000318	mg/L
Station 160	7/9/2023	Mercury	0.00000194	mg/L
Station 160	7/16/2023	Mercury	0.00000062	mg/L
Station 160	8/6/2023	Mercury	0.00000065	mg/L
Station 160	8/20/2023	Mercury	0.00000000	mg/L
Station 160	8/20/2023	Mercury	0.00000050	mg/L
Station 160	9/3/2023	Mercury	0.00000048	mg/L
Station 160	9/18/2023	Mercury	0.00000052	mg/L
Station 160	9/26/2023	Mercury	0.00000000	mg/L
Station 160	9/26/2023	Mercury	0.00000000	mg/L
Station 160	5/21/2024	Mercury	0.00001170	mg/L
Station 160	5/27/2024	Mercury	0.00000449	mg/L
Station 160	5/27/2024	Mercury	0.00000000	mg/L
Station 160	6/3/2024	Mercury	0.00000422	mg/L
Station 160	6/16/2024	Mercury	0.00000215	mg/L
Station 160	7/1/2024	Mercury	0.00000071	mg/L
Station 160	7/1/2024	Mercury	0.00000000	mg/L
Station 160	7/14/2024	Mercury	0.00000000	mg/L
Station 160	8/4/2024	Mercury	0.00002650	mg/L
Station 160	8/4/2024	Mercury	0.00000009	mg/L
Station 160	8/18/2024	Mercury	0.00000241	mg/L

Table Appendix I-3 Station 160 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 160	8/18/2024	Mercury	0.00000000	mg/L
Station 160	9/8/2024	Mercury	0.00000179	mg/L
Station 160	9/15/2024	Mercury	0.00000067	mg/L
Station 160	9/15/2024	Mercury	0.00000000	mg/L
Station 160	9/23/2024	Mercury	0.00000046	mg/L
Station 160	9/23/2024	Mercury	0.00000000	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix I-4 Station 140 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/2/2016	Mercury	0.000217	mg/L
Station 140	5/2/2016	Mercury	*0.000000083*	mg/L
Station 140	5/16/2016	Mercury	0.0000065	mg/L
Station 140	5/16/2016	Mercury	0.0000002	mg/L
Station 140	6/6/2016	Mercury	*0.000000083*	mg/L
Station 140	6/6/2016	Mercury	0.00000218	mg/L
Station 140	6/20/2016	Mercury	0.0000012	mg/L
Station 140	6/20/2016	Mercury	*0.0000002*	mg/L
Station 140	7/4/2016	Mercury	0.00000197	mg/L
Station 140	7/4/2016	Mercury	*0.000000083*	mg/L
Station 140	7/18/2016	Mercury	0.0000013	mg/L
Station 140	7/18/2016	Mercury	*0.0000002*	mg/L
Station 140	8/1/2016	Mercury	0.00000102	mg/L
Station 140	8/1/2016	Mercury	0.031	mg/L
Station 140	8/1/2016	Mercury	*0.000000083*	mg/L
Station 140	8/15/2016	Mercury	*0.0000002*	mg/L
Station 140	8/15/2016	Mercury	0.0000008	mg/L
Station 140	8/15/2016	Mercury	*0.0000002*	mg/L
Station 140	8/15/2016	Mercury	0.0000007	mg/L
Station 140	9/5/2016	Mercury	0.00000121	mg/L
Station 140	9/5/2016	Mercury	*0.000000083*	mg/L
Station 140	9/19/2016	Mercury	0.000001	mg/L
Station 140	9/19/2016	Mercury	*0.0000002*	mg/L
Station 140	10/7/2016	Mercury	*0.0000002*	mg/L
Station 140	10/7/2016	Mercury	0.0000029	mg/L
Station 140	10/17/2016	Mercury	0.0000033	mg/L
Station 140	10/17/2016	Mercury	*0.0000002*	mg/L

Table Appendix I-4 Station 140 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	5/14/2017	Mercury	*0.00000015*	mg/L
Station 140	5/14/2017	Mercury	0.000345	mg/L
Station 140	5/22/2017	Mercury	*0.0000002*	mg/L
Station 140	5/22/2017	Mercury	0.000033	mg/L
Station 140	6/4/2017	Mercury	0.0000249	mg/L
Station 140	6/4/2017	Mercury	*0.00000015*	mg/L
Station 140	6/19/2017	Mercury	0.0000025	mg/L
Station 140	6/19/2017	Mercury	*0.0000002*	mg/L
Station 140	7/9/2017	Mercury	*0.00000015*	mg/L
Station 140	7/9/2017	Mercury	0.0000029	mg/L
Station 140	7/17/2017	Mercury	0.0000066	mg/L
Station 140	7/17/2017	Mercury	*0.0000002*	mg/L
Station 140	8/8/2017	Mercury	*0.000000166*	mg/L
Station 140	8/8/2017	Mercury	0.00000182	mg/L
Station 140	8/21/2017	Mercury	0.0000027	mg/L
Station 140	8/21/2017	Mercury	0.0000002	mg/L
Station 140	9/3/2017	Mercury	0.00000113	mg/L
Station 140	9/3/2017	Mercury	*0.000000231*	mg/L
Station 140	9/18/2017	Mercury	0.000001	mg/L
Station 140	9/18/2017	Mercury	0.0000002	mg/L
Station 140	9/25/2017	Mercury	0.0000013	mg/L
Station 140	9/25/2017	Mercury	0.0000002	mg/L
Station 140	5/14/2018	Mercury	*9.68E-08*	mg/L
Station 140	5/14/2018	Mercury	0.000135	mg/L
Station 140	5/21/2018	Mercury	0.000051	mg/L
Station 140	5/21/2018	Mercury	*0.0000002*	mg/L
Station 140	6/4/2018	Mercury	0.0000681	mg/L
Station 140	6/6/2018	Mercury	*0.000000273*	mg/L
Station 140	6/18/2018	Mercury	0.0000035	mg/L
Station 140	6/18/2018	Mercury	*0.0000002*	mg/L
Station 140	7/8/2018	Mercury	0.00000371	mg/L
Station 140	7/8/2018	Mercury	*0.000000155*	mg/L
Station 140	7/8/2018	Mercury	*0.000000155*	mg/L
Station 140	7/16/2018	Mercury	0.0000002	mg/L
Station 140	7/16/2018	Mercury	0.0000016	mg/L
Station 140	8/13/2018	Mercury	0.00000194	mg/L
Station 140	8/13/2018	Mercury	*0.000000193*	mg/L
Station 140	8/20/2018	Mercury	0.0000011	mg/L

Table Appendix I-4 Station 140 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	8/20/2018	Mercury	0.0000002	mg/L
Station 140	9/9/2018	Mercury	0.00000154	mg/L
Station 140	9/9/2018	Mercury	*0.000000201*	mg/L
Station 140	9/17/2018	Mercury	*0.0000002*	mg/L
Station 140	9/17/2018	Mercury	0.0000046	mg/L
Station 140	9/25/2018	Mercury	0.0000018	mg/L
Station 140	9/25/2018	Mercury	*0.0000002*	mg/L
Station 140	5/14/2019	Mercury	0.00083	mg/L
Station 140	5/14/2019	Mercury	0.0000002	mg/L
Station 140	5/19/2019	Mercury	*0.000000316*	mg/L
Station 140	5/19/2019	Mercury	0.000167	mg/L
Station 140	6/2/2019	Mercury	0.0000844	mg/L
Station 140	6/2/2019	Mercury	*0.000000269*	mg/L
Station 140	6/9/2019	Mercury	0.00000883	mg/L
Station 140	6/9/2019	Mercury	*0.000000203*	mg/L
Station 140	6/17/2019	Mercury	0.0000002	mg/L
Station 140	6/17/2019	Mercury	0.0000051	mg/L
Station 140	6/30/2019	Mercury	0.00000347	mg/L
Station 140	6/30/2019	Mercury	*0.000000467*	mg/L
Station 140	7/14/2019	Mercury	0.0000013	mg/L
Station 140	7/14/2019	Mercury	0.0000002	mg/L
Station 140	8/4/2019	Mercury	0.00000793	mg/L
Station 140	8/18/2019	Mercury	0.0000015	mg/L
Station 140	8/18/2019	Mercury	*0.0000002*	mg/L
Station 140	9/8/2019	Mercury	0.00000457	mg/L
Station 140	9/8/2019	Mercury	*0.0000001*	mg/L
Station 140	9/16/2019	Mercury	0.0000015	mg/L
Station 140	9/16/2019	Mercury	*0.0000001*	mg/L
Station 140	5/12/2020	Mercury	0.000112	mg/L
Station 140	5/12/2020	Mercury	*0.0000001*	mg/L
Station 140	5/18/2020	Mercury	0.000162	mg/L
Station 140	5/18/2020	Mercury	*0.0000003*	mg/L
Station 140	6/2/2020	Mercury	*0.0000001*	mg/L
Station 140	6/2/2020	Mercury	0.0000113	mg/L
Station 140	6/14/2020	Mercury	0.000004	mg/L
Station 140	6/14/2020	Mercury	*0.0000003*	mg/L
Station 140	6/26/2020	Mercury	0.00000558	mg/L
Station 140	6/26/2020	Mercury	*0.0000001*	mg/L

Table Appendix I-4 Station 140 Mercury Data 2016 through 2024				
Location/Station	Date	Parameter	Concentration	Unit
Station 140	7/5/2020	Mercury	*0.0000001*	mg/L
Station 140	7/5/2020	Mercury	0.00000187	mg/L
Station 140	7/19/2020	Mercury	*0.0000003*	mg/L
Station 140	7/19/2020	Mercury	0.0000019	mg/L
Station 140	8/3/2020	Mercury	0.00000142	mg/L
Station 140	8/3/2020	Mercury	*0.0000001*	mg/L
Station 140	8/16/2020	Mercury	0.000006	mg/L
Station 140	8/16/2020	Mercury	*0.0000003*	mg/L
Station 140	8/28/2020	Mercury	*0.000000551*	mg/L
Station 140	8/28/2020	Mercury	0.00000149	mg/L
Station 140	9/15/2020	Mercury	*0.00000014*	mg/L
Station 140	9/15/2020	Mercury	0.0000019	mg/L
Station 140	9/20/2020	Mercury	0.000003	mg/L
Station 140	9/20/2020	Mercury	*0.0000003*	mg/L
Station 140	9/27/2020	Mercury	0.0000155	mg/L
Station 140	9/27/2020	Mercury	*0.00000014*	mg/L
Station 140	5/9/2021	Mercury	0.000398	mg/L
Station 140	5/24/2021	Mercury	0.0000239	mg/L
Station 140	6/6/2021	Mercury	0.00000563	mg/L
Station 140	6/20/2021	Mercury	0.00000446	mg/L
Station 140	6/20/2021	Mercury	0	mg/L
Station 140	7/4/2021	Mercury	0.00000239	mg/L
Station 140	7/25/2021	Mercury	0.00000275	mg/L
Station 140	7/25/2021	Mercury	0	mg/L
Station 140	8/8/2021	Mercury	0.00000184	mg/L
Station 140	8/15/2021	Mercury	0.00000161	mg/L
Station 140	9/6/2021	Mercury	0.00000126	mg/L
Station 140	9/19/2021	Mercury	0.00000088	mg/L
Station 140	9/27/2021	Mercury	0.0000006	mg/L
Station 140	5/9/2022	Mercury	0.000107	mg/L
Station 140	5/22/2022	Mercury	0.0000456	mg/L
Station 140	6/5/2022	Mercury	0.00000406	mg/L
Station 140	6/19/2022	Mercury	0	mg/L
Station 140	7/10/2022	Mercury	0.00000141	mg/L
Station 140	7/17/2022	Mercury	0	mg/L
Station 140	8/1/2022	Mercury	0.00000115	mg/L
Station 140	8/14/2022	Mercury	0.00000067	mg/L
Station 140	9/4/2022	Mercury	0.00000075	mg/L

Table Appendix I-4 Station 140 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 140	9/20/2022	Mercury	0.00000528	mg/L
Station 140	9/26/2022	Mercury	0.00000126	mg/L
Station 140	5/23/2023	Mercury	0.0000933	mg/L
Station 140	5/28/2023	Mercury	0.0000192	mg/L
Station 140	5/28/2023	Mercury	*0*	mg/L
Station 140	6/4/2023	Mercury	0.00000304	mg/L
Station 140	6/18/2023	Mercury	*0*	mg/L
Station 140	7/9/2023	Mercury	0.00000321	mg/L
Station 140	7/16/2023	Mercury	0.00000136	mg/L
Station 140	8/20/2023	Mercury	0.00000112	mg/L
Station 140	8/20/2023	Mercury	*0*	mg/L
Station 140	9/3/2023	Mercury	0.00000122	mg/L
Station 140	9/18/2023	Mercury	0.000001	mg/L
Station 140	9/27/2023	Mercury	0.00000114	mg/L
Station 140	9/27/2023	Mercury	*0*	mg/L
Station 140	5/21/2024	Mercury	0.00282	mg/L
Station 140	5/27/2024	Mercury	0.0000312	mg/L
Station 140	5/27/2024	Mercury	*0*	mg/L
Station 140	6/3/2024	Mercury	0.0000141	mg/L
Station 140	6/16/2024	Mercury	0.00000031	mg/L
Station 140	7/1/2024	Mercury	0.00000207	mg/L
Station 140	7/1/2024	Mercury	*0*	mg/L
Station 140	7/14/2024	Mercury	*0*	mg/L
Station 140	8/4/2024	Mercury	0.000106	mg/L
Station 140	8/4/2024	Mercury	*0*	mg/L
Station 140	8/18/2024	Mercury	0.000003	mg/L
Station 140	8/18/2024	Mercury	*0*	mg/L
Station 140	9/8/2024	Mercury	0.00000294	mg/L
Station 140	9/15/2024	Mercury	0.00000076	mg/L
Station 140	9/15/2024	Mercury	*0*	mg/L
Station 140	9/23/2024	Mercury	0.00000383	mg/L
Station 140	9/23/2024	Mercury	*0*	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Mercury	0.0000061	mg/L

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	5/2/2016	Mercury	*0.000000083*	mg/L
Station 12	5/16/2016	Mercury	0.0000002	mg/L
Station 12	5/16/2016	Mercury	0.0000013	mg/L
Station 12	6/6/2016	Mercury	0.000000599	mg/L
Station 12	6/6/2016	Mercury	*0.000000083*	mg/L
Station 12	6/20/2016	Mercury	*0.0000002*	mg/L
Station 12	6/20/2016	Mercury	0.0000002	mg/L
Station 12	7/4/2016	Mercury	0.000000327	mg/L
Station 12	7/4/2016	Mercury	*0.000000083*	mg/L
Station 12	7/18/2016	Mercury	0.0000003	mg/L
Station 12	7/18/2016	Mercury	*0.0000002*	mg/L
Station 12	8/1/2016	Mercury	0.000000231	mg/L
Station 12	8/1/2016	Mercury	0.031	mg/L
Station 12	8/1/2016	Mercury	*0.000000126*	mg/L
Station 12	8/15/2016	Mercury	*0.0000002*	mg/L
Station 12	8/15/2016	Mercury	0.0000004	mg/L
Station 12	9/5/2016	Mercury	0.000000324	mg/L
Station 12	9/5/2016	Mercury	*0.000000083*	mg/L
Station 12	9/19/2016	Mercury	0.0000003	mg/L
Station 12	9/19/2016	Mercury	*0.0000002*	mg/L
Station 12	10/3/2016	Mercury	0.000000336	mg/L
Station 12	10/3/2016	Mercury	*0.000000083*	mg/L
Station 12	10/17/2016	Mercury	0.0000002	mg/L
Station 12	10/17/2016	Mercury	*0.0000002*	mg/L
Station 12	5/14/2017	Mercury	*0.000000207*	mg/L
Station 12	5/14/2017	Mercury	0.00000959	mg/L
Station 12	5/22/2017	Mercury	0.0000068	mg/L
Station 12	5/22/2017	Mercury	*0.0000002*	mg/L
Station 12	6/4/2017	Mercury	0.00000526	mg/L
Station 12	6/4/2017	Mercury	*0.00000015*	mg/L
Station 12	6/19/2017	Mercury	*0.0000002*	mg/L
Station 12	6/19/2017	Mercury	0.0000004	mg/L
Station 12	7/9/2017	Mercury	0.00000145	mg/L
Station 12	7/9/2017	Mercury	*0.000000157*	mg/L
Station 12	7/17/2017	Mercury	0.0000025	mg/L
Station 12	7/17/2017	Mercury	*0.0000002*	mg/L
Station 12	8/8/2017	Mercury	0.00000147	mg/L
Station 12	8/8/2017	Mercury	*0.00000015*	mg/L

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	8/21/2017	Mercury	0.0000002	mg/L
Station 12	8/21/2017	Mercury	0.0000005	mg/L
Station 12	9/3/2017	Mercury	0.000000607	mg/L
Station 12	9/3/2017	Mercury	*0.000000234*	mg/L
Station 12	9/18/2017	Mercury	0.0000004	mg/L
Station 12	9/18/2017	Mercury	0.0000007	mg/L
Station 12	9/25/2017	Mercury	0.0000003	mg/L
Station 12	9/25/2017	Mercury	0.0000002	mg/L
Station 12	5/21/2018	Mercury	0.0000118	mg/L
Station 12	5/21/2018	Mercury	*0.0000002*	mg/L
Station 12	6/4/2018	Mercury	0.00000469	mg/L
Station 12	6/6/2018	Mercury	*0.000000103*	mg/L
Station 12	6/18/2018	Mercury	0.0000013	mg/L
Station 12	6/18/2018	Mercury	*0.0000002*	mg/L
Station 12	7/8/2018	Mercury	0.00000167	mg/L
Station 12	7/8/2018	Mercury	*0.000000239*	mg/L
Station 12	7/8/2018	Mercury	*0.000000239*	mg/L
Station 12	7/16/2018	Mercury	0.0000016	mg/L
Station 12	7/16/2018	Mercury	0.0000002	mg/L
Station 12	8/13/2018	Mercury	0.000000851	mg/L
Station 12	8/13/2018	Mercury	*0.000000333*	mg/L
Station 12	8/20/2018	Mercury	0.0000006	mg/L
Station 12	8/20/2018	Mercury	0.0000002	mg/L
Station 12	9/9/2018	Mercury	0.00000102	mg/L
Station 12	9/9/2018	Mercury	*0.000000476*	mg/L
Station 12	9/17/2018	Mercury	*0.0000002*	mg/L
Station 12	9/17/2018	Mercury	0.0000002	mg/L
Station 12	9/25/2018	Mercury	0.0000003	mg/L
Station 12	9/25/2018	Mercury	*0.0000002*	mg/L
Station 12	5/14/2019	Mercury	0.0000142	mg/L
Station 12	5/14/2019	Mercury	0.0000002	mg/L
Station 12	5/19/2019	Mercury	0.0000157	mg/L
Station 12	5/19/2019	Mercury	*0.000000435*	mg/L
Station 12	6/2/2019	Mercury	0.0000059	mg/L
Station 12	6/2/2019	Mercury	*0.000000156*	mg/L
Station 12	6/9/2019	Mercury	0.00000266	mg/L
Station 12	6/9/2019	Mercury	*0.000000244*	mg/L
Station 12	6/17/2019	Mercury	0.0000002	mg/L

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	6/17/2019	Mercury	0.0000009	mg/L
Station 12	6/30/2019	Mercury	0.000000824	mg/L
Station 12	6/30/2019	Mercury	*0.000000086*	mg/L
Station 12	7/14/2019	Mercury	0.0000006	mg/L
Station 12	7/14/2019	Mercury	0.0000002	mg/L
Station 12	8/4/2019	Mercury	0.00000408	mg/L
Station 12	8/18/2019	Mercury	0.0000008	mg/L
Station 12	8/18/2019	Mercury	*0.0000002*	mg/L
Station 12	9/8/2019	Mercury	0.00000119	mg/L
Station 12	9/8/2019	Mercury	*0.0000001*	mg/L
Station 12	9/16/2019	Mercury	0.000000717	mg/L
Station 12	9/16/2019	Mercury	*0.0000001*	mg/L
Station 12	5/12/2020	Mercury	0.0000144	mg/L
Station 12	5/12/2020	Mercury	*0.0000001*	mg/L
Station 12	5/18/2020	Mercury	0.00001	mg/L
Station 12	5/18/2020	Mercury	*0.0000003*	mg/L
Station 12	6/2/2020	Mercury	0.0000103	mg/L
Station 12	6/2/2020	Mercury	*0.0000001*	mg/L
Station 12	6/14/2020	Mercury	0.0000008	mg/L
Station 12	6/14/2020	Mercury	*0.0000003*	mg/L
Station 12	6/26/2020	Mercury	0.000000628	mg/L
Station 12	6/26/2020	Mercury	*0.0000001*	mg/L
Station 12	7/5/2020	Mercury	*0.0000001*	mg/L
Station 12	7/5/2020	Mercury	0.000000959	mg/L
Station 12	7/19/2020	Mercury	0.0000005	mg/L
Station 12	7/19/2020	Mercury	*0.0000003*	mg/L
Station 12	8/3/2020	Mercury	*0.0000001*	mg/L
Station 12	8/3/2020	Mercury	0.000000311	mg/L
Station 12	8/16/2020	Mercury	0.0000003	mg/L
Station 12	8/16/2020	Mercury	*0.0000003*	mg/L
Station 12	8/28/2020	Mercury	0.000000281	mg/L
Station 12	8/28/2020	Mercury	*0.000000374*	mg/L
Station 12	9/15/2020	Mercury	*0.00000014*	mg/L
Station 12	9/15/2020	Mercury	0.000000248	mg/L
Station 12	9/20/2020	Mercury	*0.0000003*	mg/L
Station 12	9/20/2020	Mercury	*0.0000003*	mg/L
Station 12	9/20/2020	Mercury	0.0000003	mg/L
Station 12	9/27/2020	Mercury	0.000000913	mg/L

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	9/27/2020	Mercury	0.00000014	mg/L
Station 12	5/9/2021	Mercury	0.00000914	mg/L
Station 12	5/24/2021	Mercury	0.00000410	mg/L
Station 12	6/6/2021	Mercury	0.00000093	mg/L
Station 12	6/20/2021	Mercury	0.00000071	mg/L
Station 12	6/20/2021	Mercury	*0.00000000*	mg/L
Station 12	7/4/2021	Mercury	0.00000099	mg/L
Station 12	7/25/2021	Mercury	0.00000168	mg/L
Station 12	7/25/2021	Mercury	*0.00000000*	mg/L
Station 12	8/8/2021	Mercury	0.00000085	mg/L
Station 12	8/15/2021	Mercury	0.00000055	mg/L
Station 12	9/6/2021	Mercury	0.00000054	mg/L
Station 12	9/19/2021	Mercury	0.00000000	mg/L
Station 12	9/19/2021	Mercury	0.00000000	mg/L
Station 12	9/27/2021	Mercury	0.00000000	mg/L
Station 12	5/9/2022	Mercury	0.00000303	mg/L
Station 12	5/22/2022	Mercury	0.00000900	mg/L
Station 12	6/5/2022	Mercury	0.00000159	mg/L
Station 12	6/19/2022	Mercury	0.00000035	mg/L
Station 12	7/10/2022	Mercury	0.00000057	mg/L
Station 12	7/17/2022	Mercury	0.00000037	mg/L
Station 12	8/1/2022	Mercury	0.00000053	mg/L
Station 12	8/14/2022	Mercury	*0.00000000*	mg/L
Station 12	9/4/2022	Mercury	0.00000035	mg/L
Station 12	9/20/2022	Mercury	0.00000302	mg/L
Station 12	9/26/2022	Mercury	0.00000081	mg/L
Station 12	5/23/2023	Mercury	0.00000484	mg/L
Station 12	5/28/2023	Mercury	0.00000713	mg/L
Station 12	5/28/2023	Mercury	0.00000000	mg/L
Station 12	6/4/2023	Mercury	0.00000186	mg/L
Station 12	6/18/2023	Mercury	0.00000000	mg/L
Station 12	7/9/2023	Mercury	0.00000360	mg/L
Station 12	7/16/2023	Mercury	0.00000050	mg/L
Station 12	8/6/2023	Mercury	0.00000066	mg/L
Station 12	8/20/2023	Mercury	0.00000031	mg/L
Station 12	8/20/2023	Mercury	0.00000000	mg/L
Station 12	9/3/2023	Mercury	0.00000056	mg/L
Station 12	9/18/2023	Mercury	*0.00000000*	mg/L

Table Appendix I-5 Station 12 Mercury Data 2016 through 2024				
Location/Station	**Date**	**Parameter**	**Concentration**	**Unit**
Station 12	9/26/2023	Mercury	*0.00000000*	mg/L
Station 12	9/26/2023	Mercury	*0.00000000*	mg/L
Station 12	5/21/2024	Mercury	0.00001240	mg/L
Station 12	5/27/2024	Mercury	0.00000421	mg/L
Station 12	5/27/2024	Mercury	*0.00000000*	mg/L
Station 12	6/3/2024	Mercury	0.00000421	mg/L
Station 12	6/16/2024	Mercury	0.00000123	mg/L
Station 12	7/1/2024	Mercury	0.00000050	mg/L
Station 12	7/1/2024	Mercury	*0.00000000*	mg/L
Station 12	7/14/2024	Mercury	0.00000069	mg/L
Station 12	8/4/2024	Mercury	0.00000849	mg/L
Station 12	8/4/2024	Mercury	*0.00000000*	mg/L
Station 12	8/18/2024	Mercury	0.00000176	mg/L
Station 12	8/18/2024	Mercury	*0.00000000*	mg/L
Station 12	9/8/2024	Mercury	0.00000154	mg/L
Station 12	9/15/2024	Mercury	0.00000048	mg/L
Station 12	9/15/2024	Mercury	*0.00000000*	mg/L
Station 12	9/23/2024	Mercury	0.00000035	mg/L
Station 12	9/23/2024	Mercury	*0.00000000*	mg/L

Gray italicized indicates Field Blank or Equipment Blank

Attachment 2

EXTENDED COMPLIANCE SCHEDULE

Red Dog Mine APDES Permit No. AK0038652 Compliance Schedule Extension

June 2025

Teck

Table of Contents

List of Tables

List of Figures

Introduction

Teck Alaska Incorporated (Teck) is submitting this document in accordance with the “Red Dog Mine Basis for Compliance Schedule Extension” document submitted to Alaska Department of Environmental Conservation (ADEC) on 25 February 2025.

This document offers more details about the makeup of activities Teck will undertake as a justification for the 10-year term of the proposed extension of the 2021 Alaska Pollutant Discharge Elimination System (APDES) minor permit modification.

Extension of the minor permit modification and completing the tasks that make up the proposed Compliance Schedule will allow Teck sufficient time to perform critical environmental, operational, and technical evaluations with the objective of identifying, permitting and implementing a long-term and sustainable solution to managing mine water at the Red Dog Mine.

During the requested 10-year extension period, Teck proposes continuing to discharge treated water seasonally, under the terms of the 2021 APDES minor permit modification that establishes an allowable annual total dissolved solids (TDS) discharge of 24,235 short tons measured at Outfall 001.

Teck has a long history of efforts aimed at improving water management at Red Dog including water treatment system enhancements, water diversion upgrades, and water quality management programs (detailed list is further below in the document). However, despite these efforts, a combination of increased precipitation and naturally degraded background water quality caused by permafrost degradation have offset these gains significantly. The fact that the assimilative capacity in the TDS mixing zones in Red Dog and Ikalukrok creeks disappeared abruptly and without warning in 2019 has precluded Teck’s ability to implement timely and fully effective mitigation measures.

In the absence of these mixing zones Teck’s historic approach to managing mine water is no longer tenable and dictates a fundamental change to its otherwise previously successful water management strategy. Sufficient time is needed to fully vet and implement a new approach, which Teck anticipates will be successful during the 10-year term of this proposed compliance schedule.

Teck’s approach to identifying a new and sustainable long-term solution for maintaining the mine site water balance is largely driven by the following facts:

- Any new water management solution must allow Teck to continue to operate within applicable water quality regulations, comply with 18 AAC 83 and be authorized under an APDES permit.
- The background water quality in Red Dog and Ikalukrok creeks is erratic and no longer provides reliable mixing zones for TDS. Any long-term solution should consider that TDS mixing zones in Red Dog and Ikalukrok creeks may not be reliable.
- Due to the uncertainty of the existence of future TDS mixing zones in Red Dog or Ikalukrok creeks, any long-term solution that includes a discharge at Outfall 001 would have to meet TDS permit limits at the “end of pipe” (EOP), or some new higher in-stream limits.

Considering these facts, Teck has currently identified four options for a long-term solution. The above facts drive Teck's efforts described in the proposed Compliance Schedule, which includes the following options, in order of Teck preference, based on its current knowledge and understanding:

A. Regulatory changes to in-stream limits for TDS in Red Dog and Ikalukrok creeks. This could include site-specific criteria for TDS or replacing TDS limits with sulfate limits, (as is currently under consideration by some other states). This option may also include further investigation into in-stream conditions to understand the potential for future assimilative capacity and impacts to aquatic life.
B. Implement mine site operational improvements sufficient to meet new TDS permit limits at Outfall 001 (i.e., end of pipe) without any reliance on freshwater mixing zones for TDS.
C. Construct a pipeline and discharge treated water to a marine outfall, incorporating a marine mixing zone, at the mine port site under an APDES permit.
D. Some combination of Options A, B and/or C.

Teck's preference is to continue discharging to Outfall 001. Though cost-intensive, Option C of constructing a pipeline is included in case the other options are not feasible. The proposed 10-year Compliance Schedule starts with efforts that pursue options A, B and C until one or more of the options is shown NOT to offer a long-term feasible and sustainable solution within the 10-year timeframe. From that point forward the Compliance Schedule is focused on advancing the prevailing solution through full implementation and issuance of a new APDES permit by the end of the 10-year period.

Option A includes assessing potential changes to instream permit limits for TDS to as much as 2,400 mg/L consistent with recent toxicology studies, or regulatory changes that recognize sulfate, rather than TDS, in permit limits. For the mine site operational improvements option (Option B) that includes identifying new improvements and then implementing the improvements sufficient to meet the permit limits at EOP at Outfall 001 and incorporating it all into a new APDES permit. For the pipeline option (Option C) that includes permitting the pipeline through Cape Krusenstern National Monument, receipt of local, state and federal permits, completing the NEPA process, and constructing and commissioning the pipeline. Option D would be adopted late in the compliance schedule when it became clear that integrating some, or all, of Options A, B and C were advantageous. Even if it became clear that a pipeline is required for the primary means of disposing of treated mine water, there may be benefits for continuing to discharge some water to Outfall 001 that meets new TDS permit limits, including benefits to the aquatic ecosystem as well as providing a degree of pipeline operational flexibility.

The 10-year term is driven by the steps reasonably and likely required to identify, design, permit and construct the final solution. While it may be possible to reach the goal in less time, the Compliance Schedule includes enough detail to support the position that it could take the full 10 years.

Long-Term Water Management Options

As described, Teck recognizes four long-term water management options. Teck will investigate each during the proposed 10-year term of the compliance schedule. Select Pros and Cons of these four options are outlined in Table 1 and described in more detail below.

Table 1. Pros and Cons of Main Water Management Options

Options	Pro	Con
<u>Option A</u> **Outfall 001 Discharge Meeting New in-Stream Limits for TDS, other regulatory changes**	• Continues to benefit the downstream aquatic ecosystem • Offers operational flexibility	• Potential uncertainty in background conditions • Communities of Interest (COI) may not support
<u>Option B</u> **Outfall 001 Discharge Meeting new APDES Permit Limits at "EOP"**	• Not reliant on fresh water mixing zones for TDS • Could reduce long-term water management risk for extended mine life and closure • Could incorporate some improvements which are already part of the reclamation plan. • Continue to contribute to improving water quality and supporting aquatic life in Red Dog Creek	• Potentially significant capital costs to implement • Potentially higher long-term operating costs • Require significant source control, pre-treatment, and water treatment upgrades. • High degree of feasibility uncertainty related to technical challenges, costs and associated permit requirements
<u>Option C</u> **Meet APDES Marine Discharge Permit Limits at Chukchi Sea via Ocean Pipeline**	• Strong support from COI • Significant assimilative capacity of the ocean • Long-term water management risk reduction for extended mine life and closure scenarios • Might offset some on-site improvement and long-term post- closure water treatment costs	• Significant Capital Cost • Significant implementation and continuing O&M costs • >5-year timeline for permitting and construction • Legal uncertainties around acquiring National Park Service (NPS) approvals for pipeline right-of-way (ROW) through Park. • Potential actual or perceived caribou impacts • Return to pre-mine lower water quality in Red Dog Creek resulting in negative impacts to aquatic life • Potential pushback from COI
<u>Option D</u> **Combination of Options A, B, C**	• Offers operational flexibility to Options A, B and C • Continues benefits to aquatic life in Red Dog Creek • Continue to use existing water treatment infrastructure at site	• Significant Capital Cost • May not garner same COI support as pipeline only option • Higher costs of maintaining two discharge options

Option A – Outfall 001 Discharge - Meet New In-Stream Limits

There are some potential regulatory changes that, if implemented, could provide Teck with a path forward that would not require a pipeline and would accommodate future discharges to Outfall 001 by meeting new in-stream limits for TDS. Multiple options for regulatory changes will be investigated including, but not limited to, site-specific in-stream TDS limits and substitution of sulfate criteria. This option may also include further investigation into, and modeling of, in-stream conditions to understand the potential for future assimilative capacity and impacts to aquatic life.

In 2021, EcoTox, LLC completed a study on the effects of increased concentrations of TDS on the life stages of salmonids and concluded that it is likely that TDS concentrations of up to ~2,400 mg/L would still be protective of salmonid aquatic life. If that is accurate then it might be possible to change current in-stream limits for TDS from 1,500 and 1,000 mg/L in Red Dog and Ikalukrok Creek, respectively, to 2,400 mg/L. Teck will evaluate this option further during the compliance schedule term. One potential limiting factor for this option is the time it might take for ADEC to implement the regulatory change. For example, it took 6 years to implement the current site-specific criteria for TDS, including the required studies.

In addition to the potential for increased site-specific TDS limits, ADEC has advised that some states have considered changing regulations by eliminating water quality criteria for TDS and substituting criteria for sulfate. The steps and timing for such a regulatory change are poorly defined but such a regulatory change could benefit Red Dog's ability to continue to discharge through Outfall 001. Teck will evaluate this option further during the compliance schedule term.

More compliance schedule details about the potential site improvements comprising Option A are included in Figure 1.

Option B – Outfall 001 Discharge - Meet EOP Permit Limits at Outfall 001

Teck has been investigating and implementing improvements to water management at Red Dog since the mine opened. The mine has made improvements to the efficacy and capacity of Water Treatment Plants (WTP) 1 and 2, and in 2021 commissioned a new reverse osmosis (RO) treatment plant. In addition, Teck is now collecting and pre-treating some of its most impacted water and has accelerated the cover installation on its Main Waste Stockpile (MWS) as a step in reducing the amount of water infiltration and the loading of those waters.

The following list of site improvements, totalling more than $100M in associated costs, is being provided here for context of Teck's determined efforts to improve the effectiveness of its water management efforts at the mine. The loss of TDS mixing zones in Red Dog and Ikalukrok creeks beginning in 2019 cannot be offset by these improvements.

- Water Capture & Treatment Improvements
  - Acid Rock Drainage (ARD) Capture & Treatment ($15M)
  - Initial Gypsum addition ($3M)
  - Reclaim system and WTP2 & sand filter system improvements ($5-10M)
- Water Volume & Quality Management (WVQM)
  - RO plant construction (~$20M)

    - WTP1 and 2 upgrades, including new gypsum addition system and associated enhancements (~$8M)
    - MWS cover acceleration (~$60M)
    - Reverse pumping system to pump from Tailings Storage Facility (TSF) to the pits (~$2M)
    - Background and permafrost studies (~$3M)
- Accelerated dam construction ($50-60M)
- Shelly Creek Diversion Extension ($1.2M to-date)
- Main Pit Water Reservoir (MPWR) Neutralization ($5.4M)
- Water Volume Reduction (WVR) Program
    - Red Dog Creek Culvert Work ($1.5M to-date)
    - TSF Neutralization ($3M to-date, likely $30M including lime costs)
    - ARD capture and treatment ($3M to-date)
    - WTP2 Underflow (U/F) regrind ($1-2M to-date)

A portion of these improvements were implemented prior to 2019, and enabled the mine to effectively manage water until 2019 when the TDS mixing zones in Red Dog and Ikalukrok creeks all but vanished because of naturally increasing TDS. The loss of assimilative capacity was likely related to thawing permafrost in the region and the release of increasing volumes of shallow groundwater into the natural environment. This phenomenon has now been documented in more than 75 streams in northern Alaska by the USGS. (The Rusting of Arctic Rivers: Freshwater Ecosystems Respond to Rapidly Uptaking Metals U.S. Geological Survey).

Improvements after 2019 have enabled the mine to maintain compliance under the minor permit modification but have been insufficient in enabling the site to reduce the total water volume managed on site due to continued increases in precipitation resulting from climate change.

Option B is focused on evaluating whether additional "site system" improvement opportunities still exist that would allow the mine to improve the discharge of treated water at Outfall 001 to the point that it could meet new APDES permit limits at Outfall 001 – before being discharged into Red Dog Creek. The opportunities loosely fall into 4 categories:

1. Source Control
2. ARD Pretreatment
3. Water Treatment Upgrades
4. Clean Water Diversion

The goal of site system changes is to reduce water volumes managed on site by 1) increasing discharge volumes; and 2) reducing the amount of unimpacted water entering the mine footprint ("clean water diversion"). Discharge volumes can be increased through improvements to water treatment processes ("water treatment upgrades") and improvements to on-site water quality ("source control" and "ARD pretreatment").

Source control in the context of this document refers to actions that reduce acid generation from mined rock by either reducing infiltration of oxygen and/or precipitation into mined rock stockpiles including ore and waste rock or strategies that reduce the reactivity of those stockpiles. Source control at the mine could include progressive reclamation of pits and stockpiles or improved waste segregation and blending. One potential example would be to expedite mining and backfill of Qanaiyaq Pit so that it could be covered and reclaimed during mine life. During Phases 1 and 2, source control strategies will be investigated through environmental monitoring, mined rock characterization, and modeling to determine the potential water quality benefits that could be gained within the 10-year timeframe.

Pretreatment of ARD sources is another strategy to improve water quality and thereby improve discharge volumes. Ongoing pretreatment work includes pretreatment of ARD from the MWS in WTPs 1 and 3, and direct lime addition to the TSF and MPWR. Additional sources of ARD will be investigated and will be considered for pretreatment.

Improvements to the existing water treatment system are critical for improving discharge volumes. Multiple improvements are currently underway and studies to determine other potential opportunities will be pursued as part of Option B. However, the high-density sludge (HDS) systems are limited in their capabilities to meet potential end-of-pipe discharge limits. Therefore, other technologies including expansion of the RO system will be evaluated. Teck has already assumed that design and construction of a new water treatment system for closure will be required, therefore, this will be evaluated for early implementation.

While converting 100% to RO treatment at the mine could meet the desired goal, this would require increasing the current RO capacity from approximately 1,500 gallons per minute (gpm) to 12,000 gpm of permeate. In addition to the prohibitive capital cost in expanding the RO capacity, this would require increasing the mine’s power generating capacity significantly and permitting these additional emission sources. It would also create a significant waste stream consisting of RO reject that could, over time, compound the problem of managing TDS on site by concentrating TDS in the TSF to the point where it could no longer be effectively treated.

One of the most effective methods of reducing water volume on site is to reduce precipitation and groundwater inflows to the mine site. Diversion ditches and culverts are located around the perimeter of the site and already divert a significant amount of water away from the mine footprint. One example of an opportunity for more clean water diversion would be diverting Willy Nilly Creek (also known as Channel A) to the Bons catchment south of the TSF. To realize this opportunity, water quality monitoring will be needed to determine if the creek is still mine impacted due to its proximity to the MWS. While there are likely few opportunities to divert clean water, other areas of the site will be evaluated.

All opportunities will be identified through a comprehensive assessment process. Environmental studies, monitoring and sample analysis, and modeling, at a minimum, will be used to determine if the available opportunities could enable sufficient reduction of water volume. Additionally, the opportunities will be evaluated for their life cycle cost including impacts to LOM and closure. Many of the opportunities under Option B may also be required in closure or improve closure water management and would therefore offset closure costs.

The real challenge for Option B is to evaluate whether, after already making a significant number of improvements at site over many years, there is still the ability to make significant additional improvement that could bring the desired result within the 10-year timeframe. However, this is the preferred option for the mine if it can be achieved within the 10-yr compliance schedule at lower costs than the pipeline and if it is reliable for the long term. The opportunities identified in Option B could be enhanced by future APDES permit limits that accommodate site-specific TDS criteria or standards and other regulatory changes as discussed in Option A.

More compliance schedule details about the potential site improvements comprising Option B are included in Figure 1.

Option C – Convey Treated Water via Pipeline to a Marine Outfall at Mine Port Site

Option C is focused on evaluating the merits of continuing to treat water at the mine but then convey it via a pipeline along the existing Port Road corridor and discharge the water into a marine mixing zone at the mine port site. Several pipeline studies have been completed as recently as 2022 (Kuna Engineering). In general terms, the pipeline would need to be capable of conveying about 2 billion gallons of water during a seasonal discharge season. Year-round discharge will be considered, but the expected increase in capital and operating costs appear to make it less desirable, if even feasible.

The pipeline-related activities incorporated into the proposed compliance schedule initially focus on several basic issues related to acquiring a ROW for the pipeline, upscaled pipeline design and associated costs, mitigating concerns over potential risks to caribou and other environmental aspects, and the constructability of the pipeline. Subsequent work would include a decision on which option to carry forward to implementation and if that were the pipeline, it would include advancing engineering, environmental studies, permitting and finally, materials procurement and construction of the pipeline.

The pipeline is included in the event that Option A or B are determined unobtainable or infeasible. Some initial benefits of the pipeline include eliminating the reliance on any fresh water mixing zones that appear to be quite uncertain in a changing arctic environment. While the pipeline marine discharge would be reliant on a mixing zone, it would be a marine mixing zone capable of being quite large and with a much greater assimilative capacity and less prone to seasonal or other changes in water quality. The main challenges with Option C are timeline and cost of implementation of this option. Completing the necessary baseline data gathering, impacts analysis, successful completion of the NEPA permitting process, followed by construction and commissioning could be outside the 10-year time frame. Additionally, there are technical challenges to address with operating a 52-mile pipeline in the arctic.

More compliance schedule details about the potential activities comprising Option C are included in Figure 1.

Option D – Combination of Options A, B and C

Some combination of Options A, B or C could be implemented as the final solution. For example, even if Option C, the pipeline, is chosen as the long-term solution to water management at site, there may be some benefits to maintaining the ability to discharge to Outfall 001. With the RO plant operating at site, it is already possible to discharge a relatively small amount of water to Outfall 001 that could meet APDES permit limits without any reliance on fresh water mixing zones. Practically speaking, a small amount of treated water from WTPs 1 and 2 could be added to the 1,500 gpm permeate flow from the RO plant and still meet APDES permit limits at Outfall 001. The ability to discharge this admittedly small volume of treated water might still offer some advantage when, for example, the pipeline is down for maintenance. Continued discharge to Outfall 001 could also be used to maintain a limited flow to Red Dog Creek to help sustain the aquatic ecosystem.

Maintaining the ability to discharge through Outfall 001 and meet APDES permit limits might also offer a degree of scalability without increasing the capacity of the pipeline, for example, to accommodate additional discharge coming from the dewatering of the Anarraaq and Aktigiruq Mine Life Extension project (AAMLE) exploration or production phase. For example, the ability to discharge 1,500 gpm at Outfall 001 might accommodate the entire volume of water from the AAMLE project.

All Options

For all options, a communication and engagement plan will need to be developed and executed through all phases of the compliance schedule. As studies advance for each of the options, lifecycle cost analyses will be advanced and refined. These cost analyses will consider the impacts to the life of mine (LOM) and closure costs. Some options may have negative impacts to the LOM while reducing closure liability, while others may have minimal impact to the LOM, but increase closure liabilities. Considerations for COI, owner (NANA), and other stakeholder preference; technical feasibility within the timeline; and life cycle costs will all be significant factors in the decision-making process.

Compliance Schedule

During the 10-year term of the proposed Compliance Schedule, Teck is proposing to continue to discharge seasonally at Outfall 001 under the terms of the 2021 minor APDES permit modification. Doing so will allow Teck to safely manage its mine site water balance while continuing to be protective of the environment and contributing to the quality of the aquatic ecosystem downstream of Outfall 001.

As described below, the initial studies and technical evaluations are intended to fill data gaps in the knowledge base and are otherwise directed at evaluating potential technical solutions that individually or in combination will offer solutions for long-term water management that are feasible and can be integrated into a new APDES permit.

These evaluations will allow Teck to identify and select a final solution (Option A, B, C or D) within the first 4 years and then take concrete steps to implement the solution. The process for decision-making will be iterative and require simultaneous advancement of options A, B and C until one or more are eliminated as a stand-alone option. The intent of this document is to provide a degree of specificity regarding the studies that comprise the 4 phases of the 10-year compliance schedule. These are described below and offer several decision and reporting milestones. It is Teck's intent to collaborate with ADEC throughout the term of the compliance schedule.

Compliance Schedule 10-Year Term

The proposed compliance schedule has a term of 10 years. The objective of any compliance schedule is to come into regulatory compliance at the end of the compliance schedule term and the 10-year term has been proposed to ensure sufficient time for evaluation and implementation of the discussed options while also expediting efforts to come into compliance. For Red Dog that means researching, selecting, permitting and implementing the chosen long-term water management strategy and incorporating that into a new APDES permit. After researching the potential timelines associated with each of the studies in Options A, B and C, coupled with the time to develop and implement these options and receive permit-coverage, Teck is confident that it will require the entire 10-year term of the proposed compliance schedule. Teck will take whatever steps it can to shorten the process and is proposing a collaborative relationship with ADEC to foster a productive alliance throughout the 10-year compliance schedule period.

For both practical and discussion purposes Teck has broken the 10-year term into 4 phases as illustrated in Figure 1 and discussed below.

Phase 1 Year 1

The objective of Phase 1 is to develop a more detailed list of studies foundational to advancing all options and initiating as many as practical. For Option A (Outfall 001 In-Stream Limits), this includes advancing studies to support regulatory changes such as different site-specific water quality criteria and/or standards for TDS and sulfate. For Option B, this includes advancing studies or research related to geochemistry, reducing constituent loading, water balance modeling, implementing elements of mine reclamation, and mine water volume reduction. For Option C (pipeline), it includes ROW legal review, terrestrial and marine environmental baseline studies, pipeline engineering studies, permafrost geotechnical studies, cost/benefit studies, community outreach and the initiation of dialogue with the Department of Interior on a pipeline ROW. For Option D, it is ground truthing the feasibility and potential timelines associated with regulatory changes.

Teck anticipates that a significant portion of the study work initiated in Phase 1 will be done by contractors. Therefore, in addition to the time directly required for the studies, there is an element of time involved in developing the scopes of work (SOW), requests for proposals (RFP), evaluating proposals, budget approvals, awarding the contracts, and initiating the work. This all contributes to the time allotted to both Phases 1 and 2 specifically but to all phases to some degree.

Phase 2 Years 2 - 3

The objective of Phase 2 is to complete enough of the foundational studies sufficient to select either Option A, B or C as the long-term strategy for water management. Stated simply, at the end of year 4 Teck will be able to advise ADEC whether it intends to pursue Option C, the pipeline option, or not. If Option C is selected, Option D may still be selected later, but most efforts will be focused on advancing the pipeline option through Phases 3 and 4.

Phase 3 Years 4 - 5

Having selected either Option A, B, or C by year 4, Teck will focus on advancing it. For Option C, the pipeline option, Teck would finalize any of the early studies, develop early permit applications (404, NPS-ROW, APDES, NWAB, other), continue environmental baseline monitoring, finalize any geotechnical studies, continue community outreach, and incorporating environmental and geotechnical information into a pipeline design update. For Option B this would mean taking the physical steps necessary to start implementing the site improvements identified in Phase 1 and 2. For Option A it would mean advancing the regulatory changes that would need to be implemented. For all options, this phase will likely require another round of developing SOWs, RFPs and contracting to start to physically implement the plan.

During Phase 3, Option D may be evaluated as well. This would include advancing the pipeline option with vigor but keeping alive the option of discharging to Outfall 001 with site system improvements, regulatory changes or a combination of these under the terms of the new APDES permit. Under Option D Teck would have the option to discharge through both a marine outfall and Outfall 001. The ability to discharge some of treated water might still offer some advantage when, for example, the pipeline is down for maintenance.

Phase 4 Years 6 – 10

Phase 4 will consist of permitting and constructing the final solution. The activities and schedule related to Options A, B, C or D look different starting in Phase 4, depending on which option Teck selects to pursue. Potentially the physical steps required to implement Option B, site improvements, could be fully implemented sooner than those in Options A or C, for example. Permitting timelines might vary depending on the selected Option. For example, the pipeline will require certain federal permits, which would trigger the National Environmental Policy Act (NEPA). There may not be any need for any federal permits or to comply with NEPA for Options A or B.

However, the pipeline option will include a ROW permit from Department of the Interior (DOI) and a 404 permit from the US Army Corps of Engineers (USACE), both of which would have requirements to comply with the NEPA. The project may be deemed to have impacts sufficient to require development of an Environmental Impact Statement (EIS). Tentatively, Teck estimates that the federal permit process, including NEPA, could take 3 years.

For Option B, all site improvements will be complete and the new APDES permit will be issued by the end of Phase 4, and Teck can initiate its discharge under the new APDES permit.

For Options C or D, Phase 4 will include contracting final design engineering, procurement and construction, conclusion of the NEPA process and the initiation of procurement and construction as soon as the DOI ROW and USACE 404 permits have been issued. Owing to the seasonality of the sealift at the mine, Teck may have to consider starting the pipeline material procurement process in advance of having the permits in-place, which comes at some risk to Teck should the pipeline permits be delayed.

In Phase 4, the final option will receive its final local, state and federal permits and be fully implemented, meaning Teck will be in the position to manage mine water for the long-term in compliance with a new APDES permit.

Reporting

Teck anticipates regular reporting to ADEC through the 10-year term of the proposed compliance schedule as a means of ensuring that milestones are being met and as a vehicle to communicate any mitigating circumstances that might arise from time to time.

Teck proposes formal reporting at the end of Phases 2, 3 and mid-Phase 4. The first report at the end of Phase 2 will provide ADEC with Teck's final decision on whether it intends to pursue a pipeline as part of its long-term water management strategy. At the end of Phase 3, Teck will inform ADEC whether it intends to pursue Option C which will include both the pipeline and a limited discharge to Outfall 001.

The reports are intended to document the decisions and schedule milestones, but Teck intends to include ADEC input into these decisions in advance of making them final.

The end of Phase 3 and mid-Phase 4 reporting are intended to provide updates on implementation of the proposed final option. In addition, by mid-Phase 4, Teck will be fully engaged with ADEC on the new APDES permit application adjudication process with the effect that ADEC will be well informed on project progress.

Formal reporting will transition into ADEC adjudication of a new APDES permit application in Phase 4 and Teck's goal is to receive final APDES permit approval to coincide with final implementation of its long-term water management changes so that it could discharge under the terms of the new APDES permit.

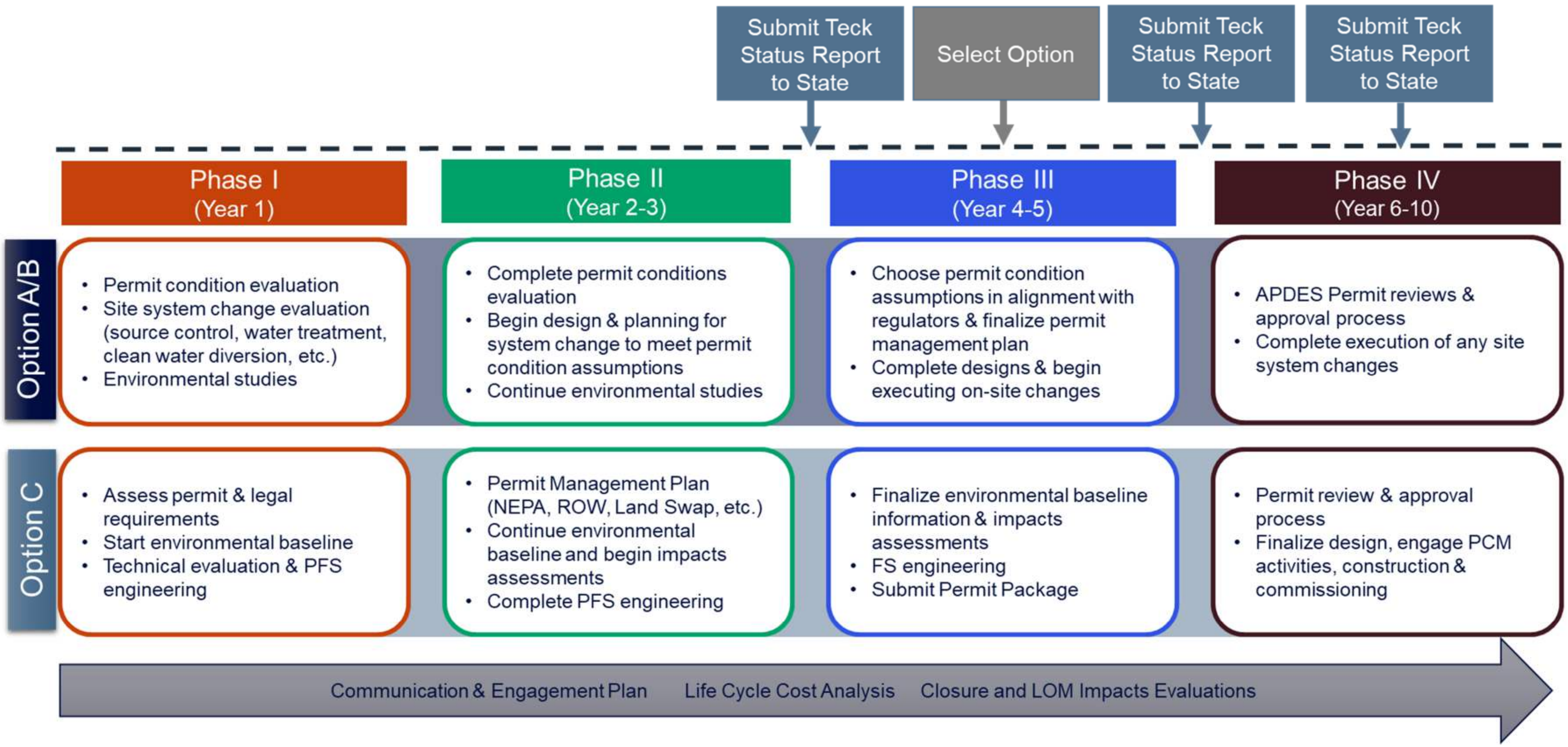


Figure 1. Compliance Schedule, Phases, Milestones and Description

Attachment 3

AK0038652 FACT SHEET

ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT FACT SHEET

Permit Number: AK0038652

Teck Alaska, Incorporated

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Wastewater Discharge Authorization Program

555 Cordova Street

Anchorage, AK 99501

Public Comment Period Start Date: April 7, 2017
Public Comment Period Expiration Date: May 8, 2017
Alaska Online Public Notice System

Technical Contact: Tim Pilon
Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
610 University Avenue
Fairbanks, AK 99709-3643
(907) 451-2136
Fax: (907) 451-2187
tim.pilon@alaska.gov

Reissuance of an Alaska Pollutant Discharge Elimination System (APDES) permit to

TECK ALASKA, INCORPORATED

For wastewater discharges from

Red Dog Mine into
Red Dog Creek,
82 miles north of Kotzebue, Alaska in the foothills of the DeLong Mountains
Latitude 68^0 04' 17” N, Longitude 162^0 52' 05” W

The Alaska Department of Environmental Conservation (Department or DEC) reissues an APDES individual permit (permit) to Teck Alaska, Incorporated (TAK). The permit authorizes and sets conditions on the discharge of pollutants from this facility to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility and outlines best management practices to which the facility must adhere.

This fact sheet explains the nature of potential discharges from the Red Dog Mine and the development of the permit including:

- information on public comment, public hearing, and appeal procedures
- a listing of effluent limitations and other conditions
- technical material supporting the conditions in the permit
- monitoring requirements in the permit

After the close of the public comment period and after a public hearing, if applicable, the Department will review the comments received on the draft permit. The Department will respond to the comments received in a Response to Comments document that will be made available to the public. If no substantive comments are received, the tentative conditions in the draft permit will become the final permit.

The proposed final permit will be made publicly available for a five-day applicant review. The applicant may waive this review period. After the close of the proposed final permit review period, the Department will make a final decision regarding permit issuance. A final permit will become effective 30 days after the Department's decision, in accordance with the state's appeals process at 18 AAC 15.185.

The Department will transmit the final permit, fact sheet (amended as appropriate), and the Response to Comments to anyone who provided comments during the public comment period or who requested to be notified of the Department's final decision.

The Department has both an informal review process and a formal administrative appeal process for final APDES permit decisions. An informal review request must be delivered within 15 days after receiving the Department's decision to the Director of the Division of Water at the following address:

> Director, Division of Water
> Alaska Department of Environmental Conservation
> 410 Willoughby Avenue, Suite 303
> Juneau AK, 99811-1800

Interested persons can review 18 AAC 15.185 for the procedures and substantive requirements regarding a request for an informal Department review.

See http://www.dec.state.ak.us/commish/InformalReviews.htm for information regarding informal reviews of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department within 30 days of the permit decision or a decision issued under the informal review process. An adjudicatory hearing will be conducted by an administrative law judge in the Office of Administrative Hearings within the Department of Administration. A written request for an adjudicatory hearing shall be delivered to the Commissioner at the following address:

> Commissioner
> Alaska Department of Environmental Conservation
> 410 Willoughby Avenue, Suite 303
> Juneau AK, 99811-1800

Interested persons can review 18 AAC 15.200 for the procedures and substantive requirements regarding a request for an adjudicatory hearing. See http://www.dec.state.ak.us/commish/ReviewGuidance.htm for information regarding appeals of Department decisions.

Documents are Available

The permit, fact sheet, application, and related documents can be obtained by visiting or contacting DEC between 8:00 a.m. and 4:30 p.m. Monday through Friday at the addresses below. The permit, fact sheet, application, and other information are located on the Department's Wastewater Discharge Authorization Program website: http://www.dec.state.ak.us/water/wwdp/index.htm .

Alaska Department of Environmental Conservation **Division of Water** **Wastewater Discharge Authorization Program**	
Fairbanks Office 610 University Ave. Fairbanks, AK 99709 (907) 451-2136	***Anchorage Office*** 555 Cordova Street Anchorage, AK 99501 (907) 269-6285

TABLE OF CONTENTS

TABLES

FIGURES

LIST OF APPENDICES

1.0 APPLICANT

This fact sheet provides information on the Alaska Pollutant Discharge Elimination System (APDES) permit for the following entity:

Name of Facility:	Red Dog Mine
APDES Permit Number:	AK0038652
Facility Location:	82 miles Northeast of Kotzebue
Mailing Address:	Teck Alaska Incorporated 3105 Lakeshore Drive Anchorage, AK 99517
Facility Contact:	Mr. Henri Letient, General Manager

Figures in Appendix A show the location of the Red Dog Mine along with discharge and monitoring locations and a line drawing of the designated uses of creeks in the area.

2.0 FACILITY INFORMATION

2.1 Facility Activity

Teck Alaska, Incorporated (TAK), in partnership with the NANA Regional Corporation, Inc. operates the Red Dog zinc and lead mine in the Northwest Arctic Borough of Alaska, 82 miles north of Kotzebue and 47 miles inland from the coast of the Chukchi Sea. Mine facilities are located on a ridge between the Middle and South Forks of Red Dog Creek, in the DeLong Mountains of the Western Brooks Range. Red Dog is one of the world's largest zinc mines. NANA Management Services, Inc. provides camp management, housekeeping, catering and other services; and NANA/Lynden LLC, operates trucks carrying mineral concentrates from the mine to the Alaska Industrial Development and Export Authority's Delong Mountain Transportation System port facility.

The Red Dog deposit consists of metal sulfides in Mississippian-aged shale. The orebody lies within the drainage basin of the Middle Fork of Red Dog Creek. Facilities at the mine site include an open pit zinc/lead mine, concentrator, tailings impoundment, concentrate storage building, maintenance facilities, power generation plant and an accommodations complex. The mine facility is established on both sides of the valley of the Middle Fork of Red Dog Creek.

Mine production at the Red Dog Mine involves the stripping and stockpiling of ore, waste (i.e., rock with sub-economic value), and overburden/topsoil. Mill production involves crushing, grinding and processing to produce mineral concentrates. The Red Dog Mine main pit remained in production until 2012. TAK currently mines a second pit, Aqqaluk, which would allow for continued mining through 2031. The mine produces approximately 9,000 tonnes of ore per day.

The mill is located on a graded pad adjacent to, and northeast of, the tailings dam and requires a consistent feed of homogeneous ore material to optimize recovery. To accommodate this requirement, layered stockpiles, typically holding 280,000 tonnes, are built to combine the various types and grades of ore. The operation includes two crushing plants and grinding, flotation, reagent and dewatering facilities. Stockpiled ore is fed through a gyratory crusher where it is reduced to a size of less than six inches in one pass. Crushed ore is conveyed to an enclosed, coarse ore stockpile. The building is capable of holding about 15,000 tonnes of mill feed in one large pile. Coarsely crushed ore is withdrawn from underneath the stockpile to feed three Semi-Autogenous Grinding (SAG) mills. The grinding circuit overflow is delivered to the preflotation circuit. Froth flotation processes separate materials into floating (particles attached to bubbles) and sinking components, which produce concentrate and tailings, respectively.

Final lead and zinc concentrates are thickened and dewatered to a cake. These filtered concentrates are stored in the mill site concentrate storage building. From there, the concentrate is transferred by truck to the port site for shipment.

The concentrator tailings are pumped from the mill to the tailings facility and deposited either sub-aqueously or sub-aerially. The facility includes a rock fill dam and impoundment, a seepage collection and pumping system, a tailings discharge system (pumps and pipeline), and a water reclamation system.

The current dam crest is at elevation 986 feet. The pond elevation is at 971 feet. Upstream (south) of the dam, the impoundment is 8,000 feet long and 2,600 feet wide at its widest point. It is bounded on the south end by the Overburden Stockpile built on the divide between the South Fork of Red Dog Creek and Bons Creek. The impoundment has an ultimate capacity of approximately 39.3 million cubic yards (cy) of tailings, assuming that the tailings remain covered by water.

2.2 Background

In the early 1980s, TAK submitted several applications for federal authorizations for the project. The surface water discharge was a new source which required the Environmental Protection Agency (EPA) to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA). The EIS was issued in 1984 and the first National Pollutant Discharge Elimination System (NPDES) permit was issued in 1985 and expired in 1990.

The permit was administratively extended and reissued in 1998. EPA proposed to modify the permit in 2003 but the conditions were appealed, and the changed conditions did not go into effect. TAK re-applied for the NPDES permit in a timely manner so the permit was administratively extended until reissuance.

EPA reissued the NPDES permit in March 2007. The reissued permit was again appealed and EPA withdrew the reissued permit on September 27, 2007, citing the need to conduct additional NEPA analysis. On December 2, 2009, EPA issued a Supplemental EIS for permit reissuance which included TAK's request to develop the Aqqaluk Pit.

On January 8, 2010, EPA Region 10 reissued the NPDES permit for Red Dog Mine. On February 16, 2010, Trustees for Alaska and the Center on Race, Poverty and the Environment, representing regional environmental groups, local individuals and the Native Villages of Kivalina and Point Hope, filed a petition for review of the permit with EPA's Environmental Appeals Board (EAB). Among other things, the petition raised issues regarding antidegradation implementation procedures in the State of Alaska. By letter dated February 26, 2010, EPA Region 10 identified five contested permit conditions that were stayed by the petition for review – effluent limits for lead (monthly average limit), selenium (daily maximum limit), zinc, weak acid dissociable (WAD) cyanide (CN), and total dissolved solids (TDS). All remaining, uncontested permit conditions became fully effective and enforceable on March 31, 2010, in accordance with 40 CFR 124.16(a)(2) and 124.20(d). On March 17, 2010, EPA withdrew the five contested effluent limits and on April 30, 2010, the EAB dismissed as moot those portions of the petition for review related to the withdrawn limits.

On July 14, 2010, DEC issued a policy and procedure document setting forth Interim Antidegradation Implementation Methods. The legality of DEC's interim methods for conducting an antidegradation analysis using these methods was challenged in Alaska's Superior Court, Case

No. 3AN-11-07159CI. On September 4, 2012, the court found the Department's implementation of the interim methods legal and denied the challenge.

By letter dated September 8, 2010, TAK requested that EPA replace the withdrawn monthly average limitations for lead and zinc as well as the daily maximum limitations for selenium and zinc with the 1998 permit limitations. The 1998 permit limitations for these parameters are more stringent than those calculated for the 2010 permit and are more stringent than necessary to protect the receiving water.

On November 8, 2010, the EAB denied review of the remaining issue in the petition related to monitoring requirements. This issue was further reviewed by United States Court of Appeals for the Ninth Circuit in Case No. 11-70776, Native Village of Kivalina v. EPA. On August 9, 2012, the court dismissed the complaint against EPA.

On December 8, 2010, Region 10 issued a final permit decision notifying the parties that, with the exception of the withdrawn limits identified above, all conditions in the 2010 permit remained in effect. In addition, Region 10 stated that the following conditions in the 1998 NPDES Permit No. AK-003865-2 would remain in effect until further agency action:

- Part I.A.1 - effluent limitations for lead (monthly average limit), selenium (daily maximum limit), zinc, total dissolved solids, and total cyanide

On April 19, 2011, the validity of EPA's approval of the site specific criterion (SSC) for TDS in the Main Stem of Red Dog Creek was challenged in United States District Court. It was resolved on September 13, 2012, when the court upheld EPA's approval of the SSC and denied the challenge.

On April 25, 2011, EPA public noticed a Statement of Basis for reinstating the permit limits that were withdrawn on March 17, 2010.

In November, 2012, EPA determined that all relevant appeals of the permit had been resolved and verbally notified DEC and TAK of the intent to transfer jurisdiction of the permit to DEC given primacy for mining NPDES permits had transferred to DEC in October 2011.

In a letter dated November 27, 2012, TAK requested that DEC not take action on the selenium daily maximum limit in light of TAK's continuing evaluation of recent discharge information. Based in part on TAK's request for no permit action on selenium, DEC took no action on selenium (daily maximum), lead (monthly average), and zinc (monthly average and daily maximum) at that time. Until DEC addressed selenium, lead, or zinc limits through a future permitting action, the corresponding limits from the 1998 permit remained in effect for selenium daily maximum (5.6 μg/L), lead monthly average (8.1 μg/L), zinc daily maximum (257.3 μg/L), and zinc monthly average (119.6 μg/L).

By letter sent on December 4, 2012, EPA formally transferred jurisdiction of the permit to DEC. The letter further stated that, "the Department may prepare the proposed final permit from an EPA-drafted permit and issue the permit, which would otherwise be prepared by EPA."

DEC addressed the five withdrawn limits as described in EPA's April 25, 2011 Statement of Basis. DEC reinstated the previously withdrawn 2010 permit limits for TDS and WAD cyanide, and in taking no action on the withdrawn selenium, lead, and zinc limits, the 1998 permit limits remained in effect for those parameters.

On February 15, 2013, DEC reinstated TDS and WAD cyanide limits in the APDES permit, which became effective on April 1, 2013.

Through APDES permit modification #1 effective May 8, 2014, DEC authorized a mixing zone for selenium and adjusted selenium effluent limits accordingly.

Due to the number and variety of appeals while under the jurisdiction of EPA and considering that all of those appeals were resolved before the permit was transferred to DEC, this permit reissuance mirrors the methods and conditions of the previous permit to the maximum extent possible. The primary, if not only, variation from the 2010 permit is the assimilation of new monitoring data resulting in new effluent limits and adjusted monitoring frequencies.

3.0 COMPLIANCE HISTORY

On December 4, 2012, jurisdiction over the Red Dog Mine NPDES permit was transferred to DEC. Discharge Monitoring Reports (DMRs) from December 2012, since taking over the permit, through December 2016 were reviewed to determine the facility's compliance with effluent limits. DMR's indicate that no permit violations have occurred under DEC's administration of the permit.

4.0 EFFLUENT LIMITS AND MONITORING REQUIREMENTS

4.1 Basis for Permit Effluent Limits

The CWA requires that the limits for a particular pollutant be the more stringent of either technology-based effluent limits (TBELs) or water quality-based limits (WQBELs). TBELs are set according to the level of treatment that is achievable using available technology. WQBELs are set as the permit limit if they are more stringent than TBELs to ensure that the receiving water quality is protected.

Outfall 001 discharges mine drainage at the site. EPA promulgated effluent limitation guidelines (ELGs) for the ore mining and dressing point source category at 40 CFR Part 440, which include TBELs for this point source category. Subpart J is applicable to the Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores Subcategory. The ELGs in Subpart J are applicable to Outfall 001.

The discharge at Outfall 001 is subject to the new source performance standards at 40 CFR § 440.104(a). These ELGs are applicable to a source that commenced construction after December 3, 1982. Table 1 identifies the parameters and TBELs for Outfall 001 found in 40 CFR Part 440.

Table 1: Technology-Based Effluent Limits for Outfall 001 [40 CFR § 440.104(a)]

Parameter	Units	Maximum for any 1 day	Average of daily values for 30 consecutive days	Range
Cadmium	mg/L[1]	0.10	0.05	-
Copper	mg/L	0.30	0.15	-
Lead	mg/L	0.6	0.3	-
Mercury	mg/L	0.002	0.001	-
Zinc	mg/L	1.5	0.75	-
pH	s.u.[2]	-	-	6.0-9.0
Total Suspended Solids (TSS)	mg/L	30.0	20.0	-

1. Milligrams per liter
2. Standard units

4.2 Basis for Effluent and Receiving Water Monitoring

In accordance with AS 46.03.110(d), the Department may specify in a permit the terms and conditions under which waste material may be disposed. Monitoring in a permit is required to determine compliance with effluent limits. Monitoring may also be required to gather effluent and receiving water data to determine if additional effluent limits are required or to monitor effluent impact on the receiving waterbody quality. The permittee is responsible for conducting the monitoring and for reporting results on DMRs or on the application for reissuance, as appropriate, to the Department. Fact Sheet Sections 4.3 and 4.4 summarize monitoring requirements DEC has determined necessary to implement in the permit (additional discussion about the basis for monitoring requirements can be found in APPENDIX B).

4.3 Effluent Limits and Monitoring Requirements

The permit contains effluent limits that are the most stringent of either TBELs or WQBELs and a flow limit based on the design of the treatment systems. Monitoring frequencies are based on the nature and effect of a pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Permittees have the option of taking more frequent samples than are required under the permit. These samples must be included in calculations and used for averaging if they are conducted using the Department-approved, significantly sensitive test methods (generally found in 18 AAC 70 and 40 CFR Part 136 [adopted by reference in 18 AAC 83.010(f)]) and if the method detection limits are less than the effluent limits.

Table 2 summarizes the effluent limits and monitoring requirements for Outfall 001 and provides a comparison to the limits in the previous permit. Please see APPENDIX B for more details regarding the legal and technical basis surrounding the selection of effluent limits.

Table 2: Effluent Limits and Monitoring Frequencies for Outfall 001 (Changes in Boldface)

Parameter (in µg/L[1] unless otherwise noted)	Daily Maximum		Monthly Average		Minimum Sample Frequency		
	2010 Permit	2017 Permit	2010 Permit	2017 Permit	1998 Permit	2010 Permit	2017 Permit
Aluminum[2]	157	**NA**	53	**NA**	1/month	1/month	**NA**
Ammonia, Total as N, mg/L[3]	8.8	**monitor**	5.7	**monitor**	1/week	1/week	1/week
Biochemical Oxygen Demand (BOD_5), mg/L	monitor				1/month	1/month	**1/2 months[4]**
Barium[2]	monitor				NA	1/month	1/month
Cadmium[2]	3.2	**3.7**	1.7	**1.4**	1/week	1/week	1/week
Chlorine, Total Residual	monitor				1/month	1/month	**1/2 months**
Chromium[2]	monitor	**NA**	monitor	**NA**	1/week	1/month	**NA**
Copper[2]	34.4	**52**	12.6	**21**	1/week	1/week	1/week
Cyanide, WAD[5]	22.2	**monitor**	10.3	**monitor**	1/week	1/week	1/week
Fecal Coliform, #/100 ml	400	**NA**	200	**NA**	1/ 2 months	1/ 2 months	**NA**
Iron[2]	monitor	**NA**	monitor	**NA**	1/month	1/month	**NA**
Lead[2]	18.3	**18.3[6]**	8.1	**8.1[6]**	1/week	1/month	1/month
Manganese[2]	monitor	**NA**	monitor	**NA**	1/week	1/month	**NA**
Mercury, Total	0.02	**0.018**	0.01	0.010	1/month	1/month	1/month
Nickel[2]	216.5	NA	80.0	NA	1/week	1/month	**NA**
Organic Priority Pollutant Scan[7]	monitor				3/year	1/year	1/year
pH, standard units (s.u.)	Within the range of 6.5 to 10.5				1/week	1/week	1/week
Selenium[2]	17	17	11	11	1/week	1/week	1/week
Temperature, °C	monitor				daily	daily	**1/week**
Total Dissolved Solids (TDS), mg/L	See note 8.				1/week	1/week	1/week
TDS, Anions and Cations[9]	monitor				NA	1/month	1/month
Total Suspended Solids (TSS), mg/L	30	30	20	20	1/week	1/week	1/week
Turbidity, NTU[10]	monitor	**NA**	monitor	**NA**	1/week	1/month	**NA**
Volume, cumulative gallons	2.418 billion gallons per year				continuous	continuous	continuous
Whole Effluent Toxicity (WET), TU$_C$[11]	12.2	12.2	9.7	9.7	1/month	1/month	**1/2 months**
Zinc[2]	257.3	**388**	119.6	**221**	1/week	1/month	1/month

1. Micrograms per liter
2. All metals shall be analyzed as total recoverable unless otherwise indicated.
3. Milligrams per liter
4. Once every two months
5. Weak acid dissociable
6. Based on the chronic WQS and Department-prescribed methodology, the calculated limits are 34 and 11 µg/L. However in a letter dated May 8, 2017, TAK requested that the more stringent limits from the 2010 permit be retained in this permit.
7. Volatile organics shall be monitored using EPA analytical method 624, and semi-volatile organics shall be monitored using EPA analytical method 625. The pollutants assayed should include the following pollutants listed in Table 6-C of DEC's APDES permit application form 2C: (1) 1V-31V – volatile organic compounds, (2) 1A- 11A – acid fraction compounds, and (3) 1B – 46B base/neutral compounds.
8. Based on TDS measurements from Stations 151, 150, and 160 as described in Permit Part 1.2.8
9. This monitoring shall include carbonates, chlorides, sulfates, potassium, magnesium, calcium, and sodium. The carbonate analysis should be estimated based on direct measurement of alkalinity.
10. Nephelometric turbidity units
11. Chronic toxicity units

As required under 18 AAC 83.435, a reasonable potential analysis was conducted to determine if effluent from Outfall 001 has reasonable potential to exceed Alaska WQS. An analysis of five years of monitoring data showed that there is no reasonable potential to exceed WQS for aluminum, chromium, iron, manganese, and nickel. Consequently, the permit no longer requires monitoring for those parameters. Additionally, there is no reasonable potential to exceed WQS for ammonia and cyanide at the boundary of the mixing zone. However, ammonia and cyanide monitoring was maintained while the limits were removed to track potential pollutants of concern.

Effluent limits must be developed for parameters that have a reasonable potential to exceed WQS. Analysis of recent data resulted in a number of changes to the effluent limits in the permit. Some limits have decreased, while other limits have increased. For parameters that did not demonstrate reasonable potential, limits or monitoring requirements may have been revised or removed as discussed in the preceding paragraph. The Department has required the necessary antibacksliding analysis in Section 6.0, which is further examined in Section 7.0.

The permittee shall also consult and review APDES application form 2C, which contains specific effluent monitoring requirements due to be submitted in the application for permit reissuance (180 days prior to the permit expiration date). A copy of Form 2C can be found at http://dec.alaska.gov/water/wwdp/index.htm.

4.4 Whole Effluent Toxicity Monitoring

WET tests are laboratory tests that measure total toxic effect of an effluent on living organisms. The tests use small vertebrate and invertebrate species and/or plants to measure the aggregate toxicity of an effluent. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day or 48 hour exposure. Chronic toxicity monitoring shall be conducted by the permittee according to the methods and species approved by the EPA in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition* (October 2002).

Under 18 AAC 83.435, a permit shall contain limitations on WET when a discharge has reasonable potential to cause or contribute to exceedances of WQS. From 2010 through 2014, WET tests were conducted 32 times with a maximum of 9.0 TU_c and a mean equal 6.1 TU_c. The permit requires bimonthly WET testing at Outfall 001 to demonstrate compliance with permit limits.

5.0 RECEIVING WATERBODY

5.1 Water Quality Standards

Regulations in 18 AAC 70 require that the conditions in permits ensure compliance with the WQS. The state’s WQS are composed of use classifications, numeric and narrative water quality criteria, and an Antidegradation Policy. The use classification system designates the beneficial uses that each waterbody is required to achieve. The numeric and narrative water quality criteria are deemed necessary by the state to support the beneficial use classification of each waterbody. The Antidegradation Policy ensures that beneficial uses and existing water quality are maintained.

Waterbodies in Alaska are designated for all uses unless the water has been reclassified under 18 AAC 70.230 as listed under 18 AAC 70.230(e). Some waterbodies in Alaska can also have site–specific water quality criterion per 18 AAC 70.235, such as those listed under

18 AAC 70.236(b). Waterbodies in the area of Red Dog Mine have been reclassified and assigned site-specific water quality criteria, 1,500 mg/L for TDS and 2.0 µg/L for cadmium in the Main Stem. See Figures 2 and 3 for further details. Fresh water designated use classes listed in 18 AAC 70.020(a)(1) include:

1. domestic water supply – 18 AAC 70.020(b)(1)(A)(i)
2. agriculture water supply – 18 AAC 70.020(b)(1)(A)(ii)
3. aquaculture water supply – 18 AAC 70.020(b)(1)(A)(iii)
4. industrial uses – 18 AAC 70.020(b)(1)(A)(iv)
5. contact recreation – 18 AAC 70.020(b)(1)(B)(i)
6. secondary recreation – 18 AAC 70.020(b)(1)(B)(ii)
7. growth and propagation of fish, shellfish, other aquatic life, and wildlife – 18 AAC 70.020(b)(1)(C)

5.2 Water Quality Status of Receiving Water

Any part of a waterbody for which the water quality does not or is not expected to meet applicable WQS is defined as a "water quality limited segment" and placed on the state's impaired waterbody list. For an impaired waterbody, Section 303(d) of the Clean Water Act (CWA) requires states to develop a Total Maximum Daily Load (TMDL) management plan for a waterbody determined to be water quality limited. The TMDL documents the amount of a pollutant a waterbody can assimilate without violating a state's WQS and allocates that load to known point sources and nonpoint sources.

No waterbodies affected by Red Dog Mine wastewater are included on the *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report*, July 15, 2010, as impaired nor are any listed as a CWA 303(d) waterbody requiring a TMDL. As such, a TMDL has not been completed for the waterbody.

5.3 Ambient Monitoring

The permit carries forward the biomonitoring program from the previous permit. Alaska Department of Fish and Game (ADF&G) has conducted an annual ambient water quality monitoring and bioassessment program at Red Dog Mine since 2001. The program has been kept intact from the previous permit to assure reference point continuity. This biomonitoring program will verify that the designated uses downstream of Red Dog Mine have been protected.

5.4 Mixing Zones

Under 18 AAC 70.240, as amended through June 26, 2003, the Department may authorize a mixing zone in a permit. The Department authorizes mixing zones at designated reaches within Red Dog Creek for specified parameters described below. The three mixing zones authorized in the permit remain unchanged from the previously issued permit.

<u>Mixing Zone 1</u>: Lower Middle Fork Red Dog Creek extends from the terminus of the Red Dog Mine Water Management System to the confluence with North Fork Red Dog Creek. It is the location of Mixing Zone 1 for pH and is classified for the following designated uses: industrial, wading only, and secondary recreation. Since the designated and existing uses for the Lower Middle Fork Red Dog Creek are restricted, Mixing Zone 1, which starts at Outfall 001, is protective of all uses and ends at the point where designated and existing uses expand, the Main Stem. In accordance with 18 AAC 70.245, the mixing zone has been appropriately sized to fully protect the designated and existing uses of the Lower Middle Fork Red Dog Creek. DEC first

authorized Mixing Zone 1 as part of a 2010 NPDES permit reissuance. See the Fact Sheet of the 2010 NPDES permit for more details.

Mixing Zone 2: Mixing Zone 2 in the Main Stem of Red Dog Creek (Main Stem) extends from the confluence of the Lower Middle fork with the North Fork to Station 151. The Main Stem is classified with the following designated uses: industrial, wading only, secondary recreation, human health for consumption of aquatic organisms only, and growth and propagation of fish, shellfish, other aquatic life, and wildlife
(18 AAC 70.230(e)(18)). Water quality criteria (WQC) for the designated uses of drinking water, stock water, irrigation water, and human health for consumption of water plus aquatic organisms are not applicable, because those are not designated uses for the Main Stem. DEC authorized Mixing Zone 2 for TDS (on June 25, 2003 as part of a permit modification process), ammonia and cyanide (as part of the 2010 NPDES permit reissuance), and selenium (on April 4, 2014 as part of the APDES permit modification). Mixing Zone 2 is approximately 1,930 feet long and provides mixing in the ratio of 1.5 parts receiving flow to 1 part effluent inflow for a dilution factor of 2.5.

Appendix C, Mixing Zone Analysis Checklist, outlines criteria that must be considered when the Department analyzes a permittee's request for a mixing zone. These criteria include: the size of the mixing zone, treatment technology, designated and existing uses of the waterbody, human consumption, spawning areas, human health, aquatic life, and endangered species. All criteria must be met in order to authorize a mixing zone. The following summarizes the Department's analysis:

Size - In accordance with 18 AAC 70.255, the Department determined that the size of the mixing zone for the Red Dog Mine wastewater discharge is appropriate. Based on conductivity cross section analysis performed in 2001, TAK provided data to the DEC for certification of a 2003 NPDES permit modification resulting in DEC authorizing Mixing Zone 2 to be approximately 1,930 feet downstream of the confluence of the Middle Fork and the North Fork of Red Dog Creek (otherwise known as the Main Stem). The exact length of the mixing zone varies slightly with stream stage. The conductivity analysis showed that a bedrock outcropping causing nearly a 90 degree change in stream direction forces mechanical mixing of the entire stream at all stream stages and results in complete chemical homogeneity downstream of the outcrop. Station 151 is located at the downstream boundary of Mixing Zone 2. This location is where the entire stream has been empirically demonstrated to be completely mixed at all stream stages. It defines the downstream boundary of the mixing zone and is therefore sized to be as small as practicable as required by 18 AAC 70.240(a)(2).

Technology - In accordance with 18 AAC 70.240(a)(3), the most effective technological and economical methods were used to disperse, treat, remove, and reduce pollutants. Additionally, the Department finds that treatment is consistent with the highest statutory and regulatory treatment requirements. See fifth finding of DEC's antidegradation analysis for more detailed explanation of this finding.

The primary treatment method used for the Red Dog Mine tailings pond water prior to its discharge to Outfall 001 is the high density sludge (HDS) treatment technology, which the Department finds to be the most effective and technologically and economically feasible method for Red Dog Mine. In Section 8.0, High Density Sludge Treatment Technology Review of the EPA Ore Mining and Dressing Preliminary Study Report (EPA, 2011), EPA describes the HDS as "a highly efficient treatment technology for certain types of waste streams." Further, EPA notes that HDS technology "may serve as a resource for ore mine operators and NPDES permit writers when considering mine wastewater treatment systems." The HDS treatment process at the mine facility is described below:

Reclaim water is pumped to Water Treatment Plant 2 (WTP2) where it is treated before being discharged through Outfall 001. Within the WTP2 influent pipeline, reclaim water is first treated with sodium sulfide and mixed via an in-line mixer. The sulfide reacts primarily with the dissolved cadmium and also other metals in the reclaim water to form insoluble cadmium sulfide and other metal sulfides, which are stable through the remainder of the treatment process. The sodium sulfide-treated reclaim water then reports to a rapid mix tank where slaked lime (calcium hydroxide) and recycled clarifier underflow solids are added to adjust the pH. From the rapid mix tank, the solution flows into the lime reactor which provides residence time to facilitate complete chemical reactions. Additionally, compressed air is added into the lime reactor tank to ensure oxidation of ions in the solution, specifically and most significantly the oxidation of metals.

The precipitated solids containing the metals remain in suspension and flocculent is added to unite smaller particles into larger solids in the flocculent mix tank. The solution then flows into a clarifier where the solids are allowed to gravity-settle. Settled solids are removed through the "underflow" and the treated decant water leaves the clarifier through the "overflow." Underflow solids are recycled back to the beginning of the treatment process with some solids periodically purged from the system to the tailing impoundment to maintain a constant sludge bed level in the clarifier.

Clarifier overflow water reports to sand filters which remove residual suspended solids. Automated pH and turbidity meters take final measurements of the sand filter effluent. If the pH is within the APDES permit limits and within the operating range established to ensure effective treatment and the turbidity is within an established range which indicates that effective solids removal has been accomplished, the water is discharged to Red Dog Creek. If the pH or turbidity are not within the prescribed ranges, the filtered water is automatically rerouted back into the tailing impoundment.

<u>Low Flow Design</u> - In accordance with 18 AAC 70.255(f), Appendix B describes the process used to determine if the discharge authorized in the permit has the reasonable potential to cause or contribute to a violation of a WQS. Appendix B, Table B- 2 compares maximum projected effluent concentrations for mixing zone to the respective criterion. The determination of the low flow design for the receiving water was conducted in accordance with 18 AAC 70.255(f)(1) as follows. Measured daily average flows from the mine discharge (Outfall 001) and the Main Stem (Station 10) from May 2003 through September 2005 were reported in monthly DMRs. The dilution factor of effluent in the Main Stem is based on low flow conditions. Using the lowest 5th percentile of the calculated dilution factors (Station 10 flow/Outfall 001 flow), DEC certified a dilution factor of 2.5 for Mixing Zone 2 as part of a 2003 National Pollutant Discharge Elimination System (NPDES) permit modification process. This is a ratio of 1 part effluent to 1.5 or more parts receiving water flow. The 5th percentile was chosen because the inherent error associated with stream flow monitoring would make the selection of the lowest dilution factor or a percentile less than the 5th overly conservative and implies a level of accuracy that cannot be substantiated.

<u>Designated and Existing Uses</u> - In accordance with 18 AAC 70.245, the mixing zone has been appropriately sized to fully protect the designated and existing uses of the Main Stem. See designated uses as described in Section 5.1. The designated and existing uses have been maintained and protected under the terms of the previous permit, including preservation of a migration corridor between the Main Stem and North Fork for grayling. Semiannual migration of

resident grayling between Bons Creek and the North Fork via the Main Stem has been studied and documented by the ADF&G using tagged fish. The permit reissuance application does not contain any changes that would result in an impairment to the waterbody and consequently the elimination of existing uses if the terms of the permit are adhered to. See the Spawning Areas discussion below and Section 7.0 for additional information on the protection of designated and existing uses.

Human Consumption - In accordance with 18 AAC 70.250(b)(2) and (b)(3), the pollutants discharged cannot produce objectionable color, taste, or odor in aquatic resources harvested for human consumption; nor can the discharge preclude or limit established processing activities or commercial, sport, personal use, or subsistence fish and shellfish harvesting.

Spawning Areas - In accordance with 18 AAC 70.255(h), the mixing zone is not authorized in a known spawning area for anadromous fish or resident fish spawning redds for Dolly Varden and Arctic grayling. No active Arctic grayling spawning or spawning redds have been observed in Mixing Zone 2.

Human Health - In accordance with 18 AAC 70.250 and 18 AAC 70.255, the mixing zone authorized in the permit shall be protective of human health. An analysis of the effluent testing data that was included with the Red Dog Mine wastewater discharge application and the results of the reasonable potential analysis conducted for pollutants of concern indicate that the level of treatment at the Red Dog Mine is protective of human health. The quality of the effluent is expected to meet water quality criteria at the boundary of the mixing zone.

Aquatic Life and Wildlife - In accordance with 18 AAC 70.250 and 18 AAC 70.255, the mixing zone authorized in the permit is protective of aquatic life and wildlife. Based on a review of the effluent data, the Department concludes that the discharge will meet all water quality criteria at the termination of the mixing zone.

Endangered Species - In accordance with 18 AAC 70.250(a)(2)(D), the authorized mixing zone will not cause an adverse effect on threatened or endangered species. The National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) indicated that threatened or endangered species are not known to be present in Red Dog Creek and the downstream river system.

Mixing Zone 3: Mixing Zone 3 extends about 3,420 feet down Ikalukrok Creek from its confluence with the Main Stem and provides mixing in a ratio of 1 part receiving flow to 1 part Main Stem flow for a dilution factor of 2. Mixing Zone 3 is for TDS requiring a concentration of 1,000 mg/L or less at its downstream boundary, Station 150. DEC initially authorized Mixing Zone 3 for TDS on the June 25, 2003 as part of a permit modification process.

Under 18 AAC 70.020(b)(4)(A)(iii), *TDS may not exceed 1,000 mg/L. A concentration of TDS may not be present in water if that concentration causes or reasonably could be expected to cause an adverse effect to aquatic life (see note 12)*. Note 12*: If a permit applicant proposes to raise the total dissolved solids (TDS) levels in the receiving water to result in a concentration in the waterbody between 500 mg/l and 1,000 mg/l for all sources or above 110 mg/l for the potassium ion, the department will require a permit applicant to provide information that the department identifies as necessary to determine if the proposed TDS level will cause or can reasonably be expected to cause an adverse effect to aquatic life; based on its analysis, the department will limit the TDS level in the waterbody as necessary to prevent an adverse effect, and will set permit effluent limits accordingly; the burden of proof to demonstrate no adverse effect is on the permit applicant; implementation of the "no adverse effect" criterion is not subject to 18 AAC 70.235.*

The Department finds that the evidence submitted by TAK and other pertinent information reviewed, demonstrates that a criterion of 1000 mg/l will fully protect the designated use class 18 AAC 70.020(a)(1)(C): growth and propagation of fish, shellfish, other aquatic life, and wildlife, with no adverse effect during the non-spawning period. However during the period of chum salmon and/or Dolly Varden spawning starting on July 25th through the end of the discharge season, the Department finds that a lower TDS level of 500 mg/L is required downstream of the confluence of Ikalukrok and Dudd Creeks at Station 160, and that such level will prevent any adverse effect on the spawning activity and the aquatic life. The evidence supporting these findings includes biomonitoring data and reports received from ADF&G.

Mixing Zone Length Determination: Transects of conductivity readings on multiple sampling dates were used to determine the point of complete mixing. When conductivity readings reached a stable value across the width of the channel, complete mixing was achieved and the mixing zone length was established at that point. This method of determining complete mixing, based on measuring stable conductivity, is more accurate than mixing models often used by the department to assign mixing zones.

6.0 ANTIBACKSLIDING

Per 18 AAC 83.480(a), "Except as provided in (b) of the section, when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit, unless the circumstances on which the previous permit was based have materially and substantially changed since the permit was issued, and the change in circumstances would constitute cause for permit modification or revocation and reissuance under 18 AAC 83.135."

Effluent limitations may be relaxed as allowed under 18 AAC 83.480, CWA §402(o) and CWA §303(d)(4). 18 AAC 83.480(b) allows relaxed limitations in renewed, reissued, or modified permits when there have been material and substantial alterations or additions to the permitted facility or where new information is available that justifies the relaxation. Since the last permit was reissued, new information has been collected to characterize the effluent and determine limits.

CWA §402(o)(2)(B)(i) exempts antibacksliding provisions if information which was not available at the time of permit issuance and would have justified the application of a less stringent effluent limitation at the time of permit issuance. Outfall 001 was associated with certain limitations that are less stringent or removed (where no reasonable potential was indicated) based on the collection and statistical analysis of new effluent data, which satisfies the condition for the antibacksliding exemption under CWA §402(o)(2)(B)(i).

CWA §303(d)(4)(A) states that, for waterbodies where the water quality does not meet applicable WQS, effluent limitations may be revised under two conditions: the revised effluent limitation must ensure the attainment of the WQS (based on the waterbody TMDL or the waste load allocation) or the designated use which is not being attained is removed in accordance with the WQS regulations. Since the applicable waterbodies are not impaired and do not have a TMDL, further evaluation under this provision is not required.

CWA §303(d)(4)(B) states that, for waterbodies where the water quality meets or exceeds the level necessary to support the waterbody's designated uses, WQBELs may be revised as long as the revision is consistent with the State's Antidegradation Policy. Even if the requirements of CWA §303(d)(4) or 18 AAC 83.480(b) are satisfied, 18 AAC 83.480(c) prohibits relaxed limits that would result in violations of WQS or ELGs. Since the receiving water meets WQS to support designated uses and ELGs are applied via the permitting action, further evaluation under this provision is not required.

Since the previous permit was reissued, new information has been collected to characterize the effluent from Outfall 001. An analysis of five years of recent effluent and receiving water data resulted in changes to effluent limits. The reasonable potential analysis demonstrated that limits on aluminum, ammonia, cyanide, and nickel could be removed because there was no reasonable potential to exceed WQS.

After analyzing five years of effluent data, the Department determined that some parameters required more stringent limits. Limits that are more stringent in the permit, in comparison to the previous permit, include the average monthly limit for cadmium and the maximum daily limit for mercury. Analysis of the effluent data also showed that the limits for other parameters could be relaxed. Both the maximum daily and average monthly limits for copper, lead, and zinc, and maximum daily limit for cadmium are less stringent than in the previous permit.

These changes in the effluent limitations for Outfall 001 are based on the collection and statistical analysis of new information and, where the limitations increased or showed no reasonable potential and are no longer necessary, these changes are permissible per 18 AAC 83.135(b)(2).

7.0 ANTIDEGRADATION

Section 303(d)(4) of the CWA states that, for waterbodies where the water quality meets or exceeds the level necessary to support the waterbody's designated uses, water quality-based effluent limitations may be revised as long as the revision is consistent with the State's Antidegradation Policy.

The Antidegradation Policy of the WQS (18 AAC 70.015) states that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. This section analyzes and provides rationale for the Department's decisions in the permit issuance with respect to the Antidegradation Policy.

The Department's approach to implementing the Antidegradation Policy, found in 18 AAC 70.015, is based on the Department's *Policy and Procedure Guidance for Interim Antidegradation Implementation Methods*, dated July 14, 2010. Using these requirements and policies, the Department determines whether a waterbody, or portion of a waterbody, is classified as Tier 1, Tier 2, or Tier 3, where a higher numbered tier indicates a greater level of water quality protection. At this time, no Tier 3 waters have been designated in Alaska. Accordingly, this antidegradation analysis conservatively assumes that the discharge is to a Tier 2 water, which is the next highest level of protection and is more rigorous than a Tier 1 analysis.

The State's Antidegradation Policy in 18 AAC 70.015(a)(2) states that if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (i.e., Tier 2 waters), that quality must be maintained and protected. The Department may allow a reduction of water quality only after finding that five specific requirements of the Antidegradation Policy at 18 AAC 70.015(a)(2)(A)-(E) are met. The Department's findings follow.

1. **18 AAC 70.015(a)(2)(A).** Allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located.

   Based on the evaluation required per 18 AAC 70.0015(a)(2)(D) below, the Department has determined that the most reasonable and effective pollution prevention, control, and treatment methods are being used and that the localized lowering of water quality is necessary.

Red Dog Mine's contributions to the social and economics of Northwest Alaska and statewide are important and highly significant. The mine is the largest private sector employer in the Northwest Arctic Borough (NWAB). The following summarizes some of Red Dog Mine's benefits to Alaska's economy during 2016. TAK provided annual payments in lieu of taxes to the NWAB totaling $11 million (including $2.4 million to the NWAB School District), $122 million in royalties to NANA, and $20 million in state taxes, spent $119 million on goods and services within Alaska, and supplied the Alaska Industrial Development and Export Authority with $37 million in fees.

As detailed above, the operation of Red Dog Mine is important to the economies of the NWAB, NANA, and the entire state of Alaska. The Department finds that authorization the mine's discharge to accommodates important local, regional, and statewide economic activity and that this requirement is met.

2. **18 AAC 70.015(a)(2)(B).** Except as allowed under this subsection, reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.235 or the WET limit in 18 AAC 70.030.

   The permit prohibits violation of the water quality criteria in 18 AAC 70.020. This permit establishes effluent limits and monitoring for discharges at Outfall 001.

   Since the previous permit was reissued, new information has been collected to characterize the effluent and determine limits for Outfall 001. An analysis of five years of recent effluent and receiving water data resulted in changes to effluent limits.

   These changes in the effluent limitations for Outfall 001 are based on the collection and statistical analysis of new information and, where the limitations increased or showed no reasonable potential to exceed WQS and were no longer necessary, these changes were exempt from antibacksliding per CWA §402(o)(2)(B)(i).

   An analysis of Outfall 001 sample data showed that there is no potential to exceed WQS for aluminum, ammonia, copper, cyanide, lead, mercury, nickel, zinc, and fecal coliform bacteria. Consequently, the permit no longer requires limits for those parameters where effluent limitation guidelines do not apply, which includes aluminum, ammonia, cyanide, and nickel. Chromium, iron, manganese, and turbidity, which did not have limits in the previous permit, had monitoring requirements removed.

   For metals with hardness-based limits, the previous permit used the 5^{th} percentile of the hardness data or 260 mg/L as $CaCO_3$ to calculate applicable water quality criteria (WQC). This permit attempted to use the 15^{th} percentile of 2010 through 2014 hardness data from Station 151 or 405 mg/L. According to regulation, the maximum allowable hardness for hardness-based WQC is 400 mg/L, which was used. Increasing the hardness from 260 mg/L to 400 mg/L, increased hardness-based WQC for cadmium, copper, lead, mercury, nickel, and zinc. That results in an increase in the margin of compliance for those WQC.

   Discharges authorized under this permit will not violate applicable water quality criteria, as allowed under 18 AAC 70.235. Under this regulation, the Department may establish a site-specific water quality criteria that modifies a water quality criterion set for a waterbody. Pursuant to 18 AAC 70.235(b), the Department has established site-specific criteria for the Main Stem Red Dog Creek (see Section 2.2). Effluent limitations and monitoring at Outfall 001 ensure that the applicable WQC for the Main Stem Red Dog Creek are met.

   Historic WET test results indicate that the discharge does not violate the WET limits. WET testing is required every two months for Outfall 001. WET tests reveal if the discharge has toxicity, and the permittee is required to submit these results to DEC during the month in which the results are received. WET results are used to verify that the applicable criteria of 18 AAC 70.030 are met.

The Department finds that the reduced water quality will not violate applicable WQC and that the finding is met.

3. **18 AAC 70.015(a)(2)(C).** The resulting water quality will be adequate to fully protect existing uses of the water.

   Beginning at the Main Stem, existing and designated uses include growth and propagation of fish and aquatic life. A long history of biomonitoring demonstrates that the mine's effluent does not adversely affect fish and aquatic life in the Main Stem. To the contrary, fish use of the Main Stem has increased since the mine began operation. Permit conditions have proven over time to protect the Main Stem's existing and designated use of growth and propagation of fish and aquatic life.

   ADF&G conducted annual biomonitoring in the Main Stem from 2001 through 2016. According to the most recent ADF&G Red Dog Mine study conducted in 2015, Technical Report No. 16-01, "Median metals concentrations (Pb, Zn, Al, Cd) in Main Stem Red Dog Creek are consistently lower when compared with pre-mining data."

   The Department concludes that the resulting water quality will be adequate to fully protect existing uses and that the finding is met.

4. **18 AAC 70.015(a)(2)(D).** The methods of pollution prevention, control, and treatment found by the department to be most effective and reasonable will be applied to all wastes and other substances to be discharged.

   The Department finds the most effective methods of prevention, control, and treatment are the practices and requirements set out in this permit and currently in use at this mine. The permittee is required to implement a site management pollution prevention plan (Plan). The Plan includes pollution prevention measures and controls appropriate for each facility and discharge. The design, construction, and performance of the water treatment plants has also been reviewed and approved by the Department.

   The primary treatment method used for the Red Dog Mine tailings pond water prior to its discharge to Outfall 001 is the high density sludge (HDS) treatment technology, which the Department finds to be the most effective and technologically and economically feasible method for Red Dog Mine. In Section 8.0, High Density Sludge Treatment Technology Review of the EPA Ore Mining and Dressing Preliminary Study Report (EPA, 2011), EPA describes the HDS as "a highly efficient treatment technology for certain types of waste streams." Further, EPA notes that HDS technology "may serve as a resource for ore mine operators and NPDES permit writers when considering mine wastewater treatment systems." The HDS treatment process at the mine facility is described below:

   Reclaim water is pumped to WTP2 where it is treated before being discharged through Outfall 001. Within the WTP2 influent pipeline, reclaim water is first treated with sodium sulfide and mixed via an in-line mixer. The sulfide reacts primarily with the dissolved cadmium and also other metals in the reclaim water to form insoluble cadmium sulfide and other metal sulfides, which are stable through the remainder of the treatment process. The sodium sulfide-treated reclaim water then reports to a rapid mix tank where slaked lime (calcium hydroxide) and recycled clarifier underflow solids are added to adjust the pH. From the rapid mix tank, the solution flows into the lime reactor which provides residence time to facilitate complete chemical reactions. Additionally, compressed air is added into the lime reactor tank to ensure oxidation of ions in the solution, specifically and most significantly the oxidation of metals.

The precipitated solids containing the metals remain in suspension and flocculent is added to unite smaller particles into larger solids in the flocculent mix tank. The solution then flows into a clarifier where the solids are allowed to gravity-settle. Settled solids are removed through the "underflow" and the treated decant water leaves the clarifier through the "overflow." Underflow solids are recycled back to the beginning of the treatment process with some solids periodically purged from the system to the tailing impoundment to maintain a constant sludge bed level in the clarifier.

Clarifier overflow water reports to sand filters which remove residual suspended solids. Automated pH and turbidity meters take final measurements of the sand filter effluent. If the pH is within the APDES permit limits and within the operating range established to ensure effective treatment and the turbidity is within an established range which indicates that effective solids removal has been accomplished, the water is discharged to Red Dog Creek. If the pH or turbidity are not within the prescribed ranges, the filtered water is automatically rerouted back into the tailing impoundment

The Department finds that the most effective methods of prevention, control, and treatment are the practices and requirements set out in this permit and currently in use at this mine. The Department finds this criterion is met

5. **18 AAC 70.015(a)(2)(E).** All wastes and other substances discharged will be treated and controlled to achieve (i) for new and existing point sources, the highest statutory and regulatory requirements; and (ii) for nonpoint sources, all cost-effective and reasonable best management practices.

   Applicable "highest statutory and regulatory treatment requirements" are defined in 18 AAC 70.990(30) (as amended June 26, 2003) and in the July 14, 2010 DEC guidance titled "*Policy and Procedure Guidance for Interim Antidegradation Implementation Methods.*" Accordingly, there are three parts to the definition, which are:

   (A) Any federal technology-based effluent limitation identified in 40 CFR § 125.3 and 40 CFR § 122.29, as amended through August 15, 1997, adopted by reference;

   (B) Minimum treatment standards in 18 AAC 72.040; and

   (C) Any treatment requirements imposed under another state law that is more stringent than a requirement of this chapter.

   The first part of the definition includes all federal technology-based ELGs, which would include those that apply to Red Dog Mine. EPA promulgated ELGs for the Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores point source category at 40 CFR Part 440 Subpart J (adopted by reference at 18 AAC 83.010(g)(3)). The ELGs applicable to a new source, which is a source that has commenced construction after the ELGs were established on December 3, 1982, are applicable to discharges from active mines, and these ELGs apply to Outfall 001. All applicable ELGs have been incorporated into the permit. Therefore, the Department concludes that this requirement is met.

   The second part of the definition 18 AAC 70.990(B) (2003) appears to be in error, as 18 AAC 72.040 describes discharges to sewers and not minimum treatment. The correct reference appears to be the minimum treatment standards found at 18 AAC 72.050, which refers to domestic wastewater discharges only. No discharge of domestic wastewater is authorized under the permit; therefore, further analysis under this regulation is not required.

The third part of the definition includes any more stringent treatment required by state law, including 18 AAC 70 and 18 AAC 72. The correct operation of equipment, visual monitoring, and implementing BMPs, as well as other permit requirements, will control the discharge and satisfy all applicable federal and state requirements.

The Department finds that the treatment required in this permit achieves the highest statutory and regulatory requirements, and this finding is met.

8.0 OTHER PERMIT CONDITIONS

8.1 Electronic Reporting (E-Reporting) Rule

The Permittee is responsible for electronically submitting DMRs and other reports in accordance with 40 CFR §127. The start dates for e-reporting are provided in 40 CFR §127.16. DEC has established a website at http://dec.alaska.gov/water/Compliance/EReportingRule.htm that contains general information. As DEC implements the E-Reporting Rule, more information will be posted on this webpage. The permittee will be further notified by DEC in the future about how to implement the conditions in 40 CFR §127.

8.2 Quality Assurance Project Plan

The permittee is required to develop procedures to ensure that the monitoring data submitted are accurate and to explain data anomalies if they occur. The permittee is required to update the Quality Assurance Project Plan (QAPP) within 60 days of the effective date of the final permit. Additionally, the permittee must submit a letter to the Department within 60 days of the effective date of the permit stating that the plan has been implemented within the required time frame. The QAPP shall consist of standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples; laboratory analysis; and data reporting. The plan shall be retained on site and made available to the Department upon request.

8.3 Site Management Pollution Prevention Plan

In accordance with AS 46.03.110(d), the Department may specify in a permit the terms and conditions under which waste material may be disposed. This permit requires the permittee to develop a Site Management Pollution Prevention Plan in order to prevent or minimize the potential for the release of pollutants to waters and lands of the State of Alaska through plant site runoff, spillage or leaks, or erosion. The permit contains certain conditions that must be included in the Plan, such as prescribed best management practices, and storm water management for industrial and construction activities. The permit requires the permittee to develop or update and implement the Plan within 60 days of the effective date of the final permit. The Plan must be kept on site and made available to the Department upon request.

8.4 Standard Conditions

Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

9.0 OTHER CONSIDERATIONS

9.1 Endangered Species Act

The Endangered Species Act (ESA) requires federal agencies to consult with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. As a state agency, DEC is not required to consult with USFWS or NMFS regarding permitting actions. However, DEC values input from the Services on ESA concerns, and on February 6, 2017, DEC solicited USFWS and NMFS for feedback about ESA impacts associated with this permit. John Kurland of NMFS and Kathryn Ott of USFWS stated that there are no threatened or endangered species near Red Dog Mine or in the area of impact.

9.2 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency has the potential to adversely affect (reduce quality and/or quantity of) Essential Fish Habitat (EFH). EFH includes the waters and substrate (sediments, etc.) necessary for fish from commercially-fished species to spawn, breed, feed, or grow to maturity.

As a state agency, DEC is not required to consult with NMFS regarding permitting actions. However, DEC is concerned with protecting EFH, and on February 6, 2017, DEC spoke with Matt Eagleton, Alaska Regional EFH Coordinator. Matt Eagleton reported that there is no EFH associated with this permitting action. Additionally, Jack Winters of ADF&G provided that there is no EFH near Red Dog Mine.

9.3 Permit Expiration

The permit will expire five years from the effective date of the permit.

10.0 REFERENCES

ADF&G (Alaska Department of Fish and Game). Aquatic Biomonitoring at Red Dog Mine, 2015. Technical Report No. 16-01. March 2016.

DEC (Alaska Department of Environmental Conservation). 2003. 18 AAC 70, Water Quality Standards. State of Alaska, Department of Environmental Conservation. June 26, 2003.

DEC. 2008a. 18 AAC 83, Alaska Pollutant Discharge Elimination System. State of Alaska, Department of Environmental Conservation. October 31, 2008.

DEC. 2008b. 18 AAC 70, Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances. State of Alaska, Department of Environmental Conservation. December 12, 2008.

DEC. 2010a. Interim Antidegradation Implementation Methods, Effective July 14, 2010. State of Alaska, Department of Environmental Conservation, Policy and Procedure No. 05.03.103.

DEC. 2010b. Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report. July 15, 2010.

DEC. 2014. Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide.

DEC. 2016. 18 AAC 72, Wastewater Disposal. State of Alaska, Department of Environmental Conservation. October 22, 2016.

DEC. 2017. 18 AAC 70, Water Quality Standards. State of Alaska, Department of Environmental Conservation. February 5, 2017.

EPA. 1986. Inductively Coupled Plasma Emission Spectrometry. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. EPA SW-846.

EPA. 1986. Mercury Digestion and Cold Vapor Atomic Absorption Spectrometry. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. EPA SW-846.

EPA. 1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.

EPA. 1993. Guidance Manual for Developing Best Management Practices (BMP). Office of Water, October 1993, EPA 833-B-93-004.

EPA. 1996. The Metals Translator: Guidance for Calculation a Total Recoverable Permit Limit from a Dissolved Criterion. June 1996, EPA 823-B-96-007.

EPA. 2002. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. October 2002, EPA 821-F-02-013.

EPA. 2010. NPDES Permit Writer's Manual. EPA, Office of Water, Office of Wastewater Management, Permits Division. Washington, DC. September 2010. EPA 833-K-10-001.

APPENDIX A. FACILITY INFORMATION

Figure 1: Red Dog Mine Map

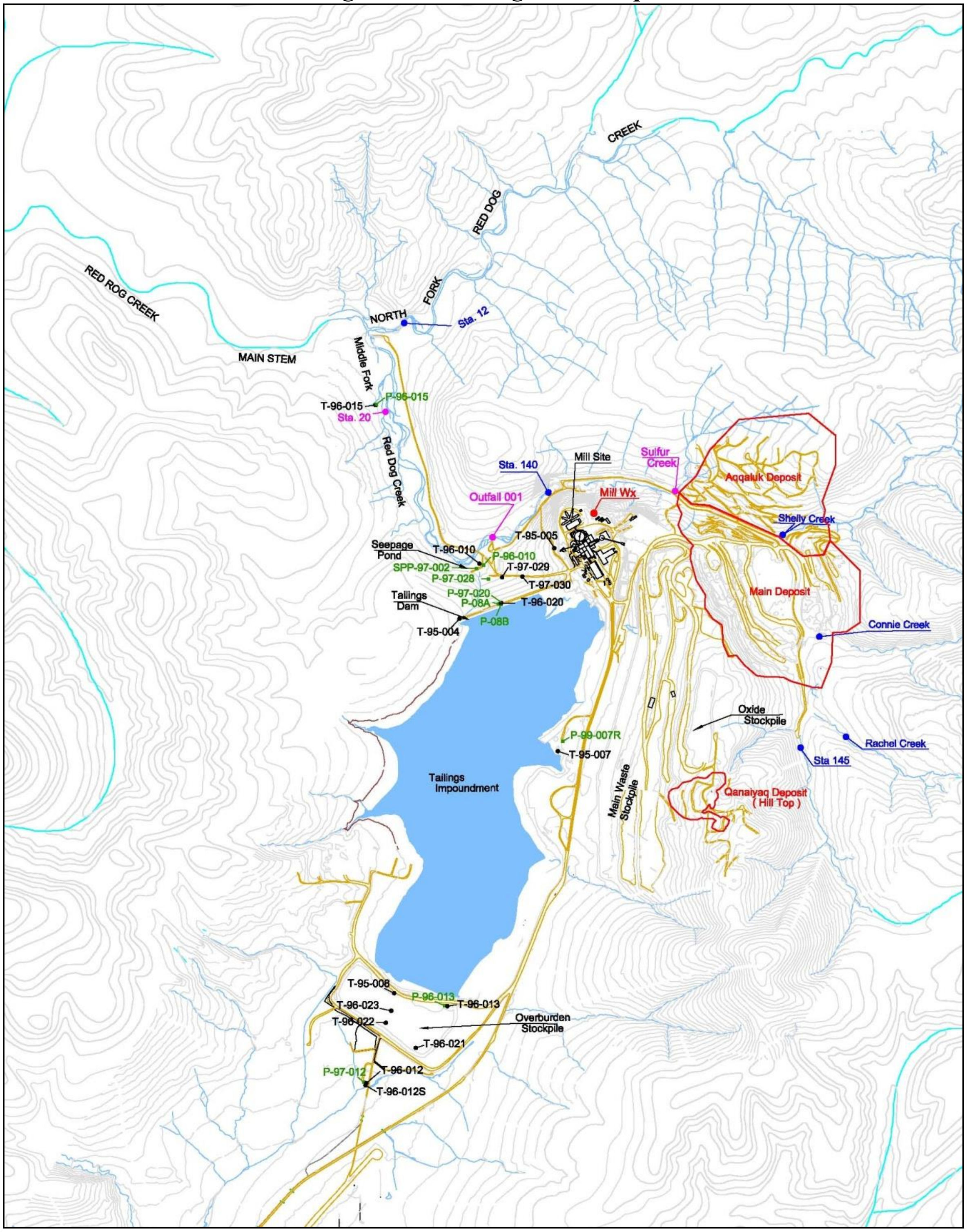


Figure 2: Map of Mixing Zones

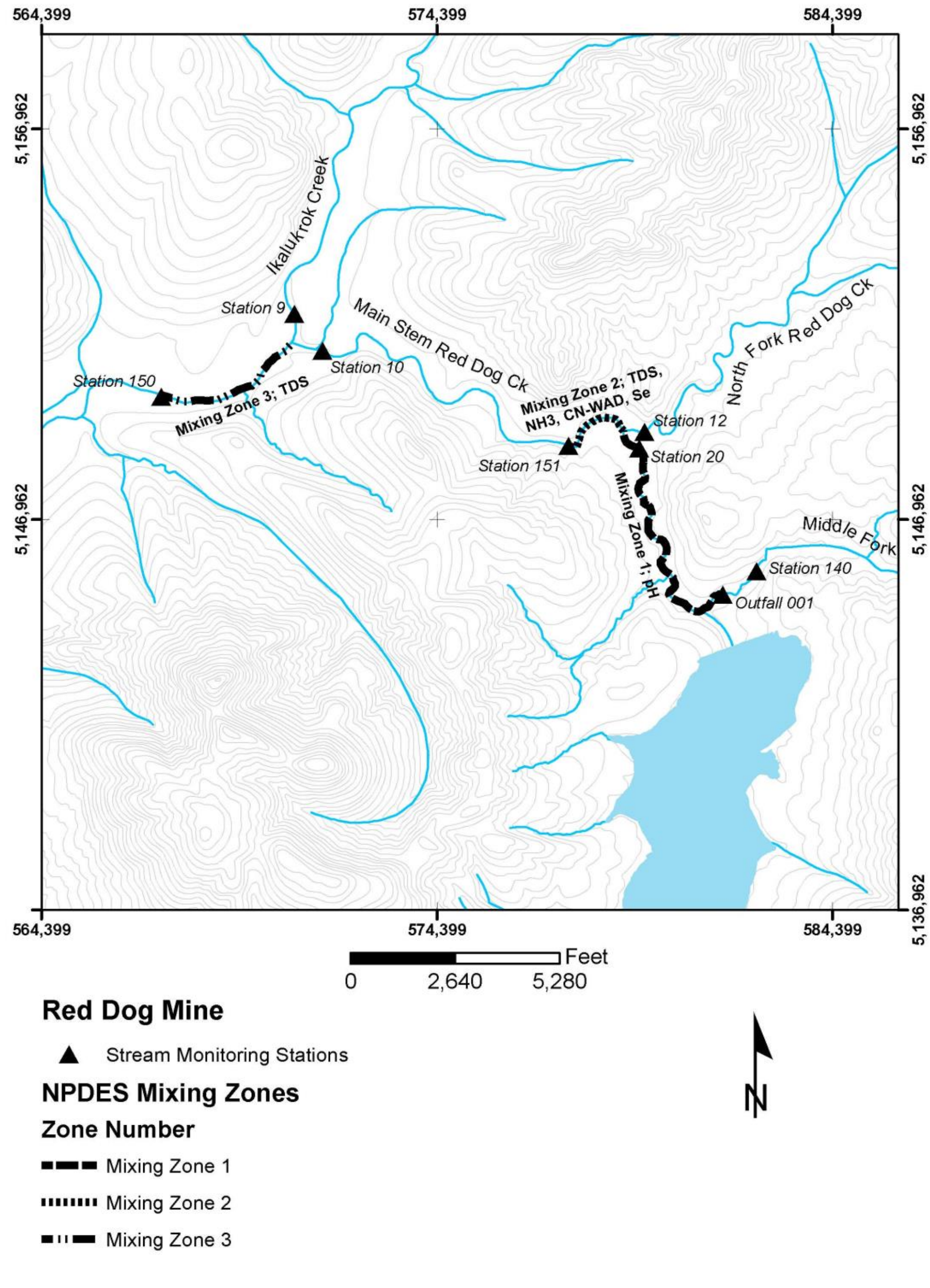
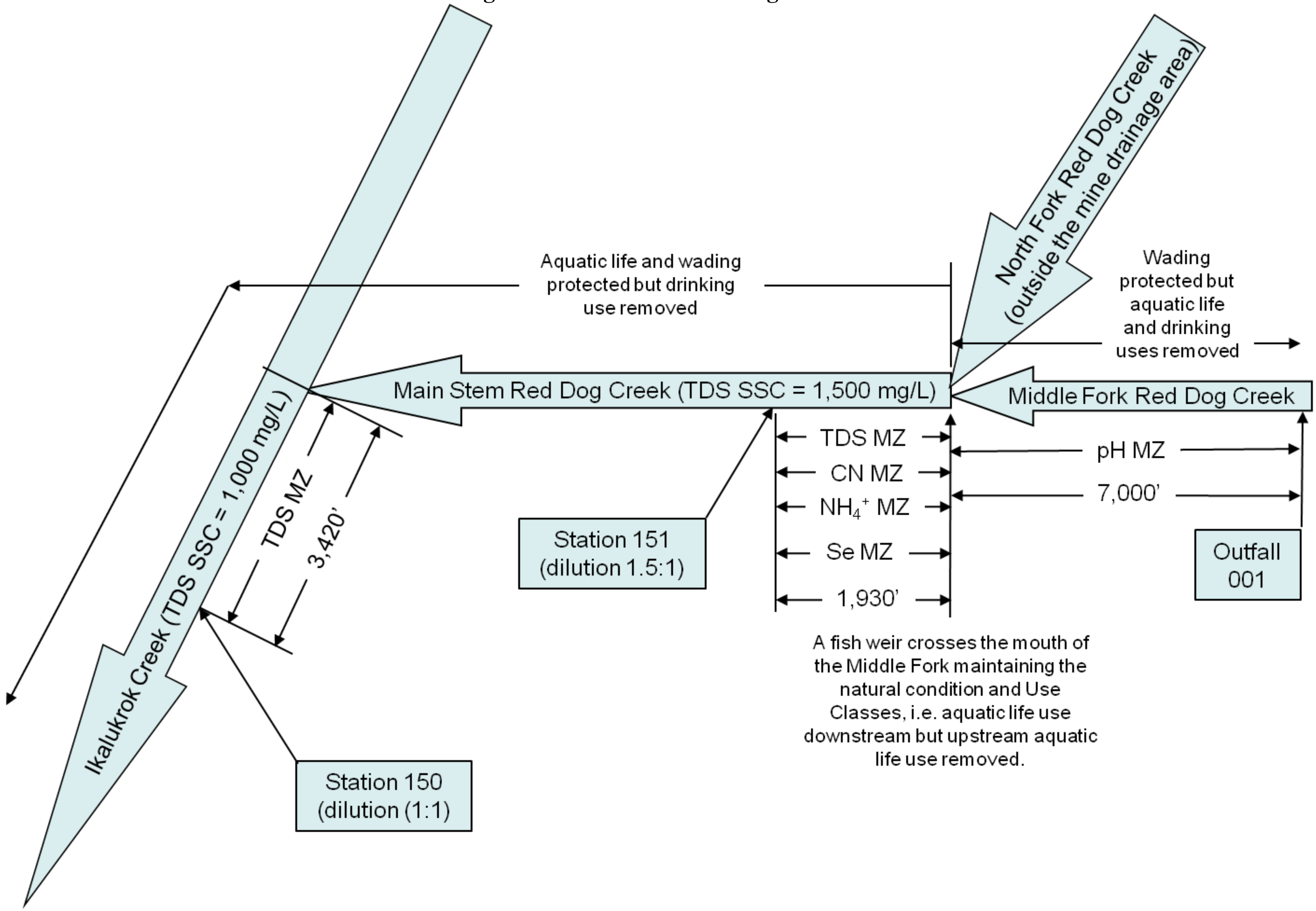


Figure 3: Schematic of Mixing Zones



APPENDIX B. BASIS FOR EFFLUENT LIMITS

This section discusses the basis for and the development of effluent limits in the permit. It is organized as follows: an overall discussion of the statutory and regulatory basis for development of effluent limitations (Section B-I); discussions of the development of technology-based effluent limits (Section B-II), water quality-based effluent limits (Section B-III); and a summary of the effluent limits (Section B-IV).

B-I Statutory and Regulatory Basis for Limits

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the Clean Water Act (CWA) provide the basis for the effluent limitations and other conditions in the permit. The Department evaluates the discharges with respect to these sections of the CWA and the relevant Alaska Pollutant Discharge Elimination System (APDES) regulations to determine which conditions to include in the permit.

In general, the Department first determines if any federally-promulgated technology-based effluent limits have been developed that must be considered as the ceiling for permit limits. The Department then evaluates the effluent quality expected to result from these controls to see if the discharge could result in any exceedances of the Alaska Water Quality Standards (WQS) in the receiving water. If reasonable potential exists that exceedances could occur, the Alaska Department of Environmental Conservation (DEC or the Department) must include water quality-based effluent limits in the permit. The permit limits reflect whichever requirements (technology-based or water quality-based) are more stringent.

B-II Outfall 001 - Technology-Based Evaluation

Section 301(b) of the CWA requires industrial dischargers to meet technology-based effluent limitation guidelines (ELGs) established by the Environmental Protection Agency (EPA) and adopted by reference in 18 AAC 83.010. These are enforceable through their incorporation into an APDES permit. Direct dischargers that are new sources must meet New Source Performance Standards (NSPS), which are based on the best available demonstrated control technology. These NSPS apply to a source that has commenced construction after the ELGs were established and, as such, are directly applicable to the discharge of treated mine drainage and contact water from Outfall 001 at Red Dog Mine.

In 40 CFR Part 440 Subpart J, EPA established ELGs for the Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores point source category. These ELGs apply NSPS to a new source mine, which is a source that has commenced construction after the ELGs were established on December 3, 1982. The NSPS that apply to Red Dog Mine are shown in Table B- 1.

Table B- 1: Technology-Based Effluent Limits for Outfall 001

Parameter	Units	Maximum for any 1 day	Average of daily values for 30 consecutive days
Cadmium	mg/L[a]	0.10	0.05
Copper	mg/L	0.30	0.15
Lead	mg/L	0.6	0.3
Mercury	mg/L	0.002	0.001
Zinc	mg/L	1.5	0.75
pH	s.u.[b]	6.5 to 10.5	
Total Suspended Solids (TSS)	mg/L	30.0	20.0
Total Dissolved Solids (TDS)	mg/L	4,925	--
Flow	billion gallons per year	2.418	
a. milligrams per liter b. standard units			

Regulation 40 CFR 440.130(d)(1) (adopted by reference in 18 AAC 83.010(g)(3)) allows for a pH adjustment above 9.0 where the application of neutralization and sedimentation technology to comply with relevant metal limitations results in an inability to comply with the pH range of 6 to 9. This is the case for the discharge at Red Dog Mine where metals precipitate out of solution better at higher pH. This permit contains the same pH limits as the 2010 permit, and the allowable pH range is 6.5 to 10.5 s.u.

Because TDS was not considered in development of the ELGs, a case-by-case technology-based effluent limitation (TBEL) was evaluated in accordance with 40 CFR 125.3(c). Based on existing information, EPA determined that the TBEL for TDS equals 4,925 mg/l, measured at the discharge location, Outfall 001.

Regulation 40 CFR 440.104(b) (adopted by reference in 18 AAC 83.010(g)(3)) states that there shall be no discharge of process wastewater to navigable waters from mills that use the froth-flotation process alone or in conjunction with other processes for the beneficiation of zinc ore. In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceed the annual evaporation (net precipitation), a volume of water equal to the difference may be discharged subject to the limitations set forth above in Table B- 1. The permit includes an annual discharge limit of 2.418 billion gallons per year, which represents the maximum estimated difference between precipitation and evaporation. Because precipitation and evaporation are variable, the permit requires that Teck Alaska, Inc. (TAK) measure and report annual precipitation and evaporation data in comparison to the discharge volume to demonstrate compliance with the net precipitation provision of 40 CFR 440.104(b) (18 AAC 83.010(g)(3)).

B-III Water Quality-Based Evaluation

In addition to the TBELs discussed above, the Department evaluated Red Dog Mine discharges to determine compliance with Section 301(b)(1)(C) of the CWA. This section requires permit limits necessary to meet WQS.

Under 18 AAC 83.435, the Department must implement Section 301(b)(1)(C) of the CWA. It requires that APDES permits include limits for all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state WQS, including state narrative criteria for water quality." The limits must be stringent enough to ensure that WQS are met and must be consistent with any available wasteload allocation (WLA).

To determine if water quality-based effluent limits (WQBEL) are needed and develop those limits when necessary, the Department follows guidance in the *APDES Permits Reasonable Potential Analysis and Effluent Limits Development Guide* (RPA Guidance, 2014). The water quality-based analysis consists of the following three step sequence:

1. Identify the applicable water quality criteria (see Section B-III.A);
2. Determine if there is "reasonable potential" for the discharge to exceed a water quality criterion in the receiving water (see Section B-III.B); and,
3. If there is "reasonable potential" or where a parameter has a technology-based limit and it requires dilution to meet WQS, develop effluent limits based on the WLA (see Section B-III.C).

The following sections provide a detailed discussion of each step.

B-III.A Water Quality Criteria

The first step in determining if WQBELs are needed is to identify the applicable water quality criteria. Alaska's WQS are found at 18 AAC 70. The applicable criteria are determined based on the beneficial uses of the receiving water.

The beneficial uses for the Lower Middle Fork Red Dog Creek (Middle Fork) from the terminus of the Red Dog Mine Water Management System to the confluence with North Fork Red Dog Creek (North Fork), the receiving water of Outfall 001, and the regulatory citation for the water quality criteria applicable to the uses are as follows:

1. industrial uses – 18 AAC 70.020(b)(1)(A)(iv)
2. contact recreation, wading only – 18 AAC 70.020(b)(1)(B)(i)***
3. secondary recreation, except fishing – 18 AAC 70.020(b)(1)(B)(ii)****

The beneficial uses for the Main Stem Red Dog Creek (Main Stem) from the confluence with the North Fork downstream to the confluence with Ikalukrok Creek and continuing downstream in Ikalukrok Creek to it confluence with the Wulik River, and the regulatory citation for the water quality criteria applicable to the uses are as follows:

1. industrial uses – 18 AAC 70.020(b)(1)(A)(iv)

2. contact recreation, wading only – 18 AAC 70.020(b)(1)(B)(i)***
3. secondary recreation – 18 AAC 70.020(b)(1)(B)(ii)
4. growth and propagation of fish, shellfish, other aquatic life, and wildlife – 18 AAC 70.020(b)(1)(C)

Under 18 AAC 70.235(b), the Department established a natural condition-based site specific criterion (NCBSSC) for cadmium (two micrograms per liter) in the Main Stem and Ikalukrok Creek, which EPA approved on February 27, 2007. Additionally according to 18 AAC 70.236(b)(5), a site specific water quality criterion of 1,500 milligrams per liter (mg/L) for total dissolved solids (TDS) applies to the Main Stem. Finally according to 18 AAC 70.020(b)(4) and note 12, TDS in concentrations up to 1,000 mg/L are in effect from the confluence of Ikalukrok Creek with the Main Stem to the Wulik River, except during chum salmon or Dolly Varden spawning in the Ikalukrok Creek, when the 500 mg/L criterion applies at Station 160 in Lower Ikalukrok Creek from July 25th through the end of the discharge season.

For a given pollutant, different uses may have different criteria. To protect all beneficial uses, the reasonable potential analysis and permit limits are based on the most stringent water quality criteria for protecting those uses. For the Main Stem, the most stringent applicable criteria are summarized in Table B- 2.

Table B- 2: Most Stringent Applicable Water Quality Criteria in the Main Stem

Parameter[a] (µg/L unless otherwise noted)	Acute Aquatic Life Criterion	Chronic Aquatic Life Criterion	Chronic Human Health Criterion[b]
Aluminum	750	750[c]	N/A
Ammonia as N[d]	7.28	2.95	N/A
Barium	NA	NA	NA
Cadmium[e]	NA	2.00[f]	NA
Chromium, Total	NA	N/A	NA
Copper[e]	51.7	30.5	NA
Cyanide, Weak Acid Dissociable (WAD)	22.0	5.20	NA
Iron	NA	1,000	NA
Lead[e]	477	18.6	NA
Manganese	NA	NA	NA
Mercury	2.40	0.012	NA
Nickel[e]	1,516	169	NA
Selenium	20.0	5.00	NA
Zinc[e]	388	388	NA
pH (s.u.)	within the range of 6.5 – 8.5		

a. Criteria for metals have been converted to total recoverable.
b. The Main Stem's designated uses 18 AAC 70.230(e)(18) exclude protection for Human Health Criteria.
c. When the hardness ≥ 50 mg/L as $CaCO_3$ and pH ≥ 7.0 s.u., then the chronic criterion changes from 87 to 750 µg/L. The 15th percentile of background measurements at Station 151 for hardness and pH are 405 mg/L and 7.31 s.u.
d. Temperature and pH based limit is calculated using the 85th percentile of Station 151 background data or 10.328 ^{0}C and 7.86 s.u.
e. Hardness-based limits using a hardness of 400 mg/L $CaCO_3$. The 15th percentile of Station 151 background data is 405 mg/L $CaCO_3$.
f. NCBSSC

B-III.B Reasonable Potential Analysis

This section discusses how reasonable potential was evaluated for Outfall 001. For each parameter, the Department compared the maximum projected concentration to the criteria for that pollutant to determine if there is "reasonable potential" to cause or contribute to an exceedance of a water quality criterion for each pollutant present in the discharge. If the projected concentration exceeds a criterion, there is "reasonable potential," and a limit must be included in the permit. The Department used the recommendations in the *RPA Guidance* to conduct the reasonable potential analysis.

For a given parameter discharged from Outfall 001, the maximum expected effluent concentration was compared to the most stringent applicable water quality criterion.

C_e (Maximum expected effluent concentration or MEC): The maximum expected effluent concentration was calculated using the statistical approach recommended in Section 2.4 of the *RPA Guidance*. In this approach, a maximum expected effluent concentration is derived by multiplying the maximum observed effluent concentration by a reasonable potential multiplier (RPM):

C_e = MEC = (maximum observed effluent concentration) x RPM

The RPM accounts for uncertainty in the effluent data. The RPM depends upon the amount of effluent data, the statistical distribution assigned to the data, and the variability of the data as measured by the coefficient of variation (CV). Effluent data for each pollutant of concern was analyzed in ProUCL—a statistical software package developed under the direction of EPA—and the statistical distributions and corresponding CVs that best fit the data were selected.

There are three equations in the *RPA Guidance* for calculating the RPM. Each equation is valid for certain statistical distributions or sample populations. These three equations—with the citation to the Section in the *RPA Guidance* in which they appear are:

Equation 2.4.2.1 (RPM for Non-Parametric and Normal Statistical Distributions)

$$\mathrm{RPM} = \frac{\exp(\hat{\mu}_n + z_{99}\hat{\sigma})}{\exp(\hat{\mu}_n + p_n\hat{\sigma})}$$

Where,

$\hat{\mu}_n =$ the mean calculated by ProUCL

$\hat{\sigma} =$ the standard deviation calculated by ProUCL

Equation 2.4.2.2 (RPM for Lognormal Statistical Distributions)

$$\mathrm{RPM} = \frac{\exp(z_{99}\hat{\sigma}_y - 0.5\hat{\sigma}_y{}^2)}{\exp(p_n\hat{\sigma}_y - 0.5\hat{\sigma}_y{}^2)}$$

Where,

$\hat{\sigma}_y =$ the lognormal standard deviation calculated by ProUCL

$\hat{\sigma}_y{}^2 =$ the lognormal variance (square of the standard deviation calculated by ProUCL)

Table B-3 shows the assigned statistical distribution, references the equation used to calculate the RPM, and lists the calculated RPM for each parameter at Outfall 001.

Table B- 3: RPM Calculation for Outfall 001

Parameter	Statistical Distribution	Equation	RPM
Aluminum	Non-parametric	2.4.2.1	1.53
Ammonia as N	Normal	2.4.2.1	1.07
Barium	Non-parametric	2.4.2.1	1.14
Cadmium	Non-parametric	2.4.2.1	1.18
Chromium, Total	Non-parametric	2.4.2.1	1.44
Copper	Non-parametric	2.4.2.1	1.18
Cyanide, WAD	Non-parametric	2.4.2.1	1.05
Iron	Non-parametric	2.4.2.1	1.42
Lead	Non-parametric	2.4.2.1	1.21
Manganese	Lognormal	2.4.2.2	3.61
Mercury	Non-parametric	2.4.2.1	1.30
Nickel	Non-parametric	2.4.2.1	1.18
Selenium	Lognormal	2.4.2.2	1.10
Zinc	Lognormal	2.4.2.2	1.23

Reasonable Potential Summary: The reasonable potential analysis covers two groups of parameters, those without a mixing zone and those with a mixing zone. Parameters without a mixing zone receive no dilution, and consequently, the reasonable potential analysis focuses on the end-of-pipe discharge. Results of the reasonable potential analysis for parameters without a mixing zone are provided in Table B- 4.

Table B- 4: Reasonable Potential Determination at the End-of-Pipe

Parameter[a] (µg/L unless otherwise noted)	Effluent Data					Most Stringent Water Quality Criterion[c]	Reasonable Potential (yes or no)
	Max Observed Effluent Conc.	Number of Samples	Coefficient of Variation (CV)	Reasonable Potential Multiplier (RPM)	Max Expected Effluent Conc. (MEC)[b]		
Aluminum	35.0	25	1.12	1.53	53.6	750	no
Barium	57.3	84	0.502	1.14	65.1	NA	no
Cadmium	2.20	87	1.07	1.18	2.60	2.00	yes
Chromium, Total	1.30	25	0.751	1.44	1.87	100	no
Copper	8.00	86	0.960	1.18	9.41	30.5	no
Iron	29.1	25	0.689	1.42	41.3	1,000	no
Lead	8.90	86	1.66	1.21	10.8	18.6	no
Manganese	436	23	1.55	3.61	1,576	NA	no
Mercury	0.00062	25	0.400	1.30	0.000806	0.012	no
Nickel	26.3	86	0.967	1.18	30.9	169	no
Zinc	220	88	0.446	1.23	271.5	388	no

a. Criteria for metals have been converted to total recoverable.
b. For each parameter, the MEC equals the maximum observed effluent concentration times the RPM producing a number based on water treatment plant performance, which was used to determine if there is a reasonable potential for the effluent to exceed WQS.
c. From Table B- 2

The mixing zone for TDS, ammonia, WAD cyanide, and selenium provides a dilution factor of 2.5. TDS has an instream site specific criterion and the permit assumes reasonable potential in requiring concurrent monitoring at the boundary of the mixing zone, Station 151. Unlike the parameters without a mixing zone, where the reasonable potential is determined at the end-of-pipe, the remaining parameters with a mixing zone, ammonia, WAD cyanide, and selenium, receive dilution from the receiving water. Therefore, reasonable potential analyses must consider the assimilative capacity of the receiving water and determine if there is reasonable potential at the boundary of the mixing zone.

Table B- 5: Reasonable Potential Determination at the Edge of the Mixing Zone

Parameter (µg/L)	Critical Upstream Concentration (total)	Max Expected Effluent Concentration	Most Stringent Water Quality Criterion	End-of-Pipe Reasonable Potential (yes or no)	Dilution Factor	Max Expected Concentration at the Boundary of the Mixing Zone	Boundary of Mixing Zone Reasonable Potential (yes or no)
Ammonia as N	0.100[a]	5.89	2.95	yes	2.5	2.42	no
Cyanide, WAD	0.0[b]	12.55	5.2	yes	2.5	5.02	no
Selenium	0.0[c]	11.15	5.0	yes	2.5	6.18	yes

a. 85th percentile of 2010 through 2014 data from the North Fork Red Dog Creek
b. Assumed to be zero because all North Fork data from 2010 through 2014 were non-detect
c. Set at zero because selenium concentration data from Station 151 demonstrates that the assimilative capacity of the receiving water provides a dilution factor ≥ 2.5.

B-III.C Water Quality–Based Effluent Limit Calculation

Once the Department determines that the effluent has a reasonable potential to exceed WQS or a parameter has a technology-based limit that exceeds WQS, a WQBEL for the pollutant is developed. Outfall 001 has shown to have reasonable potential to exceed select WQS so WQBELs were developed. This section explains the procedure used to develop WQBELs.

The first step in calculating a permit limit is development of a WLA for the pollutant. The WLA is the concentration of the pollutant that may be discharged while still ensuring that the downstream water quality criterion is met.

Outfall 001 - The derivation of WQBELs is described below.

B-III.C.A END-OF-PIPE LIMITS

WLAs

In the absence of dilution, the applicable water quality criterion becomes the WLA. Establishing the criterion as the WLA ensures that the Permittee's discharge does not contribute to an exceedance of the criterion. There may be up to three different WLAs for a given pollutant if there are acute, chronic, and human health water quality criteria for the pollutant. These WLAs include the acute WLA (WLA_{acute}) and chronic WLA ($WLA_{chronic}$).

Long Term Averages (LTAs)

Acute and chronic standards apply over different time frames; therefore, it is not possible to compare the WLAs directly to determine which standard results in the most stringent limits. The acute criteria are applied as a one-hour average and chronic criteria are applied as a four-day average. To allow for comparison of acute and chronic WLAs, long term average (LTA) loads are calculated from the acute and chronic WLAs. The most stringent LTA is used to calculate the permit limits.

Permit Limit Derivation

Once the appropriate LTA has been calculated, the Department applies the statistical approach described in Chapter 3 of the *RPA Guidance* to calculate maximum daily and average monthly permit limits. This approach takes into account effluent variability [using the Coefficient of Variation (CV)], sampling frequency, and the difference in time frames between the average monthly and maximum daily limits.

The maximum daily limit is based on the CV of the data and the probability basis, while the average monthly limit is dependent on these two variables and the monitoring frequency. As recommended in the *RPA Guidance*, the Department used a probability basis of 95 percent for average monthly limit calculation and 99 percent for the maximum daily limit calculation.

The following is a summary of the steps to derive WQBELs. Copper for Outfall 001 is used as an example.

Step 1- Determine the WLA

In this case, where there is no dilution, the acute and chronic aquatic life criteria become the WLAs. As shown in Table B- 2, the acute and chronic water quality criteria for copper are 51.7 and 30.5 µg/L, respectively. Accordingly, the WLAs are:

$$WLA_{acute} = 51.7\ \mu g/L$$

$$WLA_{chronic} = 30.5\ \mu g/L$$

Step 2 - Determine the Long-Term Average (LTA)

From Section 3.3 in the *RPA Guidance*,

$$LTA_{acute} = WLA_{acute} * e^{\left(0.5\sigma^2 - z_{99}\sigma\right)}$$

Where,

$$\sigma^2 = \ln(CV^2 + 1)$$

$$\sigma^2 = \ln(0.960^2 + 1)$$

$$\sigma^2 = 0.653$$

$$z_{99} = 2.326 \text{ for } 99^{\text{th}} \text{ percentile probability basis}$$

$$\mathbf{LTA_{acute} = 10.9\ \mu g/L}$$

$$LTA_{chronic} = WLA_{chronic} * e^{\left(0.5\sigma_4{}^2 - z_{99}\sigma_4\right)}$$

Where,

$$\sigma_4{}^2 = \ln\left(\frac{CV^2}{4} + 1\right)$$

$$\sigma_4{}^2 = \ln\left(\frac{0.960^2}{4} + 1\right)$$

$$\sigma_4{}^2 = 0.207$$

$$\boldsymbol{LTA_{chronic} = 11.7\ \mu g/L}$$

Step 3 - Most Limiting LTA

To protect a waterbody from both acute and chronic effects, the most limiting of the calculated LTAs is used to derive the effluent limitations. LTA_{acute} is the most limiting LTA.

Step 4 - Calculate the Permit Limits

The *RPA Guidance* recommends using the 95th percentile for the Average Monthly Limit (AML) and the 99th percentile for the Maximum Daily Limit (MDL). The MDL and the AML for aquatic life are calculated as follows:

$$\mathrm{MDL}_{aquatic} = LTA_{acute} * e^{\left(z_{99}\sigma - 0.5\sigma^2\right)}$$

Where,

$$\sigma^2 = 0.653 \text{ (as previously calculated)}$$

$$\boldsymbol{MDL_{aquatic} = 51.5\ \mu g/L}$$

$$\mathrm{AML}_{aquatic} = LTA_{acute} * e^{\left(z_{95}\sigma_n - 0.5\sigma_n{}^2\right)}$$

Where,

$$\sigma_n{}^2 = \ln\left(\frac{CV^2}{n} + 1\right)$$

$$\sigma_n{}^2 = \ln\left(\frac{0.960^2}{4} + 1\right)$$

$$\sigma_n{}^2 = 0.207 \text{ (as previously calculated)}$$

$$z_{95} = 1.645 \text{ for } 95^{\text{th}} \text{ percentile probability basis}$$

$$n = \text{number of sampling events per month for copper} = 4$$

$$\boldsymbol{AML_{aquatic} = 20.8\ \mu g/L}$$

B-III.C.B BOUNDARY OF MIXING ZONE LIMITS

Step 1- Determine the WLA

The acute and chronic aquatic life criteria are converted to acute and chronic WLAs using the following equation:

$$Q_dC_d = Q_eC_e + Q_uC_u$$

Q_d = downstream flow = $Q_u + Q_e$ = 1.5 + 1 = 2.5
C_d = aquatic life criteria that cannot be exceeded downstream = 5
Q_e = effluent flow = 1
C_e = concentration of pollutant in effluent = WLA_{acute} = 20 or $WLA_{chronic}$ = 5
Q_u = upstream flow = 1.5
C_u = upstream background concentration of pollutant = 0.0

Rearranging the above equation to determine the effluent concentration (C_e) or WLA results in the following:

$$C_e = WLA = \frac{Q_d C_d - Q_u C_u}{Q_e} = \frac{C_d(Q_u + Q_e) - Q_u C_u}{Q_e}$$

substitute and solve

$$WLA_{chronic} = C_e = \frac{(2.5 * 5) - (1.5 * 2.87)}{1} = 12.5$$

$$WLA_{acute} = C_e = \frac{(2.5 * 20) - (1.5 * 2.87)}{1} = 50.0$$

Steps 2 (determine LTAs), Step 3 (chose the smallest LTA), and Step 4 (calculate limits)

Performing these steps as described above produces the following selenium limits: MDL = 17.3 and AML = 11.2.

Table B- 6 summarizes the WQBEL calculations for Outfall 001. Parameters listed include selenium, which has a mixing zone, and metals with TBELs that are not protective of WQS. Hence, a WQBEL was generated for metals with TBELs, cadmium, copper, lead, mercury, and zinc.

Table B- 6: Water Quality-Based Effluent Limit Calculations for Outfall 001

Parameter (µg/L unless otherwise noted)	**Most Stringent Water Quality Criterion**	**CV**	**WLA_{acute}**	**$WLA_{chronic}$**	**$LTA_{limiting}$**	**MDL**	**AML**
Cadmium	2.00	1.07	NA	2.00	0.705	3.7	1.4
Copper	30.5	0.960	51.7	30.5	10.9	52	21
Lead	18.6	1.66	477	18.6	4.48	34	11
Mercury	0.012	0.444	2.40	0.012	0.00772	0.018	0.010
Selenium	5.00	0.324	50.0	12.5	8.71	17	11
Zinc	388	0.446	388	388	158	388	221

B-IV Summary of Permit Effluent Limitations

As discussed in Section B-I of this appendix, technology-based and water quality-based limits have been applied to the Outfall 001discharges. The following table offers Outfall 001 permit limits and their bases.

Table B- 7: Outfall 001 Effluent Limits

Parameter	Units	Daily Maximum		Monthly Average	
		Effluent Limit	Basis for Limit	Effluent Limit	Basis for Limit
Cadmium	µg/L	3.7	Chronic WQS	1.4	Chronic WQS
Copper	µg/L	52	Acute WQS	21	Acute WQS
Lead	µg/L	18.3	other[a]	8.1	other[a]
Mercury	µg/L	0.018	Chronic WQS	0.010	Chronic WQS
Selenium	µg/L	17	Chronic WQS	11	Chronic WQS
Zinc	µg/L	388	Acute WQS	221	Acute WQS
pH	mg/L	6.5 to 10.5	TBEL	NA	NA
TSS	mg/L	30	TBEL	20	TBEL
Flow	2.418 billion gallons per year				TBEL
WET	TU_c	12.2	Toxicity	9.7	Toxicity

a. Based on the chronic WQS and Department-prescribed methodology, the calculated limits are 34 and 11 µg/L. However in a letter dated May 8, 2017, TAK requested that the more stringent limits from the 2010 permit be retained in this permit.

APPENDIX C. MIXING ZONE ANALYSIS CHECKLIST

Mixing Zone Authorization Checklist

based on Alaska Water Quality Standards (2003)

The purpose of the Mixing Zone Checklist is to guide the permit writer through the mixing zone regulatory requirements to determine if all the mixing zone criteria at 18 AAC 70.240 through 18 AAC 70.270 are satisfied, as well as provide justification to authorize a mixing zone in an APDES permit. In order to authorize a mixing zone, all criteria must be met. The permit writer must document all conclusions in the permit Fact Sheet; however, if the permit writer determines that one criterion cannot be met, then a mixing zone is prohibited, and the permit writer need not include in the Fact Sheet the conclusions for when other criteria were met.

Criteria	Description	Resources	Regulation	MZ Approved Y/N
Size	Is the mixing zone as small as practicable? - Applicant collects and submits water quality ambient data for the discharge and receiving waterbody (e.g. flow and flushing rates) - Permit writer performs modeling exercise and documents analysis in Fact Sheet at: ► Section 5.4 Mixing Zones - describe what was done to reduce size.	•Technical Support Document for Water Quality Based Toxics Control •Fact Sheet, Appendix C • DEC's RPA Guidance • EPA Permit Writers' Manual	18 AAC 70.240 (a)(2) 18 AAC 70.245 (b)(1) - (b)(7) 18 AAC 70.255(e) (3) 18 AAC 70.255 (d)	**Y**
Technology	Were the most effective technological and economical methods used to disperse, treat, remove, and reduce pollutants? **If yes**, describe methods used in Fact Sheet at Section 5.4 Mixing Zones. Attach additional documents if necessary.		18 AAC 70.240 (a)(3)	**Y**

Criteria	Description	Resources	Regulation	MZ Approved Y/N
Low Flow Design	**For river, streams, and other flowing fresh waters.** - Determine low flow calculations or documentation for the applicable parameters. Justify in Fact Sheet	• Fact Sheet Section 5.4	18 AAC 70.255(f)	**Y**
Existing use	Does the mixing zone…			
	(1) partially or completely eliminate an existing use of the waterbody outside the mixing zone? **If yes, mixing zone prohibited.**		18 AAC 70.245(a)(1)	**Y**
	(2) impair overall biological integrity of the waterbody? **If yes, mixing zone prohibited.**		18 AAC 70.245(a)(2)	**Y**
	(3) provide for adequate flushing of the waterbody to ensure full protection of uses of the waterbody outside the proposed mixing zone? **If no, then mixing zone prohibited.**		18 AAC 70.250(a)(3)	**Y**
	(4) cause an environmental effect or damage to the ecosystem that the Department considers to be so adverse that a mixing zone is not appropriate? **If yes, then mixing zone prohibited.**		18 AAC 70.250(a)(4)	**Y**
	Does the mixing zone…			

Criteria	Description	Resources	Regulation	MZ Approved Y/N
Human consumption	(1) produce objectionable color, taste, or odor in aquatic resources harvested for human consumption? **If yes, mixing zone may be reduced in size or prohibited.**		18 AAC 70.250(b)(2)	Y
	(2) preclude or limit established processing activities of commercial, sport, personal use, or subsistence shellfish harvesting? **If yes, mixing zone may be reduced in size or prohibited.**		18 AAC 70.250(b)(3)	Y
Spawning Areas	Does the mixing zone…			
	(1) discharge in a spawning area for anadromous fish or Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon? **If yes, mixing zone prohibited.**		18 AAC 70.255 (h)	Y
Human Health	Does the mixing zone…			
	(1) contain bioaccumulating, bioconcentrating, or persistent chemical above natural or significantly adverse levels? **If yes, mixing zone prohibited.**		18 AAC 70.250 (a)(1)	Y

Criteria	Description	Resources	Regulation	MZ Approved Y/N
	(2) contain chemicals expected to cause carcinogenic, mutagenic, tetragenic, or otherwise harmful effects to human health? **If yes, mixing zone prohibited.**			**Y**
	(3) Create a public health hazard through encroachment on water supply or through contact recreation? **If yes, mixing zone prohibited.**		18 AAC 70.250(a)(1)(C)	**Y**
	(4) meet human health and aquatic life quality criteria at the boundary of the mixing zone? **If no, mixing zone prohibited.**		18 AAC 70.255 (b),(c)	**Y**
	(5) occur in a location where the Department determines that a public health hazard reasonably could be expected? **If yes, mixing zone prohibited.**		18 AAC 70.255(e)(3)(B)	**Y**
Aquatic Life	Does the mixing zone…			
	(1) create a significant adverse effect to anadromous, resident, or shellfish spawning or rearing? **If yes, mixing zone prohibited.**		18 AAC 70.250(a)(2)(A-C)	**Y**
	(2) form a barrier to migratory species? **If yes, mixing zone prohibited.**			**Y**
	(3) fail to provide a zone of passage? **If yes, mixing zone prohibited.**			**Y**

Criteria	Description	Resources	Regulation	MZ Approved Y/N
	(4) result in undesirable or nuisance aquatic life? **If yes, mixing zone prohibited.**		18 AAC 70.250(b)(1)	**Y**
	(5) result in permanent or irreparable displacement of indigenous organisms? **If yes, mixing zone prohibited.**		18 AAC 70.255(g)(1)	**Y**
	(6) result in a reduction in fish or shellfish population levels? **If yes, mixing zone prohibited.**		18 AAC 70.255(g)(2)	**Y**
	(7) prevent lethality to passing organisms by reducing the size of the acute zone? **If yes, mixing zone prohibited.**		18 AAC 70.255(b)(1)	**Y**
	(8) cause a toxic effect in the water column, sediments, or biota outside the boundaries of the mixing zone? **If yes, mixing zone prohibited.**		18 AAC 70.255(b)(2)	**Y**
Endangered Species	Are there threatened or endangered species (T/E spp) at the location of the mixing zone?If yes, are there likely to be adverse effects to T/E spp based on comments received from USFWS or NOAA. If yes, will conservation measures be included in the permit to avoid adverse effects? **If yes, explain conservation measures in Fact Sheet. If no, mixing zone prohibited.**	Applicant or permit writer requests list of T/E spp from USFWS prior to drafting permit conditions.	Program Description, 6.4.1 #5 18 AAC 70.250(a)(2)(D)	**Y**