



Eversource Energy Seacoast Reliability Project Jet Plow Trial Summary Report

Revised

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Executive Summary

Eversource Energy (Eversource) is proposing to construct a 12.9 mile transmission project to improve the electrical reliability in the Seacoast region of New Hampshire. Eversource's Seacoast Reliability Project (SRP) will involve burying three cables approximately 1 mile across Little Bay north of Adams Point within a corridor previously identified as "Cable Area" on navigation charts. The cables will be installed along most of the route across Little Bay using a jet plow (also called a jet sled). The project was approved by the NH Site Evaluation Committee on January 29, 2019, and by the US Army Corps of Engineers on July 3, 2019. As required by both the SEC and the Corps, Eversource conducted a trial of the jet plow along a portion of the planned installation route for the SRP in Little Bay on September 9, 2019. Based on the requirements from DES's recommendations (Condition 60b) and extensive discussion with DES, there were four main purposes for the trial:

- to enable Durocher, the marine contractor, to develop a good understanding of how the jet plow performs in the site-specific conditions;
- to conduct water quality monitoring under cable installation conditions to demonstrate ability of the project to adhere to water quality standards;
- to determine how well the model predicts the sediment plume; and
- to determine if any additional sediment suspension reduction measures are needed to help ensure surface water quality standards will be met.

Key findings during the trial included:

- Durocher Marine was able to test the ability of the jet plow to achieve required burial depths
- Crossing of the western tidal flat was achieved while pumping minimal volumes of water through the jet plow
- Turbidity levels remained below the exceedance threshold, or BSAL, of 13 and 14 NTUs (10 NTUs above background on the tidal flats and channel, respectively) at all sampling field stations throughout the trial
- Total suspended solids were low throughout the trial never exceeding 44 mg/L, and were largely at or below the levels predicted by the plume model. One exceedance at Station 24 was ephemeral, returning to below the model prediction by the next measurement.
- There were no exceedances of chronic or acute toxicity levels for ammonia or dissolved arsenic. There was one exceedance of the acute toxicity level for dissolved copper (during ebb tide in a bottom sample at Station 17, a southern boundary station), but the average over three samples collected at surface, mid-depth and bottom at this time was below both the acute and the chronic toxicity level and collections before and after this sample were all below the chronic toxicity level.

Overall, the results of the jet plow trial indicate that the sediment plume model predictions were conservative and that installation of the cables using the jet plow can be accomplished in a manner that will not compromise the water quality of Little Bay.

Certain recommendations emerged from the assessment of the results of the jet plow trial:

- Station 23 should be moved approximately 400 ft east of its current location to the edge of the channel because the drone footage indicated that the plume was concentrated in this area.
- Crossing the western tidal flat at the average advancement rate of 5.6 ft/min achieved during the trial, which produced a minor plume, is recommended for cable installations. By starting the installation at slack high tide, the cable can be laid in the tidal flat in approximately six hours during ebb tide.
- Waiting until the following day to lay the cable across the channel would allow flexibility in timing for this portion of the installation. Based upon the water quality monitoring results for the jet plow trial and the prior modeling, the approved mixing zone boundary is appropriate for installation during either ebbing or flooding tide.

1 Introduction

Eversource Energy's (Eversource) Seacoast Reliability Project (SRP) is a 12.9 mile transmission project from the Madbury substation in Madbury to the Portsmouth substation in Portsmouth designed to improve the electrical reliability in the Seacoast region of New Hampshire. The SRP involves the burial of three cables approximately 1 mile across Little Bay north of Adams Point within a corridor previously identified as "Cable Area" on navigation charts. The cables will be installed along most of the route across Little Bay using a jet plow (also called a jet sled). The project was approved by the NH Site Evaluation Committee on January 29, 2019 and by the US Army Corps of Engineers on July 3, 2019. While jet plow technology has been used extensively worldwide, it has not been used in New Hampshire. Impacts anticipated for the jet plow installation have been described in several project documents associated with Eversource's permit application review with the SEC (Normandeau 2016; RPS 2016, 2017). The primary effect from jet plowing will be release of sediments into the water column creating a turbidity plume that will move with the tides and with the progress of installation along the route. The maximum modeled extent of the sediment plume from the two rates of crossing is shown in Figure 1. Tidal circulation in Little Bay was incorporated into the sediment dispersion modeling and is a major factor determining the dimensions and movement of the plume. The model predicted that the sediment plume would move with the tides as the jet plow traversed the bay and would be ephemeral at any given time and location. As a result, impacts from the plume on biota in Little Bay are expected to be negligible.

Cable installers commonly incorporate a trial run of the jet plow into their project plans. Every project area presents different conditions in terms of water depth, sediment characteristics, and tidal conditions that can affect the efficiency of the jet plow. Conducting a trial run gives the installer a better understanding of how the jet plow will behave under site specific conditions than can be obtained otherwise. During the trial run, the installer can determine the advance rates and water jet volumes necessary to adequately install the cable, and evaluate the effects of different advance rates and changing water volume through the jets prior to cable placement.

NH DES's Permit Condition 60b stipulates that Eversource provide a plan for the jet plow trial at least 90 days prior to the actual trial (approved by DES Sept 5, 2019), further stipulating that water quality be monitored during the trial run and that cable installation by jet plow cannot proceed until NHDES has reviewed and accepted the results of that monitoring. Condition 60b specifically states:

Condition 60b: Jet Plow Trial Run

If the SEC determines that jet plowing should be allowed for submarine cable installation in Little Bay (instead of other alternatives such as horizontal directional drilling), and that a jet plow trial run (without cable) should be conducted prior to installation of the submarine cable (as recommended by NH DES in a letter dated February 28, 2018 to the SEC if jet plowing is the selected alternative), the Applicant shall, unless otherwise authorized by NH DES, comply with the following:

- *At least 90 days prior to the trial, the Applicant shall submit a Jet Plow Trial Plan (JPTP) to NHDES for approval and then implement the approved plan. The JPTP shall describe in detail how and when the trial and monitoring will be conducted and results reported.*
- *At least 14 days prior to the scheduled start of submarine cable installation in Little Bay the Applicant shall submit a jet plow trial run summary report to the SEC and NH DES that addresses the following:*
 - *how well the model predicts the sediment plume ;*
 - *how well the water quality monitoring plan works (including communication between the monitors and jet plow operators) and what if, any, modifications to the plan are necessary;*
 - *water quality monitoring results within the mixing zone and at the boundary;*
 - *how measures taken to reduce sediment suspension due to jet plowing (including, but not limited to jet plow speed and pressure reductions) impact water quality;*
 - *if results suggest that cable installation by jet plowing is likely to meet NH surface water quality standards; and*
 - *if any additional sediment suspension reduction measures are needed to help ensure surface water quality standards will be met.*
 - *Installation of submarine cable in Little Bay shall not proceed until authorized by NH DES and the SEC.*

The jet plow trial was conducted on September 9, 2019. Durocher Marine was the jet plow operator, and Normandeau Associates conducted the water quality monitoring. An Independent Environmental Monitor (IEM) representing DES was on the jet plow barge and in communication with Normandeau's On Shore Field Coordinator throughout the jet plow trial. This document provides the results of the jet plow trial, summarizes the water quality monitoring results, and recommends several changes in procedure for cable installation and improving water quality monitoring.

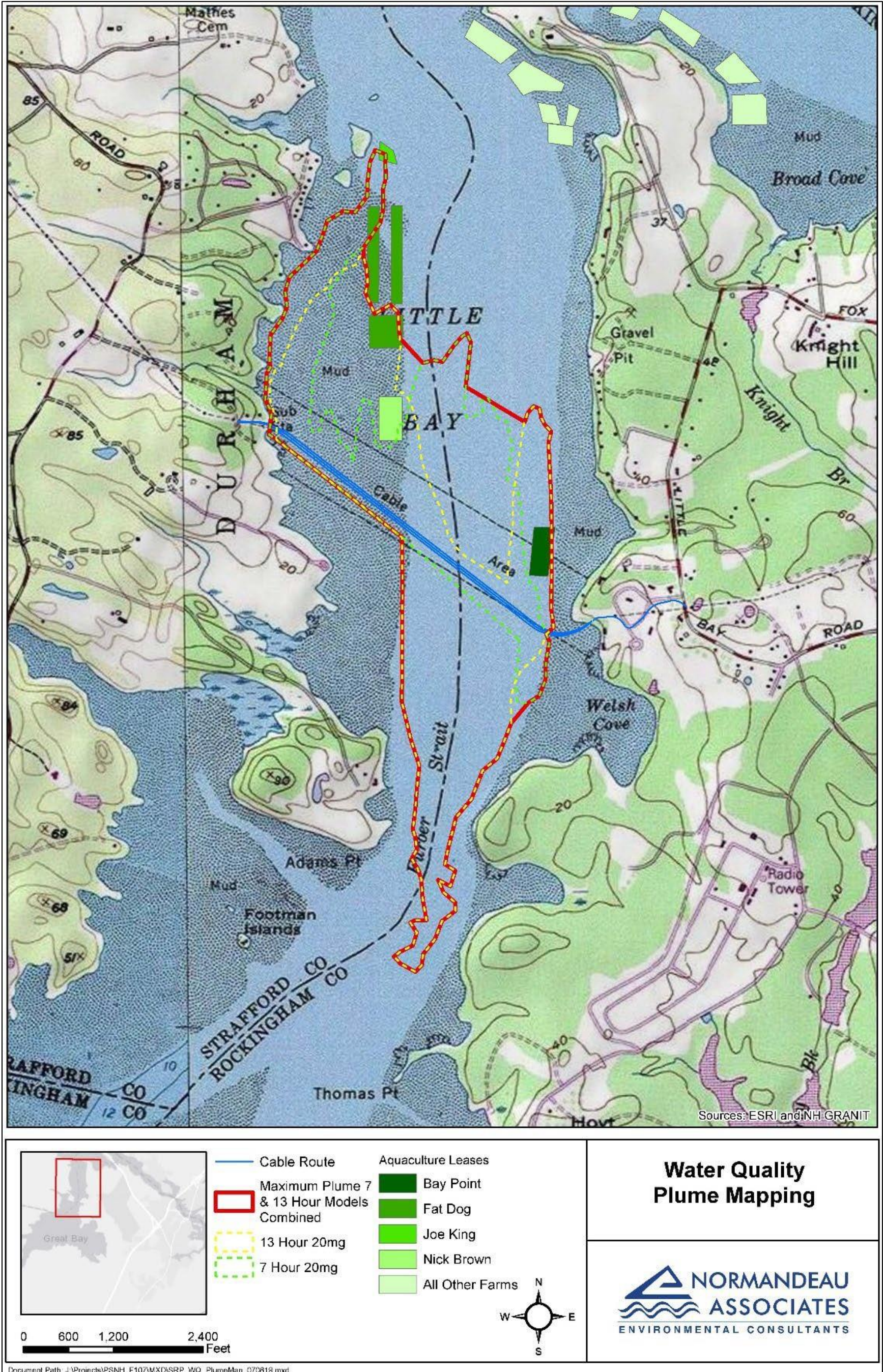


Figure 1. SRP modeled extents of sediment plumes for 7 and 13 hour jet plow crossings, and the estimated mixing zone.

2 Methods

Location of the jet plow trial was selected to represent conditions anticipated for cable installation both on the western tidal flat and in the channel, as described in the Water Quality Monitoring Plan (Normandeau 2019). Approximately half of the 1000 ft long route was on the tidal flat and half was in the channel (Figure 2). The operational goals, agreed upon with NHDES and IEM, were to allow Durocher to become familiar with the site-specific operation of the jet plow and for Normandeau to conduct the same water quality monitoring that would take place during an actual cable installation. During operations, Normandeau would report elevated turbidity levels to the IEM, but no alteration to the jet plow operation would be required, provided that the monitoring data collected by handheld instruments demonstrated that turbidity exceedances were not occurring at the mixing zone boundary and that turbidity at the nearfield stations was not exceptionally high.

The tides on September 9, 2019, were estimated based on an average of US Harbors tide data for Dover Point¹ and the Squamscott River².

2.1 Jet Plow Procedures

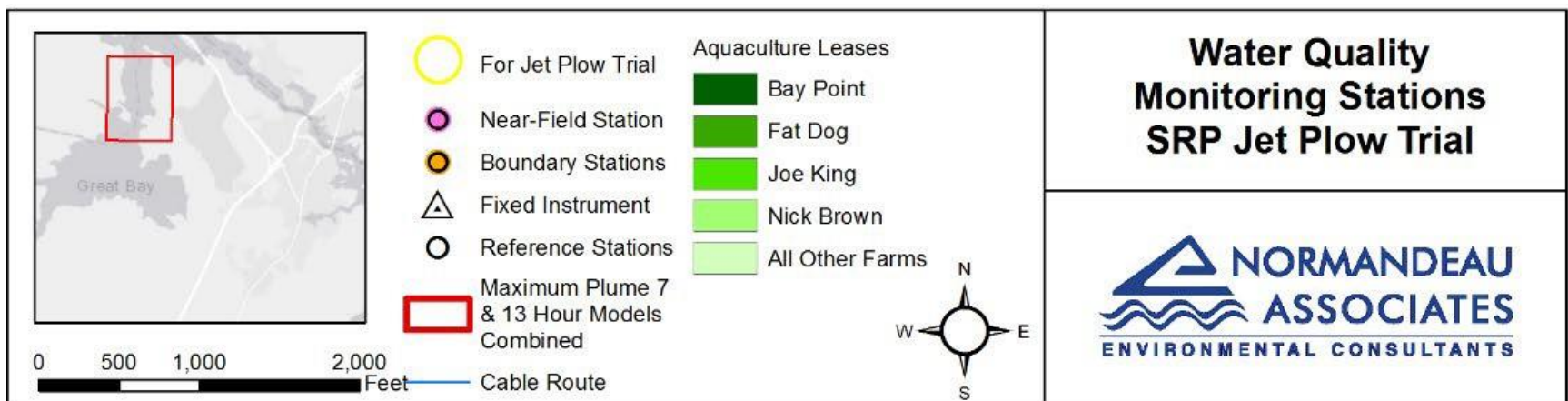
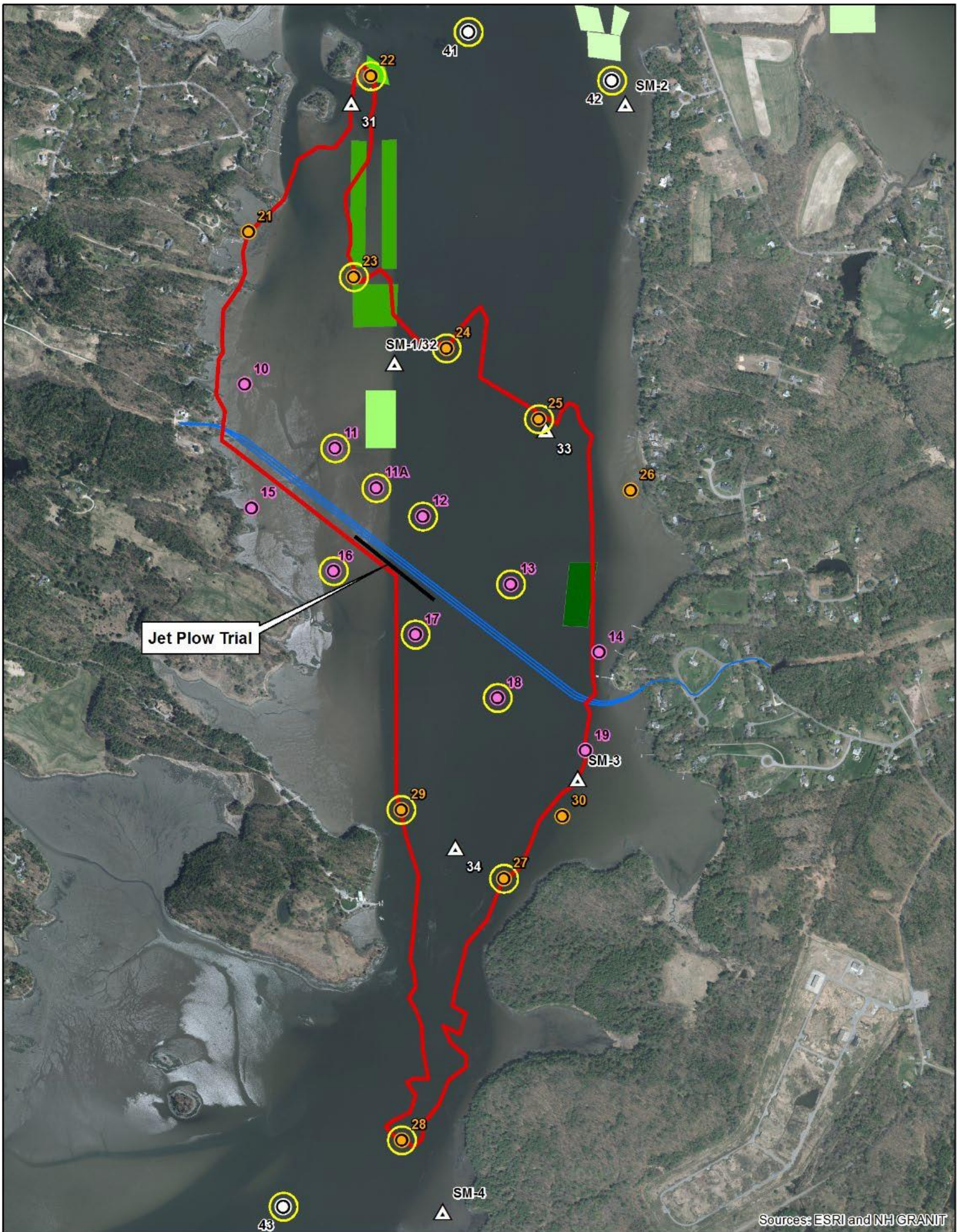
Durocher placed the jet plow on the western tidal flat at the planned starting point for the trial on Sunday September 8 at high tide. The cable lay barge (referred to as the Barge elsewhere in this section), pump barge, dive barge, support barge and several tugs were moored or anchored on spuds offshore overnight. Durocher positioned the jet plow sled on the tidal flat approximately 580 ft west of the channel on the western edge of the jet plow trial path (Figure 2).

As described in the Jet Plow Trial Plan, the five foot blade of the jet plow has nozzles along its face. Durocher plugged the uppermost 20 inches of jets so that the upper sediment layers are less fluidized than lower sediments.

Throughout the jet plow trial, Durocher operated the jet plow, cable lay barge and support vessels in the same manner planned for a cable installation.

¹ <https://www.usharbors.com/harbor/new-hampshire/dover-point-nh/tides?tide=2019-09>

² <https://www.usharbors.com/harbor/new-hampshire/squamscott-river-nh/tides?tide=2019-09>



Document Path: J:\Projects\PSNH_F107\MXD\SRP_WQ_MonitoringSta_091619.mxd

Figure 2. Location of the jet plow trial selected to represent conditions anticipated for cable installation both on the western tidal flat and in the channel.

Water quality monitoring was conducted as described in the Water Quality Monitoring Plan (Normandeau 2019).

The sampling effort for the jet plow trial is shown on Table 1. Sampling was conducted at up to three depths (near-surface, mid-depth, near-bottom) at the near-field, boundary and reference stations (Figure 2). At each station, Normandeau staff used hand-held YSI ProDSS meters to measure turbidity, temperature, salinity, dissolved oxygen and pH (occasionally to support assessment of ammonia data). Water samples were also collected by pumps for analysis of total suspended solids (TSS, the parameter used in the plume modeling), nitrogen species (nitrate, nitrite, ammonia, total Kjeldahl nitrogen), dissolved and total copper and arsenic. Fecal coliform samples were also collected in near-surface waters.

As the trial progressed, Durocher encountered a minor programming issue in communications with the jet plow that required diver intervention to ensure the proper blade angle on the jet plow for the deeper burial depth required in the channel compared to the tidal flat. This delayed the trial approximately 1 hour so that completion of the trial, including anchor moves, extended into flood tide. The onshore field coordinator reassigned two of the sampling crews to ensure that additional stations south of the work area were sampled starting at low slack.

The crew sampling the southern nearfield stations added Station 18. The crew assigned to the reference stations stopped sampling Stations 41, 42 and 43 so that they could focus on the southern boundary stations (27, 28 and 29).

As expected, water depths at tidal flat stations became too shallow to continue sampling as the tide fell. Sampling was reduced to two depths (near-surface and near-bottom) 1 hour after the jet plow started at stations 11, 11a, 16 and 23 and to one depth (near-bottom) 2 hours after the jet plow started. Stations 16 and 23 could not be sampled at all 2 hours-after-start event; Station 11 and 11a could not be sampled 3 hours-after-start event. Sampling rounds continued until 18:45, near the end of the fourth anchor move. The last samples were collected at the southern stations at 19:10. A total of 191 sets of water samples (including one duplicate and one field blank sample from each boat) and in situ measurements were collected.

Sampling crews arrived at their assigned monitoring stations by 10:30 and collected baseline data using hand-held meters, recording results on field data sheets. Then crews collected water for laboratory analysis. Water was pumped into 5 sample containers, containing preservatives as appropriate, provided by Enthalpy Laboratories and stored on ice in coolers; chains of custody were filled out. Fecal coliform samples were collected from near-surface following the NHDES protocols. Specific sampling methods are described in Normandeau (2019).

Baseline (pre-jet plow) sampling was conducted at half of the stations at about 10:30 and the other half of the stations at about 11:30 (Table 1). The jet plow was activated at 12:33 and release of bubbles followed by a localized sediment plume was observed by the drone. The barge began pulling the jet plow through the sediment at 12:39. Downcurrent sampling crews were alerted to postpone the first sample collection until the drone footage showed that the

visible plume approached the nearfield stations. Water quality sampling during jet plow operation was initiated at 12:45.

Normandeau had four boats conducting water quality sampling: two south of the barge and two north of the barge. A fifth boat was used as a courier boat to run water samples ashore for delivery to a field trailer. On shore, the sample jars were screened for complete labels and matched against the chain of custody form before releasing to Enthalpy Analytical Laboratory. Because of the short hold time for fecal coliform samples, water samples were collected from the sample boats every 2 hours, and Enthalpy made three trips to the site to collect samples over the course of the jet plow event. On the return trip to the site, the courier boat delivered fresh sample jars and ice to the water quality samplers.

Table 1. Sampling Effort by Station during Jet Plow Trial

Station ^a	Time (hrs) relative to start of jet plow -start 2 hours after high tide								
	Pre-jet plow		Active jet plow (12:39-16:26) In-Field Calibration (14:25-15:37)				Anchor move (16:26-19:20)		
Tide Stage	Slack High (10:35)	1 ebb	2 ebb	3 ebb	4 ebb	5 ebb	Slack Low (16:42)	1 Flood	2 flood
Time relative to start of trial (hrs) ^b	-2 10:30	-1 11:30	0 12:45	1 13:45	2 14:45	3 15:45	4 16:45	5 17:45	6 18:45
Number of Depths Sampled (Samples Collected) ^c									
Boundary									
(north) 22	3		3	3	3				
23		2	2	1					
24	3			3	3	3	3	3	3
25		3			3	3	3	3	3
(south) 27							3	3	3
28							3	3	3
29							3	3	3
Nearfield									
(north) 11	2		2	1	1				
11a		2	2	1	1				
12	3			3	3	3	3	3	3
13		3			3	3	3	3	3
(south) 16	2		2	1					
17		3		3	3	3	3	3	3
18							3	3	3
Reference									
41	3				3			3	
42		3		2					
43	3		3					3	
No. Sta. sampled	7	6	6	9	9	9	10	11	9

^a Highlighted stations are located on tidal flats

^b Start times shown are the beginning of each round of sampling, which took approximately 30-60 min.

^c In addition to the samples listed, each sampling crew collected at least one replicate sample for each parameter for the jet plow trial as well as a field blank for the lab parameters.

2.1.1 Boundary Station Action Levels

Per DES guidance, Boundary Station Action Levels (BSAL) were calculated for establishing the exceedance values for turbidity. The methodology is described in the Water Quality Monitoring Plan (Normandeau 2019).

The BSAL is based on all of the data collected in each of the tidal flats and channel regardless of collection depth. Reference data from tidal flat stations were grouped by measurement increments or bins (Bin 1 = 0-10 NTUs; Bin 2 = 10.1-20 NTUs; etc.). Within each bin, the data were arranged in descending order, regardless of collection depth and the value of the 90th percentile (i.e., the value that 10% of the reference data points exceeds) was calculated in Excel. The BSAL for that bin equals the 90th percentile value plus 10 NTUs. On the day of the jet plow trial, the appropriate bin for determining the BSAL for each habitat was to be based on the average of all measurements taken that day for each habitat prior to the start of in-water work associated with jet plowing. For example, if the average turbidity of all tidal flat stations measured prior to in-water work associated with jet plowing on Day 1 is 3.2 NTU, the 90th percentile from Bin 1 (0-10 NTUs) for tidal flats would be used for all tidal flat stations on Day 1 and the BSAL would be equal to the 90th percentile rounded to the nearest digit plus 10 NTU. The 90th percentile and BSAL for the channel stations would be calculated in a similar manner. The same procedure for determining the appropriate bin, 90th percentile and BSAL will be repeated each day that monitoring occurs.

2.1.2 QA/QC

Quality control for the jet plow trial entailed a combination of:

- Work plan review,
- training,
- instrument calibration,
- collection of field duplicates and field blanks, and
- paper work review during the field activities.

Training began with a meeting among the plan developers and the five crew team leaders (held on August 27, 2019) to discuss the rationale behind the work scope and the specific field procedures. The field crew team leaders were provided with copies of the Water Quality Monitoring Plan and field datasheet instructions in advance of the meeting. On the morning of the jet plow trial, the entire field team (consisting of the boat captain and two crew members for each of four sampling boats, the boat captain and crew member for the courier boat, the onshore field coordinator, the onshore sample coordinators, and the plan developers) was assembled three hours before baseline sampling was scheduled to begin for a tailboard meeting that covered health and safety and sampling protocols. Each survey boat was provided with a hard copy of the monitoring plan.

Hand-held meters were calibrated the night before the jet plow trial at the Hampton NH field office. While standard parameters such as DO, salinity, temperature, etc. are typically easily collected with meters, turbidity meters can be temperamental; therefore, the crew was

provided with turbidity standards in the event of irregular or suspicious data. In fact, it became necessary to recalibrate the hand held meters during the jet plow trial because several of the meters reported negative values. See Section 2.2.1 for further details. All hand held meters were recalibrated after the jet plow trial. Calibration graphs are maintained for each calibration.

Dataloggers at the fixed stations were downloaded weekly. Starting on September 12, 2019, measurements of all parameters at the depth of the fixed sonde were made using a calibrated Aqua TROLL 600 Vented 684275 to verify the datalogger readings.

To ensure that samples were handled carefully and appropriately in the field, three types of quality control samples were collected by each boat crew: a field duplicate of each water column profile collected with the hand held meter; a field duplicate for each laboratory analyte from a single depth; and a field blank. The results for the field duplicates and the field blanks are included in the data presented in Section 3.2. The analytical laboratory, Enthalpy, conducted their standard quality control procedures including matrix spike and matrix spike duplicates during the analysis of these water samples.

Field crews filled out chains of custody forms for the laboratory samples. These forms were reviewed by both the courier boat crew and the field sample coordinator prior to submitting to the laboratory courier. Field data sheets were reviewed by the boat crew members and then again during the data entry process.

During the monitoring events for cable installation, a member of the courier boat crew will be designated to observe each boat collect instrument profiles and water samples to confirm their adherence to sampling protocols. The courier vessel crew will also examine representative field data sheets for accuracy and completeness and examine all chains of custody for completeness. Normandeau's Quality Control Supervisor will review calibration logs for all hand held meters and data loggers.

2.1.3 In-field Turbidity Calibrations

YSI ProDSS water quality data sondes were used for the in-situ water quality measurements as per the study plan. Prior to the jet plow trial, all four YSI instruments were initially calibrated on-site by approximately 09:00. YSI instrument SN 17B103258 was accurately calibrated during the initial calibration as evident by positive turbidity readings and comparison with the calibration standards, and ultimately by the field calibration. However, turbidimeter calibration issues (negative turbidity readings) were discovered during the pre-construction sampling period, prior to initiation of the jet plow trial, with the other three YSI instruments (S/Ns 16B101219, 15F101743, and 15F101742). YSI technical support was contacted when the calibration issue was recognized and, with procedures provided by a YSI technician, the three YSI instruments were field calibrated. Due to the time required to ensure proper field calibration and to ensure a conservative approach for turbidity data analysis, turbidity data are considered valid for the time periods shown in Table 2 for the four turbidimeters.

Table 2. Start Times of Valid Turbidity Readings following In-Field Calibration of YSI Sondes

Serial Number	Meter ID Number	Sample Station Number	Turbidity data valid beginning
17B103258	FA03123	16,17,18	10:50
15F101742	FA02192	11,11a,12,13	12:11
16B101219	FA02610	41,42,43,27,28,29	13:50
15F101743	FA02191	22,23,24,25	14:45

The loss of these early turbidity data did not affect the ability to assess the effects of the trial. The two turbidity meters closest to the jet plow, including the near-field north stations (Stations 11, 11a and 12), and the near-field south stations (Stations 16 and 17), were fully calibrated by the start of the trial and showed no exceedances. The northern boundary station turbidity meter (Stations 22 through 25) was fully calibrated by 14:45 and did not show exceedances. These data are supported by the TSS results, which were generally low (see section 3.2.1). Post-trial calibration checks of the turbidity meters indicated no calibration errors or the need for further data quality control measures. Instrument calibration for other water quality parameters (depth, dissolved oxygen, pH, temperature, and salinity) were performed and verified in accordance with the manufacturer’s specifications.

2.1.4 Fixed Stations

Seven data loggers were installed throughout the bay to collect continuous data for turbidity, temperature, salinity, pH, and water depth. The stations are shown on Figure 2. The meters were In Situ AquaTroll 600, programmed to capture data every 15 minutes. The data loggers were downloaded weekly and re-calibrated each week. Stations SM-1 through SM-4 were deployed with the shellfish tissue sampling cages beginning on August 6, 2019. Fixed stations 31, 33 and 34 were installed on September 4, 2019, six days before the jet plow trial as prescribed in the water quality monitoring plan. The data were downloaded on September 11, 2019, three days after the jet plow trial. Turbidity plots for six of the seven data loggers are provided in Appendix C. Water samples for measuring TSS were collected at all seven stations, to compare to the turbidity readings. Those data are not available for this summary report. The turbidity sensor at Station 31 failed on September 6, therefore no turbidity data are available from this station for the jet plow period. A replacement sonde was installed after the problem was discovered during the next week’s download.

2.1.5 Drone Flights

A drone was used to track the visual extent of the plume during the jet plow trial. The drone was flown approximately hourly starting at about 12:00 and halting at about 18:00 when light became too low for reasonable imagery and maintaining visual contact.

The drone is a DJI Phantom 4 Pro, approximately 3.2 pounds, with a range of over 1.3 miles (with visibility) and a flight time of 25 minutes. It is GPS-enabled with a hover accuracy of 1.5 m,

carries both video and still cameras, and has a still image resolution of about 20M pixels. The images can be viewed in real time from shore to direct the drone’s position, and are stored with GPS coordinates and a time stamp. The drone time stamp is 1 hour later than the actual time.

The drone operator was an FAA Certified Part 107 Remote Pilot in Command from Doucet Survey LLC. Due to proximity to Pease Air Force base, Doucet received authorization from Air Traffic Control at the Portsmouth International Airport at Pease to fly up to 150ft AGL (Above Ground Level). At height of 150 feet AGL, the image width is approximately 225 feet.

The drone footage was processed by Doucet and provided to Normandeau in the form of still images, videos, and breadcrumb trails showing the flight path of the drone as it tracked the plume. All have coordinates for positioning over the jet plow operation. The breadcrumb trails were used to approximate the location and extent of the visible sediment plume. Because the drone often overshot the width of the plume, these should be considered conservative.

2.2 Laboratory Procedures

Sample coolers were collected from the sampling crews at regular intervals during the day. They were taken to an on-site trailer where chains of custody were reviewed and finalized. Enthalpy Laboratories picked up the samples at regular intervals and transported the samples to their Hampton NH laboratory in a refrigerated van.

Samples were logged into the laboratory’s tracking system and processing was initiated immediately. Laboratory protocols are shown on Table 3.

Table 3. Analytical Methods for Water Quality Samples

Analyte	RL	MDL	Units	Method
Total Nitrogen	NA	NA	mg/L as N	Calculation
TKN	0.5	0.3	mg/L as N	SM4500-NC
NO ₃	0.05	0.005	mg/L as N	SM4500-NO3 F
NO ₂	0.05	0.005	mg/L as N	SM4500-NO3 F
NH ₃	0.1	0.06	mg/L as N	SM-4500NH3
TSS	1	0.6	mg/L	SM2540D
Copper, dissolved	0.5	0.03	µg/L	EPA 200.8
Copper, total	0.5	0.09	µg/L	EPA 200.8
Arsenic, dissolved	0.5	0.02	µg/L	EPA 200.8
Arsenic, total	0.5	0.13	µg/L	EPA 200.8
Fecal coliforms	1	1	MPN/100mL	Colilert-18

3 Results

3.1 Jet Plow Operation

The following is based on the times given in the Operator's Log in Appendix B provided by Durocher Marine. On September 9, the Durocher team along with the IEM assembled on their assigned vessels at 10:00 h to prepare for the trial. For this location, slack high tide was estimated for 10:35 h (6.1 feet), and low tide at 16:42 (+1.0 feet), using an average of the difference between tides at Dover Point and Squamscott River based on US Harbors tide charts. Because the position of the jet plow was east of the start location upon which the plume model was based for the cable laying, the jet plow trial was planned to start two hours after high slack to mimic the tide stage expected during an actual cable installation.

The jet plow water supply pump was started at idle speed at 12:33 supplying 1300 gallons per minute (GPM). At 12:39 the barge took up tension on the jet plow, and began advancing it across the tidal flat. At 12:48 the jet plow water supply was increased to 2425 GPM and at 13:15 jet plow water supply was increased to 2968 GPM. This was a slower speed than the 10 ft/min than was modeled for the 7-hour crossing (RPS 2017), but was necessary due to the higher-than-anticipated sediment resistance at depth. Winching the jet plow forward continued until 14:25 at 2968 GPM with a final distance on the tidal flat of 580 ft at an average rate of 5.6 ft/min. Once the jet plow reached the edge of the channel, the advancement method was shifted to the cable lay barge pulling against the forward anchors. This required an in-field calibration to confirm the jet plow was set to the proper depth and towing tensions were accurate. In field calibration was performed on the jet plow from 14:25 to 15:37 with the jet plow water supply at 1300 GPM.

Starting at 15:37 the cable lay barge began advancing the jet plow by using the barge's four-point anchor system. Sediments in the channel required 2425 GPM to achieve burial depth. The jet plow achieved burial depths for a distance of 457 ft at a rate of 9.7 ft/min. At 16:26, jet plowing stopped. From 16:26 to 19:20 the 4 anchors were moved.

3.2 Water Quality Monitoring

Water quality monitoring was conducted at seven nearfield, seven boundary and three reference stations on September 9, 2019, before, during, and after the jet plow trial and anchor change. Timing for occupation of each station was planned to ensure that sampling occurred prior to, during and after the times that the suspended sediment plume was expected to be present.

Reference data includes results from all stations sampled prior to the start-up of the jet plow as well as results from Stations 41, 42, and 43 throughout the trial. Reference data are added to the baseline data file to increase the reliability of comparisons of data collected during cable installation activities to the natural conditions in Upper Little Bay.

3.2.1 Turbidity and Total Suspended Solids

BSAL

BSAL were calculated for the tidal flat and the channel separately. Because the turbidity meters needed to be recalibrated immediately before the jet plow began, the turbidity data collected prior to that time had to be discarded, therefore were unavailable for calculating the BSAL. Instead we used the data from the upstream stations, which while limited, provided data that ranged between 0.4 and 3.8 NTU. The stations on the tidal flat had an average of 2.4 NTU, and a 90th percentile of 3. The results in the channel were very similar, with an average of 2.1 and a 90th percentile of 4. Adding 10 to the 90th percentile yielded a BSAL of 13 for the tidal flat and 14 for the channel.

Field Station Turbidity

During the jet plow trial, turbidity values at the near-field stations ranged from 0.2 to 9.4 with no apparent pattern associated with depth. At the boundary stations, turbidity ranged from 0.4 to 5.3, with no exceedances of State turbidity standards observed. Water quality sampling ended after the anchor changes were completed because no turbidity exceedances had been observed for two hours at any stations, consistent with the approved monitoring plan.

Fixed Station Turbidity

At the fixed stations, the turbidity data ranged between 0 and 5 NTU at five of the six stations actively recording for the 7.5 hours during the jet plow trial. At the sixth station, SM1/32, located at the Fat Dog oyster farm leases, most of the turbidity readings were between 0 and 5 NTU, five were between 5 and 19 NTU, and eight exceeded 19 NTU (23-317 NTU). The exceedances were sporadic, and most were separated by periods of background NTU. The exception were three readings above 19 NTU that recorded between 1:04 and 1:34 (range 22-234), before returning to background levels.

Station 23, located northwest of fixed station SM1/32 exhibited low TSS and turbidity levels during this time period in contrast to Station SM1/32. While a visible plume was present based on drone footage and field observations, the plume did not reach this location until approximately 1:30, and at no point in time did the field data indicate an exceedance of the turbidity standard for more than one-hour

Graphs of the fixed station turbidity readings indicate that this station and several others show periods of elevated turbidity throughout the week both pre and post-jet plow, which suggests other factors independent of the jet plow are involved (see Appendix C). The field crews have noted heavy wrack loads (debris, algae, eelgrass) accumulated on this sonde and tether during the weekly data downloads. This could contribute to the erratic readings observed at this site by both physically blocking the probe and by weighing it down closer to the sediment during peak tidal flows.

Total Suspended Solids (Field Stations only)

Total suspended solids (TSS) concentrations ranged from 4.3 to 44 mg/L throughout the jet plow trial (Table 4). Prior to the start-up of the jet plow, concentrations of TSS ranged from 4.3

to 16 mg/L across all stations and depths, averaging 7.7 mg/L. After the jet plow was started, TSS ranged from 4.5 to 44 mg/L and averaged 11.9 mg/L with a median value of 9.6 mg/L.

Table 4. Summary of Total Suspended Solids (TSS, mg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Total Suspended Solids (mg/L) ^a					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	4.8	--	6.4	13	--	7.9-23
	11a	9.5	--	8	13	--	6.3-15
	12	16	8.2	7.1	5.8-21	5.6-23	6.4-19
	13	7.9	8.2	5.9	7.4-24	7-23	6.7-12
Nearfield South	16	7.8	--	6.4	10		5.1-9.5
	17	6.6	7.5	5	5.2-13	5.6-44	7.8-26
	18	--	--	--	9.7-13	5.2-8.8	5.9-25
Boundary North	22	6.7	12	8.1	5.2-13	5.4-9.6	7.7-10
	23	4.3	--	13	5.9		4.5-16
	24	4.4	8.1	7.3	5.5-40	6.1-21	7.2-26
	25	4.6	7.6	11	7.6-13	6.6-24	5.2-8.6
Boundary South	27	--	--	--	8.1-12	5.2-11	8.8-14
	28	--	--	--	8.6-25	6.8-15	11-18
	29	--	--	--	6.3-13	9.5-13	12-15
Reference	41	6.6	6.8	10	7.1	7.5	10
	42	7.1	--	7.1	--	--	5
	43	4.6	8.4	4.7	13	9.7	6.9
Field Blanks	n/a	<1					

At the reference stations, TSS ranged from 4.6 to 10 mg/L prior to start-up of the jet plow and from 5 to 13 mg/L during the active trial. Concentrations at the nearfield stations ranged from 4.8 to 16 mg/L prior to the start-up and from 5.2 to 44 mg/L (average of 12 mg/L) during the active trial. At the boundary stations, concentrations prior to the start-up ranged from 4.3 to 13 mg/L and during the active trial concentrations ranged from 4.5 to 40 mg/L (averaging 10.8 mg/L).

The majority (136 out of 152 samples) of the concentrations during the active trial fell below 20 mg/L, with 14 collections between 20 and 30 mg/L and two collections ≥ 40 mg/L. See more detailed plots in Appendix F.

Comparison of Modeled and Observed TSS

The observed TSS results can be compared to those predicted by the hydrodynamic model by determining the modeled TSS at each station and comparing to the maximum observed TSS on the day of the jet plow trial (Table 5). The hydrodynamic modelers, RPS Inc, calculated the predicted TSS at each station for both the 7-hour and the 13-hour crossing (Appendix F); this

comparison uses the higher number at each station. The maximum observed TSS was taken from each station over all depths. For most of the stations, the maximum observed TSS was considerably less than the modeled TSS, ranging from 1 to 209 mg/l.

At four stations (Stations 16, 24, 25 and 28), the observed TSS during the jet plow trial exceeded the modeled TSS by 5 to 15 mg/l. At Station 24 where the observed TSS exceeded the modeled TSS by 15 mg/l, the levels were below the modeled value the hour before, and were 1 mg/l higher than modeled the hour after. When background TSS levels are factored in by using the reference stations (Stations 41, 42, and 43; maximum TSS values of 7 to 13), most of the exceedances are eliminated. Station 24 remains slightly elevated over the predicted TSS for only the one reading.

Based upon the comparison of the results of the jet plow trial and the hydrodynamic model, the predictions generated by the model were generally very conservative or on target. Where observed TSS exceeded modeled TSS, the observed TSS was only slightly higher than what was modeled and dissipated quickly.

Comparison of TSS and Turbidity

As part of the Water Quality Monitoring Plan, Eversource proposed to compare turbidity and TSS measurements to evaluate whether turbidity threshold could be identified for determining the need for collection of laboratory samples at the mixing zone boundary stations. To conduct this evaluation, companion turbidity and TSS data collected at each of the monitoring stations were graphed and regressed against each other. Figure 3 shows that at the low levels of turbidity found during the jet plow trial, the relationship between these two parameters is weak ($r^2 = 0.0013$) and provides no basis for identifying such a threshold. Two factors likely affect this. One is that turbidity levels were very low throughout, which limits the ability to draw relationships. The other is that turbidity was measured in situ, followed by water sample collection for TSS, meaning slightly different water “parcels” were sampled for the two parameters.

3.2.2 Dissolved Oxygen

Dissolved oxygen levels consistently exceeded the instantaneous minimum concentration of 5.0 mg/L for Class B waters (Table 6, see plot in Appendix G). Values ranged from 6.97 to 9.36 mg/L prior to the start-up of the jet plow. During the jet plow trial, values ranged from 7.09 to 10.18 mg/L. Based upon the jet plow trial run, the submarine installation will not noticeably increase dissolved oxygen levels in Little Bay.

Table 5. Modeled vs Maximum Observed TSS at the Monitoring Stations. Bolded Values Indicate Stations where the Maximum Observed Exceeded the Modeled TSS

Location	Station	Total Suspended Solids (mg/l)		
		Modeled	Max Observed	Difference
Nearfield North	11	96	23	73
	11a	56	15	41
	12	186	24	162
	13	66	24	42
Nearfield South	16	3	10	-7
	17	134	44	90
	18	234	25	209
Boundary North	22	20	13	7
	23	18	16	2
	24	25	40	-15
	25	17	22	-5
Boundary South	27	15	14	1
	28	18	25	-7
	29	24	15	9
Reference	41	NA	10	
	42	NA	7	
	43	NA	13	

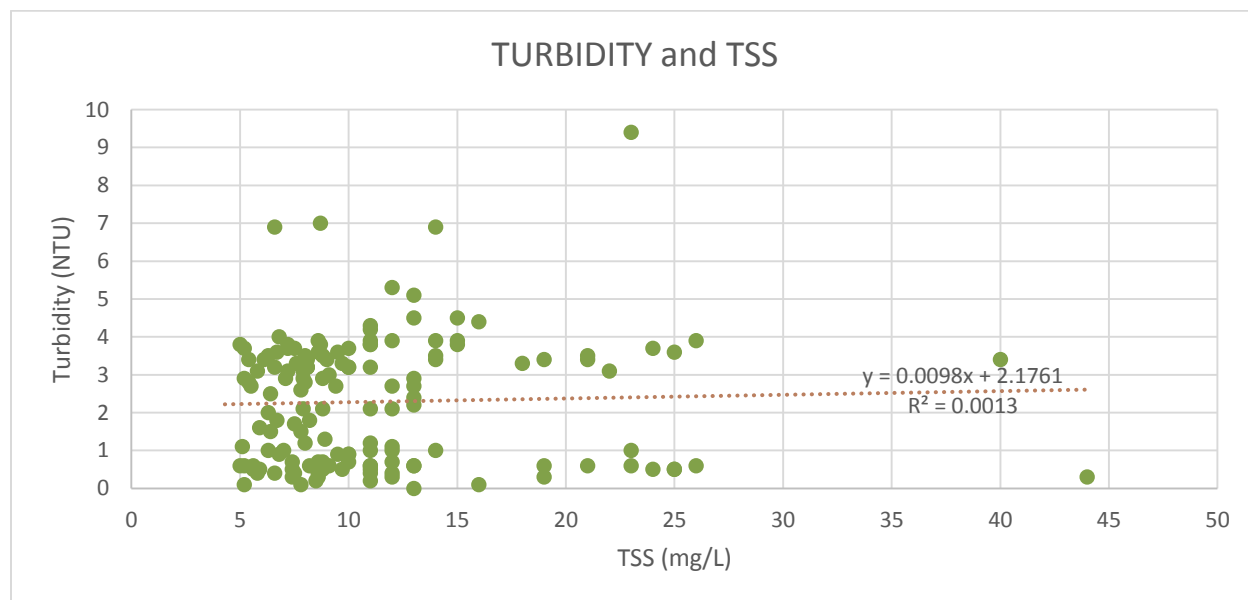


Figure 3. Comparison of TSS for all field samples during SRP jet plow trial.

Table 6. Summary of Dissolved Oxygen (DO, mg/L) Collected with Hand Held Instruments in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Dissolved Oxygen (mg/L) ^a					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	9.07	--	8.97	9.06	--	9.09-9.28
	11a	8.79	--	8.78	9.18	--	9.13-9.15
	12	8.85	8.79	8.71	9.14-10.2	9.12-10.05	9.08-9.99
	13	9.36	8.96	8.82	9.39-10.12	9.21-10.26	8.48-10.16
Nearfield South	16	8.2	--	7.94	8.11	--	8.06-8.34
	17	8.19	7.79	7.73	8.22-8.99	8.1-9.01	8.07-8.94
	18	--	--	--	8.34-9.28	8.38-9.25	8.39-9.16
Boundary North	22	7.46	7.36	7.19	8.25-7.47	7.27-7.55	7.09-7.44
	23	7.19	--	7.19	7.17	--	7.23-7.34
	24	7.18	6.99	6.97	7.17-7.97	7.33-8.05	7.32-7.96
	25	7.42	7.26	7.08	7.15-8.07	7.51-8.18	7.5-8.18
Boundary South	27	--	--	--	8.72-9.15	8.68-9.13	8.53-8.94
	28	--	--	--	8.46-9.36	8.61-9.01	8.49-8.81
	29	--	--	--	8.59-9.05	8.34-8.87	8.36-8.78
Reference	41	7.89	7.51	7.48	8.24	7.95	7.56
	42	7.91	7.95	7.98	8.25	--	8.31
	43	8.23	8.22	8.15	8.7	8.21	8.06

3.2.3 Temperature, Salinity and pH

Temperature, salinity and pH data collected in situ using hand held meters is presented in Appendix G. Temperature ranged from 17 to 18.9°C prior to the startup of the jet plow and 17.5 to 19.7°C during and after the trial.

Salinity ranged from 31.31 to 36.58 ppt prior to the jet plow start up and from 30.32 to 36.43 ppt during the jet plow trial.

The pH ranged from 7.77 to 7.88.

3.2.4 Nitrogen Species

Samples were analyzed for the inorganic nitrogen species (nitrate [NO₃], nitrite [NO₂] and ammonia [NH₃]), total Kjeldahl nitrogen, and from these analyses, total nitrogen was calculated.

Concentrations of nitrates were generally below quantification limits (0.05 mg/L). The four exceptions were samples from stations 17 and 18, three of which occurred during the active trial. These results ranged from 0.07 to 0.64 mg/L. The highest value was found in the near-bottom sample from station 17 at 1545 when the tide was ebbing, at which point station 17 was approximately 500 feet upstream of the work.

Nitrite concentrations never exceeded the quantification limit of 0.05 mg/L.

Ammonia concentrations never exceeded the quantification limit of 0.1 mg/L. At the salinities, temperatures and pH levels observed during the sampling, the quantification limit was well below both the chronic and acute toxicity levels identified in New Hampshire’s Surface Water Quality Standards (Env-Wq 1703.29 and Env-Wq 1703.32). Ammonia criteria become more stringent as temperature and pH increase and as salinity decreases. Assuming a pH of 8, salinity of 30 mg/L and temperature of 20°C, acute and chronic ammonia criteria are 7.3 and 1.1 mg NH₃/L.

Total Kjeldahl nitrogen represents organic nitrogen (Table 7; Appendix G). Before the trial started, the majority of the TKN values were below the reporting limit of 0.5 mg/L although some values ranged as high as 0.617 mg/L. During the trial values ranged from below the reporting limit to a high of 0.873 mg/L.

Table 7. Summary of Total Kjeldahl Nitrogen (TKN, mg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	TKN (mg/L)					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	0.617	--	<0.5	<0.5	--	<0.5-0.773
	11a	0.722	--	<0.5	<0.5	--	<0.5-0.615
	12	0.557	0.509	0.514	<0.5-0.647	<0.5-0.593	<0.5-0.873
	13	<0.5	<0.5	0.585	<0.5	<0.5	<0.5-0.617
Nearfield South	16	<0.5	--	0.512	<0.5	--	<0.5
	17	0.444	0.77	<0.5	<0.5	<0.5-0.545	<0.5-0.843
	18	--	--	--	<0.5-0.591	<0.5-0.556	<0.5
Boundary North	22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	23	<0.5	--	0.965	<0.5	--	<0.5-0.556
	24	<0.5	<0.5	<0.5	<0.5-0.726	<0.5	<0.5-0.742
	25	<0.5	<0.5	<0.5	<0.5-0.705	<0.5-0.584	<0.5-0.595
Boundary South	27	--	--	--	<0.5-0.609	<0.5	<0.5-0.592
	28	--	--	--	<0.5-0.669	<0.5-0.642	<0.5-0.605
	29	--	--	--	<0.5-0.663	<0.5-0.632	<0.5-0.594
Reference	41	<0.5	<0.5	<0.5	0.517	<0.5-0.741	<0.5
	42	<0.5	--	<0.5	--	--	<0.5
	43	<0.5	<0.5	<0.5	<0.5	0.529	0.582
Field Blanks	n/a	<0.5					

Total nitrogen is the sum of TKN and ammonia; values for the factors contributing to TN that were below detection limit were treated as zero in the formula. Values ranged from <0.5 to 0.965 mg/L among samples collected before the jet plow was started with the majority of these

samples falling below the reporting limit (Table 8, Appendix F). During the jet plow trial activity, total nitrogen ranged from <0.5 to 0.873 mg/L and again the majority of the samples fell below the reporting limits. Total nitrogen values fell within the range reported by Wood and Trowbridge (2014) for Great Bay estuary tributaries. Based upon the jet plow trial run, the submarine installation will not significantly increase nitrogen levels in Little Bay.

Table 8. Summary of Total Nitrogen (TN, mg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	TN (mg/L)					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	0.617	--	<0.5	<0.5	--	<0.5-0.773
	11a	0.722	--	<0.5	<0.5	--	<0.5-0.615
	12	0.557	0.509	0.514	<0.5-0.647	<0.5-0.593	<0.5-0.873
	13	<0.5	<0.5	0.585	<0.5	<0.5	<0.5-0.617
Nearfield South	16	<0.5	--	0.512	<0.5	--	<0.5
	17	0.554	0.77	<0.5	<0.5	<0.5-0.545	<0.5-0.843
	18	--	--	--	<0.5-0.591	<0.5-0.556	<0.5
Boundary North	22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	23	<0.5	--	0.965	<0.5	--	<0.5-0.556
	24	<0.5	<0.5	<0.5	<0.5-0.726	<0.5	<0.5-0.742
	25	<0.5	<0.5	<0.5	<0.5-0.705	<0.5-0.584	<0.5-0.595
Boundary South	27	--	--	--	<0.5-0.609	<0.5	<0.5-0.592
	28	--	--	--	<0.5-0.669	<0.5-0.642	<0.5-0.605
	29	--	--	--	<0.5-0.663	<0.5-0.632	<0.5-0.594
Reference	41	<0.5	<0.5	<0.5	0.517	<0.5-0.741	<0.5
	42	<0.5	--	<0.5	--	--	<0.5
	43	<0.5	<0.5	<0.5	<0.5	0.529	0.582
Field Blanks	n/a	<0.5					

3.2.5 Dissolved Metals

Water samples were analyzed for dissolved and total copper and arsenic. There were no exceedances of either acute or chronic water quality criteria for dissolved arsenic at any time during the survey. Prior to the start-up of the jet plow, there were no exceedances of either acute or chronic criteria for dissolved copper. There was one nearfield sample (17B @ 13:55) during trial activity that exceeded the chronic criterion although the average over the three depths sampled was below this threshold. This occurred during the last sampling effort of the jet plow trial survey. As NHDES recommended, the field crew collected additional water samples on Thursday September 12, 2019 at two nearfield stations so that a four-day average could be computed if needed. These samples are currently being analyzed.

Dissolved arsenic values ranged from 1.4 to 1.7 µg/L among all stations sampled before the jet plow trial began and from 1.2 to 2.9 µg/L during the trial (Table 9; Appendix G). None of these values exceeded the chronic toxicity threshold of 36 µg/L or the acute toxicity value of 69 µg/L.

Dissolved copper values ranged from <0.5 to 1.8 µg/L among the samples collected prior to the start-up of the jet plow (Table 10; Appendix F). During and after activity (jet plowing, anchor changes and maneuvering barges), dissolved copper concentrations ranged from <0.5 to 7.0 µg/L. The highest value (7.0 µg/L) occurred in a near-bottom sample at southern nearfield channel Station 17 at 13:55 when the tide was ebbing, approximately one hour after jet plowing started. At 13:55, the near-bottom value exceeded the acute toxicity threshold (4.8 µg/L) however less than one hour later at 14:45, the near-bottom value was much lower (0.9 µg/L) resulting in a one-hour average was 3.95 µg/L. Dissolved copper values from near-surface and mid-depth collections at Station 17 at 13:55 were at or below the laboratory reporting limit of 0.5 µg/L however, and the average over all depths was 2.67 µg/L, below both the acute and chronic toxicity level. The next highest dissolved copper values (2.7 and 2.9 µ/L; both below the acute and chronic criterion) occurred at south nearfield channel Station 18 at 1700 (surface, early ebb) and 1900 (mid, mid-ebb), respectively. Of the 191 samples analyzed for dissolved copper, 92 were below the reporting limit and an additional 81 were <1.0 µ/L.

Additional samples were collected on September 12, 2019 at Stations 11 and 12 to support the assessment of whether the chronic toxicity criterion for dissolved copper was met. Of the five samples (surface and bottom at Station 11; surface, mid-depth and bottom at Station 12), only one sample exceeded the reporting limit. The surface sample from Station 12 had a dissolved copper concentration of 0.9 µg/L. These results confirm that the single elevated dissolved copper level observed during the jet plow trial did not result in a chronic toxicity water quality exceedance. Laboratory data for the September 12 sampling are provided in Appendix D.

Table 9. Summary of Dissolved Arsenic Concentrations (µg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Dissolved Arsenic (µg/L) ^a					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	1.6	--	1.5	1.4	--	1.2-1.5
	11a	1.6	--	1.4	1.5	--	1.4-1.6
	12	1.6	1.6	1.5	1.2-1.8	1.2-1.8	1.2-1.7
	13	1.6	1.6	1.6	1.2-1.6	1.3-1.8	1.3-1.7
Nearfield South	16	1.6	--	1.6	1.3	--	1.3-1.4
	17	1.5	1.6	1.7	1.3-1.5	1.3-1.5	1.2-1.5
	18	--	--	--	1.2-2.9	1.3-1.5	1.2-1.4
Boundary North	22	1.6	1.6	1.6	1.5-1.6	1.5	1.5-1.6
	23	1.6	--	1.5	1.5	--	1.5-1.6
	24	1.6	1.6	1.5	1.2-1.7	1.2-1.8	1.3-1.9
	25	1.6	1.6	1.5	1.5-1.8	1.4-1.7	1.4-1.6
Boundary South	27	--	--	--	1.3-1.8	1.3-1.7	1.3-1.7
	28	--	--	--	1.5-1.7	1.4-1.5	1.4-1.5
	29	--	--	--	1.4-1.7	1.4-1.8	1.4-1.8
Reference	41	1.6	1.5	1.7	1.4	1.3	1.3
	42	1.6	--	1.6	--	--	1.2
	43	1.6	1.6	1.6	1.4	1.7	1.5
Field Blanks	n/a	<0.5					

^a acute toxicity level = 69 µg/L (one-hour exposure) chronic toxicity level = 36 µg/L (four-day exposure)

Table 10. Summary of Dissolved Copper Concentrations (µg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Dissolved Copper (µg/L) ^a					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	0.6	--	1.0	<0.5	--	<0.5
	11a	<0.5	--	<0.5	<0.5	--	<0.5
	12	1.0	<0.5	<0.5	<0.5-0.7	<0.5-0.6	<0.5-0.7
	13	0.5	<0.5	<0.5	<0.5-0.6	<0.5-0.5	<0.5-0.7
Nearfield South	16	1.4	--	0.8	1.8	--	0.9
	17	1.7	0.8	1.0	<0.5-0.8	<0.5-0.8	0.5-7.0 ^b
	18	--	--	--	0.6-2.7	<0.5-2.9	0.6-1.0
Boundary North	22	1.3	<0.5	<0.5	<0.5-0.6	<0.5-1.4	<0.5
	23	<0.5	--	<0.5	<0.5	--	<0.5-1.2
	24	0.6	<0.5	<0.5	0.6-1.9	<0.5-0.7	<0.5-0.7
	25	0.5	<0.5	<0.5	<0.5-0.8	<0.5-1.0	<0.5-1.2
Boundary South	27	--	--	--	0.5-0.7	<0.5-0.6	0.5-0.8
	28	--	--	--	<0.5-0.5	<0.5-0.5	<0.5-0.6
	29	--	--	--	<0.5-0.6	0.5-0.6	0.5-1.0
Reference	41	0.5	<0.5	<0.5	0.5	<0.5-0.7	0.5
	42	<0.5	--	0.8	--	--	0.7
	43	<0.5	<0.5	1.8	0.8	0.5	<0.5
Field Blanks	n/a	<0.5-0.7					

^a acute toxicity level = 4.8 µg/L (one-hour exposure) chronic toxicity level = 3.1 µg/L (four-day exposure)

^b Station 17@ 13:55. Average over three depths was 2.67 µg/L.

3.2.6 Total Metals (Copper and Arsenic)

Criteria for copper and arsenic are expressed in terms of the dissolved fraction because it is the fraction which is more bioavailable. Total metal concentrations are useful in helping to understand significance of dissolved concentrations and as a check of the dissolved metal results (i.e., dissolved metal concentrations should always be lower than the total metal concentration).

Total copper levels ranged from 0.6 to 4.9 µ/L across all samples collected before the jet plow started operating (Table 11; Appendix G), with a mean value of 0.99 µ/L and a median of 0.8 µ/L. During the various activities undertaken for the trial, total copper ranged from <0.5 to 28.6 µ/L with a mean of 1.2 µ/L and a median value of 0.8 µ/L. Highest values were observed at northern boundary station 24 (mid-depth sample) at 19:00, at the end of the anchor moves and at northern boundary station 22 (bottom sample) at 13:45 while the jet plow was crossing the tidal flat. The next highest values were less than 20% of the peak values and most results were at least an order of magnitude lower than the peaks.

Total arsenic values ranged from 1.2 to 1.4 µg/L before the trial started and from 0.5 to 3.2 µg/L during the trial (Table 12; Appendix G). The highest value occurred near bottom at Station 11A at 14:53 soon after the jet plow completed crossing the tidal flat. With this one exception, there was little difference in total arsenic before and during the trial. Many of the total arsenic values were lower than the dissolved values. When queried, Enthalpy stated they processed all the dissolved samples on one instrument and all of the total samples on a different instrument. They found that for arsenic, the instrument used for the dissolved samples was biased high whereas the instrument for the total samples was biased low.

Table 11. Summary of Total Copper (µg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Total Copper (µ/L)					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	0.7	--	0.7	0.6	--	0.7-1.0
	11a	0.7	--	0.6	0.7	--	0.6-1.0
	12	0.9	0.7	0.9	0.6-1.1	0.6-1.7	0.6-4.3
	13	0.8	0.8	0.9	0.6-0.9	0.6-1.5	0.6-0.7
Nearfield South	16	1.5	--	0.9	0.7	--	0.7-0.9
	17	1.0	1.1	4.9	<0.5-0.8	0.6-0.8	0.6-2.8
	18	--	--	--	0.7-1.5	0.7-0.9	0.6-0.7
Boundary North	22	0.9	0.6	0.9	0.6-1.0	0.8-1.3	0.7-25.7
	23	0.7	--	0.9	0.7	--	0.6-0.8
	24	2.9	0.7	0.6	0.8-1.5	0.6-28.6	0.7-0.9
	25	0.9	0.7	0.7	0.5-1.5	0.6-0.9	0.6-0.9
Boundary South	27	--	--	--	0.6-0.9	0.6-0.8	0.6-0.8
	28	--	--	--	0.7-1.0	0.6-0.8	0.6-2.2
	29	--	--	--	0.7-0.8	0.8-2.6	0.8-1.8
Reference	41	0.7	0.6	0.8	0.8	0.7	0.7
	42	0.8	--	1.4	--	--	0.8
	43	0.7	0.6	0.9	0.6	0.8	0.9
Field Blanks	n/a	<0.5 (except one sample = 0.9)					

Table 12. Summary of Total Arsenic (µg/L) in Water Samples Collected in Little Bay during the SRP Jet Plow Trial, September 9, 2019

Location	Station	Total Arsenic (µ/L)					
		Before Trial			During Trial		
		S	M	B	S	M	B
Nearfield North	11	1.4	--	1.3	1.2	--	0.9-1.2
	11a	1.3	--	1.3	1.2	--	1.0-3.2
	12	1.3	1.3	1.2	0.8-1.2	0.9-1.1	0.9-1.3
	13	1.3	1.4	1.3	0.9-1.1	1.0-1.1	1.0-1.1
Nearfield South	16	1.3	--	1.4	1.1	--	1.1-1.2
	17	1.3	1.3	1.3	0.8-0.9	0.8-1.0	0.8-1.0
	18	--	--	--	0.8-0.9	0.8-0.9	0.8-0.9
Boundary North	22	1.3	1.4	1.2	1.1-1.2	1.1-1.2	1.0-1.2
	23	1.2	--	1.3	1.1	--	1.1-1.3
	24	1.3	1.1	1.2	0.9-1.2	0.8-1.2	0.9-1.2
	25	1.3	1.2	1.2	0.9-1.2	0.8-1.3	0.8-1.3
Boundary South	27	--	--	--	0.9	0.8-1.0	1.0
	28	--	--	--	0.9-1.1	1.0-1.1	1.0
	29	--	--	--	0.8-1.0	0.8-1.1	0.9-1.0
Reference	41	1.3	1.1	1.2	1.0	0.8	1.0
	42	1.3	--	1.2	--	--	0.9
	43	1.3	1.5	1.3	1.2	1.1	1.2
Field Blanks	n/a	<0.5					

3.2.7 Fecal Coliforms

New Hampshire’s fecal coliform standards for tidal waters used for growing or taking of shellfish for human consumption are based on the National Shellfish Program guidance (USFDA 2017). The SRP activities do not fall neatly into any of the sampling schemes addressed in the guidance document. This states that the fecal coliform median or geometric mean most probably number (MPN) shall not exceed fourteen (14) per 100 ml and not more than 10 percent of the samples shall exceed an MPN of 43 MPN per 100 for a five-tube decimal dilution test; 49 MPN per 100 ml for a three-tube decimal dilution test; or 28 MPN per 100 ml for a twelve-tube decimal dilution test.

Prior to the start-up of the jet plow, fecal coliforms generally fell below the reporting limit of 10 MPN/100 ml. The two exceptions were one sample at nearfield station 11a and reference station 43; results for both samples were 20/100 ml. The median value for the pre-trial samples was below the reporting limit of 10 MPN per 100 ml.

After the trial started, only six out of the 57 samples collected had fecal coliform levels above the quantification limit. One was at boundary station 24 at 10/100 ml. The rest were at nearfield stations and all were 10/100 ml except the sample from station 13 which was 20/100

ml. The median value for samples collected during jet plow activity was below the reporting limit of 10 MPN per 100 ml and no samples exceeded the most stringent threshold of 28 MPN per 100 ml. There is no indication, therefore, that use of the jet plow introduced fecal coliforms into the water column from the sediment.

3.3 Drone Results

Drone flights occurred approximately hourly, beginning approximately 1 hour before the jet plow trial began. Once the jet plow trial began at 12:39, the drone flew to the jet plow, and then flew north-south over the visible turbidity plume generated by the jet plow to track the length of the plume, and east-west in a zig zag pattern to document its width (Figure 4). While difficult to compare precisely, the general shape and extent of the observed plume are very similar to the plume predicted by the sediment dispersion model for Hour 3 and 4 for the 13 hour crossing rate (Appendix A). Figure 5 shows the visible plume extending beyond the predicted boundary at 15:00, but neither the field sampling nor the fixed station data indicated consistently high turbidity or TSS within or beyond the mixing zone boundary. Figure 6 depicts the visible plume in the channel on 15:41, as the jet plow is nearing the end of the trial. Figure 7 is a composite of drone flight paths defining the plume throughout the jet plow trial beginning at 13:17 and extending to 16:11.

The dimensions of the plumes varied with tides. Table 13 provides the estimated average width, the maximum width and the length of each plume. During each flight the drone captured nadir & oblique photos and videos in areas of interest, using Neutral Density Polarizing filters to reduce glare on the water’s surface. Representative photos are presented in Appendix E.

Table 13. Estimated Dimensions of Plumes Tracked by Drone through the Jet Plow Passage

Start Time for Drone	Average Width of Plume (ft)	Maximum Width of Plume (ft)	Length of Plume from Jet Plow Track (ft)
13:17	334	424	1950
13:42	317	452	2425
14:15	146	503	4073
14:59	242	661	5554
15:41	236	339	525
16:11	316	373	1280

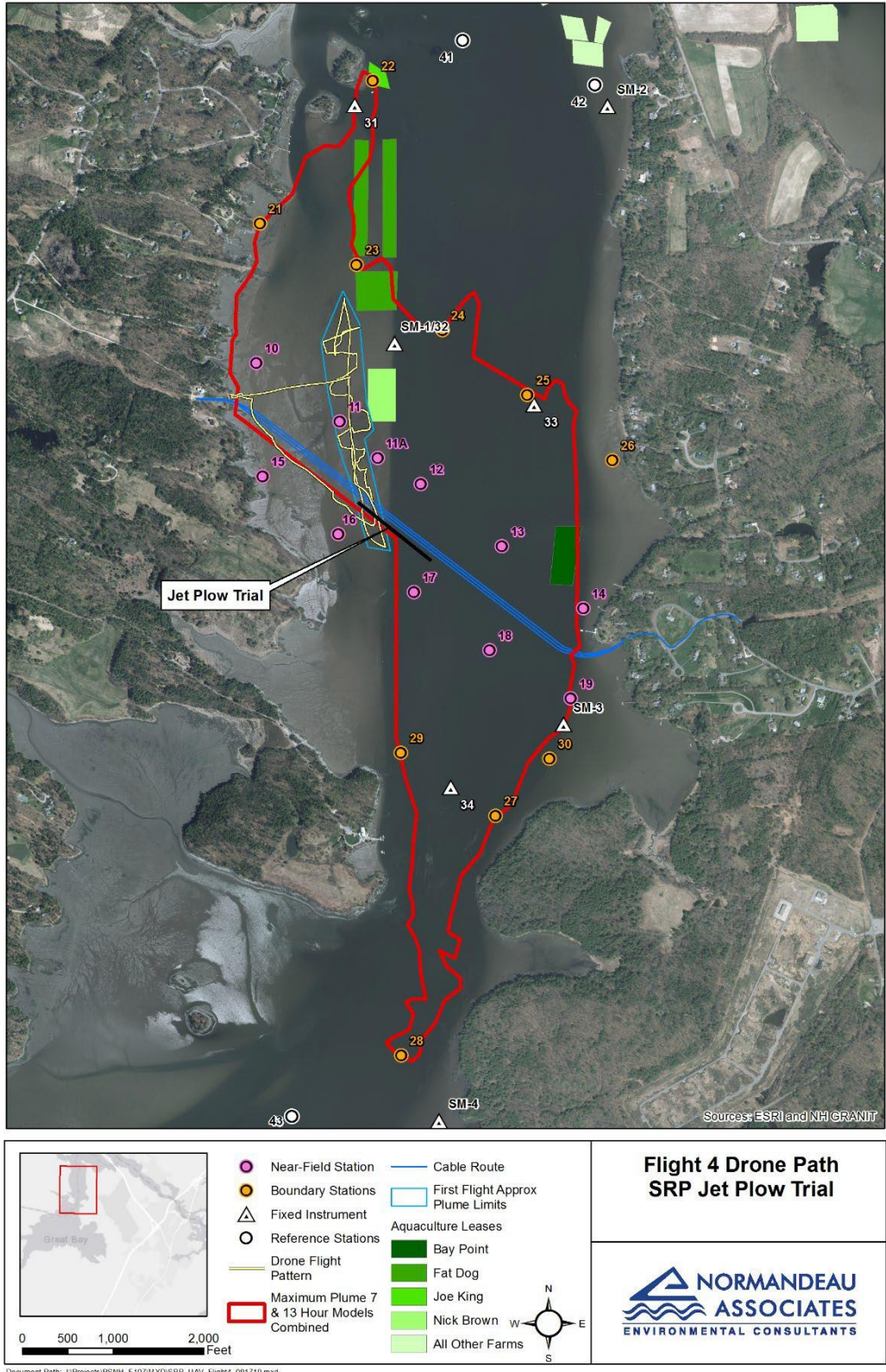
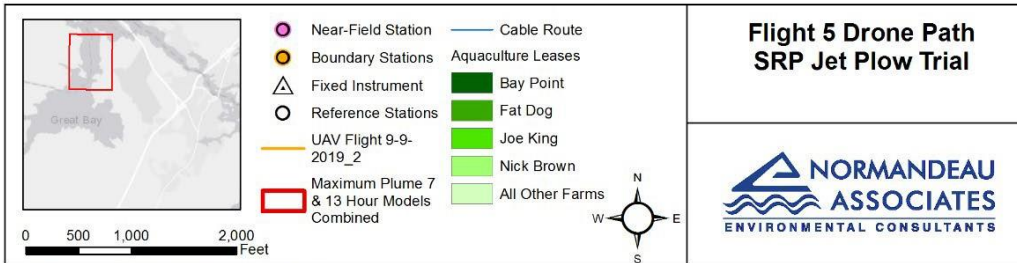
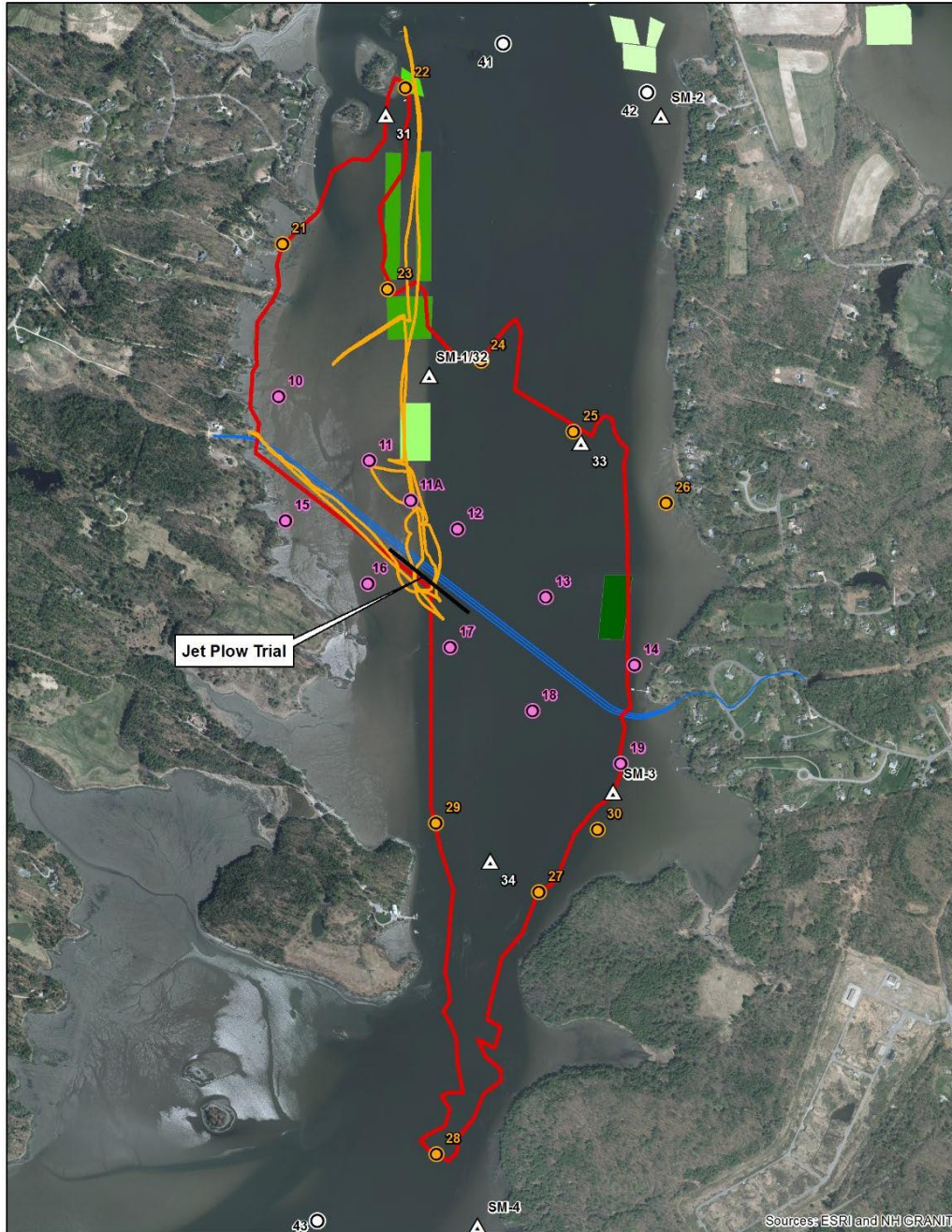


Figure 4. Drone path that approximately traces the extent of the visible plume beginning at 13:43.



Document Path: J:\Projects\PSNH_F107\MXD\SRP_UAV_Flight5_091719.mxd

Figure 5. Drone path that approximately traces the extent of the visible plume beginning at 14:59.

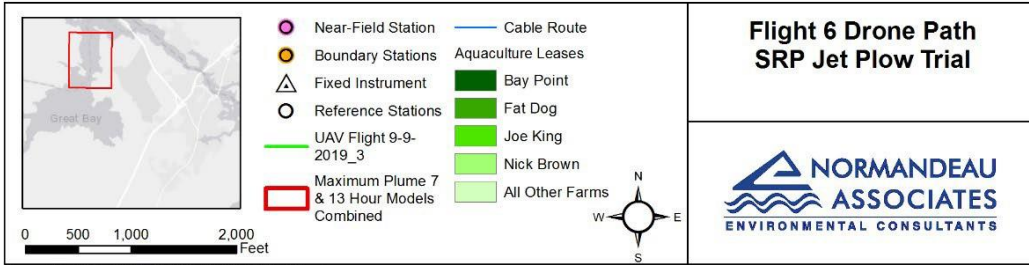
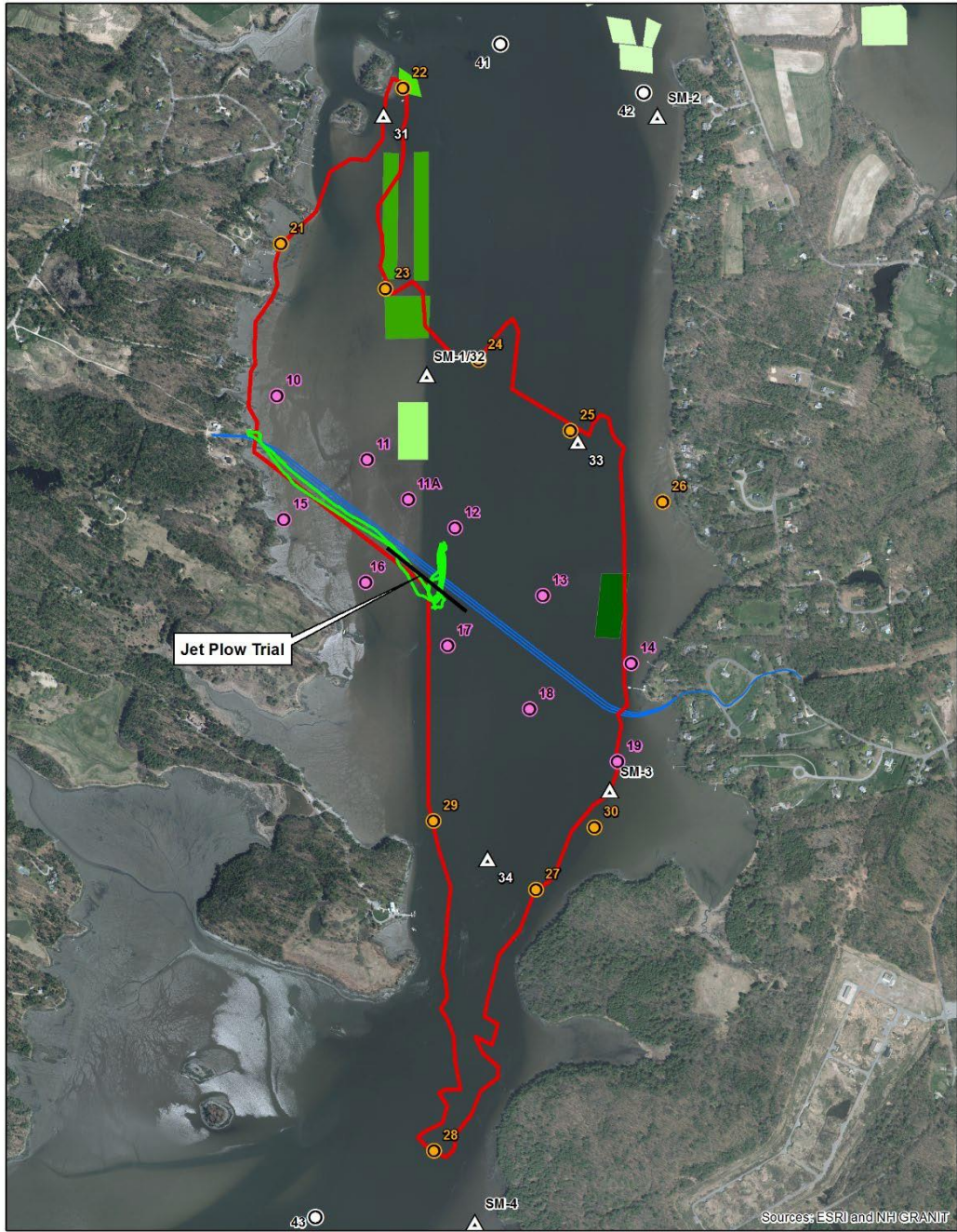
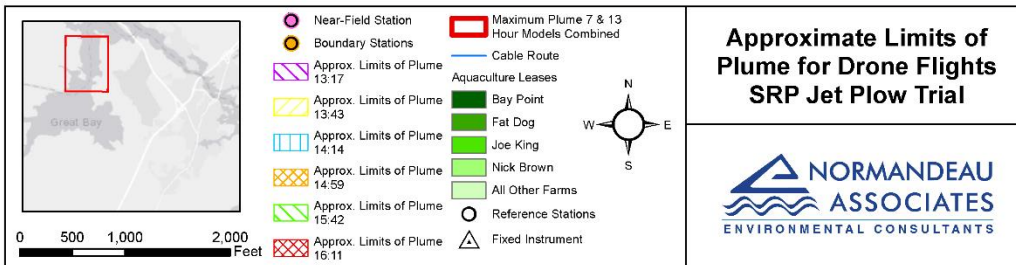
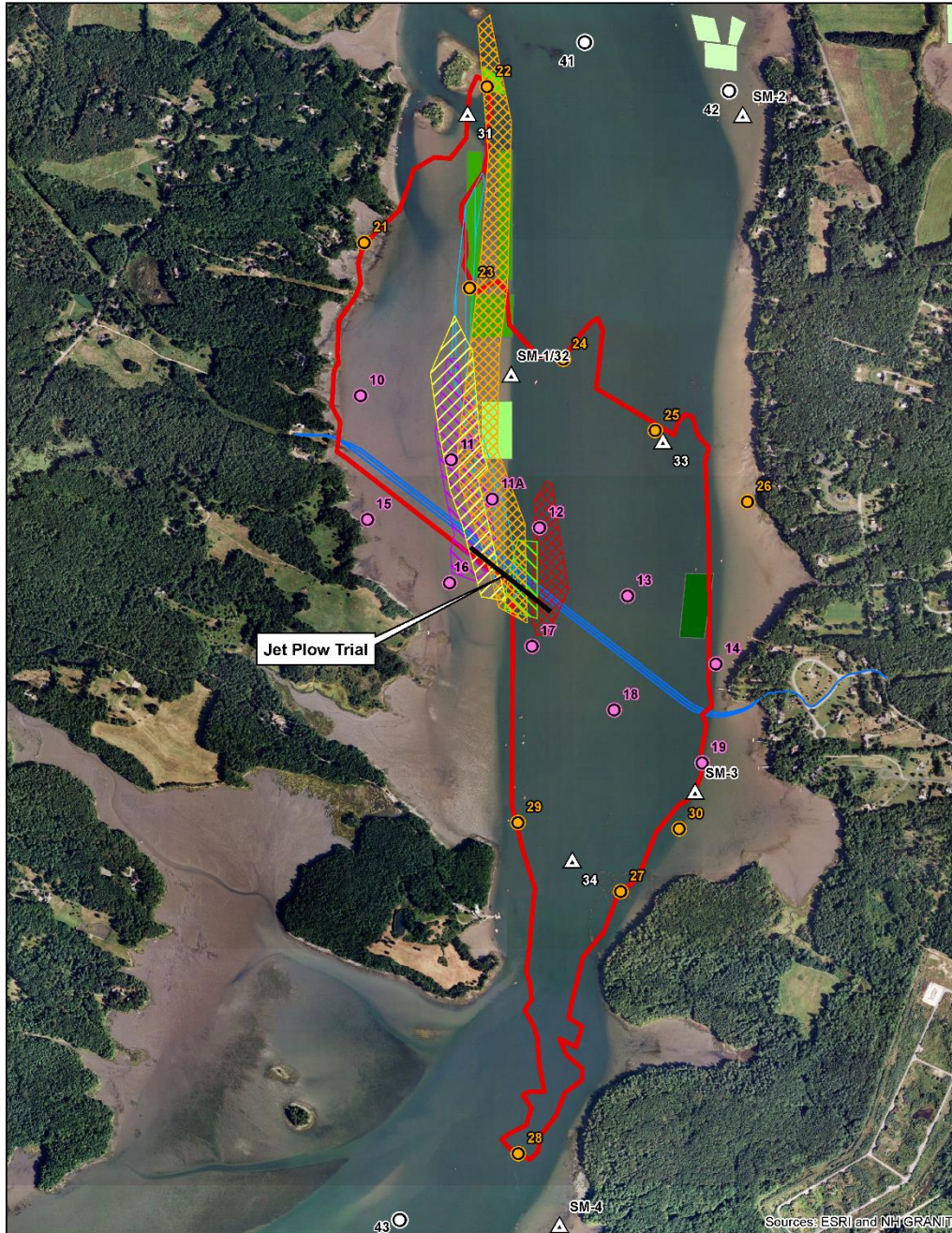


Figure 6. Drone path that approximately traces the extent of the visible plume beginning at 15:41.



Document Path: J:\Projects\PSNH_F107\W\X\SRP_UAV_Plume_100219.mxd

Figure 7. Combined drone paths tracing the extent of the visible plume from approximately 13:17 to 18:11.

4 Conclusions

Overall, most of the water quality parameters measured both in situ and through laboratory testing during the trial run did not change substantially between the pre-trial collections and those made during and after the jet plow started operating. The only exception was one elevated dissolved copper level south of the trial route during maximum ebb tide when the tide was running north. While a plume from the jet plow trial was visible in the drone imagery, turbidity levels did not reach or exceed BSAL during the hourly sampling at the boundary stations. Based on the turbidity and total suspended sediment values, the model accurately predicted the approximate boundaries of the mixing zone.

In combination, water quality measurements, water chemistry and images from the drone survey collected during the jet plow trial generally confirm the predictions of the plume modeling. The model basically characterized the plume as narrow, elongated and ephemeral. The drone data confirmed those characteristics for much of the tide cycle.

Total suspended sediment (TSS) data also showed that the model predictions were generally conservative. Most of the TSS results were well below the concentrations predicted in the nearfield and, although the plume reached the mixing zone boundary (as evidenced in the drone videos), concentrations at the boundary stations were near or below the 20 mg/L above background level indicated by the model. The exception is Station 24 where TSS was elevated to 40 mg/l for one measurement. Factoring in the estimated background TSS, this station had returned to below 20 mg/l by the next measurement.

Execution of the monitoring plan was successful. Communication with the IEM and barge through marine radio was very effective. Supplementary cell phone communication connection was difficult at times with some of the vessels. This was handled by communicating with the sample courier boat to make sure that necessary messages were conveyed to the appropriate vessels. Normandeau is working on a more direct solution to this issue.

Normandeau provided one boat to cover each of four zones within the trial area: north boundary stations, north nearfield stations, south nearfield stations, and reference stations. The trial was planned to be completed before the end of ebb tide, however, the transition of the jet plow from the tidal flat to the channel caused a delay that resulted in extending the trial for approximately 2 hours. Normandeau responded by adding stations to each of the three impact area boats and shifting the boat sampling the reference stations to the south boundary stations at low slack tide. Each of the boats was responsible for sampling at three, and occasionally four, stations on an hourly basis, an achievable level of effort. For an actual installation Normandeau plans on having an additional boat. The monitoring plan stipulates that if the turbidity threshold is exceeded at a boundary station, resampling with the hand-held meter should occur at 15 minute intervals until the values drop below the threshold. This situation did not occur during the trial. Should a turbidity threshold exceedance occur during an installation, Normandeau will instruct the crew of the courier boat (that will be equipped with all necessary sampling equipment) to assist, ensuring that all scheduled sampling will also continue.

Durocher initially operated the jet plow on the tidal flat at idle but had to increase water pressure due to higher-than-anticipated sediment resistance. The cable lay barge was anchored in the channel and the plow was pulled to the barge using a winch. Durocher was satisfied with the advancement rate (5.77 ft/min), although this is slower than the 10 ft/min that was modeled. Per agreement with NHDES on August 1, 2019, the goal of the jet plow trial was to allow Durocher to fully understand the site specific conditions and not to test adaptive management approaches. As anticipated, there was a visible turbidity plume, but the field and analytical data demonstrated that the proposed operating parameters were successful at minimizing sediment suspension.

5 Recommendations

Based on these results, Eversource proposes some changes to the cable installation.

Station 23: The majority of the water quality sampling stations appear to be reasonably located. The one recommendation we would make is to shift Station 23 approximately 400 east to better capture water flowing north along the channel edge. The drone flights indicated that the plume seemed to concentrate along that edge.

Schedule: Using the procedures described in this document, the crossing time for the cable installation across the mudflats will be approximately 6 hours. As was the case in the jet plow trial, the cable lay barge will remain in the channel and winch the jet plow to it, which will minimize the need for the barge and tugboats to operate on the tidal flats, where shallow fines are more easily suspended by propeller wash and anchoring. This will require floats on the cable to keep it off the bottom, and divers to remove the floats as the jet plow advances. This operational change and the higher resistance of the substrates will result in the rate of progression across the tidal flats being somewhat slower than expected (and was modeled), but the slower rate is advisable to minimize turbidity. Durocher expects that minimal in-field calibration at the tidal flat/channel boundary will be necessary in the future, and that anchor wire adjustments will require up to 3 hours each, with a total of two anchor wire adjustments proposed for a full cable installation.

However, given the slower rate of advancement across the mudflats and other operational requirements, the following installation schedule is proposed:

- Day #1-3 Position jet sled on west tidal flats, float cable 1st end to shore, pull to riser structure and secure.
- Day #4- **Cable burial via jet plow** across tidal flats while divers remove cable floats. 1,900 linear ft at 5.6 ft/min rate of advancement (approx. 6.0 hr jet plow duration on ebb tide starting at high slack tide).
- Day #5- **Cable burial via jet plow** across channel. 2,735 linear ft at 7ft/min rate of advancement (5.7 hr jet plow duration with intermittent stoppages for anchor cable adjustment.) **Jet plow burial complete.**
- Day #6- Cable 2nd end floating, land on east shore, pull into manhole.

The installations will be scheduled around the tides as originally proposed so that the jet plow start on the west shore occurs at slack high tide. We are currently estimating that the installation across the tidal flats will be completed near slack low tide. The cable installation across the channel on the second day may begin at a different tide stage than was modeled to take advantage of daylight hours. Given the coarser composition of sediments in the channel, the range of tides modeled, and the lack of turbidity exceedances at the boundary stations observed in the jet plow trial, Eversource does not anticipate that exceedances will occur at the mixing zone boundary regardless of tide stage.

6 References

- Normandeau. 2016. Natural Resource Impact Assessment. Appendix 34 in Application of Public Service Company of New Hampshire d/b/a Eversource Energy for Certificate of Site and Facility for the Construction of a New 115 kV Electrical Transmission Line from Madbury Substation to Portsmouth Substation. Application to the New Hampshire Site Evaluation Committee, SEC Docket No.2015-04. April 12, 2016.
- Normandeau. 2019. Seacoast Reliability Project Water Quality Monitoring Plan. Revised Final. Prepared for Eversource Energy. 26 pp. + appendices.
- Normandeau. 2016. Natural Resource Impact Assessment. Appendix 34 in Application of Public Service Company of New Hampshire d/b/a Eversource Energy for Certificate of Site and Facility for the Construction of a New 115 kV Electrical Transmission Line from Madbury Substation to Portsmouth Substation. Application to the New Hampshire Site Evaluation Committee, SEC Docket No.2015-04. April 12, 2016.
- RPS. 2016. Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Little Bay, New Hampshire. Appendix 35 in Application of Public Service Company of New Hampshire d/b/a Eversource Energy for Certificate of Site and Facility for the Construction of a New 115 kV Electrical Transmission Line from Madbury Substation to Portsmouth Substation. Application to the New Hampshire Site Evaluation Committee, SEC Docket No.2015-04. April 12, 2016.
- RPS. 2017. Revised Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Upper Little Bay, New Hampshire. Document 1 in Supplemental Information, Application to the New Hampshire Site Evaluation Committee, SEC Docket No.2015-04. June 30, 2017.
- USFDA. 2017. National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish 2017 Revision. 489 p.
- Wood, MA and P Trowbridge. 2014 "Nitrogen, Phosphorus, and Suspended Solids Concentrations in Tributaries to the Great Bay Estuary Watershed in 2013". PREP Reports & Publications. 252. <https://scholars.unh.edu/prep/252>

Appendices

**Appendix A. Hourly Plume Maps from 7 hour and 13 hour Sediment
Dispersion Model Runs (RPS ASA 2016, 2017)**

Appendix A

Hourly Plume Maps from 7 hour and 13 hour Sediment Dispersion Model Runs (RPS ASA 2016, 2017)

Revised Sediment Dispersion Modeling for Seacoast Reliability Project | RPS ASA Project 17-11

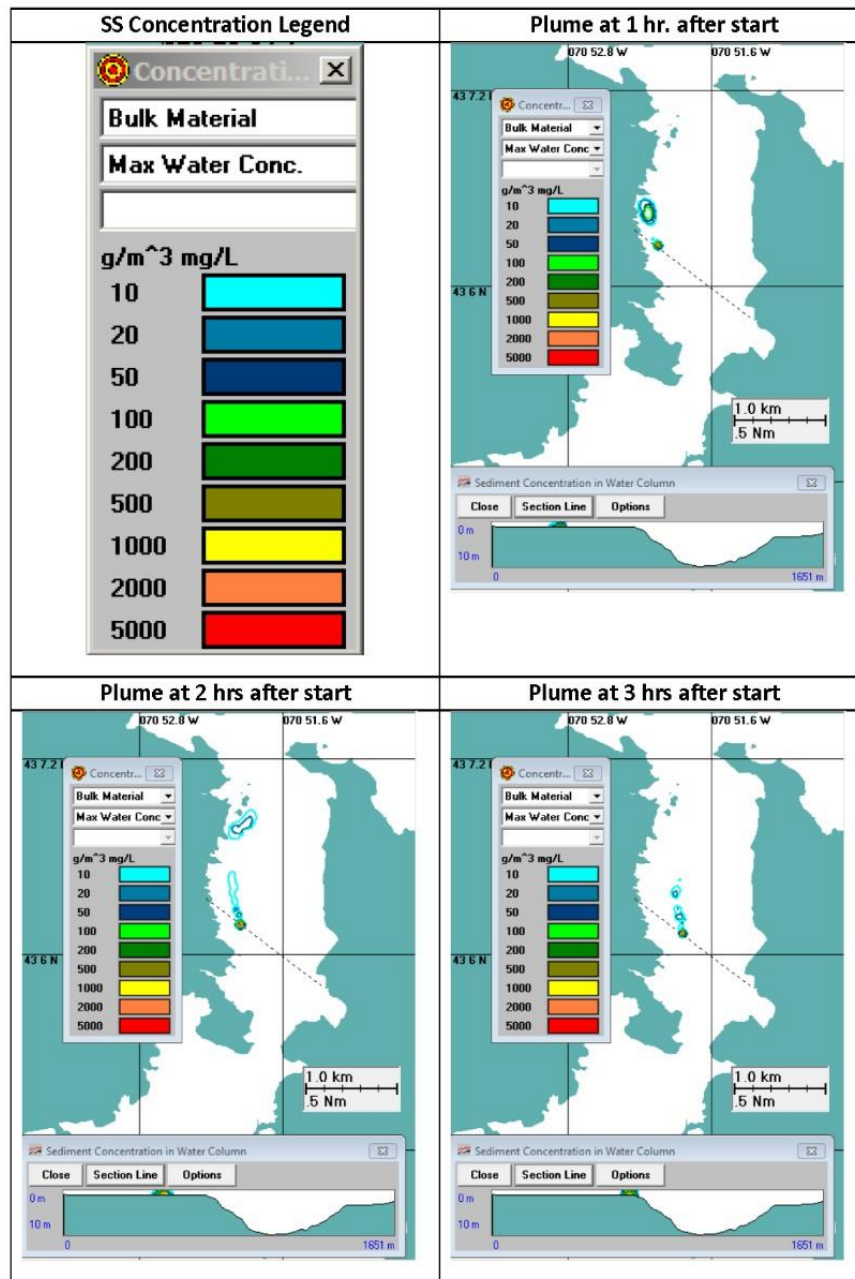


Figure 3-7. Plan view of instantaneous excess SS concentrations at 1 through 3 hrs after start of jet plowing for base case with spring tide. Vertical section view at bottom of each panel.

7 Hour Sediment Dispersion Model

Revised Sediment Dispersion Modeling for Seacoast Reliability Project | RPS ASA Project 17-119

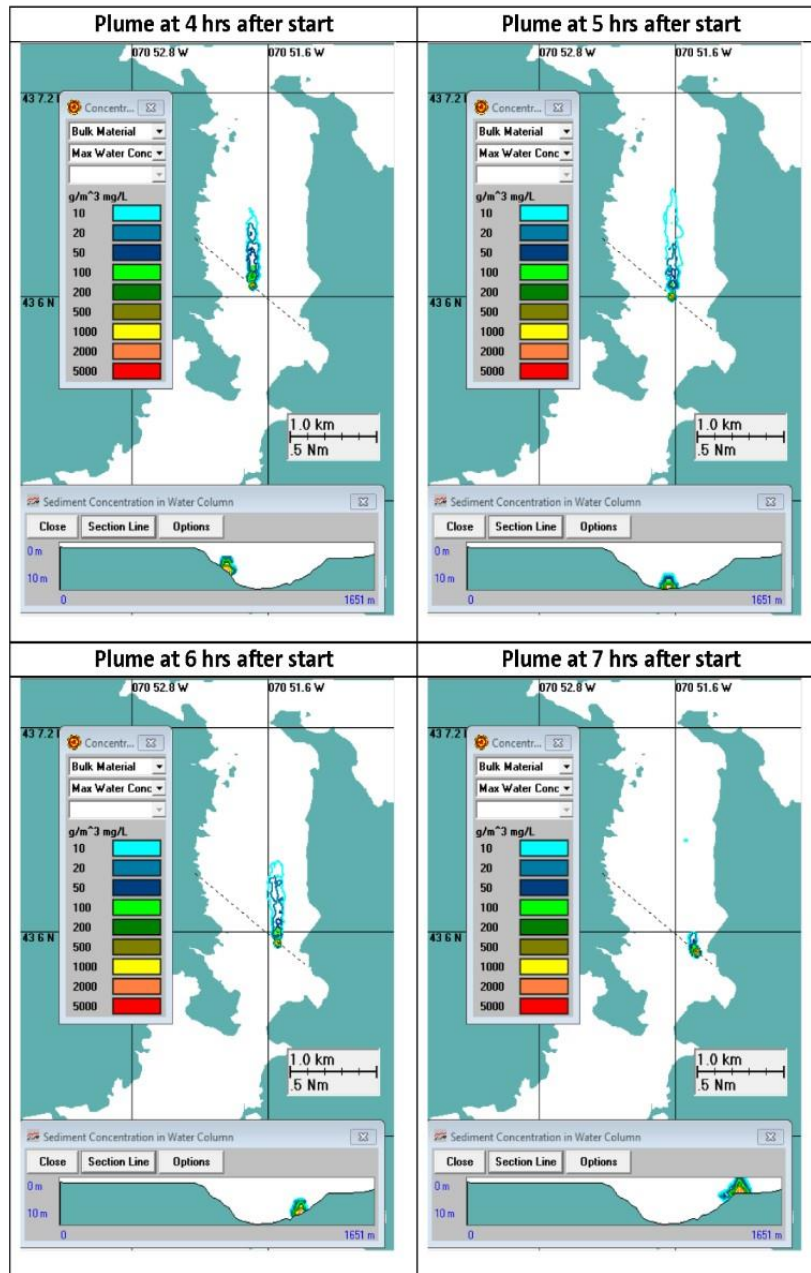


Figure 3-8. Plan view of instantaneous excess SS concentrations at 4 through 7 hrs after start of jet plowing for base case with spring tide. Vertical section view at lower portion of each panel.

7 Hour Sediment Dispersion Model

Revised Sediment Dispersion Modeling for Seacoast Reliability Project | RPS ASA Project 17-119

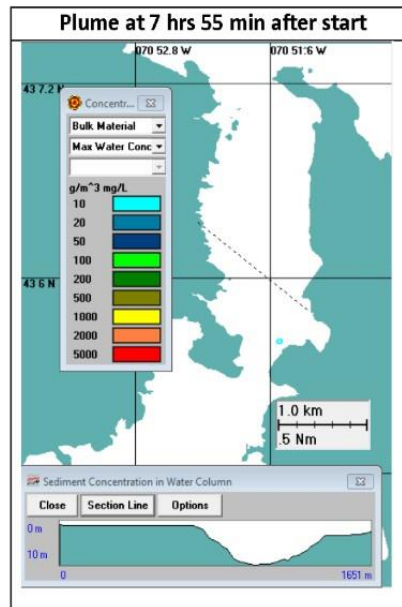


Figure 3-9. Plan view of instantaneous excess SS concentrations at 7 hrs and 55 minutes after start of jet plowing for base case with spring tide. Vertical section view at bottom of each panel. Last time step with concentrations.

7 Hour Sediment Dispersion Model

Sediment Dispersion Modeling for Seacoast Reliability Project | Project 14-270

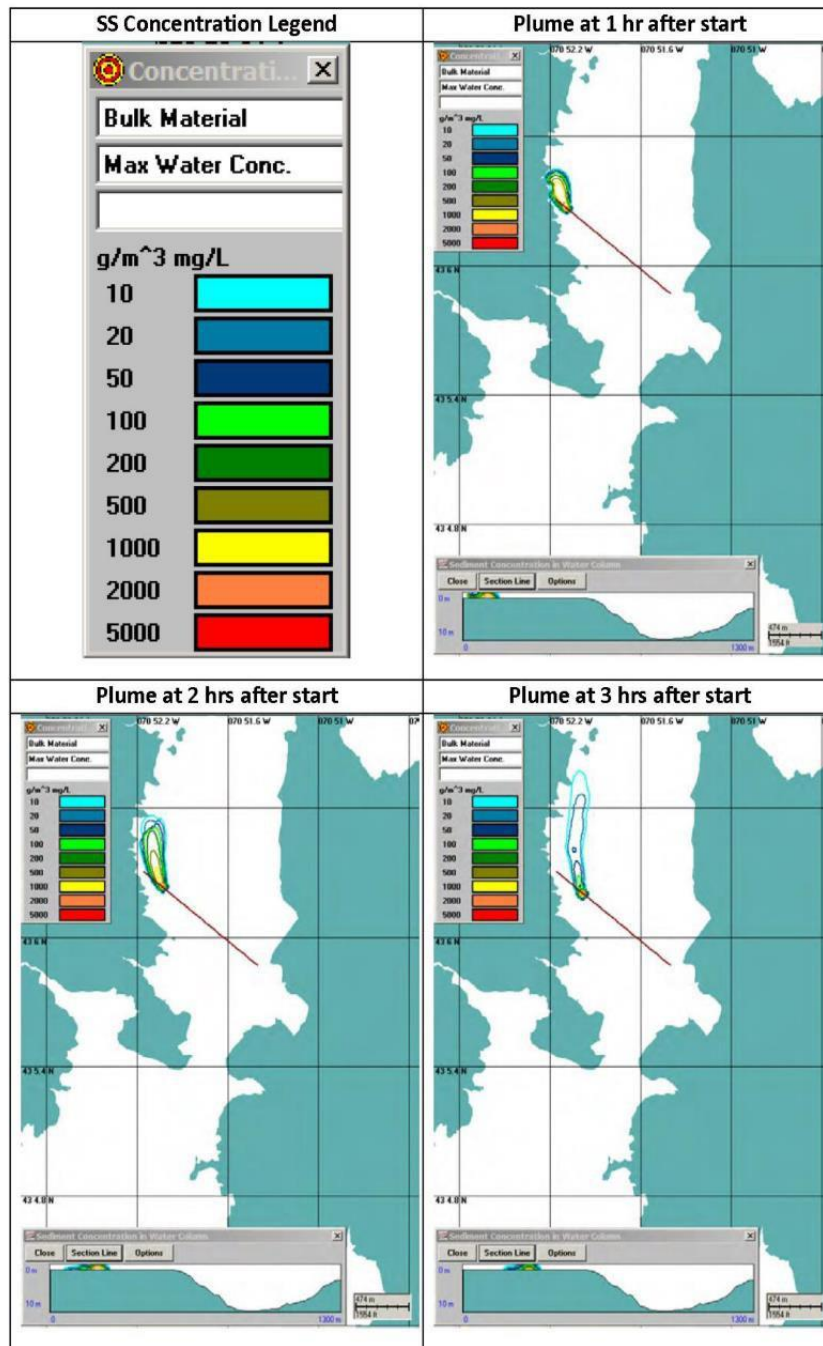


Figure 3-4. Plan view of instantaneous excess SS concentrations at 1 through 3 hrs after start of jet plowing. Vertical section view at lower left of each panel.

13 Hour Sediment Dispersion Model

Sediment Dispersion Modeling for Seacoast Reliability Project | Project 14-270

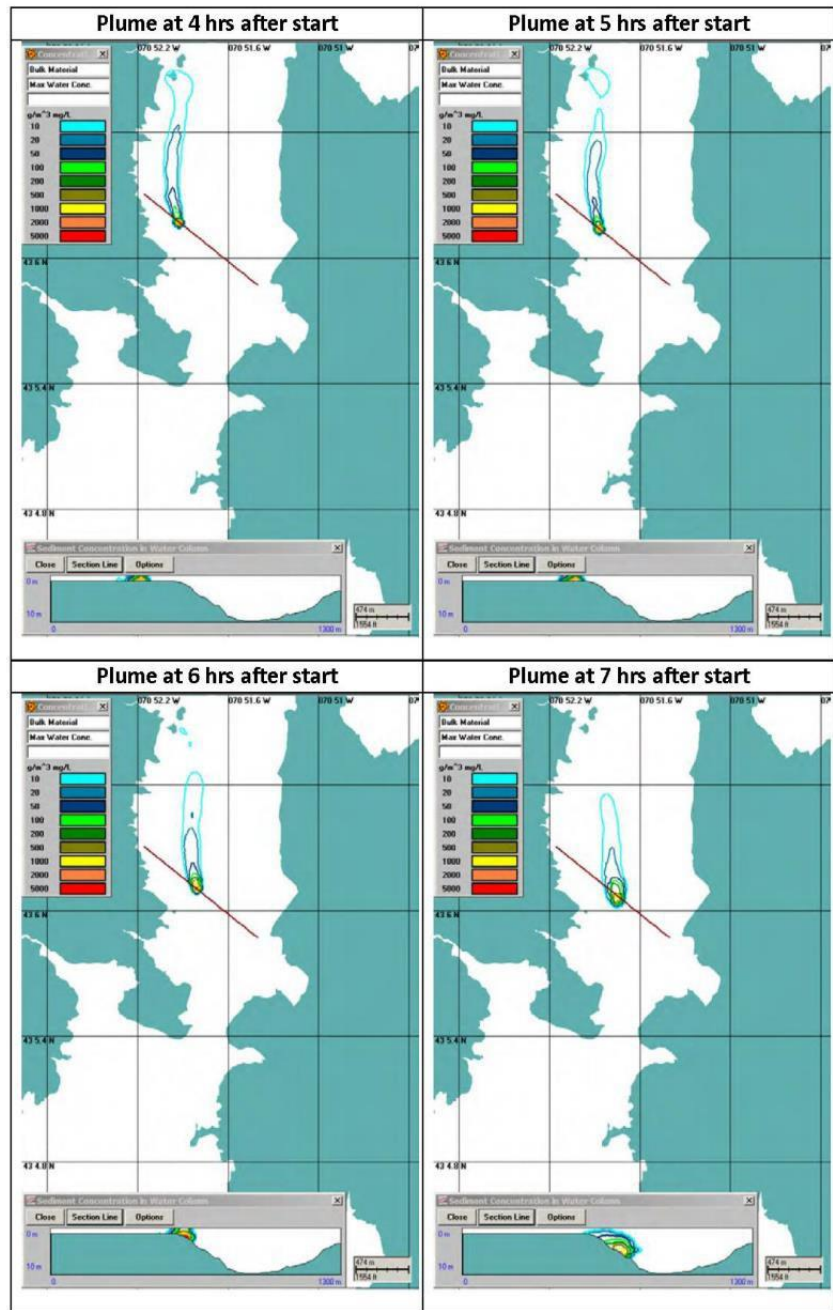


Figure 3-5. Plan view of instantaneous excess SS concentrations at 4 through 7 hrs after start of jet plowing. Vertical section view at lower left of each panel.

13 Hour Sediment Dispersion Model

Sediment Dispersion Modeling for Seacoast Reliability Project | Project 14-270

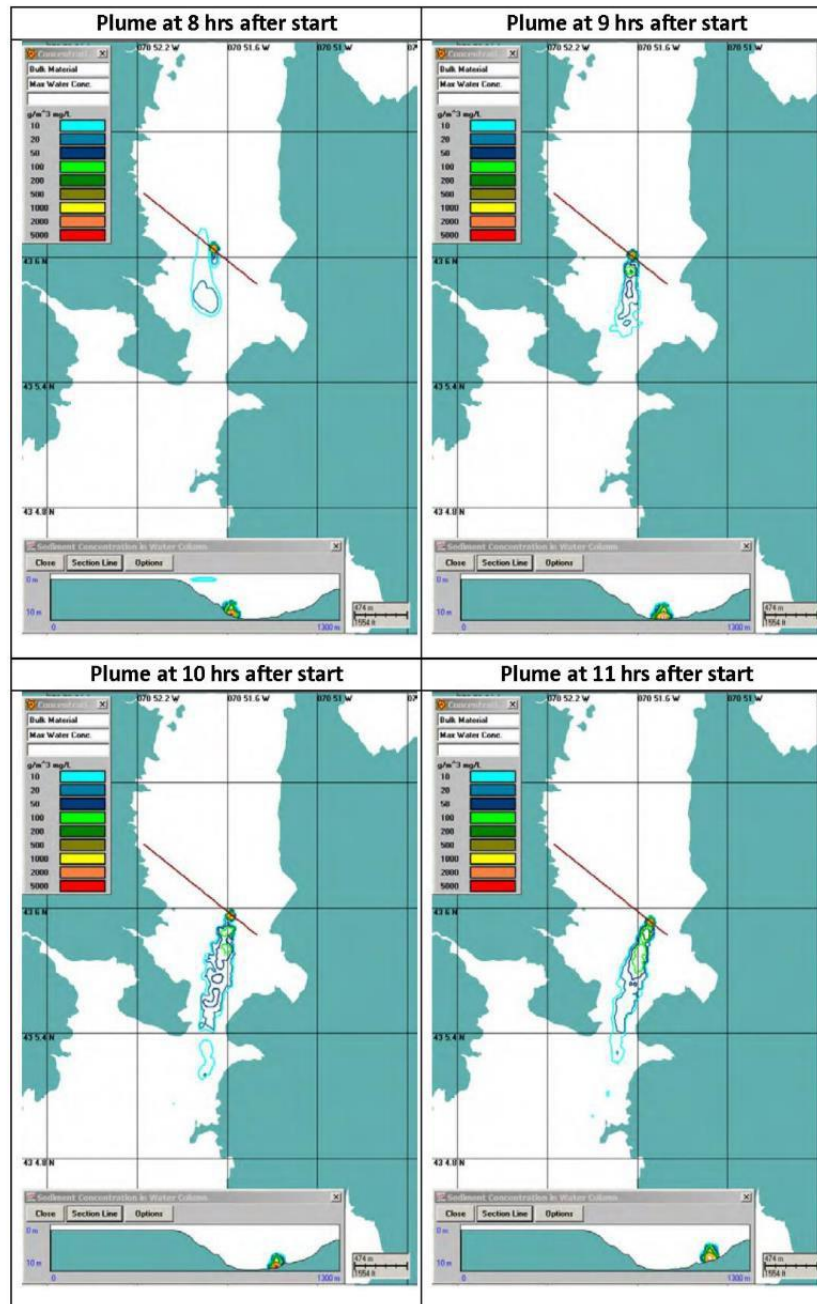


Figure 3-6. Plan view of instantaneous excess SS concentrations at 8 through 11 hrs after start of jet plowing. Vertical section view at lower left of each panel.

13 Hour Sediment Dispersion Model

Sediment Dispersion Modeling for Seacoast Reliability Project | Project 14-270

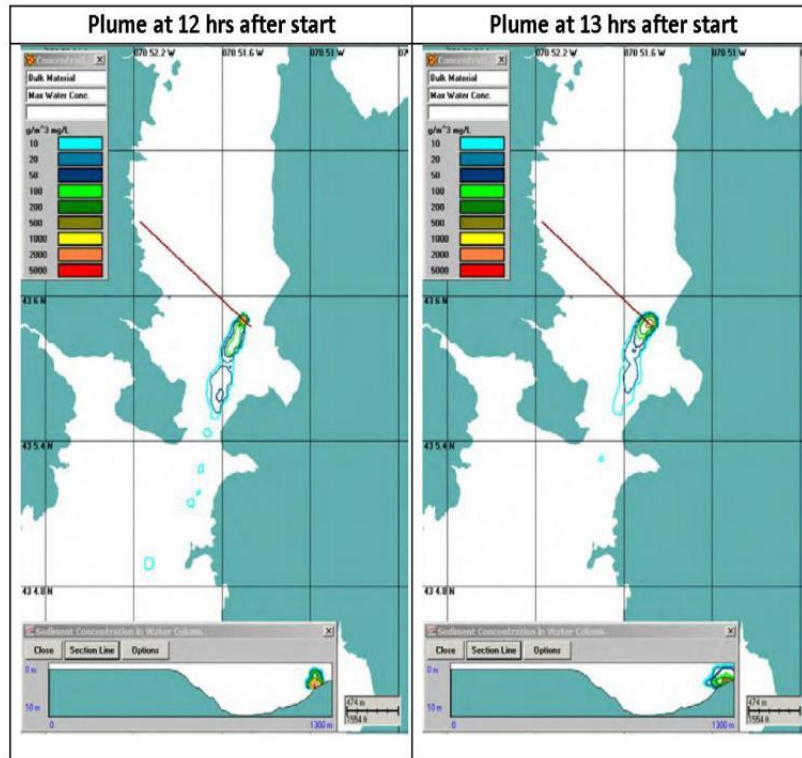


Figure 3-7. Plan view of instantaneous excess SS concentrations at 12 through 13 hrs after start of jet plowing. Vertical section view at lower left of each panel.

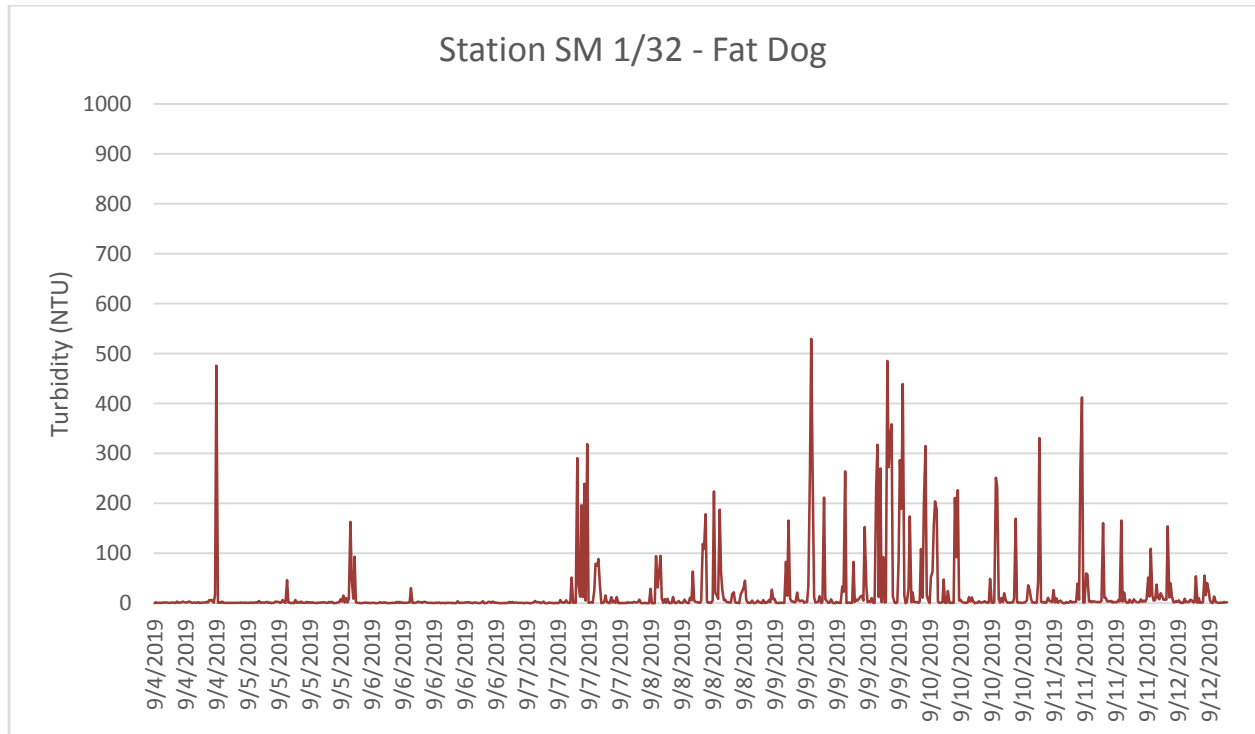
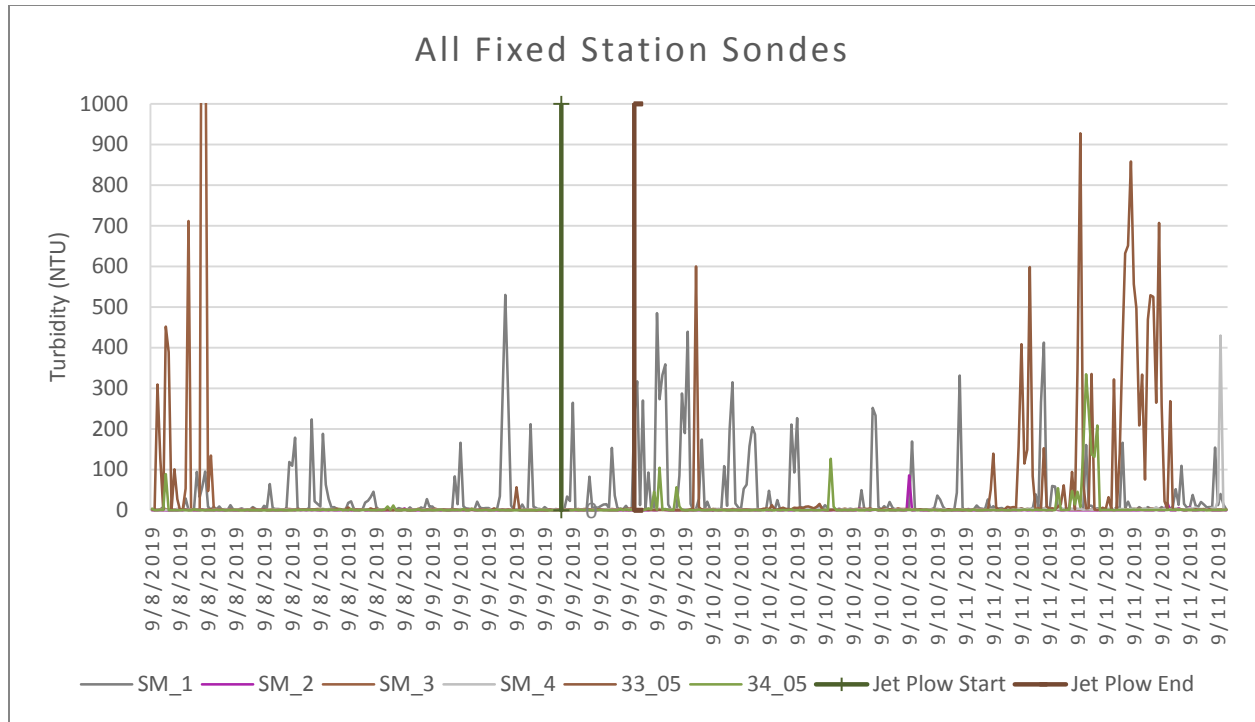
13 Hour Sediment Dispersion Model

Appendix B. September 9, 2019 Daily Operators Log from Durocher Marine

DIARY OF EVENTS FOR JET PLOW TRIAL:

EDT	Activity	Description
7:00 - 7:30	Jet Sled Trial Day 5	All team members meet at Great Bay Marine. MAP meeting and stretching. Team members to project site in work boats.
7:00 - 7:45	Jet Sled Trial Day 5	Tug move pump barge and diver support barge to jet sled.
7:45 - 11:15	Jet Sled Trial Day 5	Connect 8" water supply hose, jet sled umbilical and hydraulic hoses from pump barge to jet sled. Use tug boat to pull deck winch wire from cable lay barge to jet sled. All connections complete, ready for jet sled trial start at 12:30 due to NHDES tide requirement.
11:15 - 12:05	Jet Sled Trial Day 5	Standby for 12:30 jet sled trial start time.
12:05 - 12:20	Jet Sled Trial Day 5	MAP meeting with all team members to discuss method of procedure for jet sled trial.
12:20 - 12:39	Jet Sled Trial Day 5	Team members man all equipment ready for start of jet sled trial.
12:39 - 14:25	Jet Sled Trial Day 5	Jet sled travel 580' @ 5.6' FPM.
14:25 - 15:37	Jet Sled Trial Day 5	All stop for diver to perform in-field calibration. Check burial depth and confirm ram extension on jet tool cylinder.
15:37 - 16:26	Jet Sled Trial Day 5	Jet sled travel 457' @ 9.7 FPM for a total distance 1037' today.
16:26 - 19:20	Jet Sled Trial Day 5	Move dive barge into position to remove GPS from jet sled. Tug and assist barge move anchors per NHDES requirement.
19:20 - 20:00	Jet Sled Trial Day 5	Secure equipment for the day, team members to dock in work boats, night shift on duty.

Appendix C. Fixed Station Turbidity Results



Appendix D. Laboratory Results

EA **Enthalpy Analytical**

Enthalpy Analytical
P.O. Box 778
Hampton, NH 03843-0778
p 603-926-3345

Ann Pembroke
Normandeau Associates
25 Nashua Road
Bedford, NH 03110

PO Number: None
Report Number: 32220
Date Received: 09/09/19
Date Reported: 09/16/19

Project: Seacoast Reliability Project

Attached please find results for analyses performed on samples received on 09/09/19.

Samples were received in acceptable condition, except where noted, and under chain of custody.

Instruments used in analysis were calibrated with the appropriate frequency and to the specifications of the referenced methods.

Analytes in blanks were below levels affecting sample results.

Matrix effects as monitored by matrix spike recovery or unusual physical properties were not apparent unless otherwise noted.

Accuracy and precision as monitored by laboratory control sample analyses were within acceptance limits unless otherwise noted.

Accreditations may be viewed at www.enthalpy.com/accreditations.

The results presented in this report relate only to the samples described on the chain(s) of custody and sample receipt log(s), and are intended to be used only by the submittor.

Enthalpy Analytical

Jason Hobbs

Digitally signed by Jason Hobbs
DN: cn=Jason Hobbs, o=Enthalpy
Analytical LLC, ou=Technical Manager,
email=jason.hobbs@enthalpy.com, c=US
Date: 2019.09.27 15:15:41 -0400

Date 09/27/19

Authorized
Signature

Attachment:
Sample Qualifiers and Descriptions
Report



Report Qualifiers

J2 - LCS recovery was 73%. LCSD recovery was 70%. Limit 75-125%. Qualified result is estimated. No sample volume remains. TSS batch 522w.

J3 - Result is an estimate and biased high. LCS %R above limit. TSS batch 519w.

J4 - LCSD %RPD above limit. TSS batch 519w.

J6 - Result is an estimate and biased high. MS %R above limit. This applies to copper sample 32220-0440 in total metals batch 910w.

J7 - MSD %RPD above limit. This applies to copper sample 32220-0440 in total metals batch 910w.

J8 - Dup %RPD above limit. At least once in every TSS batch. These duplicate values were not reported.

J26 - TSS filter residue below method requirement. Result may be used with due consideration. This only applies to TSS.

B - Analyte found in laboratory blank at level indicated. Results may be used with due consideration. This applies to low level copper results in total metals batch 906w.

ND - Not detected

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
41-S	Arsenic, dissolved	32220-0001	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1051	EPA 200.8	038N	NAR/JLH
41-S	Copper, dissolved	32220-0001	0.0005		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1051	EPA 200.8	038N	NAR/JLH
41-S	Arsenic, total	32220-0002	0.0013		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1040	EPA 200.8	902W	AL
41-S	Copper, total	32220-0002	0.0007		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1040	EPA 200.8	902W	AL
41-S	FC	32220-0003	ND		10	MPN/100ml	09/09/19 1050	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
41-S	Total suspended solids	32220-0004	6.6	J8	2	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
41-S	Ammonia-N	32220-0005	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
41-S	Nitrate	32220-0006	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-S	Nitrite	32220-0006	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-S	TN	32220-0006	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
41-S	Total Kjeldahl Nitrogen	32220-0006	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
43-M	Arsenic, dissolved	32220-0007	0.0016		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/09/19 2336	EPA 200.8	039N	NAR/JLH
43-M	Copper, dissolved	32220-0007	ND		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/09/19 2336	EPA 200.8	039N	NAR/JLH
43-M	Arsenic, total	32220-0008	0.0015		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1055	EPA 200.8	902W	AL
43-M	Copper, total	32220-0008	0.0006		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1055	EPA 200.8	902W	AL
43-M	Total suspended solids	32220-0009	8.4		2	mg/L	09/09/19 1120	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
43-M	Ammonia-N	32220-0010	ND		0.1	mg/L as N	09/09/19 1120	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
43-M	Nitrate	32220-0011	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-M	Nitrite	32220-0011	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-M	TN	32220-0011	ND		0.5	mg/L	09/09/19 1120	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
43-M	Total Kjeldahl Nitrogen	32220-0011	ND		0.5	mg/L	09/09/19 1120	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
41-B	Arsenic, total	32220-0013	0.0012		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1059	EPA 200.8	902W	AL
41-B	Copper, total	32220-0013	0.0008		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1059	EPA 200.8	902W	AL
41-B	Total suspended solids	32220-0014	10		1	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
41-B	Ammonia-N	32220-0015	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
41-B	Nitrate	32220-0016	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-B	Nitrite	32220-0016	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-B	TN	32220-0016	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
41-B	Total Kjeldahl Nitrogen	32220-0016	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
43-S	Arsenic, dissolved	32220-0017	0.0016		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/09/19 2355	EPA 200.8	039N	NAR/JLH
43-S	Copper, dissolved	32220-0017	ND		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/09/19 2355	EPA 200.8	039N	NAR/JLH
43-S	Arsenic, total	32220-0018	0.0013		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1103	EPA 200.8	902W	AL
43-S	Copper, total	32220-0018	0.0007		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1103	EPA 200.8	902W	AL
43-S	FC	32220-0019	20		10	MPN/100ml	09/09/19 1120	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
43-S	Total suspended solids	32220-0020	4.6		1	mg/L	09/09/19 1120	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
43-S	Ammonia-N	32220-0021	ND		0.1	mg/L as N	09/09/19 1120	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
43-S	Nitrate	32220-0022	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-S	Nitrite	32220-0022	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-S	TN	32220-0022	ND		0.5	mg/L	09/09/19 1120	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
43-S	Total Kjeldahl Nitrogen	32220-0022	ND		0.5	mg/L	09/09/19 1120	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
41-M	Arsenic, dissolved	32220-0023	0.0015		0.0005	mg/L	09/09/19 1050	09/09/19 1830	09/09/19 2359	EPA 200.8	039N	NAR/JLH
41-M	Copper, dissolved	32220-0023	ND		0.0005	mg/L	09/09/19 1050	09/09/19 1830	09/09/19 2359	EPA 200.8	039N	NAR/JLH
41-M	Arsenic, total	32220-0024	0.0011		0.0005	mg/L	09/09/19 1050	09/09/19 1800	09/10/19 1256	EPA 200.8	903W	AL
41-M	Copper, total	32220-0024	0.0006		0.0005	mg/L	09/09/19 1050	09/09/19 1800	09/10/19 1256	EPA 200.8	903W	AL
41-M	Total suspended solids	32220-0025	6.8		1	mg/L	09/09/19 1050	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
41-M	Ammonia-N	32220-0026	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
41-M	Nitrate	32220-0027	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-M	Nitrite	32220-0027	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
41-M	TN	32220-0027	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
41-M	Total Kjeldahl Nitrogen	32220-0027	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
43-B	Arsenic, dissolved	32220-0028	0.0016		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/10/19 0004	EPA 200.8	039N	NAR/JLH
43-B	Copper, dissolved	32220-0028	0.0018		0.0005	mg/L	09/09/19 1120	09/09/19 1830	09/10/19 0004	EPA 200.8	039N	NAR/JLH
43-B	Arsenic, total	32220-0029	0.0013		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1115	EPA 200.8	902W	AL
43-B	Copper, total	32220-0029	0.0009		0.0005	mg/L	09/09/19 1120	09/09/19 1730	09/10/19 1115	EPA 200.8	902W	AL
43-B	Total suspended solids	32220-0030	4.7		1	mg/L	09/09/19 1120	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
43-B	Ammonia-N	32220-0031	ND		0.1	mg/L as N	09/09/19 1120	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
43-B	Nitrate	32220-0032	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-B	Nitrite	32220-0032	ND		0.05	mg/L	09/09/19 1120	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
43-B	TN	32220-0032	ND		0.5	mg/L	09/09/19 1120	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
43-B	Total Kjeldahl Nitrogen	32220-0032	ND		0.5	mg/L	09/09/19 1120	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
42-S	Arsenic, dissolved	32220-0033	0.0016		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1109	EPA 200.8	038N	NAR/JLH
42-S	Copper, dissolved	32220-0033	ND		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1109	EPA 200.8	038N	NAR/JLH
42-S	Arsenic, total	32220-0034	0.0013		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1118	EPA 200.8	902W	AL
42-S	Copper, total	32220-0034	0.0008		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1118	EPA 200.8	902W	AL
42-S	FC	32220-0035	ND		10	MPN/100ml	09/09/19 1220	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
42-S	Total suspended solids	32220-0036	7.1		1	mg/L	09/09/19 1220	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
42-S	Ammonia-N	32220-0037	ND		0.1	mg/L as N	09/09/19 1220	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
42-S	Nitrate	32220-0038	ND		0.05	mg/L	09/09/19 1220	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
42-S	Nitrite	32220-0038	ND		0.05	mg/L	09/09/19 1220	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
42-S	TN	32220-0038	ND		0.5	mg/L	09/09/19 1220	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
42-S	Total Kjeldahl Nitrogen	32220-0038	ND		0.5	mg/L	09/09/19 1220	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
42-B	Arsenic, dissolved	32220-0044	0.0016		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1113	EPA 200.8	038N	NAR/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
42-B	Copper, dissolved	32220-0044	0.0008		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1113	EPA 200.8	038N	NAR/JLH
42-B	Arsenic, total	32220-0045	0.0012		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1122	EPA 200.8	902W	AL
42-B	Copper, total	32220-0045	0.0014		0.0005	mg/L	09/09/19 1220	09/09/19 1730	09/10/19 1122	EPA 200.8	902W	AL
42-B	Total suspended solids	32220-0046	7.1		1	mg/L	09/09/19 1220	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
42-B	Ammonia-N	32220-0047	ND		0.1	mg/L as N	09/09/19 1220	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
42-B	Nitrate	32220-0048	ND		0.05	mg/L	09/09/19 1220	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
42-B	Nitrite	32220-0048	ND		0.05	mg/L	09/09/19 1220	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
42-B	TN	32220-0048	ND		0.5	mg/L	09/09/19 1220	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
42-B	Total Kjeldahl Nitrogen	32220-0048	ND		0.5	mg/L	09/09/19 1220	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
43-S	Arsenic, dissolved	32220-0049	0.0014		0.0005	mg/L	09/09/19 1254	09/10/19 1420	09/11 19 0034	EPA 200.8	045N	NAR/JLH
43-S	Copper, dissolved	32220-0049	0.0008		0.0005	mg/L	09/09/19 1254	09/10/19 1420	09/11 19 0034	EPA 200.8	045N	NAR/JLH
43-S	Arsenic, total	32220-0050	0.0012		0.0005	mg/L	09/09/19 1254	09/09/19 2100	09/10/19 1840	EPA 200.8	905W	AL
43-S	Copper, total	32220-0050	0.0006		0.0005	mg/L	09/09/19 1254	09/09/19 2100	09/10/19 1840	EPA 200.8	905W	AL
43-S	FC	32220-0051	ND		10	MPN/100ml	09/09/19 1254	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
43-S	Total suspended solids	32220-0052	13	J3, J4, J8	2	mg/L	09/09/19 1254	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
43-S	Ammonia-N	32220-0053	ND		0.1	mg/L as N	09/09/19 1254	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
43-S	Nitrate	32220-0054	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-S	Nitrite	32220-0054	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-S	TN	32220-0054	ND		0.5	mg/L	09/09/19 1254	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
43-S	Total Kjeldahl Nitrogen	32220-0054	ND		0.5	mg/L	09/09/19 1254	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
41-B	Arsenic, dissolved	32220-0055	0.0017		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1118	EPA 200.8	038N	NAR/JLH
41-B	Copper, dissolved	32220-0055	ND		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1118	EPA 200.8	038N	NAR/JLH
43-M	Arsenic, total	32220-0056	0.0011		0.0005	mg/L	09/09/19 1254	09/09/19 2020	09/10/19 1623	EPA 200.8	904W	AL
43-M	Copper, total	32220-0056	0.0008		0.0005	mg/L	09/09/19 1254	09/09/19 2020	09/10/19 1623	EPA 200.8	904W	AL
43-M	Total suspended solids	32220-0057	9.7	J3, J4	1	mg/L	09/09/19 1254	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
43-M	Ammonia-N	32220-0058	ND		0.1	mg/L as N	09/09/19 1254	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
43-M	Nitrate	32220-0059	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-M	Nitrite	32220-0059	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-M	TN	32220-0059	0.529		0.5	mg/L	09/09/19 1254	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
43-M	Total Kjeldahl Nitrogen	32220-0059	0.529		0.5	mg/L	09/09/19 1254	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
43-B	Arsenic, dissolved	32220-0060	0.0015		0.0005	mg/L	09/09/19 1254	09/09/19 2130	09/10/19 0432	EPA 200.8	041N	NAR/JLH
43-B	Copper, dissolved	32220-0060	ND		0.0005	mg/L	09/09/19 1254	09/09/19 2130	09/10/19 0432	EPA 200.8	041N	NAR/JLH
43-B	Arsenic, total	32220-0061	0.0012		0.0005	mg/L	09/09/19 1254	09/09/19 2100	09/10/19 1856	EPA 200.8	905W	AL
43-B	Copper, total	32220-0061	0.0009		0.0005	mg/L	09/09/19 1254	09/09/19 2100	09/10/19 1856	EPA 200.8	905W	AL
43-B	Total suspended solids	32220-0062	6.9	J3, J4	1	mg/L	09/09/19 1254	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
43-B	Ammonia-N	32220-0063	ND		0.1	mg/L as N	09/09/19 1254	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
43-B	Nitrate	32220-0064	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-B	Nitrite	32220-0064	ND		0.05	mg/L	09/09/19 1254	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
43-B	TN	32220-0064	0.582		0.5	mg/L	09/09/19 1254	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
43-B	Total Kjeldahl Nitrogen	32220-0064	0.582		0.5	mg/L	09/09/19 1254	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
42-S	FC	32220-0067	ND		10	MPN/100ml	09/09/19 1350	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
41-MDUP	Arsenic, dissolved	32220-0071	0.0012		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0314	EPA 200.8	046N	NAR/JLH
41-MDUP	Copper, dissolved	32220-0071	ND		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0314	EPA 200.8	046N	NAR/JLH
41-MDUP	Arsenic, total	32220-0072	0.001		0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2132	EPA 200.8	906W	AL
41-MDUP	Copper, total	32220-0072	0.0008	B 0.0006	0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2132	EPA 200.8	906W	AL
41-MDUP	Total suspended solids	32220-0073	7.2	J8	2	mg/L	09/09/19 1446	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
41-MDUP	Ammonia-N	32220-0074	ND		0.1	mg/L as N	09/09/19 1446	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
41-MDUP	Nitrate	32220-0075	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-MDUP	Nitrite	32220-0075	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-MDUP	TN	32220-0075	0.741		0.5	mg/L	09/09/19 1446	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
41-MDUP	Total Kjeldahl Nitrogen	32220-0075	0.741		0.5	mg/L	09/09/19 1446	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
42-B	Arsenic, dissolved	32220-0076	0.0012		0.0005	mg/L	09/09/19 1350	09/10/19 1530	09/11 19 0333	EPA 200.8	046N	NAR/JLH
42-B	Copper, dissolved	32220-0076	0.0007		0.0005	mg/L	09/09/19 1350	09/10/19 1530	09/11 19 0333	EPA 200.8	046N	NAR/JLH
42-B	Arsenic, total	32220-0077	0.0009		0.0005	mg/L	09/09/19 1350	09/10/19 1005	09/10/19 2148	EPA 200.8	906W	AL
42-B	Copper, total	32220-0077	0.0008	B 0.0006	0.0005	mg/L	09/09/19 1350	09/10/19 1005	09/10/19 2148	EPA 200.8	906W	AL
42-B	Total suspended solids	32220-0078	5	J8	2	mg/L	09/09/19 1350	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
42-B	Ammonia-N	32220-0079	ND		0.1	mg/L as N	09/09/19 1350	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
42-B	Nitrate	32220-0080	ND		0.05	mg/L	09/09/19 1350	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
42-B	Nitrite	32220-0080	ND		0.05	mg/L	09/09/19 1350	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
42-B	TN	32220-0080	ND		0.5	mg/L	09/09/19 1350	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
42-B	Total Kjeldahl Nitrogen	32220-0080	ND		0.5	mg/L	09/09/19 1350	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
41-S	Arsenic, dissolved	32220-0081	0.0014		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0337	EPA 200.8	046N	NAR/JLH
41-S	Copper, dissolved	32220-0081	0.0005		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0337	EPA 200.8	046N	NAR/JLH
41-S	Arsenic, total	32220-0082	0.001		0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2151	EPA 200.8	906W	AL
41-S	Copper, total	32220-0082	0.0008	B 0.0006	0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2151	EPA 200.8	906W	AL
41-S	FC	32220-0083	ND		10	MPN/100ml	09/09/19 1446	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
41-S	Total suspended solids	32220-0084	7.1		1	mg/L	09/09/19 1446	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
41-S	Ammonia-N	32220-0085	ND		0.1	mg/L as N	09/09/19 1446	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
41-S	Nitrate	32220-0086	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-S	Nitrite	32220-0086	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-S	TN	32220-0086	0.517		0.5	mg/L	09/09/19 1446	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
41-S	Total Kjeldahl Nitrogen	32220-0086	0.517		0.5	mg/L	09/09/19 1446	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
41-M	Arsenic, dissolved	32220-0087	0.0013		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0342	EPA 200.8	046N	NAR/JLH
41-M	Copper, dissolved	32220-0087	0.0007		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0342	EPA 200.8	046N	NAR/JLH
41-M	Arsenic, total	32220-0088	0.0008		0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2155	EPA 200.8	906W	AL
41-M	Copper, total	32220-0088	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2155	EPA 200.8	906W	AL
41-M	Total suspended solids	32220-0089	7.5		1	mg/L	09/09/19 1446	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
41-M	Ammonia-N	32220-0090	ND		0.1	mg/L as N	09/09/19 1446	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
41-M	Nitrate	32220-0091	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-M	Nitrite	32220-0091	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-M	TN	32220-0091	ND		0.5	mg/L	09/09/19 1446	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
41-M	Total Kjeldahl Nitrogen	32220-0091	ND		0.5	mg/L	09/09/19 1446	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
41-B	Arsenic, dissolved	32220-0092	0.0013		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0355	EPA 200.8	046N	NAR/JLH
41-B	Copper, dissolved	32220-0092	0.0005		0.0005	mg/L	09/09/19 1446	09/10/19 1530	09/11 19 0355	EPA 200.8	046N	NAR/JLH
41-B	Arsenic, total	32220-0093	0.001		0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2207	EPA 200.8	906W	AL
41-B	Copper, total	32220-0093	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1446	09/10/19 1005	09/10/19 2207	EPA 200.8	906W	AL
41-B	Total suspended solids	32220-0094	10		1	mg/L	09/09/19 1446	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
41-B	Ammonia-N	32220-0095	ND		0.1	mg/L as N	09/09/19 1446	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
41-B	Nitrate	32220-0096	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-B	Nitrite	32220-0096	ND		0.05	mg/L	09/09/19 1446	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
41-B	TN	32220-0096	ND		0.5	mg/L	09/09/19 1446	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
41-B	Total Kjeldahl Nitrogen	32220-0096	ND		0.5	mg/L	09/09/19 1446	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
27-S	Arsenic, dissolved	32220-0097	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0053	EPA 200.8	045N	NAR/JLH
27-S	Copper, dissolved	32220-0097	0.0005		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0053	EPA 200.8	045N	NAR/JLH
27-S	Arsenic, total	32220-0098	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1755	EPA 200.8	910W	AL
27-S	Copper, total	32220-0098	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1755	EPA 200.8	910W	AL
27-S	FC	32220-0099	ND		10	MPN/100ml	09/09/19 1645	09/09/19 2124	09/10/19 1535	SM 9223-B	LAG	
27-S	Total suspended solids	32220-0100	12		1	mg/L	09/09/19 1645	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
27-S	Ammonia-N	32220-0101	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
27-S	Nitrate	32220-0102	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
27-S	Nitrite	32220-0102	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
27-S	TN	32220-0102	0.609		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
27-S	Total Kjeldahl Nitrogen	32220-0102	0.609		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
27-M	Arsenic, dissolved	32220-0103	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1530	09/11 19 0400	EPA 200.8	046N	NAR/JLH
27-M	Copper, dissolved	32220-0103	0.0005		0.0005	mg/L	09/09/19 1645	09/10/19 1530	09/11 19 0400	EPA 200.8	046N	NAR/JLH
27-M	Arsenic, total	32220-0104	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1811	EPA 200.8	910W	AL
27-M	Copper, total	32220-0104	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1811	EPA 200.8	910W	AL
27-M	Total suspended solids	32220-0105	5.2		1	mg/L	09/09/19 1645	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
27-M	Ammonia-N	32220-0106	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
27-M	TN	32220-0107	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
27-M	Total Kjeldahl Nitrogen	32220-0107	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
27-M	Nitrate	32220-0107	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
27-M	Nitrite	32220-0107	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
27-B	Arsenic, dissolved	32220-0108	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1530	09/11 19 0404	EPA 200.8	046N	NAR/JLH
27-B	Copper, dissolved	32220-0108	0.0005		0.0005	mg/L	09/09/19 1645	09/10/19 1530	09/11 19 0404	EPA 200.8	046N	NAR/JLH
27-B	Arsenic, total	32220-0109	0.001		0.0005	mg/L	09/09/19 1645	09/10/19 1005	09/10/19 2211	EPA 200.8	906W	AL
27-B	Copper, total	32220-0109	0.0006	B 0.0006	0.0005	mg/L	09/09/19 1645	09/10/19 1005	09/10/19 2211	EPA 200.8	906W	AL
27-B	Total suspended solids	32220-0110	9.4		1	mg/L	09/09/19 1645	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
27-B	Ammonia-N	32220-0111	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
27-B	TN	32220-0112	0.535		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
27-B	Total Kjeldahl Nitrogen	32220-0112	0.535		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
27-B	Nitrate	32220-0112	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
27-B	Nitrite	32220-0112	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
P4	Arsenic, dissolved	32220-0119	ND		0.0005	mg/L	09/09/19 1540	09/10/19 1530	09/11 19 0409	EPA 200.8	046N	NAR/JLH
P4	Copper, dissolved	32220-0119	ND		0.0005	mg/L	09/09/19 1540	09/10/19 1530	09/11 19 0409	EPA 200.8	046N	NAR/JLH
P4	Arsenic, total	32220-0120	ND		0.0005	mg/L	09/09/19 1540	09/10/19 1005	09/10/19 2215	EPA 200.8	906W	AL
P4	Copper, total	32220-0120	ND	B 0.0006	0.0005	mg/L	09/09/19 1540	09/10/19 1005	09/10/19 2215	EPA 200.8	906W	AL
P4	Total suspended solids	32220-0121	ND	J26	2	mg/L	09/09/19 1540	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
P4	Ammonia-N	32220-0122	ND		0.1	mg/L as N	09/09/19 1540	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
P4	Nitrate	32220-0123	ND		0.05	mg/L	09/09/19 1540	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
P4	Nitrite	32220-0123	ND		0.05	mg/L	09/09/19 1540	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
P4	TN	32220-0123	ND		0.5	mg/L	09/09/19 1540	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
P4	Total Kjeldahl Nitrogen	32220-0123	ND		0.5	mg/L	09/09/19 1540	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
28-S	Arsenic, dissolved	32220-0129	0.0017		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10 19 1454	EPA 200.8	042N	NAR/JLH
28-S	Copper, dissolved	32220-0129	0.0005		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10 19 1454	EPA 200.8	042N	NAR/JLH
28-S	Arsenic, total	32220-0130	0.0011		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0420	EPA 200.8	909W	AL
28-S	Copper, total	32220-0130	0.001		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0420	EPA 200.8	909W	AL
28-S	FC	32220-0131	ND		10	MPN/100ml	09/09/19 1655	09/09/19 2257	09/10/19 1707	SM 9223-B	LAG	
28-S	Total suspended solids	32220-0132	8.6	J8	2	mg/L	09/09/19 1655	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
28-S	Ammonia-N	32220-0133	ND		0.1	mg/L as N	09/09/19 1655	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
28-S	Nitrate	32220-0134	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-S	Nitrite	32220-0134	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-S	TN	32220-0134	0.669		0.5	mg/L	09/09/19 1655	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
28-S	Total Kjeldahl Nitrogen	32220-0134	0.669		0.5	mg/L	09/09/19 1655	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
28-M	Arsenic, dissolved	32220-0135	0.0015		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10/19 1513	EPA 200.8	042N	NAR/JLH
28-M	Copper, dissolved	32220-0135	ND		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10/19 1513	EPA 200.8	042N	NAR/JLH
28-M	Arsenic, total	32220-0136	0.001		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0436	EPA 200.8	909W	AL
28-M	Copper, total	32220-0136	0.0008		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0436	EPA 200.8	909W	AL
28-M	Total suspended solids	32220-0137	15		1	mg/L	09/09/19 1655	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
28-M	Ammonia-N	32220-0138	ND		0.1	mg/L as N	09/09/19 1655	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
28-M	Nitrate	32220-0139	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-M	Nitrite	32220-0139	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-M	TN	32220-0139	0.642		0.5	mg/L	09/09/19 1655	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
28-M	Total Kjeldahl Nitrogen	32220-0139	0.642		0.5	mg/L	09/09/19 1655	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
28-B	Arsenic, dissolved	32220-0140	0.0015		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10/19 1517	EPA 200.8	042N	NAR/JLH
28-B	Copper, dissolved	32220-0140	ND		0.0005	mg/L	09/09/19 1655	09/10/19 1030	09/10/19 1517	EPA 200.8	042N	NAR/JLH
28-B	Arsenic, total	32220-0141	0.001		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0440	EPA 200.8	909W	AL
28-B	Copper, total	32220-0141	0.0006		0.0005	mg/L	09/09/19 1655	09/10/19 1205	09/11/19 0440	EPA 200.8	909W	AL
28-B	Total suspended solids	32220-0142	11		1	mg/L	09/09/19 1655	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
28-B	Ammonia-N	32220-0143	ND		0.1	mg/L as N	09/09/19 1655	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
28-B	Nitrate	32220-0144	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-B	Nitrite	32220-0144	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
28-B	TN	32220-0144	0.604		0.5	mg/L	09/09/19 1655	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
28-B	Total Kjeldahl Nitrogen	32220-0144	0.604		0.5	mg/L	09/09/19 1655	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
29-S	Arsenic, dissolved	32220-0145	0.0015		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1522	EPA 200.8	042N	NAR/JLH
29-S	Copper, dissolved	32220-0145	ND		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1522	EPA 200.8	042N	NAR/JLH
29-S	Arsenic, total	32220-0146	0.0009		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0444	EPA 200.8	909W	AL
29-S	Copper, total	32220-0146	0.0007		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0444	EPA 200.8	909W	AL
29-S	FC	32220-0147	ND		10	MPN/100ml	09/09/19 1710	09/09/19 2257	09/10/19 1707	SM 9223-B	LAG	
29-S	Total suspended solids	32220-0148	6.3		1	mg/L	09/09/19 1710	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
29-S	Ammonia-N	32220-0149	ND		0.1	mg/L as N	09/09/19 1710	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
29-S	Nitrate	32220-0150	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-S	Nitrite	32220-0150	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-S	TN	32220-0150	ND		0.5	mg/L	09/09/19 1710	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
29-S	Total Kjeldahl Nitrogen	32220-0150	ND		0.5	mg/L	09/09/19 1710	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
29-M	Arsenic, dissolved	32220-0151	0.0015		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1622	EPA 200.8	042N	NAR/JLH
29-M	Copper, dissolved	32220-0151	0.0005		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1622	EPA 200.8	042N	NAR/JLH
29-M	Arsenic, total	32220-0152	0.0011		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0456	EPA 200.8	909W	AL
29-M	Copper, total	32220-0152	0.0008		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0456	EPA 200.8	909W	AL
29-M	Total suspended solids	32220-0153	9.5		1	mg/L	09/09/19 1710	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
29-M	Ammonia-N	32220-0154	ND		0.1	mg/L as N	09/09/19 1710	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
29-M	Nitrate	32220-0155	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-M	Nitrite	32220-0155	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-M	TN	32220-0155	ND		0.5	mg/L	09/09/19 1710	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
29-M	Total Kjeldahl Nitrogen	32220-0155	ND		0.5	mg/L	09/09/19 1710	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
29-B	Arsenic, dissolved	32220-0156	0.0015		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1626	EPA 200.8	042N	NAR/JLH
29-B	Copper, dissolved	32220-0156	0.0007		0.0005	mg/L	09/09/19 1710	09/10/19 1030	09/10/19 1626	EPA 200.8	042N	NAR/JLH
29-B	Arsenic, total	32220-0157	0.001		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0500	EPA 200.8	909W	AL
29-B	Copper, total	32220-0157	0.0008		0.0005	mg/L	09/09/19 1710	09/10/19 1205	09/11/19 0500	EPA 200.8	909W	AL
29-B	Total suspended solids	32220-0158	12		1	mg/L	09/09/19 1710	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
29-B	Ammonia-N	32220-0159	ND		0.1	mg/L as N	09/09/19 1710	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
29-B	Nitrate	32220-0160	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-B	Nitrite	32220-0160	ND		0.05	mg/L	09/09/19 1710	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
29-B	TN	32220-0160	0.594		0.5	mg/L	09/09/19 1710	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
29-B	Total Kjeldahl Nitrogen	32220-0160	0.594		0.5	mg/L	09/09/19 1710	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
22-S	Arsenic, dissolved	32220-0161	0.0015		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0153	EPA 200.8	040N	NAR/JLH
22-S	Copper, dissolved	32220-0161	0.0006		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0153	EPA 200.8	040N	NAR/JLH
22-S	Arsenic, total	32220-0162	0.0012		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1639	EPA 200.8	904W	AL
22-S	Copper, total	32220-0162	0.0009		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1639	EPA 200.8	904W	AL
22-S	FC	32220-0163	ND		10	MPN/100ml	09/09/19 1345	09/09/19 1953	09/10/19 1405	SM 9223-B	LAG	
22-S	Total suspended solids	32220-0164	5.9		1	mg/L	09/09/19 1345	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
22-S	Ammonia-N	32220-0165	ND		0.1	mg/L as N	09/09/19 1345	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-S	Nitrate	32220-0166	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	Nitrite	32220-0166	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	TN	32220-0166	ND		0.5	mg/L	09/09/19 1345	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-S	Total Kjeldahl Nitrogen	32220-0166	ND		0.5	mg/L	09/09/19 1345	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
22-M	Arsenic, dissolved	32220-0167	0.0015		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0211	EPA 200.8	040N	NAR/JLH
22-M	Copper, dissolved	32220-0167	0.0007		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0211	EPA 200.8	040N	NAR/JLH
22-M	Arsenic, total	32220-0168	0.0012		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1643	EPA 200.8	904W	AL
22-M	Copper, total	32220-0168	0.0013		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1643	EPA 200.8	904W	AL
22-M	Total suspended solids	32220-0169	7.4		1	mg/L	09/09/19 1345	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
22-M	Ammonia-N	32220-0170	ND		0.1	mg/L as N	09/09/19 1345	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-M	Nitrate	32220-0171	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-M	Nitrite	32220-0171	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-M	TN	32220-0171	ND		0.5	mg/L	09/09/19 1345	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-M	Total Kjeldahl Nitrogen	32220-0171	ND		0.5	mg/L	09/09/19 1345	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
22-B	Arsenic, dissolved	32220-0172	0.0016		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0216	EPA 200.8	040N	NAR/JLH
22-B	Copper, dissolved	32220-0172	ND		0.0005	mg/L	09/09/19 1345	09/09/19 2030	09/10/19 0216	EPA 200.8	040N	NAR/JLH
22-B	Arsenic, total	32220-0173	0.0012		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1647	EPA 200.8	904W	AL
22-B	Copper, total	32220-0173	0.0257		0.0005	mg/L	09/09/19 1345	09/09/19 2020	09/10/19 1647	EPA 200.8	904W	AL
22-B	Total suspended solids	32220-0174	7.7		1	mg/L	09/09/19 1345	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
22-B	Ammonia-N	32220-0175	ND		0.1	mg/L as N	09/09/19 1345	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-B	Nitrate	32220-0176	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	Nitrite	32220-0176	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	TN	32220-0176	ND		0.5	mg/L	09/09/19 1345	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-B	Total Kjeldahl Nitrogen	32220-0176	ND		0.5	mg/L	09/09/19 1345	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
P1	Arsenic, dissolved	32220-0177	ND		0.0005	mg/L	09/09/19 1415	09/09/19 2130	09/10/19 0451	EPA 200.8	041N	NAR/JLH
P1	Copper, dissolved	32220-0177	0.0007		0.0005	mg/L	09/09/19 1415	09/09/19 2130	09/10/19 0451	EPA 200.8	041N	NAR/JLH
P1	Arsenic, total	32220-0178	ND		0.0005	mg/L	09/09/19 1415	09/10/19 1550	09/11/19 1815	EPA 200.8	910W	AL
P1	Copper, total	32220-0178	ND		0.0005	mg/L	09/09/19 1415	09/10/19 1550	09/11/19 1815	EPA 200.8	910W	AL
P1	Total suspended solids	32220-0180	ND		1	mg/L	09/09/19 1415	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
P1	Ammonia-N	32220-0181	ND		0.1	mg/L as N	09/09/19 1415	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
P1	Nitrate	32220-0182	ND		0.05	mg/L	09/09/19 1415	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
P1	Nitrite	32220-0182	ND		0.05	mg/L	09/09/19 1415	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
P1	TN	32220-0182	ND		0.5	mg/L	09/09/19 1415	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
P1	Total Kjeldahl Nitrogen	32220-0182	ND		0.5	mg/L	09/09/19 1415	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
23-B	Arsenic, dissolved	32220-0188	0.0015		0.0005	mg/L	09/09/19 1358	09/09/19 2130	09/10/19 0455	EPA 200.8	041N	NAR/JLH
23-B	Copper, dissolved	32220-0188	ND		0.0005	mg/L	09/09/19 1358	09/09/19 2130	09/10/19 0455	EPA 200.8	041N	NAR/JLH
23-B	Arsenic, total	32220-0189	0.0013		0.0005	mg/L	09/09/19 1358	09/09/19 2100	09/10/19 1900	EPA 200.8	905W	AL
23-B	Copper, total	32220-0189	0.0008		0.0005	mg/L	09/09/19 1358	09/09/19 2100	09/10/19 1900	EPA 200.8	905W	AL
23-B	Total suspended solids	32220-0190	16		1	mg/L	09/09/19 1358	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
23-B	Ammonia-N	32220-0191	ND		0.1	mg/L as N	09/09/19 1358	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
23-B	Nitrate	32220-0192	ND		0.05	mg/L	09/09/19 1358	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-B	Nitrite	32220-0192	ND		0.05	mg/L	09/09/19 1358	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-B	TN	32220-0192	0.556		0.5	mg/L	09/09/19 1358	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
23-B	Total Kjeldahl Nitrogen	32220-0192	0.556		0.5	mg/L	09/09/19 1358	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
22-S	Arsenic, dissolved	32220-0193	0.0015		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0220	EPA 200.8	040N	NAR/JLH
22-S	Copper, dissolved	32220-0193	0.0006		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0220	EPA 200.8	040N	NAR/JLH
22-S	Arsenic, total	32220-0194	0.0011		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1658	EPA 200.8	904W	AL
22-S	Copper, total	32220-0194	0.0006		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1658	EPA 200.8	904W	AL
22-S	FC	32220-0195	ND		10	MPN/100ml	09/09/19 1248	09/09/19 1953	09/10/19 1405	SM 9223-B	LAG	
22-S	Total suspended solids	32220-0196	5.2		1	mg/L	09/09/19 1248	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
22-S	Ammonia-N	32220-0197	ND		0.1	mg/L as N	09/09/19 1248	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-S	Nitrate	32220-0198	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	Nitrite	32220-0198	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	TN	32220-0198	ND		0.5	mg/L	09/09/19 1248	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-S	Total Kjeldahl Nitrogen	32220-0198	ND		0.5	mg/L	09/09/19 1248	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
22-M	Arsenic, dissolved	32220-0199	0.0015		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0234	EPA 200.8	040N	NAR/JLH
22-M	Copper, dissolved	32220-0199	0.0014		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0234	EPA 200.8	040N	NAR/JLH
22-M	Arsenic, total	32220-0200	0.0011		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1702	EPA 200.8	904W	AL
22-M	Copper, total	32220-0200	0.0008		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1702	EPA 200.8	904W	AL
22-M	Total suspended solids	32220-0201	9.6		1	mg/L	09/09/19 1248	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
22-M	Ammonia-N	32220-0202	ND		0.1	mg/L as N	09/09/19 1248	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-M	Nitrate	32220-0203	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-M	Nitrite	32220-0203	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-M	TN	32220-0203	ND		0.5	mg/L	09/09/19 1248	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-M	Total Kjeldahl Nitrogen	32220-0203	ND		0.5	mg/L	09/09/19 1248	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
22-B	Arsenic, dissolved	32220-0204	0.0015		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0239	EPA 200.8	040N	NAR/JLH
22-B	Copper, dissolved	32220-0204	ND		0.0005	mg/L	09/09/19 1248	09/09/19 2030	09/10/19 0239	EPA 200.8	040N	NAR/JLH
22-B	Arsenic, total	32220-0205	0.001		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1706	EPA 200.8	904W	AL
22-B	Copper, total	32220-0205	0.0007		0.0005	mg/L	09/09/19 1248	09/09/19 2020	09/10/19 1706	EPA 200.8	904W	AL
22-B	Total suspended solids	32220-0206	8.1	J3, J4	1	mg/L	09/09/19 1248	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
22-B	Ammonia-N	32220-0207	ND		0.1	mg/L as N	09/09/19 1248	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-B	Nitrate	32220-0208	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	Nitrite	32220-0208	ND		0.05	mg/L	09/09/19 1248	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	TN	32220-0208	ND		0.5	mg/L	09/09/19 1248	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-B	Total Kjeldahl Nitrogen	32220-0208	ND		0.5	mg/L	09/09/19 1248	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
23-S	Arsenic, dissolved	32220-0209	0.0015		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0500	EPA 200.8	041N	NAR/JLH
23-S	Copper, dissolved	32220-0209	ND		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0500	EPA 200.8	041N	NAR/JLH
23-S	Arsenic, total	32220-0210	0.0011		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 1903	EPA 200.8	905W	AL
23-S	Copper, total	32220-0210	0.0007		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 1903	EPA 200.8	905W	AL
23-S	FC	32220-0211	ND		10	MPN/100ml	09/09/19 1300	09/09/19 1953	09/10/19 1405	SM 9223-B	LAG	
23-S	Total suspended solids	32220-0212	5.9		1	mg/L	09/09/19 1300	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
23-S	Ammonia-N	32220-0213	ND		0.1	mg/L as N	09/09/19 1300	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
23-S	Nitrate	32220-0214	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-S	Nitrite	32220-0214	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-S	TN	32220-0214	ND		0.5	mg/L	09/09/19 1300	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
23-S	Total Kjeldahl Nitrogen	32220-0214	ND		0.5	mg/L	09/09/19 1300	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
23-B	Arsenic, dissolved	32220-0220	0.0016		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0514	EPA 200.8	041N	NAR/JLH
23-B	Copper, dissolved	32220-0220	0.0012		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0514	EPA 200.8	041N	NAR/JLH
23-B	Arsenic, total	32220-0221	0.0011		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 1915	EPA 200.8	905W	AL
23-B	Copper, total	32220-0221	0.0006		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 1915	EPA 200.8	905W	AL
23-B	Total suspended solids	32220-0222	4.5		1	mg/L	09/09/19 1300	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
23-B	Ammonia-N	32220-0223	ND		0.1	mg/L as N	09/09/19 1300	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
23-B	Nitrate	32220-0224	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-B	Nitrite	32220-0224	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
23-B	TN	32220-0224	ND		0.5	mg/L	09/09/19 1300	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
23-B	Total Kjeldahl Nitrogen	32220-0224	ND		0.5	mg/L	09/09/19 1300	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
23-S	Arsenic, dissolved	32220-0225	0.0016		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1132	EPA 200.8	038N	NAR/JLH
23-S	Copper, dissolved	32220-0225	ND		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1132	EPA 200.8	038N	NAR/JLH
23-S	Arsenic, total	32220-0226	0.0012		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1126	EPA 200.8	902W	AL
23-S	Copper, total	32220-0226	0.0007		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1126	EPA 200.8	902W	AL
23-S	FC	32220-0227	ND		10	MPN/100ml	09/09/19 1150	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
23-S	Total suspended solids	32220-0228	4.3		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
23-S	Ammonia-N	32220-0229	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
23-S	Nitrate	32220-0230	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-S	Nitrite	32220-0230	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-S	TN	32220-0230	ND		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
23-S	Total Kjeldahl Nitrogen	32220-0230	ND		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
23-B	Arsenic, dissolved	32220-0231	0.0015		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1136	EPA 200.8	038N	NAR/JLH
23-B	Copper, dissolved	32220-0231	ND		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1136	EPA 200.8	038N	NAR/JLH
23-B	Arsenic, total	32220-0232	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1130	EPA 200.8	902W	AL
23-B	Copper, total	32220-0232	0.0009		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1130	EPA 200.8	902W	AL
23-B	Total suspended solids	32220-0233	13		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
23-B	Ammonia-N	32220-0234	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
23-B	Nitrate	32220-0235	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-B	Nitrite	32220-0235	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-B	TN	32220-0235	0.965		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
23-B	Total Kjeldahl Nitrogen	32220-0235	0.965		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
23-BDUP	Arsenic, dissolved	32220-0236	0.0015		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1141	EPA 200.8	038N	NAR/JLH
23-BDUP	Copper, dissolved	32220-0236	ND		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1141	EPA 200.8	038N	NAR/JLH
23-BDUP	Arsenic, total	32220-0237	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1134	EPA 200.8	902W	AL
23-BDUP	Copper, total	32220-0237	0.0007		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1134	EPA 200.8	902W	AL
23-BDUP	Total suspended solids	32220-0238	11		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
23-BDUP	Ammonia-N	32220-0239	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
23-BDUP	Nitrate	32220-0240	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-BDUP	Nitrite	32220-0240	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
23-BDUP	TN	32220-0240	ND		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
23-BDUP	Total Kjeldahl Nitrogen	32220-0240	ND		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
25-S	Arsenic, dissolved	32220-0241	0.0016		0.0005	mg/L	09/09/19 1205	09/09/19 1830	09/10/19 0017	EPA 200.8	039N	NAR/JLH
25-S	Copper, dissolved	32220-0241	0.0005		0.0005	mg/L	09/09/19 1205	09/09/19 1830	09/10/19 0017	EPA 200.8	039N	NAR/JLH
25-S	Arsenic, total	32220-0242	0.0013		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1138	EPA 200.8	902W	AL
25-S	Copper, total	32220-0242	0.0009		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1138	EPA 200.8	902W	AL
25-S	FC	32220-0243	ND		10	MPN/100ml	09/09/19 1205	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
25-S	Total suspended solids	32220-0244	4.6		1	mg/L	09/09/19 1205	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
25-S	Ammonia-N	32220-0245	ND		0.1	mg/L as N	09/09/19 1205	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
25-S	Nitrate	32220-0246	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-S	Nitrite	32220-0246	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-S	TN	32220-0246	ND		0.5	mg/L	09/09/19 1205	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
25-S	Total Kjeldahl Nitrogen	32220-0246	ND		0.5	mg/L	09/09/19 1205	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
25-M	Arsenic, dissolved	32220-0247	0.0016		0.0005	mg/L	09/09/19 1205	09/09/19 1830	09/10/19 0022	EPA 200.8	039N	NAR/JLH
25-M	Copper, dissolved	32220-0247	ND		0.0005	mg/L	09/09/19 1205	09/09/19 1830	09/10/19 0022	EPA 200.8	039N	NAR/JLH
25-M	Arsenic, total	32220-0248	0.0012		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1205	EPA 200.8	902W	AL
25-M	Copper, total	32220-0248	0.0007		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1205	EPA 200.8	902W	AL
25-M	Total suspended solids	32220-0249	7.6		1	mg/L	09/09/19 1205	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
25-M	Ammonia-N	32220-0250	ND		0.1	mg/L as N	09/09/19 1205	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
25-M	Nitrate	32220-0251	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-M	Nitrite	32220-0251	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-M	TN	32220-0251	ND		0.5	mg/L	09/09/19 1205	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
25-M	Total Kjeldahl Nitrogen	32220-0251	ND		0.5	mg/L	09/09/19 1205	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
25-B	Arsenic, dissolved	32220-0252	0.0015		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1145	EPA 200.8	038N	NAR/JLH
25-B	Copper, dissolved	32220-0252	ND		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1145	EPA 200.8	038N	NAR/JLH
25-B	Arsenic, total	32220-0253	0.0012		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1201	EPA 200.8	902W	AL
25-B	Copper, total	32220-0253	0.0007		0.0005	mg/L	09/09/19 1205	09/09/19 1730	09/10/19 1201	EPA 200.8	902W	AL
25-B	Total suspended solids	32220-0254	11		1	mg/L	09/09/19 1205	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
25-B	Ammonia-N	32220-0255	ND		0.1	mg/L as N	09/09/19 1205	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
25-B	Nitrate	32220-0256	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-B	Nitrite	32220-0256	ND		0.05	mg/L	09/09/19 1205	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
25-B	TN	32220-0256	ND		0.5	mg/L	09/09/19 1205	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
25-B	Total Kjeldahl Nitrogen	32220-0256	ND		0.5	mg/L	09/09/19 1205	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
22-S	Arsenic, dissolved	32220-0257	0.0016		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0243	EPA 200.8	040N	NAR/JLH
22-S	Copper, dissolved	32220-0257	ND		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0243	EPA 200.8	040N	NAR/JLH
22-S	Arsenic, total	32220-0258	0.0012		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1710	EPA 200.8	904W	AL
22-S	Copper, total	32220-0258	0.001		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1710	EPA 200.8	904W	AL
22-S	FC	32220-0259	ND		10	MPN/100ml	09/09/19 1445	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
22-S	Total suspended solids	32220-0260	13	J3, J4	1	mg/L	09/09/19 1445	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
22-S	Ammonia-N	32220-0261	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-S	Nitrate	32220-0262	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	Nitrite	32220-0262	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-S	TN	32220-0262	ND		0.5	mg/L	09/09/19 1445	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-S	Total Kjeldahl Nitrogen	32220-0262	ND		0.5	mg/L	09/09/19 1445	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
22-M	Arsenic, dissolved	32220-0263	0.0015		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0248	EPA 200.8	040N	NAR/JLH
22-M	Copper, dissolved	32220-0263	ND		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0248	EPA 200.8	040N	NAR/JLH
22-M	Arsenic, total	32220-0264	0.0012		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1714	EPA 200.8	904W	AL
22-M	Copper, total	32220-0264	0.0011		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1714	EPA 200.8	904W	AL
22-M	Total suspended solids	32220-0265	5.4	J3, J4	1	mg/L	09/09/19 1445	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
22-M	Ammonia-N	32220-0266	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
24-B	Nitrate	32220-0267	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
24-B	Nitrite	32220-0267	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
24-B	TN	32220-0267	ND		0.5	mg/L	09/09/19 1445	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0267	ND		0.5	mg/L	09/09/19 1445	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
22-B	Arsenic, dissolved	32220-0268	0.0016		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0252	EPA 200.8	040N	NAR/JLH
22-B	Copper, dissolved	32220-0268	ND		0.0005	mg/L	09/09/19 1445	09/09/19 2030	09/10/19 0252	EPA 200.8	040N	NAR/JLH
22-B	Arsenic, total	32220-0269	0.0012		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1718	EPA 200.8	904W	AL
22-B	Copper, total	32220-0269	0.001		0.0005	mg/L	09/09/19 1445	09/09/19 2020	09/10/19 1718	EPA 200.8	904W	AL
22-B	Total suspended solids	32220-0270	10	J3, J4	1	mg/L	09/09/19 1445	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
22-B	Ammonia-N	32220-0271	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
22-B	Nitrate	32220-0272	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	Nitrite	32220-0272	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
22-B	TN	32220-0272	ND		0.5	mg/L	09/09/19 1445	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
22-B	Total Kjeldahl Nitrogen	32220-0272	ND		0.5	mg/L	09/09/19 1445	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
24-S	Arsenic, dissolved	32220-0273	0.0016		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0518	EPA 200.8	041N	NAR/JLH
24-S	Copper, dissolved	32220-0273	0.0008		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0518	EPA 200.8	041N	NAR/JLH
24-S	Arsenic, total	32220-0274	0.0012		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1919	EPA 200.8	905W	AL
24-S	Copper, total	32220-0274	0.0015		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1919	EPA 200.8	905W	AL
24-S	FC	32220-0275	ND		10	MPN/100ml	09/09/19 1405	09/09/19 2001	09/10/19 1405	SM 9223-B		LAG
24-S	Total suspended solids	32220-0276	15		1	mg/L	09/09/19 1405	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
24-S	Ammonia-N	32220-0277	ND		0.1	mg/L as N	09/09/19 1405	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
24-S	Nitrate	32220-0278	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-S	Nitrite	32220-0278	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-S	TN	32220-0278	ND		0.5	mg/L	09/09/19 1405	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
24-S	Total Kjeldahl Nitrogen	32220-0278	ND		0.5	mg/L	09/09/19 1405	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
24-M	Arsenic, dissolved	32220-0279	0.0015		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0523	EPA 200.8	041N	NAR/JLH
24-M	Copper, dissolved	32220-0279	ND		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0523	EPA 200.8	041N	NAR/JLH
24-M	Arsenic, total	32220-0280	0.0011		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1923	EPA 200.8	905W	AL
24-M	Copper, total	32220-0280	0.0009		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1923	EPA 200.8	905W	AL
24-M	Total suspended solids	32220-0281	6.1		1	mg/L	09/09/19 1405	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
24-M	Ammonia-N	32220-0282	ND		0.1	mg/L as N	09/09/19 1405	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
24-M	Nitrate	32220-0283	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-M	Nitrite	32220-0283	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-M	TN	32220-0283	ND		0.5	mg/L	09/09/19 1405	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
24-M	Total Kjeldahl Nitrogen	32220-0283	ND		0.5	mg/L	09/09/19 1405	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
24-B	Arsenic, dissolved	32220-0284	0.0016		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0527	EPA 200.8	041N	NAR/JLH
24-B	Copper, dissolved	32220-0284	ND		0.0005	mg/L	09/09/19 1405	09/09/19 2130	09/10/19 0527	EPA 200.8	041N	NAR/JLH
24-B	Arsenic, total	32220-0285	0.0012		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1927	EPA 200.8	905W	AL
24-B	Copper, total	32220-0285	0.0009		0.0005	mg/L	09/09/19 1405	09/09/19 2100	09/10/19 1927	EPA 200.8	905W	AL
24-B	Total suspended solids	32220-0286	10		1	mg/L	09/09/19 1405	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
24-B	Ammonia-N	32220-0287	ND		0.1	mg/L as N	09/09/19 1405	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
24-B	Nitrate	32220-0288	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-B	Nitrite	32220-0288	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
24-B	TN	32220-0288	0.637		0.5	mg/L	09/09/19 1405	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0288	0.637		0.5	mg/L	09/09/19 1405	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
22-S	Arsenic, dissolved	32220-0289	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1150	EPA 200.8	038N	NAR/JLH
22-S	Copper, dissolved	32220-0289	0.0013		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1150	EPA 200.8	038N	NAR/JLH
22-S	Arsenic, total	32220-0290	0.0013		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1209	EPA 200.8	902W	AL
22-S	Copper, total	32220-0290	0.0009		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1209	EPA 200.8	902W	AL
22-S	FC	32220-0291	ND		10	MPN/100ml	09/09/19 1050	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
22-S	Total suspended solids	32220-0292	6.7		1	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
22-S	Ammonia-N	32220-0293	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
22-S	Nitrate	32220-0294	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
22-S	Nitrite	32220-0294	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JWH
22-S	TN	32220-0294	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
22-S	Total Kjeldahl Nitrogen	32220-0294	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
22-M	Arsenic, dissolved	32220-0295	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1830	09/10/19 0027	EPA 200.8	039N	NAR/JLH
22-M	Copper, dissolved	32220-0295	ND		0.0005	mg/L	09/09/19 1050	09/09/19 1830	09/10/19 0027	EPA 200.8	039N	NAR/JLH
22-M	Arsenic, total	32220-0296	0.0014		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1213	EPA 200.8	902W	AL
22-M	Copper, total	32220-0296	0.0006		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1213	EPA 200.8	902W	AL
22-M	Total suspended solids	32220-0297	12	J8	2	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
22-M	Ammonia-N	32220-0298	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
22-M	Nitrate	32220-0299	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
22-M	Nitrite	32220-0299	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
22-M	TN	32220-0299	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
22-M	Total Kjeldahl Nitrogen	32220-0299	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
22-B	Arsenic, dissolved	32220-0300	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1154	EPA 200.8	038N	NAR/JLH
22-B	Copper, dissolved	32220-0300	ND		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1154	EPA 200.8	038N	NAR/JLH
22-B	Arsenic, total	32220-0301	0.0012		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1217	EPA 200.8	902W	AL
22-B	Copper, total	32220-0301	0.0009		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1217	EPA 200.8	902W	AL
22-B	Total suspended solids	32220-0302	8.1		1	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
22-B	Ammonia-N	32220-0303	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
22-B	Nitrate	32220-0304	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
22-B	Nitrite	32220-0304	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
22-B	TN	32220-0304	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
22-B	Total Kjeldahl Nitrogen	32220-0304	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
24-S	Arsenic, dissolved	32220-0305	0.0016		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0031	EPA 200.8	039N	NAR/JLH
24-S	Copper, dissolved	32220-0305	0.0006		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0031	EPA 200.8	039N	NAR/JLH
24-S	Arsenic, total	32220-0306	0.0013		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1312	EPA 200.8	903W	AL
24-S	Copper, total	32220-0306	0.0029		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1312	EPA 200.8	903W	AL
24-S	FC	32220-0307	ND		10	MPN/100mL	09/09/19 1110	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
24-S	Total suspended solids	32220-0308	4.4		1	mg/L	09/09/19 1110	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
24-S	Ammonia-N	32220-0309	ND		0.1	mg/L as N	09/09/19 1110	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
24-S	Nitrate	32220-0310	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-S	Nitrite	32220-0310	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-S	TN	32220-0310	ND		0.5	mg/L	09/09/19 1110	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
24-S	Total Kjeldahl Nitrogen	32220-0310	ND		0.5	mg/L	09/09/19 1110	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
24-M	Arsenic, dissolved	32220-0311	0.0016		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0035	EPA 200.8	039N	NAR/JLH
24-M	Copper, dissolved	32220-0311	ND		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0035	EPA 200.8	039N	NAR/JLH
24-M	Arsenic, total	32220-0312	0.0011		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1316	EPA 200.8	903W	AL
24-M	Copper, total	32220-0312	0.0007		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1316	EPA 200.8	903W	AL
24-M	Total suspended solids	32220-0313	8.1		1	mg/L	09/09/19 1110	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
24-M	Ammonia-N	32220-0314	ND		0.1	mg/L as N	09/09/19 1110	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
24-M	Nitrate	32220-0315	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-M	Nitrite	32220-0315	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-M	TN	32220-0315	ND		0.5	mg/L	09/09/19 1110	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
24-M	Total Kjeldahl Nitrogen	32220-0315	ND		0.5	mg/L	09/09/19 1110	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
24-B	Arsenic, dissolved	32220-0316	0.0015		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0040	EPA 200.8	039N	NAR/JLH
24-B	Copper, dissolved	32220-0316	ND		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0040	EPA 200.8	039N	NAR/JLH
24-B	Arsenic, total	32220-0317	0.0012		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1320	EPA 200.8	903W	AL
24-B	Copper, total	32220-0317	0.0006		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1320	EPA 200.8	903W	AL
24-B	Total suspended solids	32220-0318	7.3		1	mg/L	09/09/19 1110	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
24-B	Ammonia-N	32220-0319	ND		0.1	mg/L as N	09/09/19 1110	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
24-B	Nitrate	32220-0320	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-B	Nitrite	32220-0320	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	429W	JHW
24-B	TN	32220-0320	ND		0.5	mg/L	09/09/19 1110	09/11/19	09/11/19	SM 4500-NO3 F	006W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0320	ND		0.5	mg/L	09/09/19 1110	9/11/2019	9/11/2019	SM 4500-NO3 F	006W	JHW
16-S	Arsenic, dissolved	32220-0321	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1159	EPA 200.8	038N	NAR/JLH
16-S	Copper, dissolved	32220-0321	0.0014		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1159	EPA 200.8	038N	NAR/JLH
16-S	Arsenic, total	32220-0322	0.0013		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1221	EPA 200.8	902W	AL
16-S	Copper, total	32220-0322	0.0015		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1221	EPA 200.8	902W	AL
16-S	FC	32220-0323	ND		10	MPN/100mL	09/09/19 1050	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
16-S	Total suspended solids	32220-0324	7.8		1	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
16-S	Ammonia-N	32220-0325	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
16-S	Nitrate	32220-0326	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JHW
16-S	Nitrite	32220-0326	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JHW
16-S	TN	32220-0326	ND		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
16-S	Total Kjeldahl Nitrogen	32220-0326	ND		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
43-M	Arsenic, dissolved	32220-0327	0.0017		0.0005	mg/L	09/09/19 1254	09/09/19 2030	09/10/19 0257	EPA 200.8	040N	NAR/JLH
43-M	Copper, dissolved	32220-0327	0.0005		0.0005	mg/L	09/09/19 1254	09/09/19 2030	09/10/19 0257	EPA 200.8	040N	NAR/JLH
16-B	Arsenic, dissolved	32220-0332	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1226	EPA 200.8	038N	NAR/JLH
16-B	Copper, dissolved	32220-0332	0.0008		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1226	EPA 200.8	038N	NAR/JLH
16-B	Arsenic, total	32220-0333	0.0014		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1225	EPA 200.8	902W	AL
16-B	Copper, total	32220-0333	0.0009		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10/19 1225	EPA 200.8	902W	AL
16-B	Total suspended solids	32220-0334	6.4		1	mg/L	09/09/19 1050	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
16-B	Ammonia-N	32220-0335	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
16-B	Nitrate	32220-0336	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
16-B	Nitrite	32220-0336	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
16-B	TN	32220-0336	0.512		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
16-B	Total Kjeldahl Nitrogen	32220-0336	0.512		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
17-S	Arsenic, dissolved	32220-0337	0.0015		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1231	EPA 200.8	038N	NAR/JLH
17-S	Copper, dissolved	32220-0337	0.0017		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1231	EPA 200.8	038N	NAR/JLH
17-S	Arsenic, total	32220-0338	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1229	EPA 200.8	902W	AL
17-S	Copper, total	32220-0338	0.001		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1229	EPA 200.8	902W	AL
17-S	FC	32220-0339	ND		10	MPN/100ml	09/09/19 1150	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
17-S	Total suspended solids	32220-0340	6.6		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
17-S	Ammonia-N	32220-0341	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
17-S	Nitrate	32220-0342	0.11		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-S	Nitrite	32220-0342	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-S	TN	32220-0342	0.554		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0342	0.444		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
17-M	Arsenic, dissolved	32220-0343	0.0016		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1236	EPA 200.8	038N	NAR/JLH
17-M	Copper, dissolved	32220-0343	0.0008		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1236	EPA 200.8	038N	NAR/JLH
17-M	Arsenic, total	32220-0344	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1233	EPA 200.8	902W	AL
17-M	Copper, total	32220-0344	0.0011		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1233	EPA 200.8	902W	AL
17-M	Total suspended solids	32220-0345	7.5		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
17-M	Ammonia-N	32220-0346	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
17-M	Nitrate	32220-0347	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-M	Nitrite	32220-0347	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-M	TN	32220-0347	0.77		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0347	0.77		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
17-B	Arsenic, dissolved	32220-0348	0.0017		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1240	EPA 200.8	038N	NAR/JLH
17-B	Copper, dissolved	32220-0348	0.001		0.0005	mg/L	09/09/19 1150	09/09/19 1730	09/10/19 1240	EPA 200.8	038N	NAR/JLH
17-B	Arsenic, total	32220-0349	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1800	09/10/19 1331	EPA 200.8	903W	AL
17-B	Copper, total	32220-0349	0.0049		0.0005	mg/L	09/09/19 1150	09/09/19 1800	09/10/19 1331	EPA 200.8	903W	AL
17-B	Total suspended solids	32220-0350	5		1	mg/L	09/09/19 1150	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
17-B	Ammonia-N	32220-0351	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
17-B	Nitrate	32220-0352	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-B	Nitrite	32220-0352	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
17-B	TN	32220-0352	ND		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0352	ND		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
16-S	Arsenic, dissolved	32220-0353	0.0013		0.0005	mg/L	09/09/19 1245	09/10/19 1420	09/11/19 0057	EPA 200.8	045N	NAR/JLH
16-S	Copper, dissolved	32220-0353	0.0018		0.0005	mg/L	09/09/19 1245	09/10/19 1420	09/11/19 0057	EPA 200.8	045N	NAR/JLH
16-S	Arsenic, total	32220-0354	0.0011		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 1931	EPA 200.8	905W	AL
16-S	Copper, total	32220-0354	0.0007		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 1931	EPA 200.8	905W	AL
16-S	FC	32220-0355	ND		10	MPN/100ml	09/09/19 1245	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
16-S	Total suspended solids	32220-0356	10	J3, J4	1	mg/L	09/09/19 1245	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
16-S	Ammonia-N	32220-0357	ND		0.1	mg/L as N	09/09/19 1245	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
16-S	Nitrate	32220-0358	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-S	Nitrite	32220-0358	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-S	TN	32220-0358	ND		0.5	mg/L	09/09/19 1245	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
16-S	Total Kjeldahl Nitrogen	32220-0358	ND		0.5	mg/L	09/09/19 1245	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
16-B	Arsenic, dissolved	32220-0364	0.0013		0.0005	mg/L	09/09/19 1245	09/10/19 1420	09/11/19 0102	EPA 200.8	045N	NAR/JLH
16-B	Copper, dissolved	32220-0364	0.0009		0.0005	mg/L	09/09/19 1245	09/10/19 1420	09/11/19 0102	EPA 200.8	045N	NAR/JLH
16-B	Arsenic, total	32220-0365	0.0011		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 1935	EPA 200.8	905W	AL
16-B	Copper, total	32220-0365	0.0009		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 1935	EPA 200.8	905W	AL
16-B	Total suspended solids	32220-0366	5.1	J3, J4	1	mg/L	09/09/19 1245	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
16-B	Ammonia-N	32220-0367	ND		0.1	mg/L as N	09/09/19 1245	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
16-B	Nitrate	32220-0368	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-B	Nitrite	32220-0368	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-B	TN	32220-0368	ND		0.5	mg/L	09/09/19 1245	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
16-B	Total Kjeldahl Nitrogen	32220-0368	ND		0.5	mg/L	09/09/19 1245	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
16-B	Arsenic, dissolved	32220-0380	0.0014		0.0005	mg/L	09/09/19 1345	09/10/19 1420	09/11/19 0116	EPA 200.8	045N	NAR/JLH
16-B	Copper, dissolved	32220-0380	0.0009		0.0005	mg/L	09/09/19 1345	09/10/19 1420	09/11/19 0116	EPA 200.8	045N	NAR/JLH
16-B	Arsenic, total	32220-0381	0.0012		0.0005	mg/L	09/09/19 1345	09/09/19 2100	09/10/19 1939	EPA 200.8	905W	AL
16-B	Copper, total	32220-0381	0.0007		0.0005	mg/L	09/09/19 1345	09/09/19 2100	09/10/19 1939	EPA 200.8	905W	AL
16-B	Total suspended solids	32220-0382	9.5	J3, J4	1	mg/L	09/09/19 1345	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
16-B	Ammonia-N	32220-0383	ND		0.1	mg/L as N	09/09/19 1345	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
16-B	Nitrate	32220-0384	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-B	Nitrite	32220-0384	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
16-B	TN	32220-0384	ND		0.5	mg/L	09/09/19 1345	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
16-B	Total Kjeldahl Nitrogen	32220-0384	ND		0.5	mg/L	09/09/19 1345	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
17-S	Arsenic, dissolved	32220-0385	0.0015		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0532	EPA 200.8	041N	NAR/JLH
17-S	Copper, dissolved	32220-0385	0.0005		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0532	EPA 200.8	041N	NAR/JLH
17-S	Arsenic, total	32220-0386	0.0009		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1819	EPA 200.8	910W	AL
17-S	Copper, total	32220-0386	0.0008		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1819	EPA 200.8	910W	AL
17-S	FC	32220-0387	10		10	MPN/100ml	09/09/19 1355	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
17-S	Total suspended solids	32220-0388	8.2		1	mg/L	09/09/19 1355	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-S	Ammonia-N	32220-0389	ND		0.1	mg/L as N	09/09/19 1355	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
17-S	Nitrate	32220-0390	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-S	Nitrite	32220-0390	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-S	TN	32220-0390	ND		0.5	mg/L	09/09/19 1355	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0390	ND		0.5	mg/L	09/09/19 1355	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
17-M	Arsenic, dissolved	32220-0391	0.0015		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0537	EPA 200.8	041N	NAR/JLH
17-M	Copper, dissolved	32220-0391	ND		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0537	EPA 200.8	041N	NAR/JLH
17-M	Arsenic, total	32220-0392	0.0009		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1830	EPA 200.8	910W	AL
17-M	Copper, total	32220-0392	0.0007		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1830	EPA 200.8	910W	AL
17-M	Total suspended solids	32220-0393	10		1	mg/L	09/09/19 1355	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
17-M	Ammonia-N	32220-0394	ND		0.1	mg/L as N	09/09/19 1355	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-M	Nitrate	32220-0395	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-M	Nitrite	32220-0395	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-M	TN	32220-0395	ND		0.5	mg/L	09/09/19 1355	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0395	ND		0.5	mg/L	09/09/19 1355	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
17-B	Arsenic, dissolved	32220-0396	0.0015		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0541	EPA 200.8	041N	NAR/JLH
17-B	Copper, dissolved	32220-0396	0.007		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0541	EPA 200.8	041N	NAR/JLH
17-B	Arsenic, total	32220-0397	0.0008		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1834	EPA 200.8	910W	AL
17-B	Copper, total	32220-0397	0.0009		0.0005	mg/L	09/09/19 1355	09/10/19 1550	09/11/19 1834	EPA 200.8	910W	AL
17-B	Total suspended solids	32220-0398	11		1	mg/L	09/09/19 1355	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-B	Ammonia-N	32220-0399	ND		0.1	mg/L as N	09/09/19 1355	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-B	Nitrate	32220-0400	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-B	Nitrite	32220-0400	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
17-B	TN	32220-0400	0.529		0.5	mg/L	09/09/19 1355	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0400	0.529		0.5	mg/L	09/09/19 1355	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
17-S	Arsenic, dissolved	32220-0401	0.0014		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1631	EPA 200.8	042N	NAR/JLH
17-S	Copper, dissolved	32220-0401	0.0008		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1631	EPA 200.8	042N	NAR/JLH
17-S	Arsenic, total	32220-0402	0.0009		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0503	EPA 200.8	909W	AL
17-S	Copper, total	32220-0402	ND		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0503	EPA 200.8	909W	AL
17-S	FC	32220-0403	ND		10	MPN/100ml	09/09/19 1445	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
17-S	Total suspended solids	32220-0404	11		1	mg/L	09/09/19 1445	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
17-S	Ammonia-N	32220-0405	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
17-S	Nitrate	32220-0406	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-S	Nitrite	32220-0406	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-S	TN	32220-0406	ND		0.5	mg/L	09/09/19 1445	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0406	ND		0.5	mg/L	09/09/19 1445	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
17-M	Arsenic, dissolved	32220-0407	0.0014		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1635	EPA 200.8	042N	NAR/JLH
17-M	Copper, dissolved	32220-0407	0.0008		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1635	EPA 200.8	042N	NAR/JLH
17-M	Arsenic, total	32220-0408	0.0009		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0507	EPA 200.8	909W	AL
17-M	Copper, total	32220-0408	0.0006		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0507	EPA 200.8	909W	AL
17-M	Total suspended solids	32220-0409	5.6		1	mg/L	09/09/19 1445	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
17-M	Ammonia-N	32220-0410	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
17-M	Nitrate	32220-0411	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
17-M	Nitrite	32220-0411	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
17-M	TN	32220-0411	0.528		0.5	mg/L	09/09/19 1445	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0411	0.528		0.5	mg/L	09/09/19 1445	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
17-B	Arsenic, dissolved	32220-0412	0.0014		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1640	EPA 200.8	042N	NAR/JLH
17-B	Copper, dissolved	32220-0412	0.0009		0.0005	mg/L	09/09/19 1445	09/10/19 1030	09/10 19 1640	EPA 200.8	042N	NAR/JLH
17-B	Arsenic, total	32220-0413	0.0009		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0511	EPA 200.8	909W	AL
17-B	Copper, total	32220-0413	0.0006		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0511	EPA 200.8	909W	AL
17-B	Total suspended solids	32220-0414	13		1	mg/L	09/09/19 1445	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
17-B	Ammonia-N	32220-0415	ND		0.1	mg/L as N	09/09/19 1445	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
17-B	Nitrate	32220-0416	0.1		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-B	Nitrite	32220-0416	ND		0.05	mg/L	09/09/19 1445	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-B	TN	32220-0416	ND		0.5	mg/L	09/09/19 1445	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0416	ND		0.5	mg/L	09/09/19 1445	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
17-S	Arsenic, dissolved	32220-0417	0.0013		0.0005	mg/L	09/09/19 1545	09/10/19 1530	09/11 19 0414	EPA 200.8	046N	NAR/JLH
17-S	Copper, dissolved	32220-0417	ND		0.0005	mg/L	09/09/19 1545	09/10/19 1530	09/11 19 0414	EPA 200.8	046N	NAR/JLH
17-S	Arsenic, total	32220-0418	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1838	EPA 200.8	910W	AL
17-S	Copper, total	32220-0418	0.0007		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1838	EPA 200.8	910W	AL
17-S	FC	32220-0419	ND		10	MPN/100ml	09/09/19 1545	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
17-S	Total suspended solids	32220-0420	5.2		1	mg/L	09/09/19 1545	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-S	Ammonia-N	32220-0421	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-S	Nitrate	32220-0422	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-S	Nitrite	32220-0422	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-S	TN	32220-0422	ND		0.5	mg/L	09/09/19 1545	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0422	ND		0.5	mg/L	09/09/19 1545	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-M	Arsenic, dissolved	32220-0423	0.0013		0.0005	mg/L	09/09/19 1545	09/10/19 1530	09/11 19 0418	EPA 200.8	046N	NAR/JLH
17-M	Copper, dissolved	32220-0423	0.0006		0.0005	mg/L	09/09/19 1545	09/10/19 1530	09/11 19 0418	EPA 200.8	046N	NAR/JLH
17-M	Arsenic, total	32220-0424	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1842	EPA 200.8	910W	AL
17-M	Copper, total	32220-0424	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1842	EPA 200.8	910W	AL
17-M	Total suspended solids	32220-0425	8.5		1	mg/L	09/09/19 1545	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-M	Ammonia-N	32220-0426	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
17-M	Nitrate	32220-0427	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-M	Nitrite	32220-0427	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-M	TN	32220-0427	0.545		0.5	mg/L	09/09/19 1545	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0427	0.545		0.5	mg/L	09/09/19 1545	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-B	Arsenic, dissolved	32220-0428	0.0014		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11 19 0120	EPA 200.8	045N	NAR/JLH
17-B	Copper, dissolved	32220-0428	0.0005		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11 19 0120	EPA 200.8	045N	NAR/JLH
17-B	Arsenic, total	32220-0429	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1846	EPA 200.8	910W	AL
17-B	Copper, total	32220-0429	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1846	EPA 200.8	910W	AL
17-B	Total suspended solids	32220-0430	7.8		1	mg/L	09/09/19 1545	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-B	Ammonia-N	32220-0431	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-B	Nitrate	32220-0432	0.64		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-B	Nitrite	32220-0432	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-B	TN	32220-0432	ND		0.5	mg/L	09/09/19 1545	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0432	ND		0.5	mg/L	09/09/19 1545	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-S	Arsenic, dissolved	32220-0433	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0125	EPA 200.8	045N	NAR/JLH
17-S	Copper, dissolved	32220-0433	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0125	EPA 200.8	045N	NAR/JLH
17-S	Arsenic, total	32220-0434	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1850	EPA 200.8	910W	AL
17-S	Copper, total	32220-0434	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1850	EPA 200.8	910W	AL
17-S	FC	32220-0435	ND		10	MPN/100mL	09/09/19 1645	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
17-S	Total suspended solids	32220-0436	6.3		1	mg/L	09/09/19 1645	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-S	Ammonia-N	32220-0437	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-S	Nitrate	32220-0438	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-S	Nitrite	32220-0438	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-S	TN	32220-0438	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0438	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-M	Arsenic, dissolved	32220-0439	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0129	EPA 200.8	045N	NAR/JLH
17-M	Copper, dissolved	32220-0439	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0129	EPA 200.8	045N	NAR/JLH
17-M	Arsenic, total	32220-0440	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1854	EPA 200.8	910W	AL
17-M	Copper, total	32220-0440	0.0007	J6,J7	0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1854	EPA 200.8	910W	AL
17-M	Total suspended solids	32220-0441	10		1	mg/L	09/09/19 1645	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-M	Ammonia-N	32220-0442	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-M	Nitrate	32220-0443	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-M	Nitrite	32220-0443	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-M	TN	32220-0443	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0443	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-B	Arsenic, dissolved	32220-0444	0.0012		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0134	EPA 200.8	045N	NAR/JLH
17-B	Copper, dissolved	32220-0444	0.0012		0.0005	mg/L	09/09/19 1645	09/10/19 1420	09/11 19 0134	EPA 200.8	045N	NAR/JLH
17-B	Arsenic, total	32220-0445	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1917	EPA 200.8	910W	AL
17-B	Copper, total	32220-0445	0.0013		0.0005	mg/L	09/09/19 1645	09/10/19 1550	09/11/19 1917	EPA 200.8	910W	AL
17-B	Total suspended solids	32220-0446	19		1	mg/L	09/09/19 1645	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
17-B	Ammonia-N	32220-0447	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1240	09/10/19 1240	SM 4500-NH3 G	172W	MBL/JLH
17-B	Nitrate	32220-0448	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-B	Nitrite	32220-0448	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	438W	JWH
17-B	TN	32220-0448	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0448	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
17-S	Arsenic, dissolved	32220-0449	0.0013		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0423	EPA 200.8	046N	NAR/JLH
17-S	Copper, dissolved	32220-0449	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0423	EPA 200.8	046N	NAR/JLH
17-S	Arsenic, total	32220-0450	0.0009		0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2219	EPA 200.8	906W	AL
17-S	Copper, total	32220-0450	0.0008	B 0.0006	0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2219	EPA 200.8	906W	AL
17-S	FC	32220-0451	ND		10	MPN/100mL	09/09/19 1745	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
17-S	Total suspended solids	32220-0452	13	J8	2	mg/L	09/09/19 1745	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
17-S	Ammonia-N	32220-0453	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
17-S	Nitrate	32220-0454	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-S	Nitrite	32220-0454	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-S	TN	32220-0454	ND		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
17-S	Total Kjeldahl Nitrogen	32220-0454	ND		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
17-M	Arsenic, dissolved	32220-0455	0.0013		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0450	EPA 200.8	046N	NAR/JLH
17-M	Copper, dissolved	32220-0455	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0450	EPA 200.8	046N	NAR/JLH
17-M	Arsenic, total	32220-0456	0.0009		0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2223	EPA 200.8	906W	AL
17-M	Copper, total	32220-0456	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2223	EPA 200.8	906W	AL
17-M	Total suspended solids	32220-0457	16	J8	2	mg/L	09/09/19 1745	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
17-M	Ammonia-N	32220-0458	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
17-M	Nitrate	32220-0459	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-M	Nitrite	32220-0459	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
17-M	TN	32220-0459	ND		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
17-M	Total Kjeldahl Nitrogen	32220-0459	ND		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
17-B	Arsenic, dissolved	32220-0460	0.0012		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0455	EPA 200.8	046N	NAR/JLH
17-B	Copper, dissolved	32220-0460	0.0005		0.0005	mg/L	09/09/19 1745	09/10/19 1530	09/11 19 0455	EPA 200.8	046N	NAR/JLH
17-B	Arsenic, total	32220-0461	0.0009		0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2226	EPA 200.8	906W	AL
17-B	Copper, total	32220-0461	0.0028	B 0.0006	0.0005	mg/L	09/09/19 1745	09/10/19 1005	09/10/19 2226	EPA 200.8	906W	AL
17-B	Total suspended solids	32220-0462	26		1	mg/L	09/09/19 1745	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
17-B	Ammonia-N	32220-0463	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
17-B	Nitrate	32220-0464	ND		0.05	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
17-B	Nitrite	32220-0464	ND		0.05	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
17-B	TN	32220-0464	0.56		0.5	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
17-B	Total Kjeldahl Nitrogen	32220-0464	0.56		0.5	mg/L	09/09/19 1745	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
18-S	Arsenic, dissolved	32220-0465	0.0012		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0459	EPA 200.8	046N	NAR/JLH
18-S	Copper, dissolved	32220-0465	0.0006		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0459	EPA 200.8	046N	NAR/JLH
18-S	Arsenic, total	32220-0466	0.0008		0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2230	EPA 200.8	906W	AL
18-S	Copper, total	32220-0466	0.0009	B 0.0006	0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2230	EPA 200.8	906W	AL
18-S	FC	32220-0467	ND		10	MPN/100mL	09/09/19 1800	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
18-S	Total suspended solids	32220-0468	12		1	mg/L	09/09/19 1800	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
18-S	Ammonia-N	32220-0469	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-S	Nitrate	32220-0470	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-S	Nitrite	32220-0470	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-S	TN	32220-0470	ND		0.5	mg/L	09/09/19 1800	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
18-S	Total Kjeldahl Nitrogen	32220-0470	ND		0.5	mg/L	09/09/19 1800	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
18-M	Arsenic, dissolved	32220-0471	0.0014		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0504	EPA 200.8	046N	NAR/JLH
18-M	Copper, dissolved	32220-0471	ND		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0504	EPA 200.8	046N	NAR/JLH
18-M	Arsenic, total	32220-0472	0.0009		0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2254	EPA 200.8	906W	AL
18-M	Copper, total	32220-0472	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2254	EPA 200.8	906W	AL
18-M	Total suspended solids	32220-0473	8.8		1	mg/L	09/09/19 1800	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
18-M	Ammonia-N	32220-0474	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-M	Nitrate	32220-0475	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-M	Nitrite	32220-0475	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-M	TN	32220-0475	0.516		0.5	mg/L	09/09/19 1800	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
18-M	Total Kjeldahl Nitrogen	32220-0475	0.516		0.5	mg/L	09/09/19 1800	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
18-B	Arsenic, dissolved	32220-0476	0.0012		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0508	EPA 200.8	046N	NAR/JLH
18-B	Copper, dissolved	32220-0476	0.0006		0.0005	mg/L	09/09/19 1800	09/10/19 1530	09/11 19 0508	EPA 200.8	046N	NAR/JLH
18-B	Arsenic, total	32220-0477	0.0009		0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2258	EPA 200.8	906W	AL
18-B	Copper, total	32220-0477	0.0006	B 0.0006	0.0005	mg/L	09/09/19 1800	09/10/19 1005	09/10/19 2258	EPA 200.8	906W	AL
18-B	Total suspended solids	32220-0478	25		1	mg/L	09/09/19 1800	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
18-B	Ammonia-N	32220-0479	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-B	Nitrate	32220-0480	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-B	Nitrite	32220-0480	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
18-B	TN	32220-0480	ND		0.5	mg/L	09/09/19 1800	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
18-B	Total Kjeldahl Nitrogen	32220-0480	ND		0.5	mg/L	09/09/19 1800	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
11-S	Arsenic, dissolved	32220-0481	0.0016		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1245	EPA 200.8	038N	NAR/JLH
11-S	Copper, dissolved	32220-0481	0.0006		0.0005	mg/L	09/09/19 1050	09/09/19 1730	09/10 19 1245	EPA 200.8	038N	NAR/JLH
11-S	Arsenic, total	32220-0482	0.0014		0.0005	mg/L	09/09/19 1050	09/09/19 1800	09/10/19 1335	EPA 200.8	903W	AL
11-S	Copper, total	32220-0482	0.0007		0.0005	mg/L	09/09/19 1050	09/09/19 1800	09/10/19 1335	EPA 200.8	903W	AL
11-S	FC	32220-0483	ND		10	MPN/100mL	09/09/19 1050	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
11-S	Total suspended solids	32220-0484	4.8		1	mg/L	09/09/19 1050	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
11-S	Ammonia-N	32220-0485	ND		0.1	mg/L as N	09/09/19 1050	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
11-S	Nitrate	32220-0486	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11-S	Nitrite	32220-0486	ND		0.05	mg/L	09/09/19 1050	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11-S	TN	32220-0486	0.617		0.5	mg/L	09/09/19 1050	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
11-S	Total Kjeldahl Nitrogen	32220-0486	0.617		0.5	mg/L	09/09/19 1050	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
11-B	Arsenic, dissolved	32220-0492	0.0015		0.0005	mg/L	09/09/19 1055	09/09/19 1730	09/10 19 1249	EPA 200.8	038N	NAR/JLH
11-B	Copper, dissolved	32220-0492	0.001		0.0005	mg/L	09/09/19 1055	09/09/19 1730	09/10 19 1249	EPA 200.8	038N	NAR/JLH
11-B	Arsenic, total	32220-0493	0.0013		0.0005	mg/L	09/09/19 1055	09/09/19 1800	09/10/19 1339	EPA 200.8	903W	AL
11-B	Copper, total	32220-0493	0.0007		0.0005	mg/L	09/09/19 1055	09/09/19 1800	09/10/19 1339	EPA 200.8	903W	AL
11-B	Total suspended solids	32220-0494	6.4		1	mg/L	09/09/19 1055	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
11-B	Ammonia-N	32220-0495	ND		0.1	mg/L as N	09/09/19 1055	09/09/19 1420	09/09/19 1420	SM 4500-NH3 G	166W	MBL/JLH
11-B	Nitrate	32220-0496	ND		0.05	mg/L	09/09/19 1055	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11-B	Nitrite	32220-0496	ND		0.05	mg/L	09/09/19 1055	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11-B	TN	32220-0496	ND		0.5	mg/L	09/09/19 1055	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
11-B	Total Kjeldahl Nitrogen	32220-0496	ND		0.5	mg/L	09/09/19 1055	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
12-S	Arsenic, dissolved	32220-0497	0.0016		0.0005	mg/L	09/09/19 1105	09/09/19 1830	09/10/19 0045	EPA 200.8	039N	NAR/JLH
12-S	Copper, dissolved	32220-0497	0.001		0.0005	mg/L	09/09/19 1105	09/09/19 1830	09/10/19 0045	EPA 200.8	039N	NAR/JLH
12-S	Arsenic, total	32220-0498	0.0013		0.0005	mg/L	09/09/19 1105	09/09/19 1800	09/10/19 1343	EPA 200.8	903W	AL
12-S	Copper, total	32220-0498	0.0009		0.0005	mg/L	09/09/19 1105	09/09/19 1800	09/10/19 1343	EPA 200.8	903W	AL
12-S	FC	32220-0499	ND		10	MPN/100mL	09/09/19 1105	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
12-S	Total suspended solids	32220-0500	16	J8	2	mg/L	09/09/19 1105	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
12-S	Ammonia-N	32220-0501	ND		0.1	mg/L as N	09/09/19 1105	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
12-S	Nitrate	32220-0502	ND		0.05	mg/L	09/09/19 1105	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-S	Nitrite	32220-0502	ND		0.05	mg/L	09/09/19 1105	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-S	TN	32220-0502	0.557		0.5	mg/L	09/09/19 1105	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
12-S	Total Kjeldahl Nitrogen	32220-0502	0.557		0.5	mg/L	09/09/19 1105	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
12-M	Arsenic, dissolved	32220-0503	0.0016		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0112	EPA 200.8	039N	NAR/JLH
12-M	Copper, dissolved	32220-0503	ND		0.0005	mg/L	09/09/19 1110	09/09/19 1830	09/10/19 0112	EPA 200.8	039N	NAR/JLH
12-M	Arsenic, total	32220-0504	0.0013		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1347	EPA 200.8	903W	AL
12-M	Copper, total	32220-0504	0.0007		0.0005	mg/L	09/09/19 1110	09/09/19 1800	09/10/19 1347	EPA 200.8	903W	AL
12-M	Total suspended solids	32220-0505	8.2		1	mg/L	09/09/19 1110	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM

32220 Analytical Data

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-M	Ammonia-N	32220-0506	ND		0.1	mg/L as N	09/09/19 1110	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
12-M	Nitrate	32220-0507	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-M	Nitrite	32220-0507	ND		0.05	mg/L	09/09/19 1110	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-M	TN	32220-0507	0.509		0.5	mg/L	09/09/19 1110	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
12-M	Total Kjeldahl Nitrogen	32220-0510	0.509		0.5	mg/L	09/09/19 1110	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
12-B	Arsenic, dissolved	32220-0508	0.0015		0.0005	mg/L	09/09/19 1115	09/09/19 1830	09/10/19 0116	EPA 200.8	039N	NAR/JLH
12-B	Copper, dissolved	32220-0508	ND		0.0005	mg/L	09/09/19 1115	09/09/19 1830	09/10/19 0116	EPA 200.8	039N	NAR/JLH
12-B	Arsenic, total	32220-0509	0.0012		0.0005	mg/L	09/09/19 1115	09/09/19 1800	09/10/19 1351	EPA 200.8	903W	AL
12-B	Copper, total	32220-0509	0.0009		0.0005	mg/L	09/09/19 1115	09/09/19 1800	09/10/19 1351	EPA 200.8	903W	AL
12-B	Total suspended solids	32220-0510	7.1		1	mg/L	09/09/19 1115	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
12-B	Ammonia-N	32220-0511	ND		0.1	mg/L as N	09/09/19 1115	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
12-B	Nitrate	32220-0512	ND		0.05	mg/L	09/09/19 1115	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-B	Nitrite	32220-0512	ND		0.05	mg/L	09/09/19 1115	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
12-B	TN	32220-0512	0.514		0.5	mg/L	09/09/19 1115	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
12-B	Total Kjeldahl Nitrogen	32220-0512	0.514		0.5	mg/L	09/09/19 1115	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
11A-S	Arsenic, dissolved	32220-0513	0.0016		0.0005	mg/L	09/09/19 1150	09/09/19 1830	09/10/19 0121	EPA 200.8	039N	NAR/JLH
11A-S	Copper, dissolved	32220-0513	ND		0.0005	mg/L	09/09/19 1150	09/09/19 1830	09/10/19 0121	EPA 200.8	039N	NAR/JLH
11A-S	Arsenic, total	32220-0514	0.0013		0.0005	mg/L	09/09/19 1150	09/09/19 1800	09/10/19 1355	EPA 200.8	903W	AL
11A-S	Copper, total	32220-0514	0.0007		0.0005	mg/L	09/09/19 1150	09/09/19 1800	09/10/19 1355	EPA 200.8	903W	AL
11A-S	FC	32220-0515	20		10	MPN/100ml	09/09/19 1150	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
11A-S	Total suspended solids	32220-0516	9.5		1	mg/L	09/09/19 1150	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
11A-S	Ammonia-N	32220-0517	ND		0.1	mg/L as N	09/09/19 1150	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
11A-S	Nitrate	32220-0518	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11A-S	Nitrite	32220-0518	ND		0.05	mg/L	09/09/19 1150	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11A-S	TN	32220-0518	0.722		0.5	mg/L	09/09/19 1150	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
11A-S	Total Kjeldahl Nitrogen	32220-0518	0.722		0.5	mg/L	09/09/19 1150	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
11A-B	Arsenic, dissolved	32220-0524	0.0014		0.0005	mg/L	09/09/19 1155	09/09/19 1830	09/10/19 0126	EPA 200.8	039N	NAR/JLH
11A-B	Copper, dissolved	32220-0524	ND		0.0005	mg/L	09/09/19 1155	09/09/19 1830	09/10/19 0126	EPA 200.8	039N	NAR/JLH
11A-B	Arsenic, total	32220-0525	0.0013		0.0005	mg/L	09/09/19 1155	09/09/19 1800	09/10/19 1418	EPA 200.8	903W	AL
11A-B	Copper, total	32220-0525	0.0006		0.0005	mg/L	09/09/19 1155	09/09/19 1800	09/10/19 1418	EPA 200.8	903W	AL
11A-B	Total suspended solids	32220-0526	8		1	mg/L	09/09/19 1155	09/09/19 1750	9/10/19 1400	SM 2540D	518W	BG/KM
11A-B	Ammonia-N	32220-0527	ND		0.1	mg/L as N	09/09/19 1155	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
11A-B	Nitrate	32220-0528	ND		0.05	mg/L	09/09/19 1155	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11A-B	Nitrite	32220-0528	ND		0.05	mg/L	09/09/19 1155	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
11A-B	TN	32220-0528	ND		0.5	mg/L	09/09/19 1155	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
11A-B	Total Kjeldahl Nitrogen	32220-0528	ND		0.5	mg/L	09/09/19 1155	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
13-S	Arsenic, dissolved	32220-0529	0.0016		0.0005	mg/L	09/09/19 1210	09/09/19 1730	09/10/19 1254	EPA 200.8	038N	NAR/JLH
13-S	Copper, dissolved	32220-0529	0.0005		0.0005	mg/L	09/09/19 1210	09/09/19 1730	09/10/19 1254	EPA 200.8	038N	NAR/JLH
13-S	Arsenic, total	32220-0530	0.0013		0.0005	mg/L	09/09/19 1210	09/09/19 1800	09/10/19 1422	EPA 200.8	903W	AL
13-S	Copper, total	32220-0530	0.0008		0.0005	mg/L	09/09/19 1210	09/09/19 1800	09/10/19 1422	EPA 200.8	903W	AL
13-S	FC	32220-0531	ND		10	MPN/100ml	09/09/19 1210	09/09/19 1730	09/10/19 1140	SM 9223-B		LAG
13-S	Total suspended solids	32220-0532	7.9		1	mg/L	09/09/19 1210	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
13-S	Ammonia-N	32220-0533	ND		0.1	mg/L as N	09/09/19 1210	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
13-S	Nitrate	32220-0534	ND		0.05	mg/L	09/09/19 1210	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-S	Nitrite	32220-0534	ND		0.05	mg/L	09/09/19 1210	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-S	TN	32220-0534	ND		0.5	mg/L	09/09/19 1210	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
13-S	Total Kjeldahl Nitrogen	32220-0534	ND		0.5	mg/L	09/09/19 1210	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
13-M	Arsenic, dissolved	32220-0535	0.0016		0.0005	mg/L	09/09/19 1215	09/09/19 1730	09/10/19 1258	EPA 200.8	038N	NAR/JLH
13-M	Copper, dissolved	32220-0535	ND		0.0005	mg/L	09/09/19 1215	09/09/19 1730	09/10/19 1258	EPA 200.8	038N	NAR/JLH
13-M	Arsenic, total	32220-0536	0.0014		0.0005	mg/L	09/09/19 1215	09/09/19 1800	09/10/19 1426	EPA 200.8	903W	AL
13-M	Copper, total	32220-0536	0.0008		0.0005	mg/L	09/09/19 1215	09/09/19 1800	09/10/19 1426	EPA 200.8	903W	AL
13-M	Total suspended solids	32220-0537	8.2		1	mg/L	09/09/19 1215	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
13-M	Ammonia-N	32220-0538	ND		0.1	mg/L as N	09/09/19 1215	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
13-M	Nitrate	32220-0539	ND		0.05	mg/L	09/09/19 1215	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-M	Nitrite	32220-0539	ND		0.05	mg/L	09/09/19 1215	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-M	TN	32220-0539	ND		0.5	mg/L	09/09/19 1215	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
13-M	Total Kjeldahl Nitrogen	32220-0539	ND		0.5	mg/L	09/09/19 1215	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
13-B	Arsenic, dissolved	32220-0540	0.0016		0.0005	mg/L	09/09/19 1219	09/09/19 1730	09/10/19 1303	EPA 200.8	038N	NAR/JLH
13-B	Copper, dissolved	32220-0540	ND		0.0005	mg/L	09/09/19 1219	09/09/19 1730	09/10/19 1303	EPA 200.8	038N	NAR/JLH
13-B	Arsenic, total	32220-0541	0.0013		0.0005	mg/L	09/09/19 1219	09/09/19 1800	09/10/19 1430	EPA 200.8	903W	AL
13-B	Copper, total	32220-0541	0.0009		0.0005	mg/L	09/09/19 1219	09/09/19 1800	09/10/19 1430	EPA 200.8	903W	AL
13-B	Total suspended solids	32220-0542	5.9		1	mg/L	09/09/19 1219	09/09/19 1630	9/10/19 1310	SM 2540D	517W	BG/KM
13-B	Ammonia-N	32220-0543	ND		0.1	mg/L as N	09/09/19 1219	09/09/19 1440	09/09/19 1440	SM 4500-NH3 G	167W	MBL/JLH
13-B	Nitrate	32220-0544	ND		0.05	mg/L	09/09/19 1219	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-B	Nitrite	32220-0544	ND		0.05	mg/L	09/09/19 1219	09/09/19	09/09/19	SM 4500-NO3 F	430W	JWH
13-B	TN	32220-0544	0.585		0.5	mg/L	09/09/19 1219	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
13-B	Total Kjeldahl Nitrogen	32220-0544	0.585		0.5	mg/L	09/09/19 1219	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
11-S	Arsenic, dissolved	32220-0545	0.0014		0.0005	mg/L	09/09/19 1245	09/09/19 2130	09/10/19 0608	EPA 200.8	041N	NAR/JLH
11-S	Copper, dissolved	32220-0545	ND		0.0005	mg/L	09/09/19 1245	09/09/19 2130	09/10/19 0608	EPA 200.8	041N	NAR/JLH
11-S	Arsenic, total	32220-0546	0.0012		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 2002	EPA 200.8	905W	AL
11-S	Copper, total	32220-0546	0.0006		0.0005	mg/L	09/09/19 1245	09/09/19 2100	09/10/19 2002	EPA 200.8	905W	AL
11-S	FC	32220-0547	ND		10	MPN/100ml	09/09/19 1245	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG

32220 Analytical Data

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
11-S	Total suspended solids	32220-0548	13	J3, J4, J8	2	mg/L	09/09/19 1245	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11-S	Ammonia-N	32220-0549	ND		0.1	mg/L as N	09/09/19 1245	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
11-S	Nitrate	32220-0550	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-S	Nitrite	32220-0550	ND		0.05	mg/L	09/09/19 1245	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-S	TN	32220-0550	ND		0.5	mg/L	09/09/19 1245	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11-S	Total Kjeldahl Nitrogen	32220-0550	ND		0.5	mg/L	09/09/19 1245	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
11-B	Arsenic, dissolved	32220-0556	0.0015		0.0005	mg/L	09/09/19 1250	09/09/19 2130	09/10/19 0613	EPA 200.8	041N	NAR/JLH
11-B	Copper, dissolved	32220-0556	ND		0.0005	mg/L	09/09/19 1250	09/09/19 2130	09/10/19 0613	EPA 200.8	041N	NAR/JLH
11-B	Arsenic, total	32220-0557	0.0011		0.0005	mg/L	09/09/19 1250	09/09/19 2100	09/10/19 2006	EPA 200.8	905W	AL
11-B	Copper, total	32220-0557	0.0007		0.0005	mg/L	09/09/19 1250	09/09/19 2100	09/10/19 2006	EPA 200.8	905W	AL
11-B	Total suspended solids	32220-0558	7.9	J3, J4	1	mg/L	09/09/19 1250	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11-B	Ammonia-N	32220-0559	ND		0.1	mg/L as N	09/09/19 1250	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
11-B	Nitrate	32220-0560	ND		0.05	mg/L	09/09/19 1250	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-B	Nitrite	32220-0560	ND		0.05	mg/L	09/09/19 1250	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-B	TN	32220-0560	0.773		0.5	mg/L	09/09/19 1250	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11-B	Total Kjeldahl Nitrogen	32220-0560	0.773		0.5	mg/L	09/09/19 1250	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
11A-S	Arsenic, dissolved	32220-0561	0.0015		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0617	EPA 200.8	041N	NAR/JLH
11A-S	Copper, dissolved	32220-0561	ND		0.0005	mg/L	09/09/19 1300	09/09/19 2130	09/10/19 0617	EPA 200.8	041N	NAR/JLH
11A-S	Arsenic, total	32220-0562	0.0012		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 2010	EPA 200.8	905W	AL
11A-S	Copper, total	32220-0562	0.0007		0.0005	mg/L	09/09/19 1300	09/09/19 2100	09/10/19 2010	EPA 200.8	905W	AL
11A-S	FC	32220-0563	ND		10	MPN/100mL	09/09/19 1300	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
11A-S	Total suspended solids	32220-0564	13	J3, J4	1	mg/L	09/09/19 1300	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11A-S	Ammonia-N	32220-0565	ND		0.1	mg/L as N	09/09/19 1300	09/09/19 2025	09/09/19 2025	SM 4500-NH3 G	168W	MBL/JLH
11A-S	Nitrate	32220-0566	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-S	Nitrite	32220-0566	ND		0.05	mg/L	09/09/19 1300	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-S	TN	32220-0566	ND		0.5	mg/L	09/09/19 1300	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11A-S	Total Kjeldahl Nitrogen	32220-0566	ND		0.5	mg/L	09/09/19 1300	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
11A-B	Arsenic, dissolved	32220-0572	0.0014		0.0005	mg/L	09/09/19 1305	09/09/19 2130	09/10/19 0622	EPA 200.8	041N	NAR/JLH
11A-B	Copper, dissolved	32220-0572	ND		0.0005	mg/L	09/09/19 1305	09/09/19 2130	09/10/19 0622	EPA 200.8	041N	NAR/JLH
11A-B	Arsenic, total	32220-0573	0.0011		0.0005	mg/L	09/09/19 1305	09/09/19 2100	09/10/19 2014	EPA 200.8	905W	AL
11A-B	Copper, total	32220-0573	0.0007		0.0005	mg/L	09/09/19 1305	09/09/19 2100	09/10/19 2014	EPA 200.8	905W	AL
11A-B	Total suspended solids	32220-0574	6.3	J3, J4	1	mg/L	09/09/19 1305	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11A-B	Ammonia-N	32220-0575	ND		0.1	mg/L as N	09/09/19 1305	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
11A-B	Nitrate	32220-0576	ND		0.05	mg/L	09/09/19 1305	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-B	Nitrite	32220-0576	ND		0.05	mg/L	09/09/19 1305	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-B	TN	32220-0576	ND		0.5	mg/L	09/09/19 1305	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11A-B	Total Kjeldahl Nitrogen	32220-0576	ND		0.5	mg/L	09/09/19 1305	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
11-B	Arsenic, dissolved	32220-0577	0.0015		0.0005	mg/L	09/09/19 1345	09/09/19 2130	09/10/19 0626	EPA 200.8	041N	NAR/JLH
11-B	Copper, dissolved	32220-0577	ND		0.0005	mg/L	09/09/19 1345	09/09/19 2130	09/10/19 0626	EPA 200.8	041N	NAR/JLH
11-B	Arsenic, total	32220-0578	0.0012		0.0005	mg/L	09/09/19 1345	09/09/19 2100	09/10/19 2018	EPA 200.8	905W	AL
11-B	Copper, total	32220-0578	0.001		0.0005	mg/L	09/09/19 1345	09/09/19 2100	09/10/19 2018	EPA 200.8	905W	AL
11-B	FC	32220-0579	ND		10	MPN/100mL	09/09/19 1345	09/09/19 2001	09/10/19 1405	SM 9223-B		LAG
11-B	Total suspended solids	32220-0580	23	J3, J4	1	mg/L	09/09/19 1345	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11-B	Ammonia-N	32220-0581	ND		0.1	mg/L as N	09/09/19 1345	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
11-B	Nitrate	32220-0582	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-B	Nitrite	32220-0582	ND		0.05	mg/L	09/09/19 1345	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11-B	TN	32220-0582	ND		0.5	mg/L	09/09/19 1345	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11-B	Total Kjeldahl Nitrogen	32220-0582	ND		0.5	mg/L	09/09/19 1345	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
11A-B	Arsenic, dissolved	32220-0593	0.0014		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0631	EPA 200.8	041N	NAR/JLH
11A-B	Copper, dissolved	32220-0593	ND		0.0005	mg/L	09/09/19 1355	09/09/19 2130	09/10/19 0631	EPA 200.8	041N	NAR/JLH
11A-B	Arsenic, total	32220-0594	0.001		0.0005	mg/L	09/09/19 1355	09/09/19 2100	09/10/19 2022	EPA 200.8	905W	AL
11A-B	Copper, total	32220-0594	0.0006		0.0005	mg/L	09/09/19 1355	09/09/19 2100	09/10/19 2022	EPA 200.8	905W	AL
11A-B	FC	32220-0595	10		10	MPN/100mL	09/09/19 1355	09/09/19 2001	09/10/19 1405	SM 9223-B		LAG
11A-B	Total suspended solids	32220-0596	8.6	J3, J4	1	mg/L	09/09/19 1355	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11A-B	Ammonia-N	32220-0597	ND		0.1	mg/L as N	09/09/19 1355	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
11A-B	Nitrate	32220-0598	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-B	Nitrite	32220-0598	ND		0.05	mg/L	09/09/19 1355	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
11A-B	TN	32220-0598	0.615		0.5	mg/L	09/09/19 1355	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
11A-B	Total Kjeldahl Nitrogen	32220-0598	0.615		0.5	mg/L	09/09/19 1355	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
12-S	Arsenic, dissolved	32220-0609	0.0012		0.0005	mg/L	09/09/19 1405	09/10/19 1530	09/11/19 0513	EPA 200.8	046N	NAR/JLH
12-S	Copper, dissolved	32220-0609	0.0007		0.0005	mg/L	09/09/19 1405	09/10/19 1530	09/11/19 0513	EPA 200.8	046N	NAR/JLH
12-S	Arsenic, total	32220-0610	0.0008		0.0005	mg/L	09/09/19 1405	09/10/19 1005	09/10/19 2302	EPA 200.8	906W	AL
12-S	Copper, total	32220-0610	0.0011	B 0.0006	0.0005	mg/L	09/09/19 1405	09/10/19 1005	09/10/19 2302	EPA 200.8	906W	AL
12-S	FC	32220-0611	ND		10	MPN/100mL	09/09/19 1405	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
12-S	Total suspended solids	32220-0612	8.8		1	mg/L	09/09/19 1405	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-S	Ammonia-N	32220-0613	ND		0.1	mg/L as N	09/09/19 1405	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
12-S	Nitrate	32220-0614	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-S	Nitrite	32220-0614	ND		0.05	mg/L	09/09/19 1405	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-S	TN	32220-0614	ND		0.5	mg/L	09/09/19 1405	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
12-S	Total Kjeldahl Nitrogen	32220-0614	ND		0.5	mg/L	09/09/19 1405	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
12-M	Arsenic, dissolved	32220-0615	0.0012		0.0005	mg/L	09/09/19 1410	09/10/19 1530	09/11/19 0518	EPA 200.8	046N	NAR/JLH
12-M	Copper, dissolved	32220-0615	ND		0.0005	mg/L	09/09/19 1410	09/10/19 1530	09/11/19 0518	EPA 200.8	046N	NAR/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-M	Arsenic, total	32220-0616	0.0009		0.0005	mg/L	09/09/19 1410	09/10/19 1005	09/10/19 2306	EPA 200.8	906W	AL
12-M	Copper, total	32220-0616	0.0006	B 0.0006	0.0005	mg/L	09/09/19 1410	09/10/19 1005	09/10/19 2306	EPA 200.8	906W	AL
12-M	Total suspended solids	32220-0617	12		1	mg/L	09/09/19 1410	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-M	Ammonia-N	32220-0618	ND		0.1	mg/L as N	09/09/19 1410	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
12-M	Nitrate	32220-0619	ND		0.05	mg/L	09/09/19 1410	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-M	Nitrite	32220-0619	ND		0.05	mg/L	09/09/19 1410	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-M	TN	32220-0619	ND		0.5	mg/L	09/09/19 1410	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
12-M	Total Kjeldahl Nitrogen	32220-0619	ND		0.5	mg/L	09/09/19 1410	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
12-B	Arsenic, dissolved	32220-0620	0.0014		0.0005	mg/L	09/09/19 1415	09/10/19 1030	09/10 19 1644	EPA 200.8	042N	NAR/JLH
12-B	Copper, dissolved	32220-0620	ND		0.0005	mg/L	09/09/19 1415	09/10/19 1030	09/10 19 1644	EPA 200.8	042N	NAR/JLH
12-B	Arsenic, total	32220-0621	0.0009		0.0005	mg/L	09/09/19 1415	09/10/19 1005	09/10/19 2309	EPA 200.8	906W	AL
12-B	Copper, total	32220-0621	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1415	09/10/19 1005	09/10/19 2309	EPA 200.8	906W	AL
12-B	Total suspended solids	32220-0622	6.4		1	mg/L	09/09/19 1415	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-B	Ammonia-N	32220-0623	ND		0.1	mg/L as N	09/09/19 1415	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
12-B	Nitrate	32220-0624	ND		0.05	mg/L	09/09/19 1415	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-B	Nitrite	32220-0624	ND		0.05	mg/L	09/09/19 1415	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-B	TN	32220-0624	ND		0.5	mg/L	09/09/19 1415	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
12-B	Total Kjeldahl Nitrogen	32220-0624	ND		0.5	mg/L	09/09/19 1415	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
11-B	Arsenic, dissolved	32220-0625	0.0012		0.0005	mg/L	09/09/19 1445	09/10/19 1530	09/11 19 0522	EPA 200.8	046N	NAR/JLH
11-B	Copper, dissolved	32220-0625	ND		0.0005	mg/L	09/09/19 1445	09/10/19 1530	09/11 19 0522	EPA 200.8	046N	NAR/JLH
11-B	Arsenic, total	32220-0626	0.0009		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0515	EPA 200.8	909W	AL
11-B	Copper, total	32220-0626	0.0007		0.0005	mg/L	09/09/19 1445	09/10/19 1205	09/11/19 0515	EPA 200.8	909W	AL
11-B	FC	32220-0627	ND		10	MPN/100mL	09/09/19 1445	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
11-B	Total suspended solids	32220-0628	11		1	mg/L	09/09/19 1445	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
11-B	Ammonia-N	32220-0629	ND		0.1	mg/L as N	09/09/19 1445	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
11-B	Nitrate	32220-0630	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
11-B	Nitrite	32220-0630	ND		0.05	mg/L	09/09/19 1545	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
11-B	TN	32220-0630	0.531		0.5	mg/L	09/09/19 1445	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
11-B	Total Kjeldahl Nitrogen	32220-0630	0.531		0.5	mg/L	09/09/19 1445	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
28-S	Arsenic, dissolved	32220-0641	0.0015		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2155	EPA 200.8	044N	NAR/JLH
28-S	Copper, dissolved	32220-0641	ND		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2155	EPA 200.8	044N	NAR/JLH
28-S	Arsenic, total	32220-0642	0.0009		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0205	EPA 200.8	908W	AL
28-S	Copper, total	32220-0642	0.0008		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0205	EPA 200.8	908W	AL
28-S	FC	32220-0643	ND		10	MPN/100mL	09/09/19 1758	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
28-S	Total suspended solids	32220-0644	25	J2	1	mg/L	09/09/19 1758	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-S	Ammonia-N	32220-0645	ND		0.1	mg/L as N	09/09/19 1758	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
28-S	Nitrate	32220-0646	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-S	Nitrite	32220-0646	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-S	TN	32220-0646	ND		0.5	mg/L	09/09/19 1758	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
28-S	Total Kjeldahl Nitrogen	32220-0646	ND		0.5	mg/L	09/09/19 1758	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
28-M	Arsenic, dissolved	32220-0647	0.0014		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2213	EPA 200.8	044N	NAR/JLH
28-M	Copper, dissolved	32220-0647	0.0005		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2213	EPA 200.8	044N	NAR/JLH
28-M	Arsenic, total	32220-0648	0.001		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0220	EPA 200.8	908W	AL
28-M	Copper, total	32220-0648	0.0006		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0220	EPA 200.8	908W	AL
28-M	Total suspended solids	32220-0649	6.8	J2	1	mg/L	09/09/19 1758	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-M	Ammonia-N	32220-0650	ND		0.1	mg/L as N	09/09/19 1758	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
28-M	Nitrate	32220-0651	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-M	Nitrite	32220-0651	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-M	TN	32220-0651	ND		0.5	mg/L	09/09/19 1758	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
28-M	Total Kjeldahl Nitrogen	32220-0651	ND		0.5	mg/L	09/09/19 1758	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
28-B	Arsenic, dissolved	32220-0652	0.0014		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2217	EPA 200.8	044N	NAR/JLH
28-B	Copper, dissolved	32220-0652	ND		0.0005	mg/L	09/09/19 1758	09/10/19 1220	09/10 19 2217	EPA 200.8	044N	NAR/JLH
28-B	Arsenic, total	32220-0653	0.001		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0224	EPA 200.8	908W	AL
28-B	Copper, total	32220-0653	0.0008		0.0005	mg/L	09/09/19 1758	09/10/19 1130	09/11/19 0224	EPA 200.8	908W	AL
28-B	Total suspended solids	32220-0654	16	J2	1	mg/L	09/09/19 1758	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-B	Ammonia-N	32220-0655	ND		0.1	mg/L as N	09/09/19 1758	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
28-B	Nitrate	32220-0656	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-B	Nitrite	32220-0656	ND		0.05	mg/L	09/09/19 1758	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
28-B	TN	32220-0656	ND		0.5	mg/L	09/09/19 1758	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
28-B	Total Kjeldahl Nitrogen	32220-0656	ND		0.5	mg/L	09/09/19 1758	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
27-S	Arsenic, dissolved	32220-0657	0.0014		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10 19 2222	EPA 200.8	044N	NAR/JLH
27-S	Copper, dissolved	32220-0657	0.0005		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10 19 2222	EPA 200.8	044N	NAR/JLH
27-S	Arsenic, total	32220-0658	0.0009		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0228	EPA 200.8	908W	AL
27-S	Copper, total	32220-0658	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0228	EPA 200.8	908W	AL
27-S	FC	32220-0659	ND		10	MPN/100mL	09/09/19 1745	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
27-S	Total suspended solids	32220-0660	8.1		1	mg/L	09/09/19 1745	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
27-S	Ammonia-N	32220-0661	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
27-S	Nitrate	32220-0662	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-S	Nitrite	32220-0662	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-S	TN	32220-0662	0.545		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
27-S	Total Kjeldahl Nitrogen	32220-0662	0.545		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
27-M	Arsenic, dissolved	32220-0663	0.0015		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10 19 2236	EPA 200.8	044N	NAR/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QC/BATCH	INIT
27-M	Copper, dissolved	32220-0663	ND		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10/19 2236	EPA 200.8	044N	NAR/JLH
27-M	Arsenic, total	32220-0664	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0240	EPA 200.8	908W	AL
27-M	Copper, total	32220-0664	0.0008		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0240	EPA 200.8	908W	AL
27-M	Total suspended solids	32220-0665	11		1	mg/L	09/09/19 1745	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
27-M	Ammonia-N	32220-0666	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
27-M	Nitrate	32220-0667	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-M	Nitrite	32220-0667	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-M	TN	32220-0667	ND		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
27-M	Total Kjeldahl Nitrogen	32220-0667	ND		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
27-B	Arsenic, dissolved	32220-0668	0.0014		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10/19 2240	EPA 200.8	044N	NAR/JLH
27-B	Copper, dissolved	32220-0668	0.0008		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10/19 2240	EPA 200.8	044N	NAR/JLH
27-B	Arsenic, total	32220-0669	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0244	EPA 200.8	908W	AL
27-B	Copper, total	32220-0669	0.0006		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0244	EPA 200.8	908W	AL
27-B	Total suspended solids	32220-0670	8.8		1	mg/L	09/09/19 1745	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
27-B	Ammonia-N	32220-0671	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
27-B	Nitrate	32220-0672	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-B	Nitrite	32220-0672	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
27-B	TN	32220-0672	0.592		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
27-B	Total Kjeldahl Nitrogen	32220-0672	0.592		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
11A-B	Arsenic, dissolved	32220-0673	0.0016		0.0005	mg/L	09/09/19 1453	09/09/19 2030	09/10/19 0301	EPA 200.8	040N	NAR/JLH
11A-B	Copper, dissolved	32220-0673	ND		0.0005	mg/L	09/09/19 1453	09/09/19 2030	09/10/19 0301	EPA 200.8	040N	NAR/JLH
11A-B	Arsenic, total	32220-0674	0.0032		0.0005	mg/L	09/09/19 1453	09/09/19 2020	09/10/19 1722	EPA 200.8	904W	AL
11A-B	Copper, total	32220-0674	0.001		0.0005	mg/L	09/09/19 1453	09/09/19 2020	09/10/19 1722	EPA 200.8	904W	AL
11A-B	FC	32220-0675	ND		10	MPN/100ml	09/09/19 1453	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
11A-B	Total suspended solids	32220-0676	15	J3, J4	1	mg/L	09/09/19 1453	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
11A-B	Ammonia-N	32220-0677	ND		0.1	mg/L as N	09/09/19 1453	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
11A-B	Nitrate	32220-0678	ND		0.05	mg/L	09/09/19 1453	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
11A-B	Nitrite	32220-0678	ND		0.05	mg/L	09/09/19 1453	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
11A-B	TN	32220-0678	ND		0.5	mg/L	09/09/19 1453	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
11A-B	Total Kjeldahl Nitrogen	32220-0678	ND		0.5	mg/L	09/09/19 1453	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
12-S	Arsenic, dissolved	32220-0689	0.0017		0.0005	mg/L	09/09/19 1501	09/09/19 2030	09/10/19 0328	EPA 200.8	040N	NAR/JLH
12-S	Copper, dissolved	32220-0689	0.0007		0.0005	mg/L	09/09/19 1501	09/09/19 2030	09/10/19 0328	EPA 200.8	040N	NAR/JLH
12-S	Arsenic, total	32220-0690	0.0012		0.0005	mg/L	09/09/19 1501	09/09/19 2020	09/10/19 1745	EPA 200.8	904W	AL
12-S	Copper, total	32220-0690	0.0008		0.0005	mg/L	09/09/19 1501	09/09/19 2020	09/10/19 1745	EPA 200.8	904W	AL
12-S	FC	32220-0691	ND		10	MPN/100ml	09/09/19 1501	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
12-S	Total suspended solids	32220-0692	6.6	J3, J4	1	mg/L	09/09/19 1501	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
12-S	Ammonia-N	32220-0693	ND		0.1	mg/L as N	09/09/19 1501	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
12-S	Nitrate	32220-0694	ND		0.05	mg/L	09/09/19 1501	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-S	Nitrite	32220-0694	ND		0.05	mg/L	09/09/19 1501	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-S	TN	32220-0694	ND		0.5	mg/L	09/09/19 1501	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
12-S	Total Kjeldahl Nitrogen	32220-0694	ND		0.5	mg/L	09/09/19 1501	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
12-M	Arsenic, dissolved	32220-0695	0.0016		0.0005	mg/L	09/09/19 1506	09/09/19 2030	09/10/19 0333	EPA 200.8	040N	NAR/JLH
12-M	Copper, dissolved	32220-0695	ND		0.0005	mg/L	09/09/19 1506	09/09/19 2030	09/10/19 0333	EPA 200.8	040N	NAR/JLH
12-M	Arsenic, total	32220-0696	0.0011		0.0005	mg/L	09/09/19 1506	09/09/19 2020	09/10/19 1749	EPA 200.8	904W	AL
12-M	Copper, total	32220-0696	0.0008		0.0005	mg/L	09/09/19 1506	09/09/19 2020	09/10/19 1749	EPA 200.8	904W	AL
12-M	Total suspended solids	32220-0697	14	J3, J4	1	mg/L	09/09/19 1506	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
12-M	Ammonia-N	32220-0698	ND		0.1	mg/L as N	09/09/19 1506	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
12-M	Nitrate	32220-0699	ND		0.05	mg/L	09/09/19 1506	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-M	Nitrite	32220-0699	ND		0.05	mg/L	09/09/19 1506	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-M	TN	32220-0699	ND		0.5	mg/L	09/09/19 1506	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
12-M	Total Kjeldahl Nitrogen	32220-0699	ND		0.5	mg/L	09/09/19 1506	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
12-B	Arsenic, dissolved	32220-0700	0.0015		0.0005	mg/L	09/09/19 1510	09/09/19 2030	09/10/19 0338	EPA 200.8	040N	NAR/JLH
12-B	Copper, dissolved	32220-0700	ND		0.0005	mg/L	09/09/19 1510	09/09/19 2030	09/10/19 0338	EPA 200.8	040N	NAR/JLH
12-B	Arsenic, total	32220-0701	0.0013		0.0005	mg/L	09/09/19 1510	09/09/19 2020	09/10/19 1753	EPA 200.8	904W	AL
12-B	Copper, total	32220-0701	0.0008		0.0005	mg/L	09/09/19 1510	09/09/19 2020	09/10/19 1753	EPA 200.8	904W	AL
12-B	Total suspended solids	32220-0702	8.7	J3, J4	1	mg/L	09/09/19 1510	09/09/19 1955	09/10/19 1145	SM 2540D	519W	BG/KM
12-B	Ammonia-N	32220-0703	ND		0.1	mg/L as N	09/09/19 1510	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
12-B	Nitrate	32220-0704	ND		0.05	mg/L	09/09/19 1510	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-B	Nitrite	32220-0704	ND		0.05	mg/L	09/09/19 1510	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
12-B	TN	32220-0704	0.873		0.5	mg/L	09/09/19 1510	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
12-B	Total Kjeldahl Nitrogen	32220-0704	0.873		0.5	mg/L	09/09/19 1510	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
24-S	Arsenic, dissolved	32220-0705	0.0015		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1139	EPA 200.8	047N	NAR/JLH
24-S	Copper, dissolved	32220-0705	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1139	EPA 200.8	047N	NAR/JLH
24-S	Arsenic, total	32220-0706	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2012	EPA 200.8	911W	AL
24-S	Copper, total	32220-0706	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2012	EPA 200.8	911W	AL
24-S	FC	32220-0707	10		10	MPN/100ml	09/09/19 1645	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
24-S	Total suspended solids	32220-0708	40	J2, J8	2	mg/L	09/09/19 1645	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
24-S	Ammonia-N	32220-0709	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
24-S	Nitrate	32220-0710	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-S	Nitrite	32220-0710	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-S	TN	32220-0710	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
24-S	Total Kjeldahl Nitrogen	32220-0710	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QC/BATCH	INIT
24-M	Arsenic, dissolved	32220-0711	0.0016		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1158	EPA 200.8	047N	NAR/JLH
24-M	Copper, dissolved	32220-0711	ND		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1158	EPA 200.8	047N	NAR/JLH
24-M	Arsenic, total	32220-0712	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2028	EPA 200.8	911W	AL
24-M	Copper, total	32220-0712	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2028	EPA 200.8	911W	AL
24-M	Total suspended solids	32220-0713	21	J2	1	mg/L	09/09/19 1645	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
24-M	Ammonia-N	32220-0714	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
24-M	Nitrate	32220-0715	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-M	Nitrite	32220-0715	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-M	TN	32220-0715	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
24-M	Total Kjeldahl Nitrogen	32220-0715	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
24-B	Arsenic, dissolved	32220-0716	0.0016		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1202	EPA 200.8	047N	NAR/JLH
24-B	Copper, dissolved	32220-0716	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1630	09/11/19 1202	EPA 200.8	047N	NAR/JLH
24-B	Arsenic, total	32220-0717	0.001		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2031	EPA 200.8	911W	AL
24-B	Copper, total	32220-0717	0.0008		0.0005	mg/L	09/09/19 1645	09/10/19 1615	09/11/19 2031	EPA 200.8	911W	AL
24-B	Total suspended solids	32220-0718	7.2		1	mg/L	09/09/19 1645	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
24-B	Ammonia-N	32220-0719	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
24-B	Nitrate	32220-0720	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-B	Nitrite	32220-0720	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
24-B	TN	32220-0720	ND		0.5	mg/L	09/09/19 1645	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0720	ND		0.5	mg/L	09/09/19 1645	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
25-S	Arsenic, dissolved	32220-0721	0.0016		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1207	EPA 200.8	047N	NAR/JLH
25-S	Copper, dissolved	32220-0721	ND		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1207	EPA 200.8	047N	NAR/JLH
25-S	Arsenic, total	32220-0722	0.001		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2035	EPA 200.8	911W	AL
25-S	Copper, total	32220-0722	0.0015		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2035	EPA 200.8	911W	AL
25-S	FC	32220-0723	ND		10	MPN/100ml	09/09/19 1700	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
25-S	Total suspended solids	32220-0724	11	J2	1	mg/L	09/09/19 1700	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
25-S	Ammonia-N	32220-0725	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
25-S	Nitrate	32220-0726	ND		0.05	mg/L	09/09/19 1700	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
25-S	Nitrite	32220-0726	ND		0.05	mg/L	09/09/19 1700	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
25-S	TN	32220-0726	ND		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
25-S	Total Kjeldahl Nitrogen	32220-0726	ND		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
25-M	Arsenic, dissolved	32220-0727	0.0016		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1220	EPA 200.8	047N	NAR/JLH
25-M	Copper, dissolved	32220-0727	ND		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1220	EPA 200.8	047N	NAR/JLH
25-M	Arsenic, total	32220-0728	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2047	EPA 200.8	911W	AL
25-M	Copper, total	32220-0728	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2047	EPA 200.8	911W	AL
25-M	Total suspended solids	32220-0729	24	J2	1	mg/L	09/09/19 1700	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
25-M	Ammonia-N	32220-0730	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
25-M	Nitrate	32220-0731	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
25-M	Nitrite	32220-0731	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
25-M	TN	32220-0731	ND		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
25-M	Total Kjeldahl Nitrogen	32220-0731	ND		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
25-B	Arsenic, dissolved	32220-0732	0.0016		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1225	EPA 200.8	047N	NAR/JLH
25-B	Copper, dissolved	32220-0732	ND		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1225	EPA 200.8	047N	NAR/JLH
25-B	Arsenic, total	32220-0733	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2051	EPA 200.8	911W	AL
25-B	Copper, total	32220-0733	0.0007		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2051	EPA 200.8	911W	AL
25-B	Total suspended solids	32220-0734	7.2		1	mg/L	09/09/19 1700	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
25-B	Ammonia-N	32220-0735	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
25-B	Nitrate	32220-0736	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
25-B	Nitrite	32220-0736	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
25-B	TN	32220-0736	ND		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
25-B	Total Kjeldahl Nitrogen	32220-0736	ND		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
13-S	Arsenic, dissolved	32220-0737	0.0012		0.0005	mg/L	09/09/19 1530	09/10/19 1420	09/11/19 0139	EPA 200.8	045N	NAR/JLH
13-S	Copper, dissolved	32220-0737	ND		0.0005	mg/L	09/09/19 1530	09/10/19 1420	09/11/19 0139	EPA 200.8	045N	NAR/JLH
13-S	Arsenic, total	32220-0738	0.0009		0.0005	mg/L	09/09/19 1530	09/10/19 1550	09/11/19 1921	EPA 200.8	910W	AL
13-S	Copper, total	32220-0738	0.0007		0.0005	mg/L	09/09/19 1530	09/10/19 1550	09/11/19 1921	EPA 200.8	910W	AL
13-S	FC	32220-0739	ND		10	MPN/100ml	09/09/19 1530	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
13-S	Total suspended solids	32220-0740	7.5		1	mg/L	09/09/19 1530	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
13-S	Ammonia-N	32220-0741	ND		0.1	mg/L as N	09/09/19 1530	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
13-S	Nitrate	32220-0742	ND		0.05	mg/L	09/09/19 1530	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-S	Nitrite	32220-0742	ND		0.05	mg/L	09/09/19 1530	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-S	TN	32220-0742	ND		0.5	mg/L	09/09/19 1530	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
13-S	Total Kjeldahl Nitrogen	32220-0742	ND		0.5	mg/L	09/09/19 1530	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW
13-M	Arsenic, dissolved	32220-0743	0.0014		0.0005	mg/L	09/09/19 1535	09/10/19 1420	09/11/19 0143	EPA 200.8	045N	NAR/JLH
13-M	Copper, dissolved	32220-0743	ND		0.0005	mg/L	09/09/19 1535	09/10/19 1420	09/11/19 0143	EPA 200.8	045N	NAR/JLH
13-M	Arsenic, total	32220-0744	0.001		0.0005	mg/L	09/09/19 1535	09/10/19 1550	09/11/19 1925	EPA 200.8	910W	AL
13-M	Copper, total	32220-0744	0.0015		0.0005	mg/L	09/09/19 1535	09/10/19 1550	09/11/19 1925	EPA 200.8	910W	AL
13-M	Total suspended solids	32220-0745	7		1	mg/L	09/09/19 1535	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
13-M	Ammonia-N	32220-0746	ND		0.1	mg/L as N	09/09/19 1535	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
13-M	Nitrate	32220-0747	ND		0.05	mg/L	09/09/19 1535	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-M	Nitrite	32220-0747	ND		0.05	mg/L	09/09/19 1535	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-M	TN	32220-0747	ND		0.5	mg/L	09/09/19 1535	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
13-M	Total Kjeldahl Nitrogen	32220-0747	ND		0.5	mg/L	09/09/19 1535	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW

32220 Analytical Data

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
13-B	Arsenic, dissolved	32220-0748	0.0013		0.0005	mg/L	09/09/19 1540	09/10/19 1420	09/11/19 0211	EPA 200.8	045N	NAR/JLH
13-B	Copper, dissolved	32220-0748	ND		0.0005	mg/L	09/09/19 1540	09/10/19 1420	09/11/19 0211	EPA 200.8	045N	NAR/JLH
13-B	Arsenic, total	32220-0749	0.001		0.0005	mg/L	09/09/19 1540	09/10/19 1005	09/10/19 2313	EPA 200.8	906W	AL
13-B	Copper, total	32220-0749	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1540	09/10/19 1005	09/10/19 2313	EPA 200.8	906W	AL
13-B	Total suspended solids	32220-0750	11		1	mg/L	09/09/19 1540	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
13-B	Ammonia-N	32220-0751	ND		0.1	mg/L as N	09/09/19 1540	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
13-B	Nitrate	32220-0752	ND		0.05	mg/L	09/09/19 1540	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-B	Nitrite	32220-0752	ND		0.05	mg/L	09/09/19 1540	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-B	TN	32220-0752	ND		0.5	mg/L	09/09/19 1540	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
13-B	Total Kjeldahl Nitrogen	32220-0752	ND		0.5	mg/L	09/09/19 1540	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW
12-S	Arsenic, dissolved	32220-0753	0.0013		0.0005	mg/L	09/09/19 1605	09/10/19 1420	09/11/19 0215	EPA 200.8	045N	NAR/JLH
12-S	Copper, dissolved	32220-0753	ND		0.0005	mg/L	09/09/19 1605	09/10/19 1420	09/11/19 0215	EPA 200.8	045N	NAR/JLH
12-S	Arsenic, total	32220-0754	0.001		0.0005	mg/L	09/09/19 1605	09/10/19 1005	09/10/19 2317	EPA 200.8	906W	AL
12-S	Copper, total	32220-0754	0.0007	B 0.0006	0.0005	mg/L	09/09/19 1605	09/10/19 1005	09/10/19 2317	EPA 200.8	906W	AL
12-S	FC	32220-0755	ND		10	MPN/100ml	09/09/19 1605	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
12-S	Total suspended solids	32220-0756	5.8		1	mg/L	09/09/19 1605	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-S	Ammonia-N	32220-0757	ND		0.1	mg/L as N	09/09/19 1605	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
12-S	Nitrate	32220-0758	ND		0.05	mg/L	09/09/19 1605	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-S	Nitrite	32220-0758	ND		0.05	mg/L	09/09/19 1605	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
12-S	TN	32220-0758	ND		0.5	mg/L	09/09/19 1605	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
12-S	Total Kjeldahl Nitrogen	32220-0758	ND		0.5	mg/L	09/09/19 1605	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
12-M	Arsenic, dissolved	32220-0759	0.0013		0.0005	mg/L	09/09/19 1610	09/10/19 1420	09/11/19 0220	EPA 200.8	045N	NAR/JLH
12-M	Copper, dissolved	32220-0759	ND		0.0005	mg/L	09/09/19 1610	09/10/19 1420	09/11/19 0220	EPA 200.8	045N	NAR/JLH
12-M	Arsenic, total	32220-0760	0.0009		0.0005	mg/L	09/09/19 1610	09/10/19 1005	09/10/19 2321	EPA 200.8	906W	AL
12-M	Copper, total	32220-0760	0.0017	B 0.0006	0.0005	mg/L	09/09/19 1610	09/10/19 1005	09/10/19 2321	EPA 200.8	906W	AL
12-M	Total suspended solids	32220-0761	11		1	mg/L	09/09/19 1610	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-M	Ammonia-N	32220-0762	ND		0.1	mg/L as N	09/09/19 1610	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
12-M	Nitrate	32220-0763	ND		0.05	mg/L	09/09/19 1610	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
12-M	Nitrite	32220-0763	ND		0.05	mg/L	09/09/19 1610	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
12-M	TN	32220-0763	ND		0.5	mg/L	09/09/19 1610	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
12-M	Total Kjeldahl Nitrogen	32220-0763	ND		0.5	mg/L	09/09/19 1610	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW
12-B	Arsenic, dissolved	32220-0764	0.0012		0.0005	mg/L	09/09/19 1615	09/10/19 1420	09/11/19 0224	EPA 200.8	045N	NAR/JLH
12-B	Copper, dissolved	32220-0764	0.0006		0.0005	mg/L	09/09/19 1615	09/10/19 1420	09/11/19 0224	EPA 200.8	045N	NAR/JLH
12-B	Arsenic, total	32220-0765	0.001		0.0005	mg/L	09/09/19 1615	09/10/19 1005	09/10/19 2325	EPA 200.8	906W	AL
12-B	Copper, total	32220-0765	0.0009	B 0.0006	0.0005	mg/L	09/09/19 1615	09/10/19 1005	09/10/19 2325	EPA 200.8	906W	AL
12-B	Total suspended solids	32220-0766	19		1	mg/L	09/09/19 1615	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
12-B	Ammonia-N	32220-0767	ND		0.1	mg/L as N	09/09/19 1615	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
12-B	Nitrate	32220-0768	ND		0.05	mg/L	09/09/19 1615	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
12-B	Nitrite	32220-0768	ND		0.05	mg/L	09/09/19 1615	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
12-B	TN	32220-0768	ND		0.5	mg/L	09/09/19 1615	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
12-B	Total Kjeldahl Nitrogen	32220-0768	ND		0.5	mg/L	09/09/19 1615	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW
24-S	Arsenic, dissolved	32220-0769	0.0012		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0229	EPA 200.8	045N	NAR/JLH
24-S	Copper, dissolved	32220-0769	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0229	EPA 200.8	045N	NAR/JLH
24-S	Arsenic, total	32220-0770	0.001		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1929	EPA 200.8	910W	AL
24-S	Copper, total	32220-0770	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1929	EPA 200.8	910W	AL
24-S	FC	32220-0771	ND		10	MPN/100ml	09/09/19 1545	09/09/19 2001	09/10/19 1405	SM 9223-B		LAG
24-S	Total suspended solids	32220-0772	7.9		1	mg/L	09/09/19 1545	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
24-S	Ammonia-N	32220-0773	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
24-S	Nitrate	32220-0774	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-S	Nitrite	32220-0774	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-S	TN	32220-0774	ND		0.5	mg/L	09/09/19 1545	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
24-S	Total Kjeldahl Nitrogen	32220-0774	ND		0.5	mg/L	09/09/19 1545	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
24-M	Arsenic, dissolved	32220-0775	0.0012		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0233	EPA 200.8	045N	NAR/JLH
24-M	Copper, dissolved	32220-0775	ND		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0233	EPA 200.8	045N	NAR/JLH
24-M	Arsenic, total	32220-0776	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1933	EPA 200.8	910W	AL
24-M	Copper, total	32220-0776	0.0009		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1933	EPA 200.8	910W	AL
24-M	Total suspended solids	32220-0777	21		1	mg/L	09/09/19 1545	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
24-M	Ammonia-N	32220-0778	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
24-M	Nitrate	32220-0779	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-M	Nitrite	32220-0779	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-M	TN	32220-0779	ND		0.5	mg/L	09/09/19 1545	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
24-M	Total Kjeldahl Nitrogen	32220-0779	ND		0.5	mg/L	09/09/19 1545	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
24-B	Arsenic, dissolved	32220-0780	0.0013		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0238	EPA 200.8	045N	NAR/JLH
24-B	Copper, dissolved	32220-0780	ND		0.0005	mg/L	09/09/19 1545	09/10/19 1420	09/11/19 0238	EPA 200.8	045N	NAR/JLH
24-B	Arsenic, total	32220-0781	0.0009		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1937	EPA 200.8	910W	AL
24-B	Copper, total	32220-0781	0.0008		0.0005	mg/L	09/09/19 1545	09/10/19 1550	09/11/19 1937	EPA 200.8	910W	AL
24-B	Total suspended solids	32220-0782	11		1	mg/L	09/09/19 1545	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
24-B	Ammonia-N	32220-0783	ND		0.1	mg/L as N	09/09/19 1545	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
24-B	Nitrate	32220-0784	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-B	Nitrite	32220-0784	ND		0.05	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
24-B	TN	32220-0784	ND		0.5	mg/L	09/09/19 1545	09/11/19	09/11/19	SM 4500-NO3 F	012W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0784	ND		0.5	mg/L	09/09/19 1545	9/11/2019	9/11/2019	SM 4500-NO3 F	012W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
25-S	Arsenic, dissolved	32220-0785	0.0016		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0342	EPA 200.8	040N	NAR/JLH
25-S	Copper, dissolved	32220-0785	ND		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0342	EPA 200.8	040N	NAR/JLH
25-S	Arsenic, total	32220-0786	0.0012		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1757	EPA 200.8	904W	AL
25-S	Copper, total	32220-0786	0.0006		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1757	EPA 200.8	904W	AL
25-S	FC	32220-0787	ND		10	MPN/100ml	09/09/19 1600	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
25-S	Total suspended solids	32220-0788	7.6		1	mg/L	09/09/19 1600	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
25-S	Ammonia-N	32220-0789	ND		0.1	mg/L as N	09/09/19 1600	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-S	Nitrate	32220-0790	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-S	Nitrite	32220-0790	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-S	TN	32220-0790	0.705		0.5	mg/L	09/09/19 1600	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
25-S	Total Kjeldahl Nitrogen	32220-0790	0.705		0.5	mg/L	09/09/19 1600	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
25-M	Arsenic, dissolved	32220-0791	0.0017		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0347	EPA 200.8	040N	NAR/JLH
25-M	Copper, dissolved	32220-0791	ND		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0347	EPA 200.8	040N	NAR/JLH
25-M	Arsenic, total	32220-0792	0.0012		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1801	EPA 200.8	904W	AL
25-M	Copper, total	32220-0792	0.0007		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1801	EPA 200.8	904W	AL
25-M	Total suspended solids	32220-0793	6.6		1	mg/L	09/09/19 1600	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-M	Ammonia-N	32220-0794	ND		0.1	mg/L as N	09/09/19 1600	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-M	Nitrate	32220-0795	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-M	Nitrite	32220-0795	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-M	TN	32220-0795	0.546		0.5	mg/L	09/09/19 1600	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
25-M	Total Kjeldahl Nitrogen	32220-0795	0.546		0.5	mg/L	09/09/19 1600	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
25-B	Arsenic, dissolved	32220-0796	0.0016		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0351	EPA 200.8	040N	NAR/JLH
25-B	Copper, dissolved	32220-0796	0.0006		0.0005	mg/L	09/09/19 1600	09/09/19 2030	09/10/19 0351	EPA 200.8	040N	NAR/JLH
25-B	Arsenic, total	32220-0797	0.0013		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1805	EPA 200.8	904W	AL
25-B	Copper, total	32220-0797	0.0007		0.0005	mg/L	09/09/19 1600	09/09/19 2020	09/10/19 1805	EPA 200.8	904W	AL
25-B	Total suspended solids	32220-0798	6.7		1	mg/L	09/09/19 1600	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
25-B	Ammonia-N	32220-0799	ND		0.1	mg/L as N	09/09/19 1600	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-B	Nitrate	32220-0800	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-B	Nitrite	32220-0800	ND		0.05	mg/L	09/09/19 1600	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
25-B	TN	32220-0800	ND		0.5	mg/L	09/09/19 1600	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
25-B	Total Kjeldahl Nitrogen	32220-0800	ND		0.5	mg/L	09/09/19 1600	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
13-S	Arsenic, dissolved	32220-0801	0.0013		0.0005	mg/L	09/09/19 1620	09/10/19 1220	09/10/19 2245	EPA 200.8	044N	NAR/JLH
13-S	Copper, dissolved	32220-0801	ND		0.0005	mg/L	09/09/19 1620	09/10/19 1220	09/10/19 2245	EPA 200.8	044N	NAR/JLH
13-S	Arsenic, total	32220-0802	0.0011		0.0005	mg/L	09/09/19 1620	09/10/19 1205	09/11/19 0519	EPA 200.8	909W	AL
13-S	Copper, total	32220-0802	0.0007		0.0005	mg/L	09/09/19 1620	09/10/19 1205	09/11/19 0519	EPA 200.8	909W	AL
13-S	FC	32220-0803	ND		10	MPN/100ml	09/09/19 1620	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
13-S	Total suspended solids	32220-0804	8.8		1	mg/L	09/09/19 1620	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
13-S	Ammonia-N	32220-0805	ND		0.1	mg/L as N	09/09/19 1620	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
13-S	Nitrate	32220-0806	ND		0.05	mg/L	09/09/19 1620	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-S	Nitrite	32220-0806	ND		0.05	mg/L	09/09/19 1620	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-S	TN	32220-0806	ND		0.5	mg/L	09/09/19 1620	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
13-S	Total Kjeldahl Nitrogen	32220-0806	ND		0.5	mg/L	09/09/19 1620	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
13-M	Arsenic, dissolved	32220-0807	0.0014		0.0005	mg/L	09/09/19 1625	09/10/19 1220	09/10/19 2249	EPA 200.8	044N	NAR/JLH
13-M	Copper, dissolved	32220-0807	ND		0.0005	mg/L	09/09/19 1625	09/10/19 1220	09/10/19 2249	EPA 200.8	044N	NAR/JLH
13-M	Arsenic, total	32220-0808	0.001		0.0005	mg/L	09/09/19 1625	09/10/19 1130	09/11/19 0247	EPA 200.8	908W	AL
13-M	Copper, total	32220-0808	0.0006		0.0005	mg/L	09/09/19 1625	09/10/19 1130	09/11/19 0247	EPA 200.8	908W	AL
13-M	Total suspended solids	32220-0809	11		1	mg/L	09/09/19 1625	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
13-M	Ammonia-N	32220-0810	ND		0.1	mg/L as N	09/09/19 1625	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
13-M	Nitrate	32220-0811	ND		0.05	mg/L	09/09/19 1625	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-M	Nitrite	32220-0811	ND		0.05	mg/L	09/09/19 1625	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-M	TN	32220-0811	ND		0.5	mg/L	09/09/19 1625	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
13-M	Total Kjeldahl Nitrogen	32220-0811	ND		0.5	mg/L	09/09/19 1625	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
13-B	Arsenic, dissolved	32220-0812	0.0013		0.0005	mg/L	09/09/19 1630	09/10/19 1220	09/10/19 2254	EPA 200.8	044N	NAR/JLH
13-B	Copper, dissolved	32220-0812	ND		0.0005	mg/L	09/09/19 1630	09/10/19 1220	09/10/19 2254	EPA 200.8	044N	NAR/JLH
13-B	Arsenic, total	32220-0813	0.001		0.0005	mg/L	09/09/19 1630	09/10/19 1130	09/11/19 0251	EPA 200.8	908W	AL
13-B	Copper, total	32220-0813	0.0006		0.0005	mg/L	09/09/19 1630	09/10/19 1130	09/11/19 0251	EPA 200.8	908W	AL
13-B	Total suspended solids	32220-0814	6.7		1	mg/L	09/09/19 1630	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
13-B	Ammonia-N	32220-0815	ND		0.1	mg/L as N	09/09/19 1630	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
13-B	Nitrate	32220-0816	ND		0.05	mg/L	09/09/19 1630	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-B	Nitrite	32220-0816	ND		0.05	mg/L	09/09/19 1630	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
13-B	TN	32220-0816	0.617		0.5	mg/L	09/09/19 1630	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
13-B	Total Kjeldahl Nitrogen	32220-0816	0.617		0.5	mg/L	09/09/19 1630	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-S	Arsenic, dissolved	32220-0817	0.0018		0.0005	mg/L	09/09/19 1645	09/15/19 2030	09/15/19 2144	EPA 200.8	048N	JLH
12-S	Copper, dissolved	32220-0817	ND		0.0005	mg/L	09/09/19 1645	09/15/19 2030	09/15/19 2144	EPA 200.8	048N	JLH
12-S	Arsenic, total	32220-0818	0.0009		0.0005	mg/L	09/09/19 1645	09/10/19 1205	09/11/19 0542	EPA 200.8	909W	AL
12-S	Copper, total	32220-0818	0.0006		0.0005	mg/L	09/09/19 1645	09/10/19 1205	09/11/19 0542	EPA 200.8	909W	AL
12-S	FC	32220-0819	ND		10	MPN/100ml	09/09/19 1645	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
12-S	Total suspended solids	32220-0820	21		1	mg/L	09/09/19 1645	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
12-S	Ammonia-N	32220-0821	ND		0.1	mg/L as N	09/09/19 1645	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
12-S	Nitrate	32220-0822	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-S	Nitrite	32220-0822	ND		0.05	mg/L	09/09/19 1645	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-S	TN	32220-0822	0.647		0.5	mg/L	09/09/19 1645	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-S	Total Kjeldahl Nitrogen	32220-0822	0.647		0.5	mg/L	09/09/19 1645	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-M	Arsenic, dissolved	32220-0823	0.0018		0.0005	mg/L	09/09/19 1650	09/15/19 2030	09/15/19 2159	EPA 200.8	048N	JLH
12-M	Copper, dissolved	32220-0823	0.0006		0.0005	mg/L	09/09/19 1650	09/15/19 2030	09/15/19 2159	EPA 200.8	048N	JLH
12-M	Arsenic, total	32220-0824	0.001		0.0005	mg/L	09/09/19 1650	09/10/19 1130	09/11/19 0255	EPA 200.8	908W	AL
12-M	Copper, total	32220-0824	0.0008		0.0005	mg/L	09/09/19 1650	09/10/19 1130	09/11/19 0255	EPA 200.8	908W	AL
12-M	Total suspended solids	32220-0825	12	J8	2	mg/L	09/09/19 1650	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
12-M	Ammonia-N	32220-0826	ND		0.1	mg/L as N	09/09/19 1650	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
12-M	Nitrate	32220-0827	ND		0.05	mg/L	09/09/19 1650	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-M	Nitrite	32220-0827	ND		0.05	mg/L	09/09/19 1650	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-M	TN	32220-0827	ND		0.5	mg/L	09/09/19 1650	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-M	Total Kjeldahl Nitrogen	32220-0827	ND		0.5	mg/L	09/09/19 1650	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
12-B	Arsenic, dissolved	32220-0828	0.0013		0.0005	mg/L	09/09/19 1655	09/10/19 1220	09/10 19 2258	EPA 200.8	044N	NAR/JLH
12-B	Copper, dissolved	32220-0828	0.0007		0.0005	mg/L	09/09/19 1655	09/10/19 1220	09/10 19 2258	EPA 200.8	044N	NAR/JLH
12-B	Arsenic, total	32220-0829	0.0009		0.0005	mg/L	09/09/19 1655	09/10/19 1130	09/11/19 0259	EPA 200.8	908W	AL
12-B	Copper, total	32220-0829	0.0006		0.0005	mg/L	09/09/19 1655	09/10/19 1130	09/11/19 0259	EPA 200.8	908W	AL
12-B	Total suspended solids	32220-0830	8.9		1	mg/L	09/09/19 1655	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
12-B	Ammonia-N	32220-0831	ND		0.1	mg/L as N	09/09/19 1655	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
12-B	Nitrate	32220-0832	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-B	Nitrite	32220-0832	ND		0.05	mg/L	09/09/19 1655	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-B	TN	32220-0832	0.542		0.5	mg/L	09/09/19 1655	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-B	Total Kjeldahl Nitrogen	32220-0832	0.542		0.5	mg/L	09/09/19 1655	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
13-S	Arsenic, dissolved	32220-0833	0.0016		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1229	EPA 200.8	047N	NAR/JLH
13-S	Copper, dissolved	32220-0833	ND		0.0005	mg/L	09/09/19 1700	09/10/19 1630	09/11/19 1229	EPA 200.8	047N	NAR/JLH
13-S	Arsenic, total	32220-0834	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2055	EPA 200.8	911W	AL
13-S	Copper, total	32220-0834	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1615	09/11/19 2055	EPA 200.8	911W	AL
13-S	FC	32220-0835	20		10	MPN/100mL	09/09/19 1700	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
13-S	Total suspended solids	32220-0836	24	J2	1	mg/L	09/09/19 1700	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
13-S	Ammonia-N	32220-0837	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	174W	MBL/JLH
13-S	Nitrate	32220-0838	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-S	Nitrite	32220-0838	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-S	TN	32220-0838	ND		0.5	mg/L	09/09/19 1530	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
13-S	Total Kjeldahl Nitrogen	32220-0838	ND		0.5	mg/L	09/09/19 1530	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
13-M	Arsenic, dissolved	32220-0839	0.0015		0.0005	mg/L	09/09/19 1705	09/10/19 1630	09/11/19 1234	EPA 200.8	047N	NAR/JLH
13-M	Copper, dissolved	32220-0839	ND		0.0005	mg/L	09/09/19 1705	09/10/19 1630	09/11/19 1234	EPA 200.8	047N	NAR/JLH
13-M	Arsenic, total	32220-0840	0.001		0.0005	mg/L	09/09/19 1705	09/10/19 1615	09/11/19 2059	EPA 200.8	911W	AL
13-M	Copper, total	32220-0840	0.0009		0.0005	mg/L	09/09/19 1705	09/10/19 1615	09/11/19 2059	EPA 200.8	911W	AL
13-M	Total suspended solids	32220-0841	23	J2	1	mg/L	09/09/19 1705	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
13-M	Ammonia-N	32220-0842	ND		0.1	mg/L as N	09/09/19 1705	09/10/19 1440	09/10/19 1440	SM 4500-NH3 G	175W	MBL/JLH
13-M	Nitrate	32220-0843	ND		0.05	mg/L	09/09/19 1705	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-M	Nitrite	32220-0843	ND		0.05	mg/L	09/09/19 1705	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-M	TN	32220-0843	ND		0.5	mg/L	09/09/19 1705	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
13-M	Total Kjeldahl Nitrogen	32220-0843	ND		0.5	mg/L	09/09/19 1705	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
13-B	Arsenic, dissolved	32220-0844	0.0016		0.0005	mg/L	09/09/19 1710	09/10/19 1630	09/11/19 1239	EPA 200.8	047N	NAR/JLH
13-B	Copper, dissolved	32220-0844	ND		0.0005	mg/L	09/09/19 1710	09/10/19 1630	09/11/19 1239	EPA 200.8	047N	NAR/JLH
13-B	Arsenic, total	32220-0845	0.0011		0.0005	mg/L	09/09/19 1710	09/10/19 1615	09/11/19 2103	EPA 200.8	911W	AL
13-B	Copper, total	32220-0845	0.0007		0.0005	mg/L	09/09/19 1710	09/10/19 1615	09/11/19 2103	EPA 200.8	911W	AL
13-B	Total suspended solids	32220-0846	12	J2	1	mg/L	09/09/19 1710	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
13-B	Ammonia-N	32220-0847	ND		0.1	mg/L as N	09/09/19 1710	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
13-B	Nitrate	32220-0848	ND		0.05	mg/L	09/09/19 1710	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-B	Nitrite	32220-0848	ND		0.05	mg/L	09/09/19 1710	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
13-B	TN	32220-0848	ND		0.5	mg/L	09/09/19 1710	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
13-B	Total Kjeldahl Nitrogen	32220-0848	ND		0.5	mg/L	09/09/19 1710	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
SVY	Arsenic, dissolved	32220-0849	ND		0.0005	mg/L	09/09/19 1720	09/10/19 1630	09/11/19 1243	EPA 200.8	047N	NAR/JLH
SVY	Copper, dissolved	32220-0849	ND		0.0005	mg/L	09/09/19 1720	09/10/19 1630	09/11/19 1243	EPA 200.8	047N	NAR/JLH
SVY	Arsenic, total	32220-0850	ND		0.0005	mg/L	09/09/19 1720	09/10/19 1615	09/11/19 2107	EPA 200.8	911W	AL
SVY	Copper, total	32220-0850	ND		0.0005	mg/L	09/09/19 1720	09/10/19 1615	09/11/19 2107	EPA 200.8	911W	AL
SVY	FC	32220-0851	ND		10	MPN/100mL	09/09/19 1720	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
SVY	Total suspended solids	32220-0852	ND	J2	1	mg/L	09/09/19 1720	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
SVY	Ammonia-N	32220-0853	ND		0.1	mg/L as N	09/09/19 1720	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
SVY	Nitrate	32220-0854	ND		0.05	mg/L	09/09/19 1720	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
SVY	Nitrite	32220-0854	ND		0.05	mg/L	09/09/19 1720	09/10/19	09/10/19	SM 4500-NO3 F	437W	JWH
SVY	TN	32220-0854	ND		0.5	mg/L	09/09/19 1720	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
SVY	Total Kjeldahl Nitrogen	32220-0854	ND		0.5	mg/L	09/09/19 1720	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
25-S	Arsenic, dissolved	32220-0865	0.0015		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0636	EPA 200.8	041N	NAR/JLH
25-S	Copper, dissolved	32220-0865	ND		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0636	EPA 200.8	041N	NAR/JLH
25-S	Arsenic, total	32220-0866	0.0012		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2025	EPA 200.8	905W	AL
25-S	Copper, total	32220-0866	0.0008		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2025	EPA 200.8	905W	AL
25-S	FC	32220-0867	ND		10	MPN/100mL	09/09/19 1515	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
25-M	Total suspended solids	32220-0868	8		1	mg/L	09/09/19 1515	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-S	Ammonia-N	32220-0869	ND		0.1	mg/L as N	09/09/19 1515	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-S	Nitrate	32220-0870	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH
25-S	Nitrite	32220-0870	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	432W	JWH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
25-S	TN	32220-0870	ND		0.5	mg/L	09/09/19 1515	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
25-S	Total Kjeldahl Nitrogen	32220-0870	ND		0.5	mg/L	09/09/19 1515	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
25-M	Arsenic, dissolved	32220-0871	0.0016		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0640	EPA 200.8	041N	NAR/JLH
25-M	Copper, dissolved	32220-0871	ND		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0640	EPA 200.8	041N	NAR/JLH
25-M	Arsenic, total	32220-0872	0.0013		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2029	EPA 200.8	905W	AL
25-M	Copper, total	32220-0872	0.0006		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2029	EPA 200.8	905W	AL
25-M	Total suspended solids	32220-0873	9	J8	2	mg/L	09/09/19 1515	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-M	Ammonia-N	32220-0874	ND		0.1	mg/L as N	09/09/19 1515	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-M	Nitrate	32220-0875	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
25-M	Nitrite	32220-0875	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
25-M	TN	32220-0875	0.584		0.5	mg/L	09/09/19 1515	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
25-M	Total Kjeldahl Nitrogen	32220-0875	0.584		0.5	mg/L	09/09/19 1515	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
25-B	Arsenic, dissolved	32220-0876	0.0015		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0645	EPA 200.8	041N	NAR/JLH
25-B	Copper, dissolved	32220-0876	ND		0.0005	mg/L	09/09/19 1515	09/09/19 2130	09/10/19 0645	EPA 200.8	041N	NAR/JLH
25-B	Arsenic, total	32220-0877	0.0011		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2033	EPA 200.8	905W	AL
25-B	Copper, total	32220-0877	0.0009		0.0005	mg/L	09/09/19 1515	09/09/19 2100	09/10/19 2033	EPA 200.8	905W	AL
25-B	Total suspended solids	32220-0878	8.6		1	mg/L	09/09/19 1515	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
25-B	Ammonia-N	32220-0879	ND		0.1	mg/L as N	09/09/19 1515	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
25-B	Nitrate	32220-0880	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
25-B	Nitrite	32220-0880	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
25-B	TN	32220-0880	ND		0.5	mg/L	09/09/19 1515	09/11/19	09/11/19	SM 4500-NO3 F	009W	JHW
25-B	Total Kjeldahl Nitrogen	32220-0880	ND		0.5	mg/L	09/09/19 1515	9/11/2019	9/11/2019	SM 4500-NO3 F	009W	JHW
24-S	Arsenic, dissolved	32220-0881	0.0015		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0356	EPA 200.8	040N	NAR/JLH
24-S	Copper, dissolved	32220-0881	0.0008		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0356	EPA 200.8	040N	NAR/JLH
24-S	Arsenic, total	32220-0882	0.0012		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1809	EPA 200.8	904W	AL
24-S	Copper, total	32220-0882	0.0008		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1809	EPA 200.8	904W	AL
24-S	FC	32220-0883	ND		10	MPN/100ml	09/09/19 1503	09/09/19 1953	09/10/19 1405	SM 9223-B		LAG
24-S	Total suspended solids	32220-0884	8.8		1	mg/L	09/09/19 1503	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
24-S	Ammonia-N	32220-0885	ND		0.1	mg/L as N	09/09/19 1503	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
24-S	Nitrate	32220-0886	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
24-S	Nitrite	32220-0886	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	431W	JWH
24-S	TN	32220-0886	0.574		0.5	mg/L	09/09/19 1503	09/11/19	09/11/19	SM 4500-NO3 F	008W	JHW
24-S	Total Kjeldahl Nitrogen	32220-0886	0.574		0.5	mg/L	09/09/19 1503	9/11/2019	9/11/2019	SM 4500-NO3 F	008W	JHW
24-M	Arsenic, dissolved	32220-0887	0.0015		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0400	EPA 200.8	040N	NAR/JLH
24-M	Copper, dissolved	32220-0887	ND		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0400	EPA 200.8	040N	NAR/JLH
24-M	Arsenic, total	32220-0888	0.0012		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1812	EPA 200.8	904W	AL
24-M	Copper, total	32220-0888	0.0007		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1812	EPA 200.8	904W	AL
24-M	Total suspended solids	32220-0889	8.1		1	mg/L	09/09/19 1503	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
24-M	Ammonia-N	32220-0890	ND		0.1	mg/L as N	09/09/19 1503	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
24-M	Nitrate	32220-0891	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
24-M	Nitrite	32220-0891	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
24-M	TN	32220-0891	ND		0.5	mg/L	09/09/19 1503	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
24-M	Total Kjeldahl Nitrogen	32220-0891	ND		0.5	mg/L	09/09/19 1503	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
24-B	Arsenic, dissolved	32220-0892	0.0016		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0405	EPA 200.8	040N	NAR/JLH
24-B	Copper, dissolved	32220-0892	ND		0.0005	mg/L	09/09/19 1503	09/09/19 2030	09/10/19 0405	EPA 200.8	040N	NAR/JLH
24-B	Arsenic, total	32220-0893	0.0012		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1816	EPA 200.8	904W	AL
24-B	Copper, total	32220-0893	0.0008		0.0005	mg/L	09/09/19 1503	09/09/19 2020	09/10/19 1816	EPA 200.8	904W	AL
24-B	Total suspended solids	32220-0894	11		1	mg/L	09/09/19 1503	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
24-B	Ammonia-N	32220-0895	ND		0.1	mg/L as N	09/09/19 1503	09/09/19 2055	09/09/19 2055	SM 4500-NH3 G	169W	MBL/JLH
24-B	Nitrate	32220-0896	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
24-B	Nitrite	32220-0896	ND		0.05	mg/L	09/09/19 1503	09/10/19	09/10/19	SM 4500-NO3 F	433W	JWH
24-B	TN	32220-0896	0.729		0.5	mg/L	09/09/19 1503	09/11/19	09/11/19	SM 4500-NO3 F	007W	JHW
24-B	Total Kjeldahl Nitrogen	32220-0896	0.729		0.5	mg/L	09/09/19 1503	9/11/2019	9/11/2019	SM 4500-NO3 F	007W	JHW
18-S	Arsenic, dissolved	32220-0897	0.0029		0.0005	mg/L	09/09/19 1700	09/10/19 1420	09/11 19 0243	EPA 200.8	045N	NAR/JLH
18-S	Copper, dissolved	32220-0897	0.0027		0.0005	mg/L	09/09/19 1700	09/10/19 1420	09/11 19 0243	EPA 200.8	045N	NAR/JLH
18-S	Arsenic, total	32220-0898	0.0009		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1941	EPA 200.8	910W	AL
18-S	Copper, total	32220-0898	0.0015		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1941	EPA 200.8	910W	AL
18-S	FC	32220-0899	ND		10	MPN/100ml	09/09/19 1700	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
18-S	Total suspended solids	32220-0900	13		1	mg/L	09/09/19 1700	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
18-S	Ammonia-N	32220-0901	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-S	Nitrate	32220-0902	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
18-S	Nitrite	32220-0902	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
18-S	TN	32220-0902	0.51		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
18-S	Total Kjeldahl Nitrogen	32220-0902	0.51		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
18-M	Arsenic, dissolved	32220-0903	0.0013		0.0005	mg/L	09/09/19 1700	09/10/19 1530	09/11 19 0527	EPA 200.8	046N	NAR/JLH
18-M	Copper, dissolved	32220-0903	0.0007		0.0005	mg/L	09/09/19 1700	09/10/19 1530	09/11 19 0527	EPA 200.8	046N	NAR/JLH
18-M	Arsenic, total	32220-0904	0.0008		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1944	EPA 200.8	910W	AL
18-M	Copper, total	32220-0904	0.0007		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1944	EPA 200.8	910W	AL
18-M	Total suspended solids	32220-0905	5.2		1	mg/L	09/09/19 1700	09/10/19 1030	09/10/19 1710	SM 2540D	523W	BG/JTP
18-M	Ammonia-N	32220-0906	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-M	Nitrate	32220-0907	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
18-M	Nitrite	32220-0907	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
18-M	TN	32220-0907	ND		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
18-M	Total Kjeldahl Nitrogen	32220-0907	ND		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
18-B	Arsenic, dissolved	32220-0908	0.0014		0.0005	mg/L	09/09/19 1700	09/10/19 1420	09/11/19 0247	EPA 200.8	045N	NAR/JLH
18-B	Copper, dissolved	32220-0908	0.001		0.0005	mg/L	09/09/19 1700	09/10/19 1420	09/11/19 0247	EPA 200.8	045N	NAR/JLH
18-B	Arsenic, total	32220-0909	0.0008		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1948	EPA 200.8	910W	AL
18-B	Copper, total	32220-0909	0.0007		0.0005	mg/L	09/09/19 1700	09/10/19 1550	09/11/19 1948	EPA 200.8	910W	AL
18-B	Total suspended solids	32220-0910	5.9		1	mg/L	09/09/19 1700	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
18-B	Ammonia-N	32220-0911	ND		0.1	mg/L as N	09/09/19 1700	09/10/19 1310	09/10/19 1310	SM 4500-NH3 G	173W	MBL/JLH
18-B	Nitrate	32220-0912	0.071		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JHW
18-B	Nitrite	32220-0912	ND		0.05	mg/L	09/09/19 1700	09/11/19	09/11/19	SM 4500-NO3 F	439W	JHW
18-B	TN	32220-0912	ND		0.5	mg/L	09/09/19 1700	09/12/19	09/12/19	SM 4500-NO3 F	012W	JHW
18-B	Total Kjeldahl Nitrogen	32220-0912	ND		0.5	mg/L	09/09/19 1700	9/12/2019	9/12/2019	SM 4500-NO3 F	012W	JHW
T1	Arsenic, dissolved	32220-0913	ND		0.0005	mg/L	09/09/19 1515	09/10/19 1030	09/10/19 1649	EPA 200.8	042N	NAR/JLH
T1	Copper, dissolved	32220-0913	ND		0.0005	mg/L	09/09/19 1515	09/10/19 1030	09/10/19 1649	EPA 200.8	042N	NAR/JLH
T1	Arsenic, total	32220-0914	ND		0.0005	mg/L	09/09/19 1515	09/10/19 1205	09/11/19 0546	EPA 200.8	909W	AL
T1	Copper, total	32220-0914	0.0009		0.0005	mg/L	09/09/19 1515	09/10/19 1205	09/11/19 0546	EPA 200.8	909W	AL
T1	FC	32220-0915	ND		10	MPN/100ml	09/09/19 1515	09/09/19 2124	09/10/19 1535	SM 9223-B		LAG
T1	Total suspended solids	32220-0916	ND		1	mg/L	09/09/19 1515	09/09/19 2125	9/10/19 1440	SM 2540D	520W	BG/KM
T1	Ammonia-N	32220-0917	ND		0.1	mg/L as N	09/09/19 1515	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
T1	Nitrate	32220-0918	0.097		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	437W	JHW
T1	Nitrite	32220-0918	ND		0.05	mg/L	09/09/19 1515	09/10/19	09/10/19	SM 4500-NO3 F	437W	JHW
T1	TN	32220-0918	ND		0.5	mg/L	09/09/19 1515	09/12/19	09/12/19	SM 4500-NO3 F	013W	JHW
T1	Total Kjeldahl Nitrogen	32220-0918	ND		0.5	mg/L	09/09/19 1515	9/12/2019	9/12/2019	SM 4500-NO3 F	013W	JHW
13-S	Arsenic, dissolved	32220-0929	0.0015		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1716	EPA 200.8	042N	NAR/JLH
13-S	Copper, dissolved	32220-0929	0.0006		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1716	EPA 200.8	042N	NAR/JLH
13-S	Arsenic, total	32220-0930	0.0011		0.0005	mg/L	09/09/19 1900	09/10/19 1205	09/11/19 0550	EPA 200.8	909W	AL
13-S	Copper, total	32220-0930	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1205	09/11/19 0550	EPA 200.8	909W	AL
13-S	FC	32220-0931	ND		10	MPN/100ml	09/09/19 1900	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
13-S	Total suspended solids	32220-0932	7.4		1	mg/L	09/09/19 1900	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
13-S	Ammonia-N	32220-0933	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
13-S	Nitrate	32220-0934	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
13-S	Nitrite	32220-0934	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
13-S	TN	32220-0934	ND		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
13-S	Total Kjeldahl Nitrogen	32220-0934	ND		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
13-M	Arsenic, dissolved	32220-0935	0.0018		0.0005	mg/L	09/09/19 1905	09/15/19 2030	09/15/19 2203	EPA 200.8	048N	JLH
13-M	Copper, dissolved	32220-0935	0.0005		0.0005	mg/L	09/09/19 1905	09/15/19 2030	09/15/19 2203	EPA 200.8	048N	JLH
13-M	Arsenic, total	32220-0936	0.001		0.0005	mg/L	09/09/19 1905	09/10/19 1205	09/11/19 0554	EPA 200.8	909W	AL
13-M	Copper, total	32220-0936	0.0007		0.0005	mg/L	09/09/19 1905	09/10/19 1205	09/11/19 0554	EPA 200.8	909W	AL
13-M	Total suspended solids	32220-0937	8		1	mg/L	09/09/19 1905	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
13-M	Ammonia-N	32220-0938	ND		0.1	mg/L as N	09/09/19 1905	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
13-M	Nitrate	32220-0939	ND		0.05	mg/L	09/09/19 1905	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
13-M	Nitrite	32220-0939	ND		0.05	mg/L	09/09/19 1905	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
13-M	TN	32220-0939	ND		0.5	mg/L	09/09/19 1905	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
13-M	Total Kjeldahl Nitrogen	32220-0939	ND		0.5	mg/L	09/09/19 1905	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
13-B	Arsenic, dissolved	32220-0940	0.0017		0.0005	mg/L	09/09/19 1910	09/15/19 2030	09/15/19 2207	EPA 200.8	048N	JLH
13-B	Copper, dissolved	32220-0940	ND		0.0005	mg/L	09/09/19 1910	09/15/19 2030	09/15/19 2207	EPA 200.8	048N	JLH
13-B	Arsenic, total	32220-0941	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0558	EPA 200.8	909W	AL
13-B	Copper, total	32220-0941	0.0007		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0558	EPA 200.8	909W	AL
13-B	Total suspended solids	32220-0942	6.8		1	mg/L	09/09/19 1910	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
13-B	Ammonia-N	32220-0943	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1100	09/10/19 1100	SM 4500-NH3 G	170W	MBL/JLH
28-B	Nitrate	32220-0944	ND		0.05	mg/L	09/09/19 1857	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
28-B	Nitrite	32220-0944	ND		0.05	mg/L	09/09/19 1857	09/10/19	09/10/19	SM 4500-NO3 F	435W	JHW
28-B	TN	32220-0944	0.605		0.5	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
28-B	Total Kjeldahl Nitrogen	32220-0944	0.605		0.5	mg/L	09/09/19 1910	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
28-S	Arsenic, dissolved	32220-0961	0.0015		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1248	EPA 200.8	047N	NAR/JLH
28-S	Copper, dissolved	32220-0961	ND		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1248	EPA 200.8	047N	NAR/JLH
28-S	Arsenic, total	32220-0962	0.001		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2111	EPA 200.8	911W	AL
28-S	Copper, total	32220-0962	0.0007		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2111	EPA 200.8	911W	AL
28-S	FC	32220-0963	ND		10	MPN/100ml	09/09/19 1857	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
28-S	Total suspended solids	32220-0964	9.1	J2	1	mg/L	09/09/19 1857	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-S	Ammonia-N	32220-0965	ND		0.1	mg/L as N	09/09/19 1857	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
28-S	Nitrate	32220-0966	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JHW
28-S	Nitrite	32220-0966	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JHW
28-S	TN	32220-0966	ND		0.5	mg/L	09/09/19 1857	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
28-S	Total Kjeldahl Nitrogen	32220-0966	ND		0.5	mg/L	09/09/19 1857	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
28-M	Arsenic, dissolved	32220-0967	0.0015		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1315	EPA 200.8	047N	NAR/JLH
28-M	Copper, dissolved	32220-0967	ND		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1315	EPA 200.8	047N	NAR/JLH
28-M	Arsenic, total	32220-0968	0.0011		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2134	EPA 200.8	911W	AL
28-M	Copper, total	32220-0968	0.0007		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2134	EPA 200.8	911W	AL
28-M	Total suspended solids	32220-0969	14	J2	1	mg/L	09/09/19 1857	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-M	Ammonia-N	32220-0970	ND		0.1	mg/L as N	09/09/19 1857	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
28-M	Nitrate	32220-0971	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JHW

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
28-M	Nitrite	32220-0971	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
28-M	TN	32220-0971	ND		0.5	mg/L	09/09/19 1857	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
28-M	Total Kjeldahl Nitrogen	32220-0971	ND		0.5	mg/L	09/09/19 1857	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
28-B	Arsenic, dissolved	32220-0972	0.0015		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1320	EPA 200.8	047N	NAR/JLH
28-B	Copper, dissolved	32220-0972	0.0006		0.0005	mg/L	09/09/19 1857	09/10/19 1630	09/11/19 1320	EPA 200.8	047N	NAR/JLH
28-B	Arsenic, total	32220-0973	0.001		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2138	EPA 200.8	911W	AL
28-B	Copper, total	32220-0973	0.0022		0.0005	mg/L	09/09/19 1857	09/10/19 1615	09/11/19 2138	EPA 200.8	911W	AL
28-B	Total suspended solids	32220-0974	18	J2	2	mg/L	09/09/19 1857	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
28-B	Ammonia-N	32220-0975	ND		0.1	mg/L as N	09/09/19 1857	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
28-B	Nitrate	32220-0976	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
28-B	Nitrite	32220-0976	ND		0.05	mg/L	09/09/19 1857	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
28-B	TN	32220-0976	ND		0.5	mg/L	09/09/19 1857	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
28-B	Total Kjeldahl Nitrogen	32220-0976	ND		0.5	mg/L	09/09/19 1857	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
29-S	Arsenic, dissolved	32220-0977	0.0014		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1324	EPA 200.8	047N	NAR/JLH
29-S	Copper, dissolved	32220-0977	0.0005		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1324	EPA 200.8	047N	NAR/JLH
29-S	Arsenic, total	32220-0978	0.0008		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2142	EPA 200.8	911W	AL
29-S	Copper, total	32220-0978	0.0008		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2142	EPA 200.8	911W	AL
29-S	FC	32220-0979	ND		10	MPN/100mL	09/09/19 1910	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
29-S	Total suspended solids	32220-0980	13	J2	1	mg/L	09/09/19 1910	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
29-S	Ammonia-N	32220-0981	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1530	09/10/19 1530	SM 4500-NH3 G	176W	MBL/JLH
29-S	Nitrate	32220-0982	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
29-S	Nitrite	32220-0982	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	439W	JWH
29-S	TN	32220-0982	ND		0.5	mg/L	09/09/19 1910	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
29-S	Total Kjeldahl Nitrogen	32220-0982	ND		0.5	mg/L	09/09/19 1910	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
29-M	Arsenic, dissolved	32220-0983	0.0014		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1329	EPA 200.8	047N	NAR/JLH
29-M	Copper, dissolved	32220-0983	0.0006		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1329	EPA 200.8	047N	NAR/JLH
29-M	Arsenic, total	32220-0984	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2146	EPA 200.8	911W	AL
29-M	Copper, total	32220-0984	0.0017		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2146	EPA 200.8	911W	AL
29-M	Total suspended solids	32220-0985	13	J2	1	mg/L	09/09/19 1910	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
29-M	Ammonia-N	32220-0986	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	176W	MBL/JLH
29-M	Nitrate	32220-0987	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
29-M	Nitrite	32220-0987	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
29-M	TN	32220-0987	0.632		0.5	mg/L	09/09/19 1910	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
29-M	Total Kjeldahl Nitrogen	32220-0987	0.632		0.5	mg/L	09/09/19 1910	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
29-B	Arsenic, dissolved	32220-0988	0.0014		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1333	EPA 200.8	047N	NAR/JLH
29-B	Copper, dissolved	32220-0988	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1630	09/11/19 1333	EPA 200.8	047N	NAR/JLH
29-B	Arsenic, total	32220-0989	0.0009		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2149	EPA 200.8	911W	AL
29-B	Copper, total	32220-0989	0.0008		0.0005	mg/L	09/09/19 1910	09/10/19 1615	09/11/19 2149	EPA 200.8	911W	AL
29-B	Total suspended solids	32220-0990	12	J2	1	mg/L	09/09/19 1910	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
29-B	Ammonia-N	32220-0991	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1530	09/10/19 1530	SM 4500-NH3 G	176W	MBL/JLH
29-B	Nitrate	32220-0992	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
29-B	Nitrite	32220-0992	ND		0.05	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	440W	JWH
29-B	TN	32220-0992	ND		0.5	mg/L	09/09/19 1910	09/12/19	09/12/19	SM 4500-NO3 F	015W	JHW
29-B	Total Kjeldahl Nitrogen	32220-0992	ND		0.5	mg/L	09/09/19 1910	9/12/2019	9/12/2019	SM 4500-NO3 F	015W	JHW
29-S	Arsenic, dissolved	32220-0993	0.0017		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2219	EPA 200.8	048N	JLH
29-S	Copper, dissolved	32220-0993	0.0006		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2219	EPA 200.8	048N	JLH
29-S	Arsenic, total	32220-0994	0.001		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/10/19 2348	EPA 200.8	907W	AL
29-S	Copper, total	32220-0994	0.0007		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/10/19 2348	EPA 200.8	907W	AL
29-S	FC	32220-0995	ND		10	MPN/100mL	09/09/19 1813	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
29-S	Total suspended solids	32220-0996	10		2	mg/L	09/09/19 1813	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
29-S	Ammonia-N	32220-0997	ND		0.1	mg/L as N	09/09/19 1813	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	170W	MBL/JLH
29-S	Nitrate	32220-0998	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
29-S	Nitrite	32220-0998	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
29-S	TN	32220-0998	0.663		0.5	mg/L	09/09/19 1813	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
29-S	Total Kjeldahl Nitrogen	32220-0998	0.663		0.5	mg/L	09/09/19 1813	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
29-M	Arsenic, dissolved	32220-0999	0.0018		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2223	EPA 200.8	048N	JLH
29-M	Copper, dissolved	32220-0999	0.0006		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2223	EPA 200.8	048N	JLH
29-M	Arsenic, total	32220-1000	0.0008		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/11/19 0004	EPA 200.8	907W	AL
29-M	Copper, total	32220-1000	0.0026		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/11/19 0004	EPA 200.8	907W	AL
29-M	Total suspended solids	32220-1001	11		1	mg/L	09/09/19 1813	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
29-M	Ammonia-N	32220-1002	ND		0.1	mg/L as N	09/09/19 1813	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	170W	MBL/JLH
29-M	Nitrate	32220-1003	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
29-M	Nitrite	32220-1003	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
29-M	TN	32220-1003	0.567		0.5	mg/L	09/09/19 1813	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
29-M	Total Kjeldahl Nitrogen	32220-1003	0.567		0.5	mg/L	09/09/19 1813	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
29-B	Arsenic, dissolved	32220-1004	0.0018		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2227	EPA 200.8	048N	JLH
29-B	Copper, dissolved	32220-1004	0.0005		0.0005	mg/L	09/09/19 1813	09/15/19 2030	09/15/19 2227	EPA 200.8	048N	JLH
29-B	Arsenic, total	32220-1005	0.001		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/11/19 0008	EPA 200.8	907W	AL
29-B	Copper, total	32220-1005	0.0018		0.0005	mg/L	09/09/19 1813	09/10/19 1050	09/11/19 0008	EPA 200.8	907W	AL
29-B	Total suspended solids	32220-1006	15		1	mg/L	09/09/19 1813	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
29-B	Ammonia-N	32220-1007	ND		0.1	mg/L as N	09/09/19 1813	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH
29-B	Nitrate	32220-1008	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
29-B	Nitrite	32220-1008	ND		0.05	mg/L	09/09/19 1813	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
29-B	TN	32220-1008	ND		0.5	mg/L	09/09/19 1813	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
29-B	Total Kjeldahl Nitrogen	32220-1008	ND		0.5	mg/L	09/09/19 1813	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
13-S	Arsenic, dissolved	32220-1009	0.0014		0.0005	mg/L	09/09/19 1805	09/10/19 1220	09/10 19 2303	EPA 200.8	044N	NAR/JLH
13-S	Copper, dissolved	32220-1009	0.0006		0.0005	mg/L	09/09/19 1805	09/10/19 1220	09/10 19 2303	EPA 200.8	044N	NAR/JLH
13-S	Arsenic, total	32220-1010	0.0009		0.0005	mg/L	09/09/19 1805	09/10/19 1130	09/11/19 0303	EPA 200.8	908W	AL
13-S	Copper, total	32220-1010	0.0006		0.0005	mg/L	09/09/19 1805	09/10/19 1130	09/11/19 0303	EPA 200.8	908W	AL
13-S	FC	32220-1011	ND		10	MPN/100ml	09/09/19 1805	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
13-S	Total suspended solids	32220-1012	11		1	mg/L	09/09/19 1805	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
13-S	Ammonia-N	32220-1013	ND		0.1	mg/L as N	09/09/19 1805	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
13-S	Nitrate	32220-1014	ND		0.05	mg/L	09/09/19 1805	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-S	Nitrite	32220-1014	ND		0.05	mg/L	09/09/19 1805	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-S	TN	32220-1014	ND		0.5	mg/L	09/09/19 1805	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
13-S	Total Kjeldahl Nitrogen	32220-1014	ND		0.5	mg/L	09/09/19 1805	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
13-M	Arsenic, dissolved	32220-1015	0.0013		0.0005	mg/L	09/09/19 1810	09/10/19 1220	09/10 19 2331	EPA 200.8	044N	NAR/JLH
13-M	Copper, dissolved	32220-1015	ND		0.0005	mg/L	09/09/19 1810	09/10/19 1220	09/10 19 2331	EPA 200.8	044N	NAR/JLH
13-M	Arsenic, total	32220-1016	0.0011		0.0005	mg/L	09/09/19 1810	09/10/19 1130	09/11/19 0326	EPA 200.8	908W	AL
13-M	Copper, total	32220-1016	0.0007		0.0005	mg/L	09/09/19 1810	09/10/19 1130	09/11/19 0326	EPA 200.8	908W	AL
13-M	Total suspended solids	32220-1017	12		1	mg/L	09/09/19 1810	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
13-M	Ammonia-N	32220-1018	ND		0.1	mg/L as N	09/09/19 1810	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
13-M	Nitrate	32220-1019	ND		0.05	mg/L	09/09/19 1810	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-M	Nitrite	32220-1019	ND		0.05	mg/L	09/09/19 1810	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-M	TN	32220-1019	ND		0.5	mg/L	09/09/19 1810	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
13-M	Total Kjeldahl Nitrogen	32220-1019	ND		0.5	mg/L	09/09/19 1810	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
13-B	Arsenic, dissolved	32220-1020	0.0014		0.0005	mg/L	09/09/19 1815	09/10/19 1220	09/10 19 2335	EPA 200.8	044N	NAR/JLH
13-B	Copper, dissolved	32220-1020	0.0007		0.0005	mg/L	09/09/19 1815	09/10/19 1220	09/10 19 2335	EPA 200.8	044N	NAR/JLH
13-B	Arsenic, total	32220-1021	0.001		0.0005	mg/L	09/09/19 1815	09/10/19 1130	09/11/19 0330	EPA 200.8	908W	AL
13-B	Copper, total	32220-1021	0.0007		0.0005	mg/L	09/09/19 1815	09/10/19 1130	09/11/19 0330	EPA 200.8	908W	AL
13-B	Total suspended solids	32220-1022	8.6		1	mg/L	09/09/19 1815	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
13-B	Ammonia-N	32220-1023	ND		0.1	mg/L as N	09/09/19 1815	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
13-B	Nitrate	32220-1024	ND		0.05	mg/L	09/09/19 1815	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-B	Nitrite	32220-1024	ND		0.05	mg/L	09/09/19 1815	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
13-B	TN	32220-1024	0.505		0.5	mg/L	09/09/19 1815	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
13-B	Total Kjeldahl Nitrogen	32220-1024	0.505		0.5	mg/L	09/09/19 1815	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
17-S	Arsenic, dissolved	32220-1025	0.0013		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2340	EPA 200.8	044N	NAR/JLH
17-S	Copper, dissolved	32220-1025	0.0008		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2340	EPA 200.8	044N	NAR/JLH
17-S	Arsenic, total	32220-1026	0.0008		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0334	EPA 200.8	908W	AL
17-S	Copper, total	32220-1026	0.0006		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0334	EPA 200.8	908W	AL
17-S	FC	32220-1027	ND		10	MPN/100ml	09/09/19 1845	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
17-S	Total suspended solids	32220-1028	12	J2	1	mg/L	09/09/19 1845	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
17-S	Ammonia-N	32220-1029	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
17-S	Nitrate	32220-1030	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
17-S	Nitrite	32220-1030	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
17-S	TN	32220-1030	ND		0.5	mg/L	09/09/19 1845	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
17-S	Total Kjeldahl Nitrogen	32220-1030	ND		0.5	mg/L	09/09/19 1845	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
17-M	Arsenic, dissolved	32220-1031	0.0013		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2344	EPA 200.8	044N	NAR/JLH
17-M	Copper, dissolved	32220-1031	0.0006		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2344	EPA 200.8	044N	NAR/JLH
17-M	Arsenic, total	32220-1032	0.001		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0338	EPA 200.8	908W	AL
17-M	Copper, total	32220-1032	0.0008		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0338	EPA 200.8	908W	AL
17-M	Total suspended solids	32220-1033	44		2	mg/L	09/09/19 1845	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
17-M	Ammonia-N	32220-1034	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
17-M	Nitrate	32220-1035	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
17-M	Nitrite	32220-1035	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
17-M	TN	32220-1035	0.531		0.5	mg/L	09/09/19 1845	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
17-M	Total Kjeldahl Nitrogen	32220-1035	0.531		0.5	mg/L	09/09/19 1845	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
17-B	Arsenic, dissolved	32220-1036	0.0013		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2349	EPA 200.8	044N	NAR/JLH
17-B	Copper, dissolved	32220-1036	0.0007		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2349	EPA 200.8	044N	NAR/JLH
17-B	Arsenic, total	32220-1037	0.001		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0342	EPA 200.8	908W	AL
17-B	Copper, total	32220-1037	0.001		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0342	EPA 200.8	908W	AL
17-B	Total suspended solids	32220-1038	25		1	mg/L	09/09/19 1845	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
17-B	Ammonia-N	32220-1039	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
17-B	Nitrate	32220-1040	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
17-B	Nitrite	32220-1040	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
17-B	TN	32220-1040	0.843		0.5	mg/L	09/09/19 1845	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
17-B	Total Kjeldahl Nitrogen	32220-1040	0.843		0.5	mg/L	09/09/19 1845	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
27-S	Arsenic, dissolved	32220-1041	0.0018		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2231	EPA 200.8	048N	JLH
27-S	Copper, dissolved	32220-1041	0.0007		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2231	EPA 200.8	048N	JLH
27-S	Arsenic, total	32220-1042	0.0009		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0012	EPA 200.8	907W	AL
27-S	Copper, total	32220-1042	0.0006		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0012	EPA 200.8	907W	AL
27-S	FC	32220-1043	ND		10	MPN/100ml	09/09/19 1845	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
27-S	Total suspended solids	32220-1044	8.1		1	mg/L	09/09/19 1845	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
27-S	Ammonia-N	32220-1045	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
27-S	Nitrate	32220-1046	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-S	Nitrite	32220-1046	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-S	TN	32220-1046	ND		0.5	mg/L	09/09/19 1845	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
27-S	Total Kjeldahl Nitrogen	32220-1046	ND		0.5	mg/L	09/09/19 1845	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
27-M	Arsenic, dissolved	32220-1047	0.0017		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2234	EPA 200.8	048N	JLH
27-M	Copper, dissolved	32220-1047	0.0006		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2234	EPA 200.8	048N	JLH
27-M	Arsenic, total	32220-1048	0.001		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0023	EPA 200.8	907W	AL
27-M	Copper, total	32220-1048	0.0008		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0023	EPA 200.8	907W	AL
27-M	Total suspended solids	32220-1049	5.4		1	mg/L	09/09/19 1845	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
27-M	Ammonia-N	32220-1050	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH
27-M	Nitrate	32220-1051	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-M	Nitrite	32220-1051	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-M	TN	32220-1051	ND		0.5	mg/L	09/09/19 1845	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
27-M	Total Kjeldahl Nitrogen	32220-1051	ND		0.5	mg/L	09/09/19 1845	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
27-B	Arsenic, dissolved	32220-1052	0.0017		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2238	EPA 200.8	048N	JLH
27-B	Copper, dissolved	32220-1052	0.0005		0.0005	mg/L	09/09/19 1845	09/15/19 2030	09/15/19 2238	EPA 200.8	048N	JLH
27-B	Arsenic, total	32220-1053	0.001		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0027	EPA 200.8	907W	AL
27-B	Copper, total	32220-1053	0.0008		0.0005	mg/L	09/09/19 1845	09/10/19 1050	09/11/19 0027	EPA 200.8	907W	AL
27-B	Total suspended solids	32220-1054	14		1	mg/L	09/09/19 1845	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
27-B	Ammonia-N	32220-1055	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
27-B	Nitrate	32220-1056	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-B	Nitrite	32220-1056	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
27-B	TN	32220-1056	ND		0.5	mg/L	09/09/19 1845	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
27-B	Total Kjeldahl Nitrogen	32220-1056	ND		0.5	mg/L	09/09/19 1845	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
24-S	Arsenic, dissolved	32220-1057	0.0017		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2242	EPA 200.8	048N	JLH
24-S	Copper, dissolved	32220-1057	0.0009		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2242	EPA 200.8	048N	JLH
24-S	Arsenic, total	32220-1058	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0031	EPA 200.8	907W	AL
24-S	Copper, total	32220-1058	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0031	EPA 200.8	907W	AL
24-S	FC	32220-1059	ND		10	MPN/100ml	09/09/19 1745	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
24-S	Total suspended solids	32220-1060	5.5		1	mg/L	09/09/19 1745	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
24-S	Ammonia-N	32220-1061	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH
24-S	Nitrate	32220-1062	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-S	Nitrite	32220-1062	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-S	TN	32220-1062	0.693		0.5	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
24-S	Total Kjeldahl Nitrogen	32220-1062	0.693		0.5	mg/L	09/09/19 1745	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
24-M	Arsenic, dissolved	32220-1063	0.0018		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2306	EPA 200.8	048N	JLH
24-M	Copper, dissolved	32220-1063	0.0006		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2306	EPA 200.8	048N	JLH
24-M	Arsenic, total	32220-1064	0.0009		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0035	EPA 200.8	907W	AL
24-M	Copper, total	32220-1064	0.0008		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0035	EPA 200.8	907W	AL
24-M	Total suspended solids	32220-1065	9.7		1	mg/L	09/09/19 1745	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
24-M	Ammonia-N	32220-1066	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH
24-M	Nitrate	32220-1067	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-M	Nitrite	32220-1067	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-M	TN	32220-1067	ND		0.5	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
24-M	Total Kjeldahl Nitrogen	32220-1067	ND		0.5	mg/L	09/09/19 1745	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
24-B	Arsenic, dissolved	32220-1068	0.0019		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2310	EPA 200.8	048N	JLH
24-B	Copper, dissolved	32220-1068	0.0007		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2310	EPA 200.8	048N	JLH
24-B	Arsenic, total	32220-1069	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0039	EPA 200.8	907W	AL
24-B	Copper, total	32220-1069	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0039	EPA 200.8	907W	AL
24-B	Total suspended solids	32220-1070	26		1	mg/L	09/09/19 1745	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
24-B	Ammonia-N	32220-1071	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1130	09/10/19 1130	SM 4500-NH3 G	171W	MBL/JLH
24-B	Nitrate	32220-1072	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
24-B	Nitrite	32220-1072	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
24-B	TN	32220-1072	0.622		0.5	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
24-B	Total Kjeldahl Nitrogen	32220-1072	0.622		0.5	mg/L	09/09/19 1745	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-S	Arsenic, dissolved	32220-1073	0.0017		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2313	EPA 200.8	048N	JLH
12-S	Copper, dissolved	32220-1073	ND		0.0005	mg/L	09/09/19 1745	09/15/19 2030	09/15/19 2313	EPA 200.8	048N	JLH
12-S	Arsenic, total	32220-1074	0.0008		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0043	EPA 200.8	907W	AL
12-S	Copper, total	32220-1074	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1050	09/11/19 0043	EPA 200.8	907W	AL
12-S	FC	32220-1075	ND		10	MPN/100ml	09/09/19 1745	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
12-S	Total suspended solids	32220-1076	7.4		1	mg/L	09/09/19 1745	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
12-S	Ammonia-N	32220-1077	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
12-S	Nitrate	32220-1078	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-S	Nitrite	32220-1078	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-S	TN	32220-1078	0.584		0.5	mg/L	09/09/19 1745	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
12-S	Total Kjeldahl Nitrogen	32220-1078	0.584		0.5	mg/L	09/09/19 1745	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-M	Arsenic, dissolved	32220-1079	0.0017		0.0005	mg/L	09/09/19 1750	09/15/19 2030	09/15/19 2317	EPA 200.8	048N	JLH
12-M	Copper, dissolved	32220-1079	ND		0.0005	mg/L	09/09/19 1750	09/15/19 2030	09/15/19 2317	EPA 200.8	048N	JLH
12-M	Arsenic, total	32220-1080	0.001		0.0005	mg/L	09/09/19 1750	09/10/19 1050	09/11/19 0047	EPA 200.8	907W	AL
12-M	Copper, total	32220-1080	0.0006		0.0005	mg/L	09/09/19 1750	09/10/19 1050	09/11/19 0047	EPA 200.8	907W	AL
12-M	Total suspended solids	32220-1081	5.6		1	mg/L	09/09/19 1750	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
12-M	Ammonia-N	32220-1082	ND		0.1	mg/L as N	09/09/19 1750	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-M	Nitrate	32220-1083	ND		0.05	mg/L	09/09/19 1750	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-M	Nitrite	32220-1083	ND		0.05	mg/L	09/09/19 1750	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-M	TN	32220-1083	0.593		0.5	mg/L	09/09/19 1750	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
12-M	Total Kjeldahl Nitrogen	32220-1083	0.593		0.5	mg/L	09/09/19 1750	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-B	Arsenic, dissolved	32220-1084	0.0017		0.0005	mg/L	09/09/19 1755	09/15/19 2030	09/15/19 2321	EPA 200.8	048N	JLH
12-B	Copper, dissolved	32220-1084	ND		0.0005	mg/L	09/09/19 1755	09/15/19 2030	09/15/19 2321	EPA 200.8	048N	JLH
12-B	Arsenic, total	32220-1085	0.001		0.0005	mg/L	09/09/19 1755	09/10/19 1050	09/11/19 0110	EPA 200.8	907W	AL
12-B	Copper, total	32220-1085	0.0007		0.0005	mg/L	09/09/19 1755	09/10/19 1050	09/11/19 0110	EPA 200.8	907W	AL
12-B	Total suspended solids	32220-1086	14		1	mg/L	09/09/19 1755	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
12-B	Ammonia-N	32220-1087	ND		0.1	mg/L as N	09/09/19 1755	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
12-B	Nitrate	32220-1088	ND		0.05	mg/L	09/09/19 1755	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-B	Nitrite	32220-1088	ND		0.05	mg/L	09/09/19 1755	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
12-B	TN	32220-1088	0.576		0.5	mg/L	09/09/19 1755	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
12-B	Total Kjeldahl Nitrogen	32220-1088	0.576		0.5	mg/L	09/09/19 1755	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
24-S	Arsenic, dissolved	32220-1377	0.0017		0.0005	mg/L	09/09/19 1900	09/15/19 2030	09/15/19 2325	EPA 200.8	048N	JLH
24-S	Copper, dissolved	32220-1377	0.0019		0.0005	mg/L	09/09/19 1900	09/15/19 2030	09/15/19 2325	EPA 200.8	048N	JLH
24-S	Arsenic, total	32220-1378	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0114	EPA 200.8	907W	AL
24-S	Copper, total	32220-1378	0.001		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0114	EPA 200.8	907W	AL
24-S	FC	32220-1379	ND		10	MPN/100mL	09/09/19 1900	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
24-S	Total suspended solids	32220-1380	6.1		1	mg/L	09/09/19 1900	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
24-S	Ammonia-N	32220-1381	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
24-S	Nitrate	32220-1382	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-S	Nitrite	32220-1382	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-S	TN	32220-1382	0.726		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
24-S	Total Kjeldahl Nitrogen	32220-1382	0.726		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
24-M	Arsenic, dissolved	32220-1383	0.0015		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1721	EPA 200.8	042N	NAR/JLH
24-M	Copper, dissolved	32220-1383	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1721	EPA 200.8	042N	NAR/JLH
24-M	Arsenic, total	32220-1384	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0118	EPA 200.8	907W	AL
24-M	Copper, total	32220-1384	0.0286		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0118	EPA 200.8	907W	AL
24-M	Total suspended solids	32220-1385	8.7		1	mg/L	09/09/19 1900	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
24-M	Ammonia-N	32220-1386	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
24-M	Nitrate	32220-1387	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-M	Nitrite	32220-1387	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-M	TN	32220-1387	ND		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
24-M	Total Kjeldahl Nitrogen	32220-1387	ND		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
24-B	Arsenic, dissolved	32220-1388	0.0014		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1725	EPA 200.8	042N	NAR/JLH
24-B	Copper, dissolved	32220-1388	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10/19 1725	EPA 200.8	042N	NAR/JLH
24-B	Arsenic, total	32220-1389	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1205	09/11/19 0602	EPA 200.8	909W	AL
24-B	Copper, total	32220-1389	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1205	09/11/19 0602	EPA 200.8	909W	AL
24-B	Total suspended solids	32220-1390	14	J8	2	mg/L	09/09/19 1900	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
24-B	Ammonia-N	32220-1391	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
24-B	Nitrate	32220-1392	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-B	Nitrite	32220-1392	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
24-B	TN	32220-1392	0.742		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
24-B	Total Kjeldahl Nitrogen	32220-1392	0.742		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
25-S	Arsenic, dissolved	32220-1393	0.0015		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1730	EPA 200.8	042N	NAR/JLH
25-S	Copper, dissolved	32220-1393	0.0008		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1730	EPA 200.8	042N	NAR/JLH
25-S	Arsenic, total	32220-1394	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0606	EPA 200.8	909W	AL
25-S	Copper, total	32220-1394	0.0007		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0606	EPA 200.8	909W	AL
25-S	FC	32220-1395	ND		10	MPN/100mL	09/09/19 1910	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
25-S	Total suspended solids	32220-1396	7.8		1	mg/L	09/09/19 1910	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-S	Ammonia-N	32220-1397	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
25-S	Nitrate	32220-1398	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-S	Nitrite	32220-1398	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-S	TN	32220-1398	0.702		0.5	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
25-S	Total Kjeldahl Nitrogen	32220-1398	0.702		0.5	mg/L	09/09/19 1910	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
25-M	Arsenic, dissolved	32220-1399	0.0014		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1734	EPA 200.8	042N	NAR/JLH
25-M	Copper, dissolved	32220-1399	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1734	EPA 200.8	042N	NAR/JLH
25-M	Arsenic, total	32220-1400	0.001		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0610	EPA 200.8	909W	AL
25-M	Copper, total	32220-1400	0.0006		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0610	EPA 200.8	909W	AL
25-M	Total suspended solids	32220-1401	8		1	mg/L	09/09/19 1910	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-M	Ammonia-N	32220-1402	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
25-M	Nitrate	32220-1403	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-M	Nitrite	32220-1403	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-M	TN	32220-1403	ND		0.5	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
25-M	Total Kjeldahl Nitrogen	32220-1403	ND		0.5	mg/L	09/09/19 1910	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
25-B	Arsenic, dissolved	32220-1404	0.0014		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1739	EPA 200.8	042N	NAR/JLH
25-B	Copper, dissolved	32220-1404	0.0012		0.0005	mg/L	09/09/19 1910	09/10/19 1030	09/10/19 1739	EPA 200.8	042N	NAR/JLH
25-B	Arsenic, total	32220-1405	0.0008		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0614	EPA 200.8	909W	AL
25-B	Copper, total	32220-1405	0.0006		0.0005	mg/L	09/09/19 1910	09/10/19 1205	09/11/19 0614	EPA 200.8	909W	AL
25-B	Total suspended solids	32220-1406	5.2		1	mg/L	09/09/19 1910	09/10/19 0800	09/11/19 1250	SM 2540D	521W	BG/KM
25-B	Ammonia-N	32220-1407	ND		0.1	mg/L as N	09/09/19 1910	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
25-B	Nitrate	32220-1408	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-B	Nitrite	32220-1408	ND		0.05	mg/L	09/09/19 1910	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
25-B	TN	32220-1408	ND		0.5	mg/L	09/09/19 1910	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
25-B	Total Kjeldahl Nitrogen	32220-1408	ND		0.5	mg/L	09/09/19 1910	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
18-S	Arsenic, dissolved	32220-1409	0.0015		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1744	EPA 200.8	042N	NAR/JLH
18-S	Copper, dissolved	32220-1409	0.0006		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1744	EPA 200.8	042N	NAR/JLH
18-S	Arsenic, total	32220-1410	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0122	EPA 200.8	907W	AL
18-S	Copper, total	32220-1410	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0122	EPA 200.8	907W	AL
18-S	FC	32220-1411	10		10	MPN/100mL	09/09/19 1900	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
18-S	Total suspended solids	32220-1412	9.7		1	mg/L	09/09/19 1900	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
18-S	Ammonia-N	32220-1413	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
18-S	Nitrate	32220-1414	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
18-S	Nitrite	32220-1414	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
18-S	TN	32220-1414	0.591		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
18-S	Total Kjeldahl Nitrogen	32220-1414	0.591		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
18-M	Arsenic, dissolved	32220-1415	0.0015		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1748	EPA 200.8	042N	NAR/JLH
18-M	Copper, dissolved	32220-1415	0.0029		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1748	EPA 200.8	042N	NAR/JLH
18-M	Arsenic, total	32220-1416	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0126	EPA 200.8	907W	AL
18-M	Copper, total	32220-1416	0.0009		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0126	EPA 200.8	907W	AL
18-M	Total suspended solids	32220-1417	8.6		1	mg/L	09/09/19 1900	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
18-M	Ammonia-N	32220-1418	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
18-M	Nitrate	32220-1419	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
18-M	Nitrite	32220-1419	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
18-M	TN	32220-1419	0.556		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
18-M	Total Kjeldahl Nitrogen	32220-1419	0.556		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
18-B	Arsenic, dissolved	32220-1420	0.0014		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1753	EPA 200.8	042N	NAR/JLH
18-B	Copper, dissolved	32220-1420	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1030	09/10 19 1753	EPA 200.8	042N	NAR/JLH
18-B	Arsenic, total	32220-1421	0.0008		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0130	EPA 200.8	907W	AL
18-B	Copper, total	32220-1421	0.0007		0.0005	mg/L	09/09/19 1900	09/10/19 1050	09/11/19 0130	EPA 200.8	907W	AL
18-B	Total suspended solids	32220-1422	9.1		1	mg/L	09/09/19 1900	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
18-B	Ammonia-N	32220-1423	ND		0.1	mg/L as N	09/09/19 1900	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
18-B	Nitrate	32220-1424	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
18-B	Nitrite	32220-1424	ND		0.05	mg/L	09/09/19 1900	09/10/19	09/10/19	SM 4500-NO3 F	435W	JWH
18-B	TN	32220-1424	ND		0.5	mg/L	09/09/19 1900	09/11/19	09/11/19	SM 4500-NO3 F	011W	JHW
18-B	Total Kjeldahl Nitrogen	32220-1424	ND		0.5	mg/L	09/09/19 1900	9/11/2019	9/11/2019	SM 4500-NO3 F	011W	JHW
25-S	Arsenic, dissolved	32220-1425	0.0018		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2329	EPA 200.8	048N	JLH
25-S	Copper, dissolved	32220-1425	ND		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2329	EPA 200.8	048N	JLH
25-S	Arsenic, total	32220-1426	0.0009		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0134	EPA 200.8	907W	AL
25-S	Copper, total	32220-1426	0.0005		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0134	EPA 200.8	907W	AL
25-S	FC	32220-1427	ND		10	MPN/100mL	09/09/19 1800	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
25-S	Total suspended solids	32220-1428	13		2	mg/L	09/09/19 1800	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
25-S	Ammonia-N	32220-1429	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
25-S	Nitrate	32220-1430	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-S	Nitrite	32220-1430	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-S	TN	32220-1430	ND		0.5	mg/L	09/09/19 1800	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
25-S	Total Kjeldahl Nitrogen	32220-1430	ND		0.5	mg/L	09/09/19 1800	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
25-M	Arsenic, dissolved	32220-1431	0.0017		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2333	EPA 200.8	048N	JLH
25-M	Copper, dissolved	32220-1431	0.0006		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2333	EPA 200.8	048N	JLH
25-M	Arsenic, total	32220-1432	0.0008		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0138	EPA 200.8	907W	AL
25-M	Copper, total	32220-1432	0.0007		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0138	EPA 200.8	907W	AL
25-M	Total suspended solids	32220-1433	22		1	mg/L	09/09/19 1800	09/10/19 1445	09/11/19 1120	SM 2540D	526W	CA/KM
25-M	Ammonia-N	32220-1434	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
25-M	Nitrate	32220-1435	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-M	Nitrite	32220-1435	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-M	TN	32220-1435	0.527		0.5	mg/L	09/09/19 1800	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
25-M	Total Kjeldahl Nitrogen	32220-1435	0.527		0.5	mg/L	09/09/19 1800	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
25-B	Arsenic, dissolved	32220-1436	0.0016		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2337	EPA 200.8	048N	JLH
25-B	Copper, dissolved	32220-1436	ND		0.0005	mg/L	09/09/19 1800	09/15/19 2030	09/15/19 2337	EPA 200.8	048N	JLH
25-B	Arsenic, total	32220-1437	0.0009		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0142	EPA 200.8	907W	AL
25-B	Copper, total	32220-1437	0.0008		0.0005	mg/L	09/09/19 1800	09/10/19 1050	09/11/19 0142	EPA 200.8	907W	AL
25-B	Total suspended solids	32220-1438	5.8		1	mg/L	09/09/19 1800	09/10/19 1330	09/11/19 1225	SM 2540D	525W	BG/KM
25-B	Ammonia-N	32220-1439	ND		0.1	mg/L as N	09/09/19 1800	09/10/19 1225	09/10/19 1225	SM 4500-NH3 G	171W	MBL/JLH
25-B	Nitrate	32220-1440	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-B	Nitrite	32220-1440	ND		0.05	mg/L	09/09/19 1800	09/10/19	09/10/19	SM 4500-NO3 F	434W	JWH
25-B	TN	32220-1440	0.595		0.5	mg/L	09/09/19 1800	09/11/19	09/11/19	SM 4500-NO3 F	010W	JHW
25-B	Total Kjeldahl Nitrogen	32220-1440	0.595		0.5	mg/L	09/09/19 1800	9/11/2019	9/11/2019	SM 4500-NO3 F	010W	JHW
12-SDUP	Arsenic, dissolved	32220-1441	0.0013		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10 19 2353	EPA 200.8	044N	NAR/JLH
12-SDUP	Copper, dissolved	32220-1441	ND		0.0005	mg/L	09/09/19 1745	09/10/19 1220	09/10 19 2353	EPA 200.8	044N	NAR/JLH
12-SDUP	Arsenic, total	32220-1442	0.001		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0346	EPA 200.8	908W	AL
12-SDUP	Copper, total	32220-1442	0.0007		0.0005	mg/L	09/09/19 1745	09/10/19 1130	09/11/19 0346	EPA 200.8	908W	AL
12-SDUP	FC	32220-1443	10		10	MPN/100mL	09/09/19 1745	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
12-SDUP	Total suspended solids	32220-1444	19		1	mg/L	09/09/19 1745	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM

32220 Analytical Data

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-SDUP	Ammonia-N	32220-1445	ND		0.1	mg/L as N	09/09/19 1745	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
12-SDUP	Nitrate	32220-1446	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-SDUP	Nitrite	32220-1446	ND		0.05	mg/L	09/09/19 1745	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-SDUP	TN	32220-1446	ND		0.5	mg/L	09/09/19 1745	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-SDUP	Total Kjeldahl Nitrogen	32220-1446	ND		0.5	mg/L	09/09/19 1745	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
12-S	Arsenic, dissolved	32220-1457	0.0015		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2358	EPA 200.8	044N	NAR/JLH
12-S	Copper, dissolved	32220-1457	ND		0.0005	mg/L	09/09/19 1845	09/10/19 1220	09/10 19 2358	EPA 200.8	044N	NAR/JLH
12-S	Arsenic, total	32220-1458	0.0009		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0349	EPA 200.8	908W	AL
12-S	Copper, total	32220-1458	0.0006		0.0005	mg/L	09/09/19 1845	09/10/19 1130	09/11/19 0349	EPA 200.8	908W	AL
12-S	FC	32220-1459	ND		10	MPN/100mL	09/09/19 1845	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
12-S	FC	32220-1459	ND		10	MPN/100mL	09/09/19 1845	09/09/19 2257	09/10/19 1707	SM 9223-B		LAG
12-S	Total suspended solids	32220-1460	7.4	J2	1	mg/L	09/09/19 1845	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
12-S	Ammonia-N	32220-1461	ND		0.1	mg/L as N	09/09/19 1845	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
12-S	Nitrate	32220-1462	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-S	Nitrite	32220-1462	ND		0.05	mg/L	09/09/19 1845	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-S	TN	32220-1462	ND		0.5	mg/L	09/09/19 1845	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-S	Total Kjeldahl Nitrogen	32220-1462	ND		0.5	mg/L	09/09/19 1845	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
12-M	Arsenic, dissolved	32220-1463	0.0013		0.0005	mg/L	09/09/19 1850	09/10/19 1220	09/11 19 0003	EPA 200.8	044N	NAR/JLH
12-M	Copper, dissolved	32220-1463	ND		0.0005	mg/L	09/09/19 1850	09/10/19 1220	09/11 19 0003	EPA 200.8	044N	NAR/JLH
12-M	Arsenic, total	32220-1464	0.0009		0.0005	mg/L	09/09/19 1850	09/10/19 1130	09/11/19 0353	EPA 200.8	908W	AL
12-M	Copper, total	32220-1464	0.0008		0.0005	mg/L	09/09/19 1850	09/10/19 1130	09/11/19 0353	EPA 200.8	908W	AL
12-M	Total suspended solids	32220-1465	23		1	mg/L	09/09/19 1850	09/10/19 1055	09/11/19 1050	SM 2540D	524W	CA/KM
12-M	Ammonia-N	32220-1466	ND		0.1	mg/L as N	09/09/19 1850	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
12-M	Nitrate	32220-1467	ND		0.05	mg/L	09/09/19 1850	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-M	Nitrite	32220-1467	ND		0.05	mg/L	09/09/19 1850	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-M	TN	32220-1467	ND		0.5	mg/L	09/09/19 1850	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-M	Total Kjeldahl Nitrogen	32220-1467	ND		0.5	mg/L	09/09/19 1850	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW
12-B	Arsenic, dissolved	32220-1468	0.0013		0.0005	mg/L	09/09/19 1855	09/10/19 1220	09/11 19 0007	EPA 200.8	044N	NAR/JLH
12-B	Copper, dissolved	32220-1468	0.0005		0.0005	mg/L	09/09/19 1855	09/10/19 1220	09/11 19 0007	EPA 200.8	044N	NAR/JLH
12-B	Arsenic, total	32220-1469	0.0009		0.0005	mg/L	09/09/19 1855	09/10/19 1130	09/11/19 0357	EPA 200.8	908W	AL
12-B	Copper, total	32220-1469	0.0043		0.0005	mg/L	09/09/19 1855	09/10/19 1130	09/11/19 0357	EPA 200.8	908W	AL
12-B	Total suspended solids	32220-1470	11	J2	1	mg/L	09/09/19 1855	09/10/19 0820	09/11/19 1200	SM 2540D	522W	CA/KM
12-B	Ammonia-N	32220-1471	ND		0.1	mg/L as N	09/09/19 1855	09/10/19 1505	09/10/19 1505	SM 4500-NH3 G	175W	MBL/JLH
12-B	Nitrate	32220-1472	ND		0.05	mg/L	09/09/19 1855	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-B	Nitrite	32220-1472	ND		0.05	mg/L	09/09/19 1855	09/10/19	09/10/19	SM 4500-NO3 F	436W	JWH
12-B	TN	32220-1472	ND		0.5	mg/L	09/09/19 1855	09/12/19	09/12/19	SM 4500-NO3 F	014W	JHW
12-B	Total Kjeldahl Nitrogen	32220-1472	ND		0.5	mg/L	09/09/19 1855	9/12/2019	9/12/2019	SM 4500-NO3 F	014W	JHW

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PO Number: None
Report Number: 32220
Date Received: 09/12/19
Date Reported: 10/02/19

Project: Seacoast Reliability Project

Attached please find results for analyses performed on samples received on 09/12/19.

Samples were received in acceptable condition, except where noted, and under chain of custody.

Instruments used in analysis were calibrated with the appropriate frequency and to the specifications of the referenced methods.

Analytes in blanks were below levels affecting sample results.

Matrix effects as monitored by matrix spike recovery or unusual physical properties were not apparent unless otherwise noted.

Accuracy and precision as monitored by laboratory control sample analyses were within acceptance limits unless otherwise noted.

Accreditations may be viewed at www.enthalpy.com/accreditations.

The results presented in this report relate only to the samples described on the chain(s) of custody and sample receipt log(s), and are intended to be used only by the submittor.

Enthalpy Analytical

Jason Hobbs
Digitally signed by Jason Hobbs
DN: cn=Jason Hobbs, o=Enthalpy Analytical
LLC, ou=Technical Manager,
email=jason.hobbs@enthalpy.com, c=US
Date: 2019.10.02 16:49:07 -0400

Authorized
Signature

Attachment
Sample Qualifiers and Descriptions
Report



Report Qualifiers

ND - Not detected

ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
11-S	Arsenic, dissolved	32220-1505	0.0018		0.0005	mg/L	09/12/19 1143	09/18/19 1530	09/20/19 1642	EPA 200.8	051N	JLH
11-S	Copper, dissolved	32220-1505	ND		0.0005	mg/L	09/12/19 1143	09/18/19 1530	09/20/19 1642	EPA 200.8	051N	JLH
11-S	Arsenic, total	32220-1506	0.0017		0.0005	mg/L	09/12/19 1143	09/20/19 0945	09/20/19 1544	EPA 200.8	917W	JLH
11-S	Copper, total	32220-1506	0.0007		0.0005	mg/L	09/12/19 1143	09/20/19 0945	09/20/19 1544	EPA 200.8	917W	JLH
11-S	FC	32220-1507	ND		10	MPN/100mL	09/12/19 1143	09/12/19 1551	09/13/19 1324	SM 9223-B		CFS
11-S	Total suspended solids	32220-1508	4.2		1	mg/L	09/12/19 1143	09/17/19 1000	09/20/19 1220	SM 2540D	528W	AL
11-S	Ammonia-N	32220-1509	ND		0.1	mg/L as N	09/12/19 1143	9/16/2019	9/16/2019	SM 4500-NH3 G	177W	JHW
11-S	Nitrate	32220-1510	ND		0.05	mg/L	09/12/19 1143	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
11-S	Nitrite	32220-1510	ND		0.05	mg/L	09/12/19 1143	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
11-S	TN	32220-1510	ND		0.5	mg/L	09/12/19 1143	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
11-S	Total Kjeldahl Nitrogen	32220-1510	ND		0.5	mg/L	09/12/19 1143	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
11-B	Arsenic, dissolved	32220-1516	0.0018		0.0005	mg/L	09/12/19 1147	09/18/19 1530	09/20/19 1658	EPA 200.8	051N	JLH
11-B	Copper, dissolved	32220-1516	ND		0.0005	mg/L	09/12/19 1147	09/18/19 1530	09/20/19 1658	EPA 200.8	051N	JLH
11-B	Arsenic, total	32220-1517	0.0016		0.0005	mg/L	09/12/19 1147	09/20/19 0945	09/20/19 1607	EPA 200.8	917W	JLH
11-B	Copper, total	32220-1517	0.0005		0.0005	mg/L	09/12/19 1147	09/20/19 0945	09/20/19 1607	EPA 200.8	917W	JLH
11-B	Total suspended solids	32220-1518	6.8		1	mg/L	09/12/19 1147	09/17/19 1000	09/20/19 1220	SM 2540D	528W	AL
11-B	Ammonia-N	32220-1519	ND		0.1	mg/L as N	09/12/19 1147	9/16/2019	9/16/2019	SM 4500-NH3 G	177W	JHW
11-B	Nitrate	32220-1520	ND		0.05	mg/L	09/12/19 1147	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
11-B	Nitrite	32220-1520	ND		0.05	mg/L	09/12/19 1147	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
11-B	TN	32220-1520	ND		0.5	mg/L	09/12/19 1147	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
11-B	Total Kjeldahl Nitrogen	32220-1520	ND		0.5	mg/L	09/12/19 1147	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-S	Arsenic, dissolved	32220-1521	0.0018		0.0005	mg/L	09/12/19 1200	09/18/19 1530	09/20/19 1701	EPA 200.8	051N	JLH
12-S	Copper, dissolved	32220-1521	0.0009		0.0005	mg/L	09/12/19 1200	09/18/19 1530	09/20/19 1701	EPA 200.8	051N	JLH
12-S	Arsenic, total	32220-1522	0.0016		0.0005	mg/L	09/12/19 1200	09/20/19 0945	09/20/19 1611	EPA 200.8	917W	JLH
12-S	Copper, total	32220-1522	0.0005		0.0005	mg/L	09/12/19 1200	09/20/19 0945	09/20/19 1611	EPA 200.8	917W	JLH
12-S	FC	32220-1523	ND		10	MPN/100mL	09/12/19 1200	09/12/19 1551	09/13/19 1324	SM 9223-B		CFS
12-S	Total suspended solids	32220-1524	4.8		1	mg/L	09/12/19 1200	09/17/19 1000	09/20/19 1220	SM 2540D	528W	AL
12-S	Ammonia-N	32220-1525	ND		0.1	mg/L as N	09/12/19 1200	9/16/2019	9/16/2019	SM 4500-NH3 G	177W	JHW
12-S	Nitrate	32220-1526	ND		0.05	mg/L	09/12/19 1200	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-S	Nitrite	32220-1526	ND		0.05	mg/L	09/12/19 1200	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-S	TN	32220-1526	0.56		0.5	mg/L	09/12/19 1200	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-S	Total Kjeldahl Nitrogen	32220-1526	0.56		0.5	mg/L	09/12/19 1200	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-M	Arsenic, dissolved	32220-1527	0.0018		0.0005	mg/L	09/12/19 1202	09/18/19 1530	09/20/19 1705	EPA 200.8	051N	JLH
12-M	Copper, dissolved	32220-1527	ND		0.0005	mg/L	09/12/19 1202	09/18/19 1530	09/20/19 1705	EPA 200.8	051N	JLH
12-M	Arsenic, total	32220-1528	0.0016		0.0005	mg/L	09/12/19 1202	09/20/19 0945	09/20/19 1615	EPA 200.8	917W	JLH

Analytical Data for Samples Received 09-12-2019

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ID	PARAMETER	LAB ID	RESULT	QUAL	QLIMIT	UNITS	SAMPLED	PREPARED	ANALYZED	METHOD	QCBATCH	INIT
12-M	Copper, total	32220-1528	0.0006		0.0005	mg/L	09/12/19 1202	09/20/19 0945	09/20/19 1615	EPA 200.8	917W	JLH
12-M	Total suspended solids	32220-1529	5.8		1	mg/L	09/12/19 1202	09/17/19 1000	09/20/19 1220	SM 2540D	528W	AL
12-M	Ammonia-N	32220-1530	ND		0.1	mg/L as N	09/12/19 1202	9/16/2019	9/16/2019	SM 4500-NH3 G	177W	JHW
12-M	Nitrate	32220-1531	ND		0.05	mg/L	09/12/19 1202	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-M	Nitrite	32220-1531	ND		0.05	mg/L	09/12/19 1202	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-M	TN	32220-1531	ND		0.5	mg/L	09/12/19 1202	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-M	Total Kjeldahl Nitrogen	32220-1531	ND		0.5	mg/L	09/12/19 1202	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-B	Arsenic, dissolved	32220-1532	0.0018		0.0005	mg/L	09/12/19 1204	09/18/19 1530	09/20/19 1717	EPA 200.8	051N	JLH
12-B	Copper, dissolved	32220-1532	ND		0.0005	mg/L	09/12/19 1204	09/18/19 1530	09/20/19 1717	EPA 200.8	051N	JLH
12-B	Arsenic, total	32220-1533	0.0016		0.0005	mg/L	09/12/19 1204	09/20/19 0945	09/20/19 1619	EPA 200.8	917W	JLH
12-B	Copper, total	32220-1533	0.0008		0.0005	mg/L	09/12/19 1204	09/20/19 0945	09/20/19 1619	EPA 200.8	917W	JLH
12-B	Total suspended solids	32220-1534	7.7		1	mg/L	09/12/19 1204	09/17/19 1000	09/20/19 1220	SM 2540D	528W	AL
12-B	Ammonia-N	32220-1535	ND		0.1	mg/L as N	09/12/19 1204	9/16/2019	9/16/2019	SM 4500-NH3 G	177W	JHW
12-B	Nitrate	32220-1536	ND		0.05	mg/L	09/12/19 1204	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-B	Nitrite	32220-1536	ND		0.05	mg/L	09/12/19 1204	9/13/2019	9/13/2019	SM 4500-NO3 F	441W	JHW
12-B	TN	32220-1536	ND		0.5	mg/L	09/12/19 1204	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW
12-B	Total Kjeldahl Nitrogen	32220-1536	ND		0.5	mg/L	09/12/19 1204	9/13/2019	9/13/2019	SM 4500-NO3 F	016W	JHW

Appendix E. Examples of Images from Drone Surveys



Figure E-1. Stationary jet plow in position with pump barge, prior to start of jet plow. 11:52 AM, Sept 9, 2019.

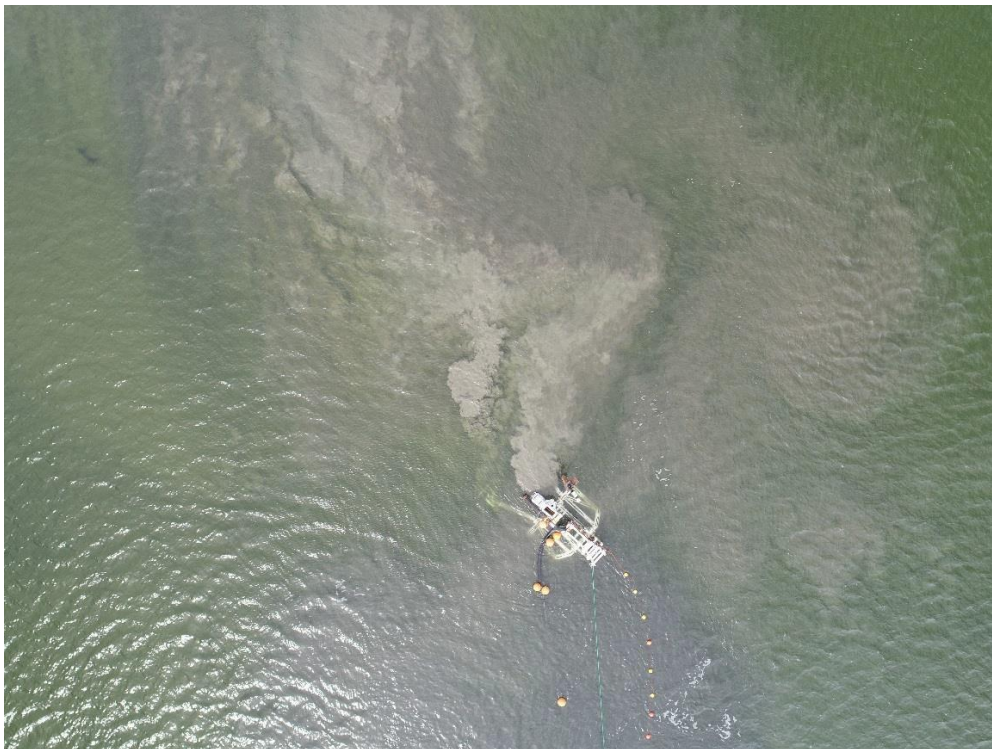


Figure E-2. Jet plow in operation on mudflats. 1:46 PM, Sept 9, 2019.

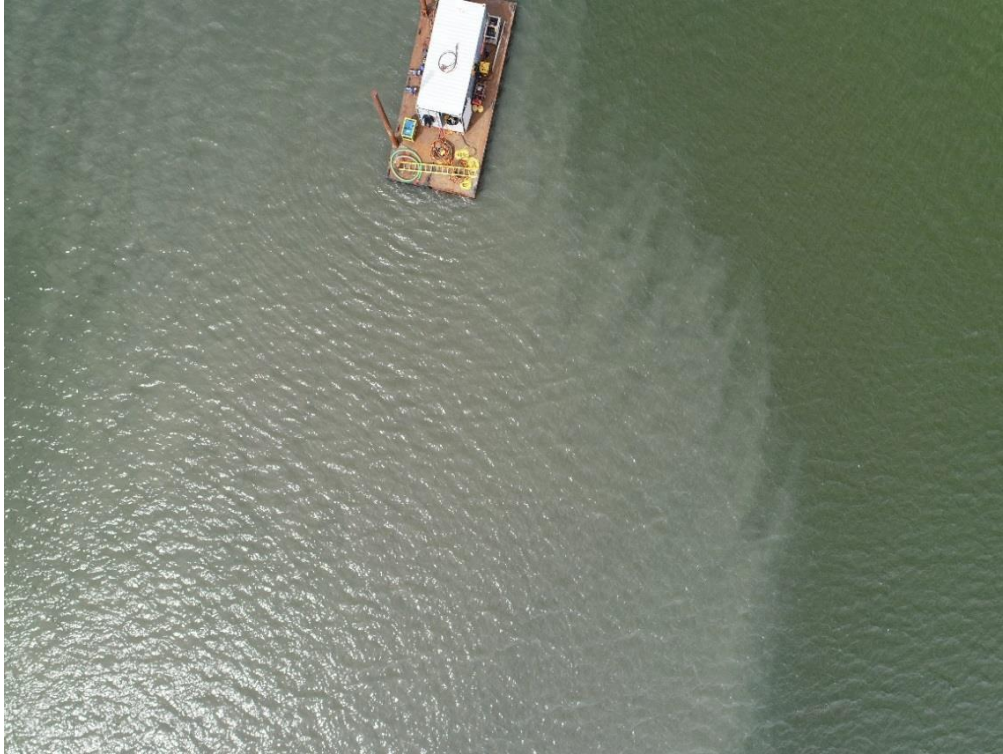


Figure E-3. Plume surrounding diver barge several hundred feet north of the jet plow. 1:48 PM, Sept 9, 2019.



Figure E-4. Plume near Durocher tender boat near Station 11. 1:50 PM, Sept 9, 2019.



Figure E-5. Northern end of plume facing south. Barge is visible to the south. 3:13 PM, Sept 9, 2019.



Figure E-6. Jet plow track showing start of jet plow. For scale, the combined width of the two skids are approximately 15 ft wide. 4:13 PM, Sept 9, 2019.



Figure E-7. Assist barge being moved into position by 650HP tug for an anchor change. 5:02 PM, Sept 9, 2019.

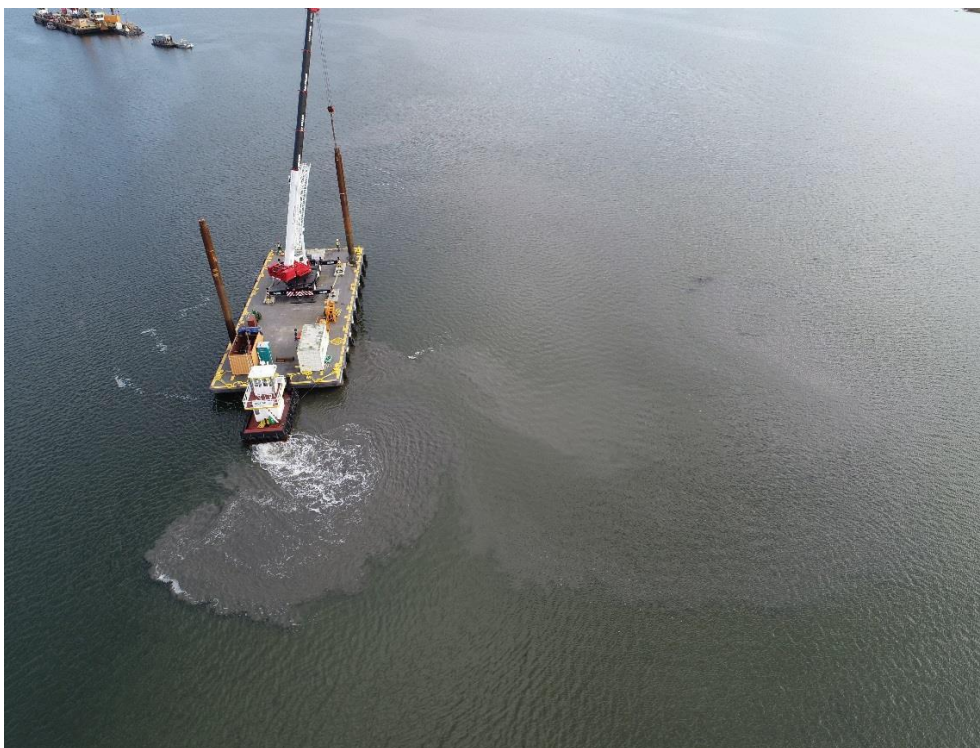


Figure E-8. Tug pivoting assist barge into position for first anchor move on edge of tidal flats. 5:21 PM, Sept 9, 2019.

Appendix F. RPS Memo on Sediment Dispersion under Different Operating Scenarios



MEMO

Date: October 2, 2019
To: Sarah Allen (Normandeau Associates Inc.)
From: Deborah Crowley (RPS) and Craig Swanson (Swanson Environmental)
Pages: 12 including this page
Regarding: *Seacoast Reliability Project – Sediment Plume*

55 Village Square Drive
South Kingstown RI 02879
T +1 401 789 6224

1. Introduction

RPS and Swanson Environmental have been supporting Normandeau Associates Inc (Normandeau) in their work conducting the environmental assessment and permitting of cable burial operations associated with the Seacoast Reliability Project which is being pursued by Public Service of New Hampshire d/b/a Eversource Energy. The project includes the construction of an electrical cable system to increase the reliability of the electrical transmission grid in southern New Hampshire. This cable would cross the Little Bay portion of the Great Bay Estuarine System. The crossing would entail burial of three separate but parallel cable bundles by jet plowing and diver assisted methods across a tidal flat and channel.

RPS has previously completed two separate modeling studies evaluating the sediment effects as characterized by the plume of total suspended solids (TSS) above ambient levels and subsequent seabed deposition. These studies listed below are referred to as 'Original' and 'Revised' herein. The revised study reflected new data and new project details and included sensitivity studies.

- Original- *Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Little Bay, New Hampshire* (Issued 14 December 2015).
- Revised – *Revised Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Upper Little Bay, New Hampshire* (Issued 27 June 2017).

Subsequent to these reports the project was granted a permit with a condition of performing a jet plow trial. The jet plow trial includes operating the jet plow (without cable) along a portion of the planned route so the installer can better understand the site and to gauge the effects on water quality. The permit included a mixing zone which was proposed by Normandeau and Eversource based on modeling results from the original study and the base case of the revised study. The mixing zone was defined as the area within which these two model runs had predicted maximum excess TSS less than 20 mg/L. The permit required that monitoring be performed at stations within and at the mixing zone boundary. The jet plow trial took place September 9, 2019 along with water quality monitoring. Normandeau issued a report describing the installation activity and observed water quality conditions. Part of the water quality observations included examining the relationship between turbidity (NTU; the regulated water quality parameter) and TSS, sampling of background conditions, sampling of conditions during the jet plow trial and sampling of conditions after the plow operation ceased.

Also subsequent to these reports and the original permit conditions it was found that a portion of the route in the channel included sand waves on the bottom. The sand waves pose potential operating restrictions to the plow due to localized seabed slope. It is now proposed that a portion of the route deviate slightly to avoid the seabed slope issues local to the sand waves.

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MEMO

Date: October 2, 2019
Regarding: SRP - TSS

RPS has prepared this memo to comment on the mixing zone relative to the modeling and jet plow trial as well as to provide comment on the route adjustment local to the sand waves.

2. Comment on Mixing Zone Relative to Jet Plow Trial and Modeling

A mixing zone developed as part of the permit was intended to delineate the area where maximum excess concentrations of TSS may exceed 20 mg/L. This mixing zone was delineated based on the union of the 20 mg/L contour from the modeling of the original base case and the revised base case. Both cases had assumed continuous jet plow operations and both reflected a start of the jet plow at the western shore at high tide such that initial plowing will be synchronous with an ebbing current (transporting sediments north). The original case had slower installation (5.47 ft/min [1.67 m/min]) such that the plowing experienced more stages of the tidal currents subsequent to the initial ebb current after high tide to slack at low tide, then flood after low tide, to slack at high tide, then ebb again, whereas the revised modeling had faster installation (~10 ft/min [~3 m/min]) such that the ebb current is experienced along most of the route with it turning to a period of flood currents after slack at low tide near the eastern end of the route.

The jet plow trial installation speeds varied only slightly (5.77 ft/min – 10.38 ft/min [1.76 m/min – 3.16 m/min]) from approximately the installation rate from the original base case modeling to that of the revised base case modeling. However, the installer has indicated that burial operations would have multiple stoppages to relocate the cable pulling barges; therefore operations could occur during any stage of the tidal current. As a result of this change in operation, it was necessary to reevaluate the suitability of the mixing zone area delineation. RPS performed an assessment of the modeling results comparing the original and revised modeling as well as results from an additional scenario carried out specifically to assess the effect of tidal stage and to reflect the currently understood operational scenario. This new scenario was modeled assuming the slow advance rate (5 ft/min [1.52 m/min]) across the mud flats followed by a 3 hour stoppage (time required for anchor changes) and finally resuming installation across the channel at the base advance rate (10 ft/min [3.04 m/min]); the stoppage is such that the resumed activities take place during a flood current. A summary of the model runs (original, revised and new) with their associated key model input values is presented in Table 1.

Maps delineating the 20 mg/L contour from the previously documented original and revised modeling (including sensitivity runs) are presented in Figure 1 and the revised base along with the new start/stop/restart scenario is presented in Figure 2. Reviewing Figure 1 it can be seen that the 20 mg/L footprints from the original and revised modeling primarily remain within the mixing zone except for small areas with the more conservative runs (higher loss rate and faster advance rate). Results from the jet plow trial indicate that neither the higher loss rate nor the faster advance rate scenarios are likely to occur. The 20 mg/L contour from the new run (Figure 2) remains primarily within the mixing zone however with some deviation since this new run captured operations with flood currents in a different manner (starting immediately after the mud flat, rather than partway across the channel, and during close to peak flood current) than the slow advance base case.

The model results were also post-processed to determine the duration that excess TSS concentrations exceeded the 20 mg/L threshold; figures of this metric are presented for the original and the revised base case in Figure 3 and Figure 4, respectively and in Figure 5 for the new case. Reviewing the durations over

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the 20 mg/L threshold, it is evident that in most locations close to the mixing zone boundary, concentrations of 20 mg/L persist for less than an hour. In fact for the revised base and new (starting, stopping, and resuming) modeling scenarios shown in Figure 4 and Figure 5, this is true even for most locations well within the mixing zone. The durations were greater for the original modeling due to the much more conservative nature of that modeling, as noted in the bullets below:

- Modeled sediments had a higher assumed fraction of fine material
- The modeled trench was deeper in the deep waters
- The modeled trench was assumed 100 percent solid (no account for moisture content since it was not available)

The maximum excess TSS concentrations from model results at the location of the jet plow trial monitoring stations were then extracted and compared to the observed TSS concentrations from the jet plow trial report (Normandeau, 2019). Note that the jet plow trial only took place over a fraction of the route whereas the modeling reflects the entire route. A summary of the observed maximum TSS concentrations and model-predicted maximum excess TSS concentrations at the jet plow trial observation station locations is presented in Table 2. Reviewing Table 2, it is evident that, during the jet plow trial, the observations were primarily much lower than the model predicted excess concentrations. The observed concentrations are total suspended sediment concentration (ambient plus plume) whereas the model concentrations are excess suspended sediment concentrations (plume only); therefore the observations of the plume concentrations due to jet plowing operations are of an even lower magnitude than what was observed since the observed contains the plume plus ambient (represented by the reference station values in Table 2) contributions.

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Table 1: Summary of Model Runs.

Original, Revised, or New Model Results	Run Descriptor	Report Date	Jet Duration (hours)	Advance Rate (ft/min)	Loss Rate (%)	Tide	Old/New Sediment	Start Time	Currents As Operations from West to East Occur
Original	Original	Dec-15	13	5.47	25	Mean	Old	High Slack	Ebb-Flood-Ebb
Revised	Revised - Base	Jul-17	7.1	10.00	25	Spring	New	High Slack	Ebb -Flood
Revised	Revised - Slow	Jul-17	14.2	5.00	25	Spring	New	High Slack	Ebb-Flood-Ebb
Revised	Revised - Fast	Jul-17	4.7	15.00	25	Spring	New	High Slack	Ebb
Revised	Revised - High Loss	Jul-17	7.1	10.00	35	Spring	New	High Slack	Ebb -Flood
Revised	Revised - Low Loss	Jul-17	7.1	10.00	10	Spring	New	High Slack	Ebb -Flood
Revised	Revised - Neap	Jul-17	7.1	10.00	25	Neap	New	High Slack	Ebb -Flood
New	Start/Stop/Restart	Oct-19	10.5	5.00 & 10.00	25	Spring	New	High Slack	Ebb -Flood-Ebb

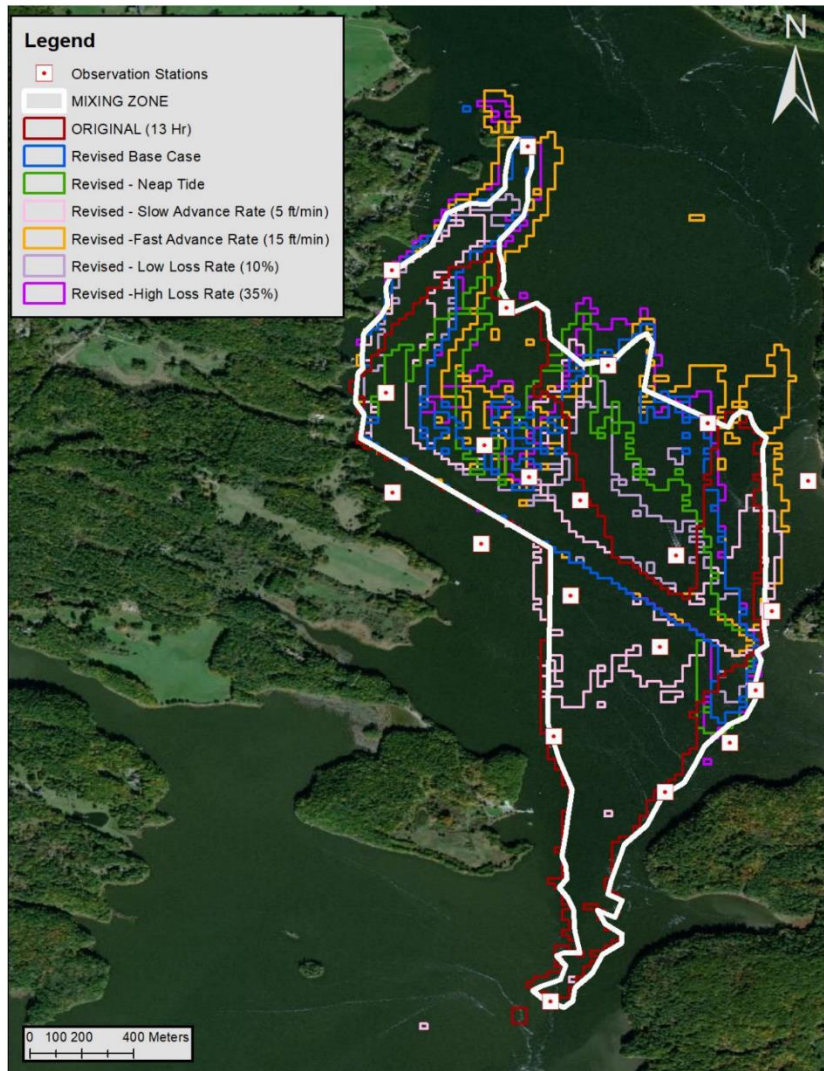


Figure 1 Delineation of the 20 mg/L contour from previously reported model runs.

MEMO



Date: October 2, 2019
Regarding: SRP - TSS

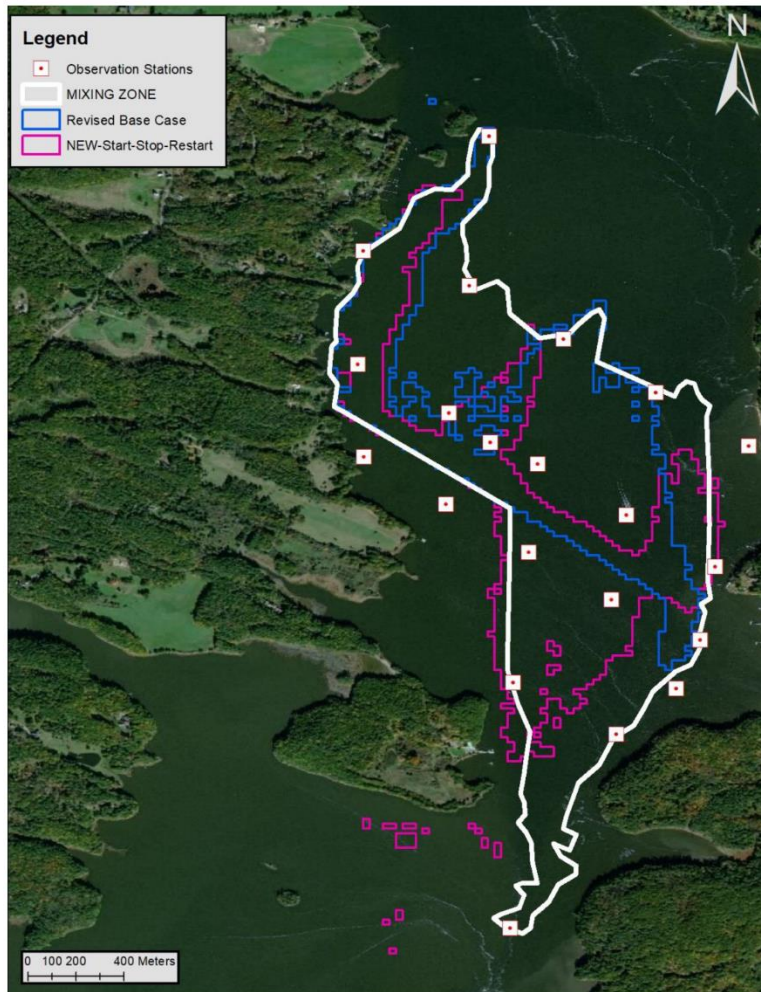


Figure 2 Delineation of the 20 mg/L contour from the updated base case from the revised modeling and that same case with a new case that reflected starting slow (5 ft/min [1.52 m/min]) across the mud flats, stopping for 3 hours and then restarting at the base advance rate (10 ft/min [3.04 m/min]).

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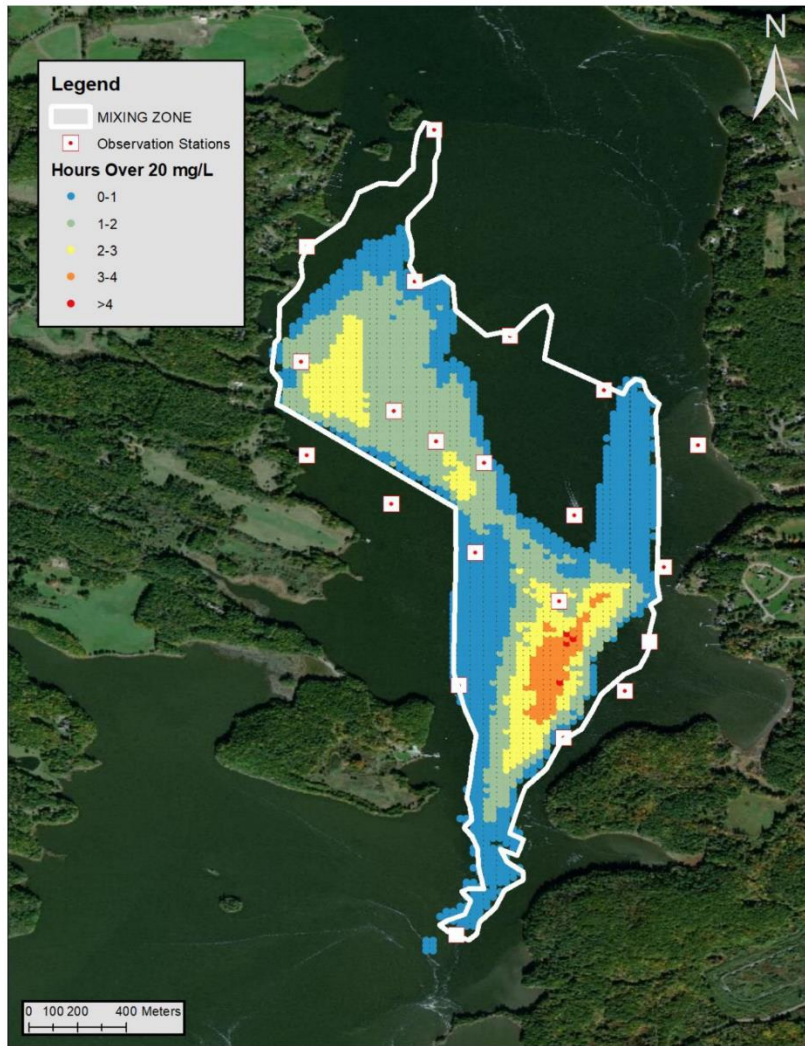


Figure 3 Hours over 20 mg/L for the original base case.

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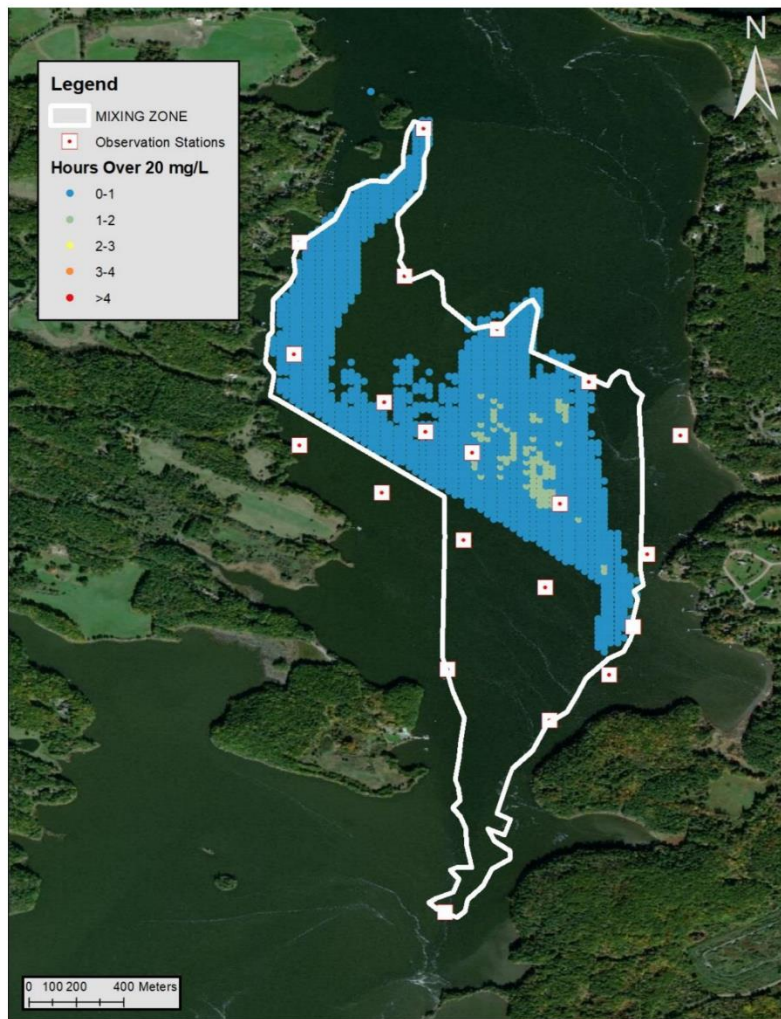


Figure 4 Hours over 20 mg/L for the revised base case.

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Date: October 2, 2019
Regarding: SRP - TSS

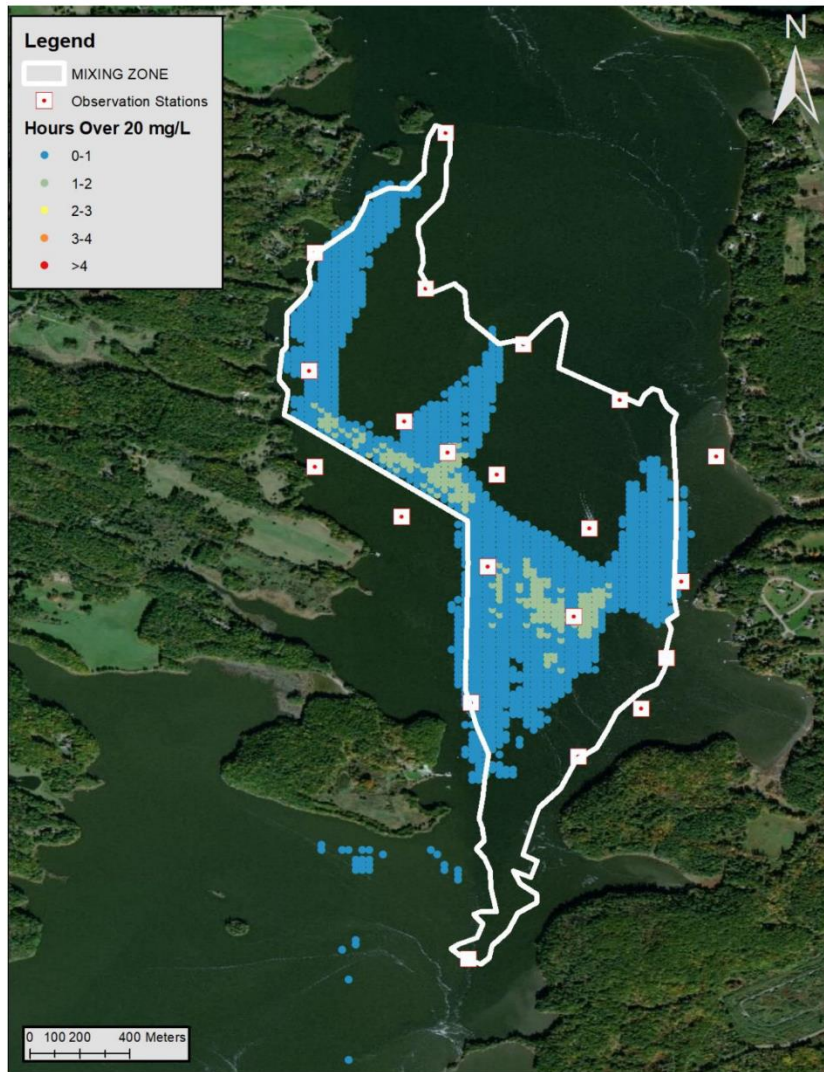


Figure 5 Hours over 20 mg/L for the new case of starting, stopping, and resuming operations.

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3. Comment on Route Adjustment

The cable burial route is proposed to be slightly adjusted to avoid a sand wave area where steeper bottom slopes exist. The adjustment is an offset from the original route for a short distance with a maximum offset of ~100 ft (~33 m) (see Figure 6).

The slight route offset will not affect the modeling results due to the small distance change from the original route. The resolution of the sediment transport modeling grid (where the excess sediment concentration and deposition is calculated) is 20 m (66 ft) in the plan view and 0.2 m (8 in) in the vertical. Thus the adjusted route would result in the sediment source (the jet plow) being located only 1-2 grid cells from the original modeled location. Although there will be a shift in the location of the maximum concentrations (>> 20 mg/L) right at and locally surrounding the jet plow, this is not anticipated to have an effect on the modeling results at large, particularly at distances where the 20 mg/L mixing zone area is delineated.

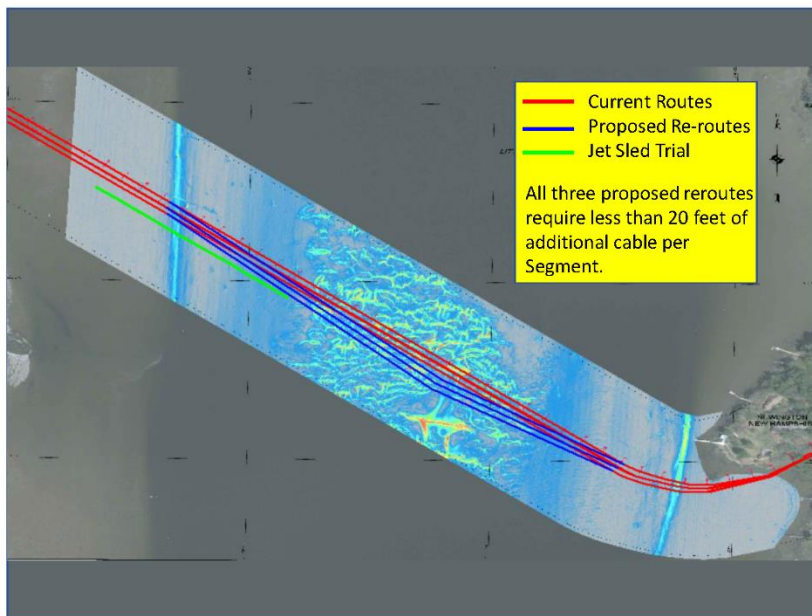


Figure 6 Illustration of adjusted route relative to the modeled route (Source: Normandeau).

MEMO



Date: October 2, 2019
Regarding: SRP - TSS

4. Conclusions

Based on the combination of modeling results from various scenarios, it is suggested that the permitted mixing zone is suitable for delineating the area where expected excess concentrations would exceed 20 mg/L from jet plow operations regardless of the tide stage at the time of crossing the channel and of the minor deviation from the original route within the channel. While there are some model predicted deviations of the 20 mg/L contour outside this mixing zone, they are at the further extents close to where the concentrations drop and are based on conservative assumptions which may have resulted in an overestimate of the plume. The assumptions have been observed to be conservative based on comparison of the maximum observed TSS during the jet plow trial which were all considerably lower than the model predicted maximum at these locations.

Further it is suggested that the route adjustment will not significantly change the model predictions, and therefore the previously completed modeling is deemed a useful proxy for the adjusted route.

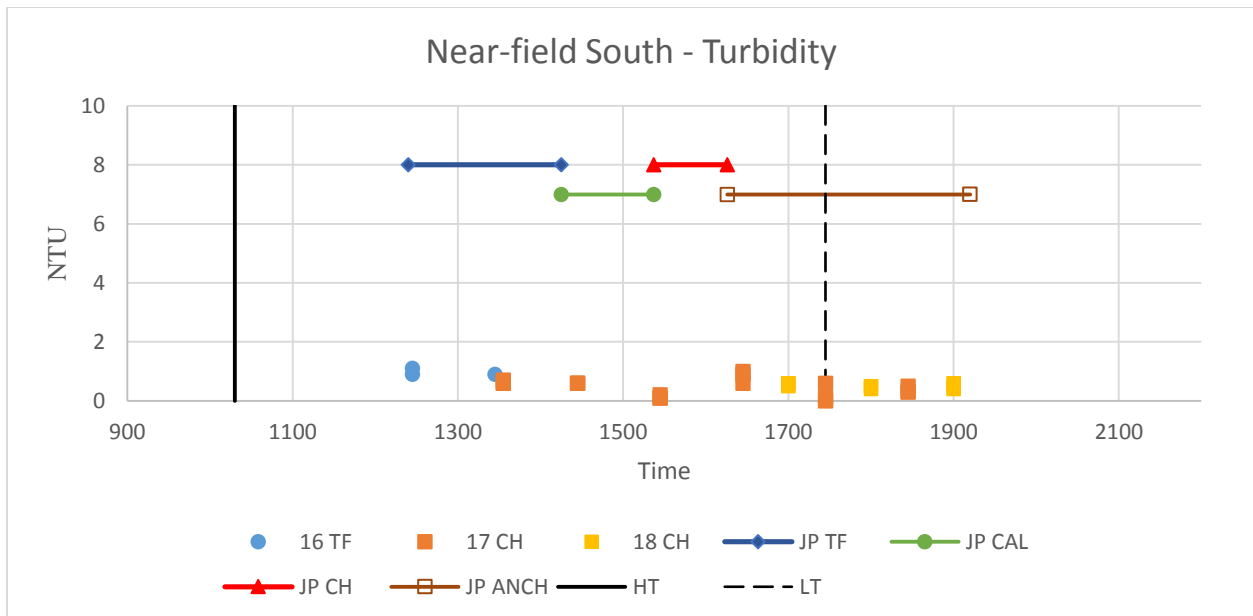
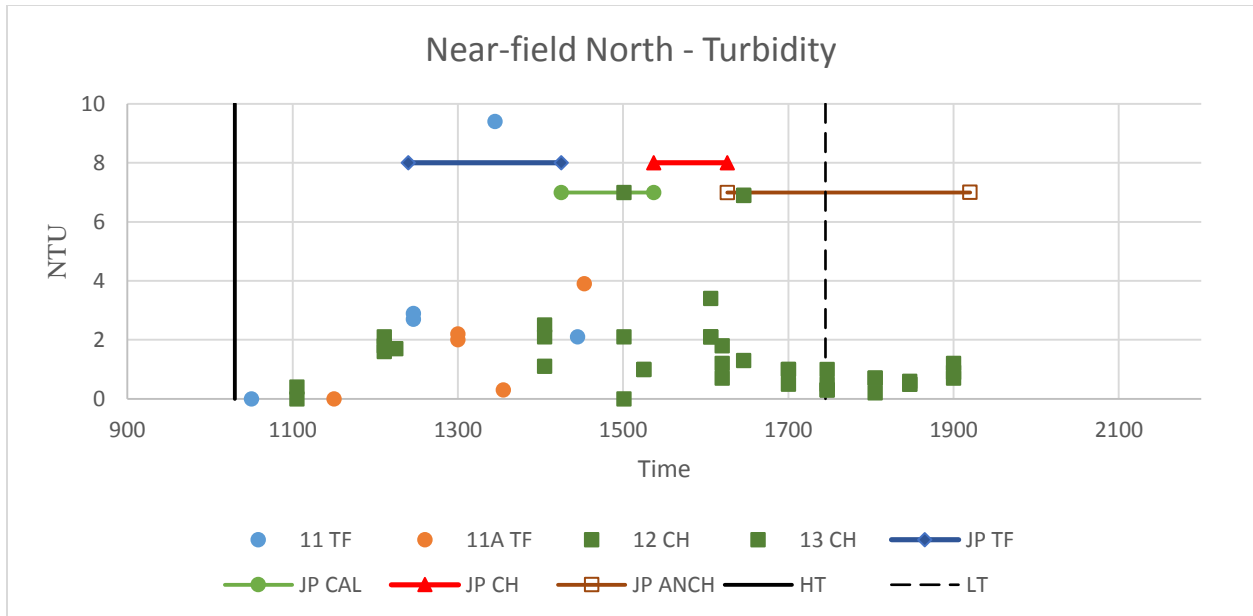
5. References

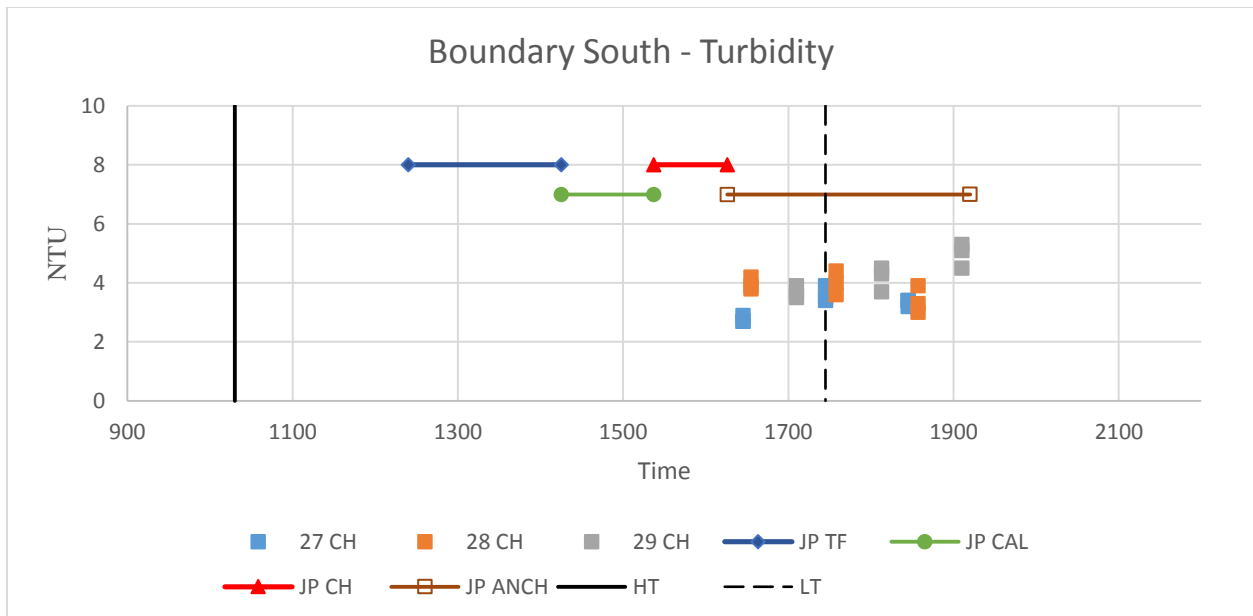
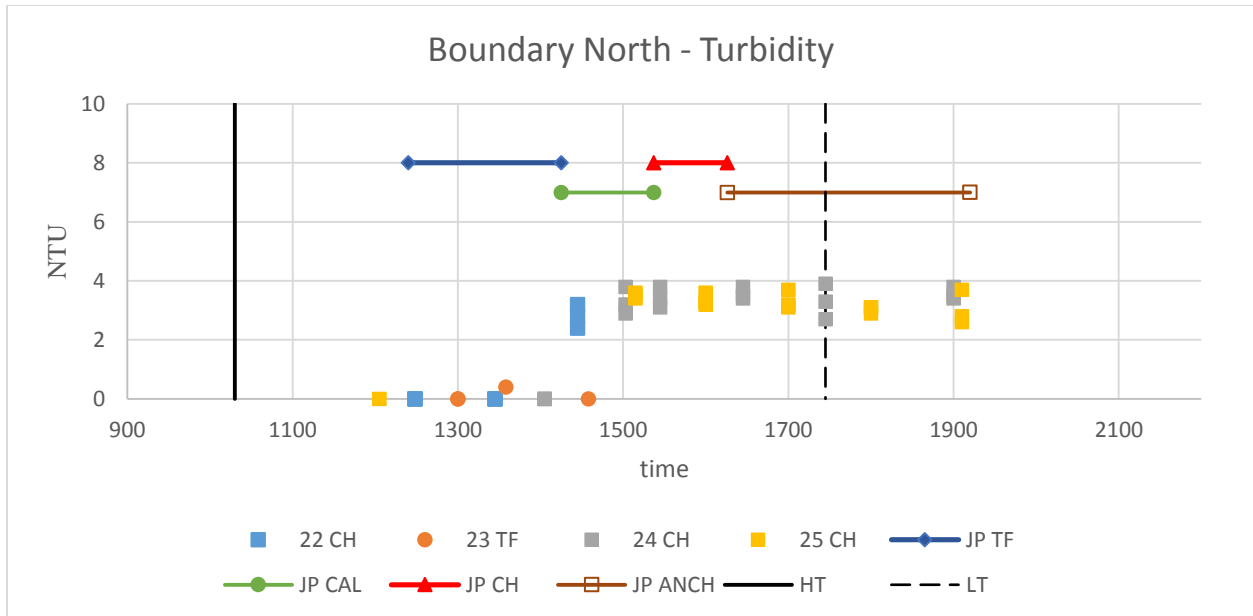
- Normandeau Associates. *Eversource Energy Seacoast Reliability Project Jet Plow Trial Summary Report* (Issued 18 September 2019).
- Swanson, J.C, T. Isaji and C. Gallagan. *Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Little Bay, New Hampshire* (Issued 14 December 2015).
- Swanson, J.C, D. Crowley, D. Mendelsohn, and N. Vinhateiro. *Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Little Bay, New Hampshire* (Issued 27 June 2017).

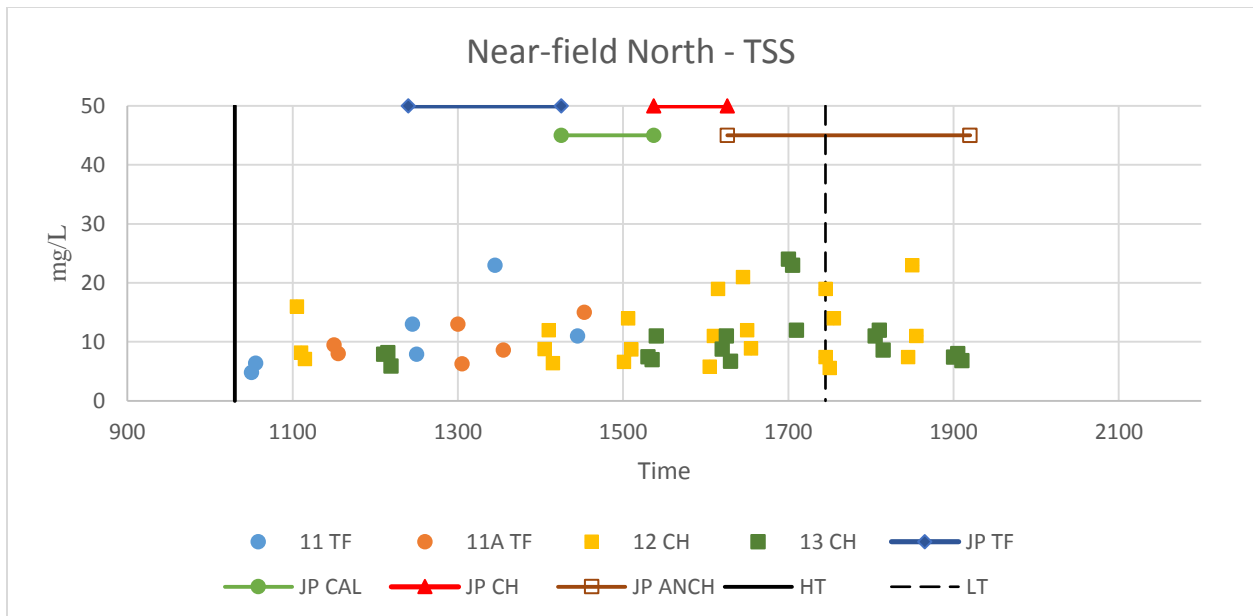
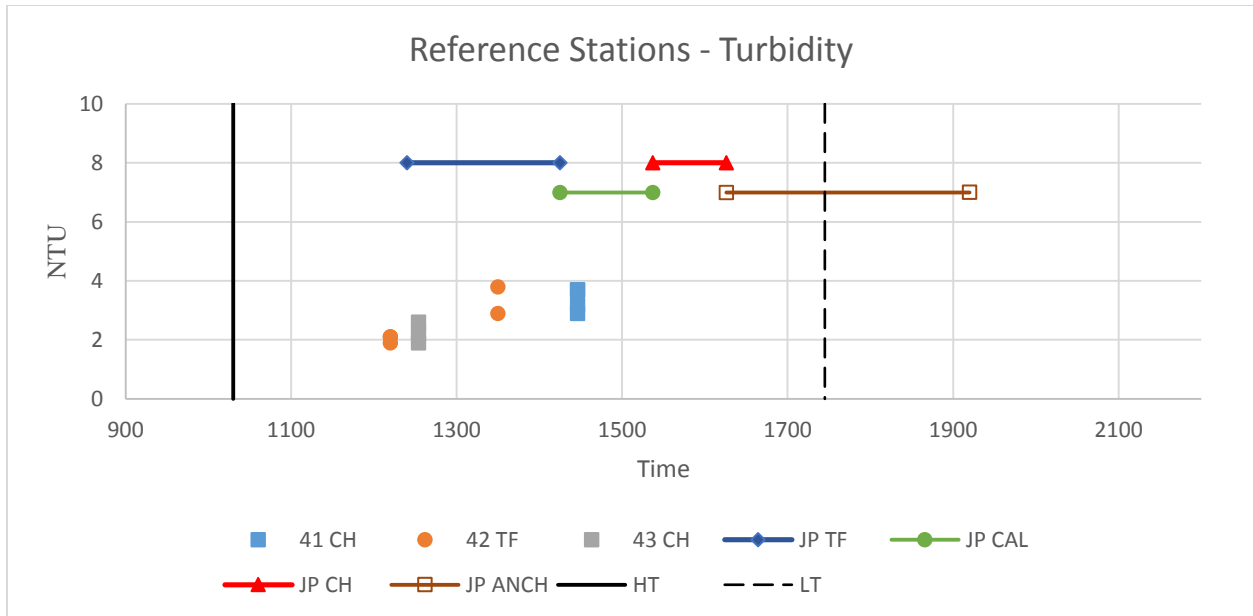
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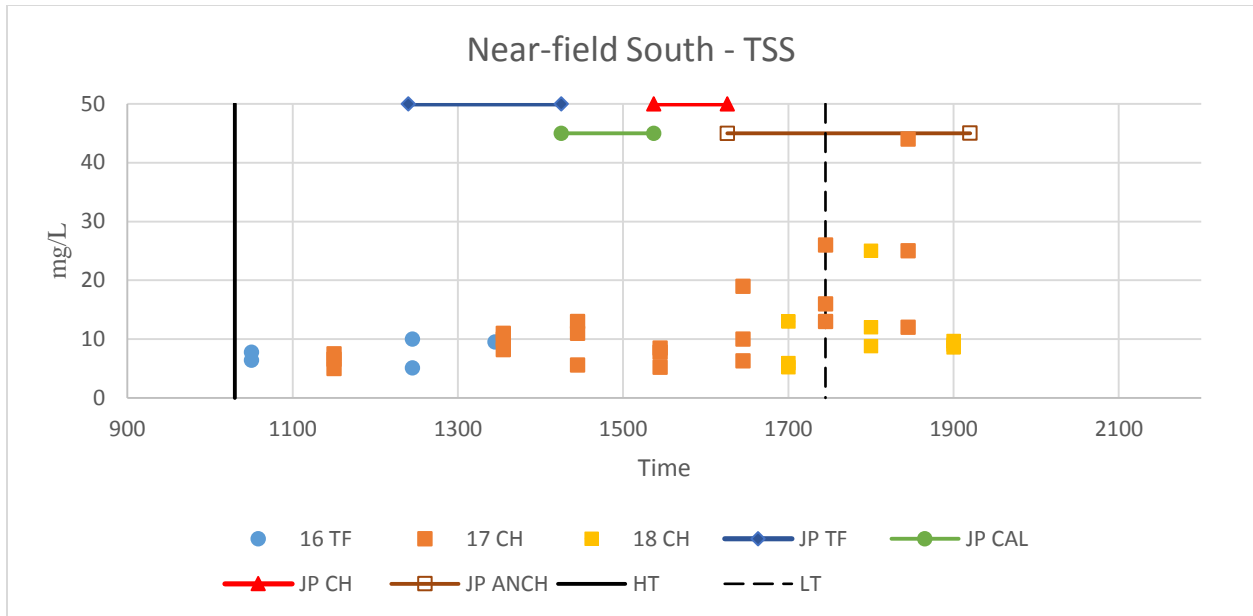
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Appendix G. Water Quality Results for Each Parameter by Station Location

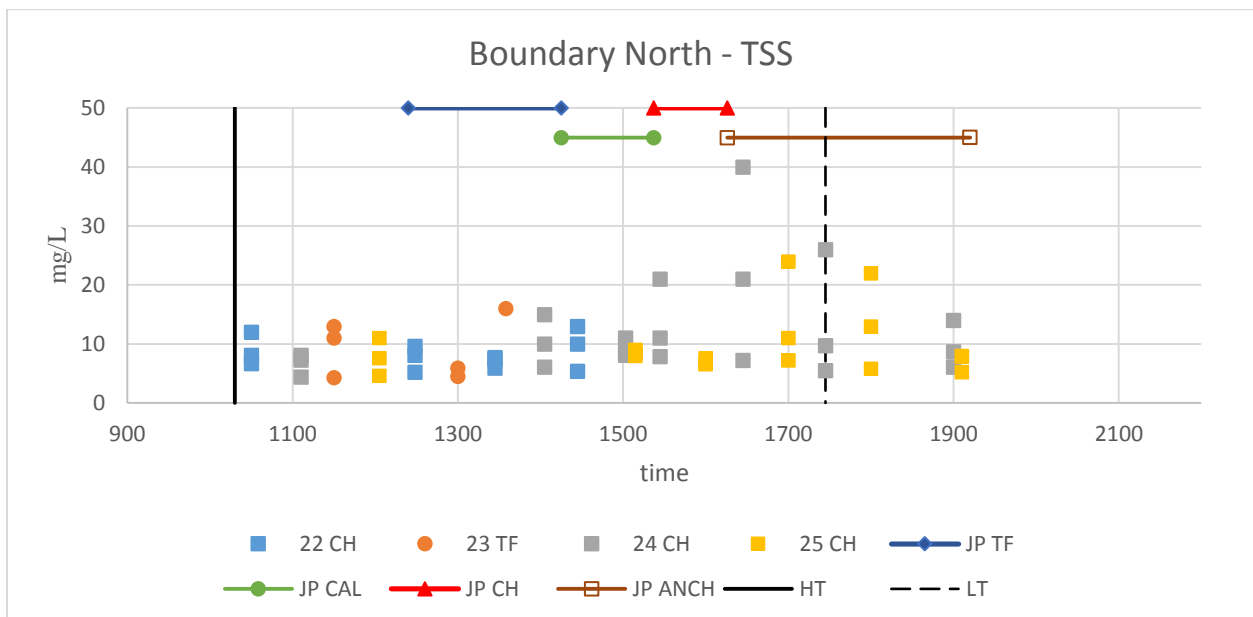


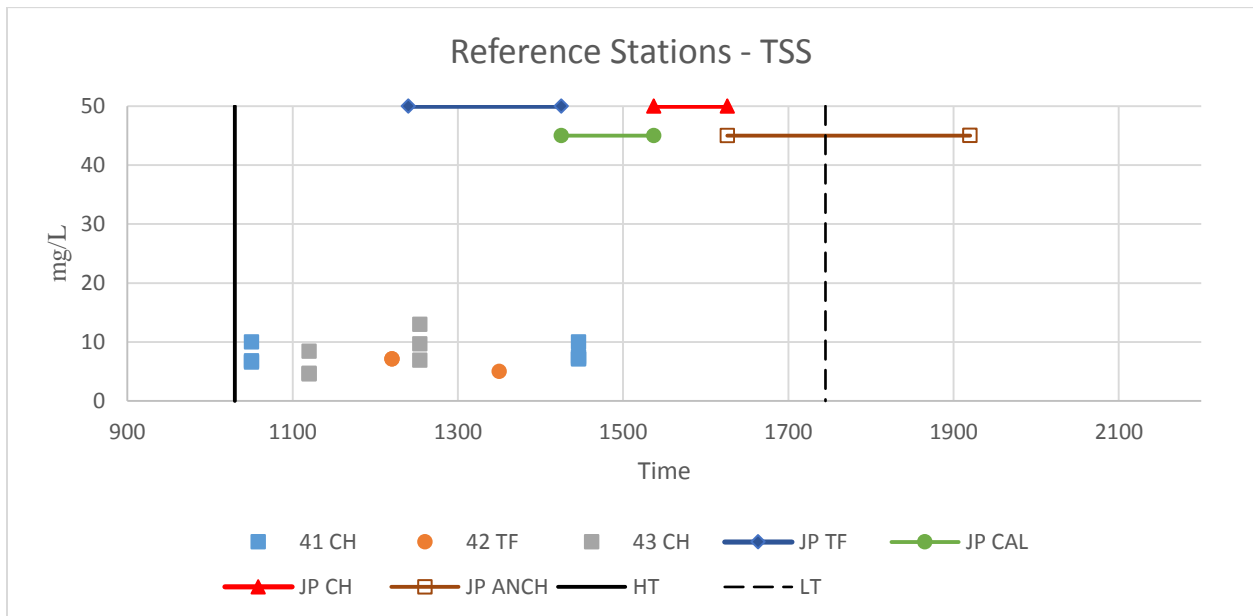
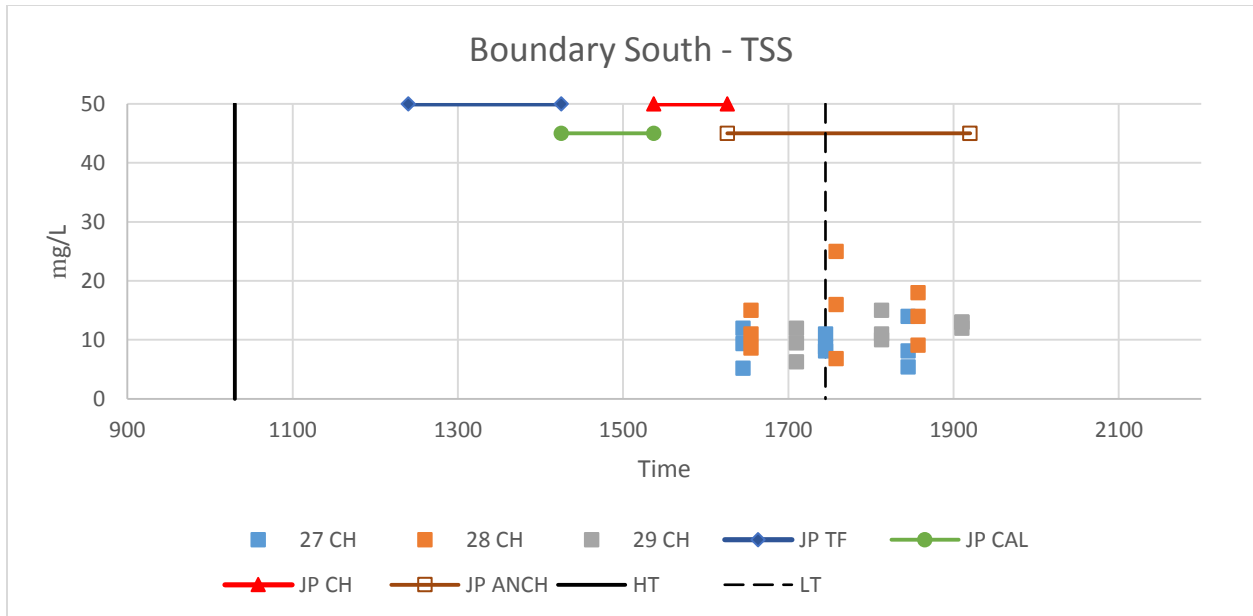




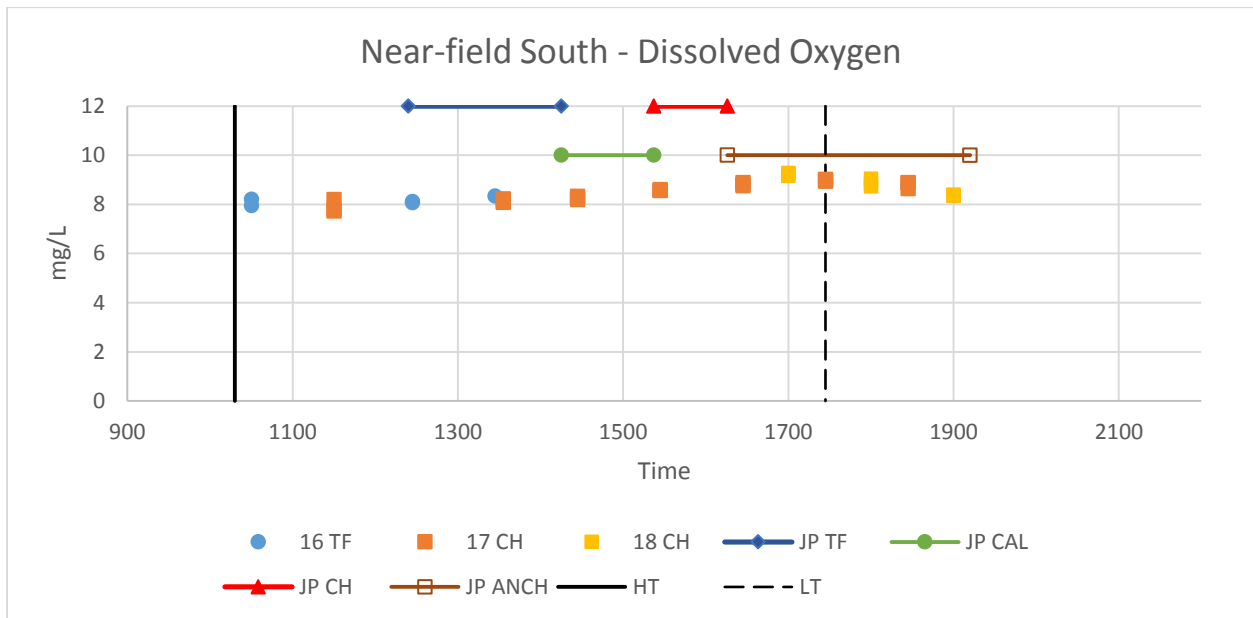
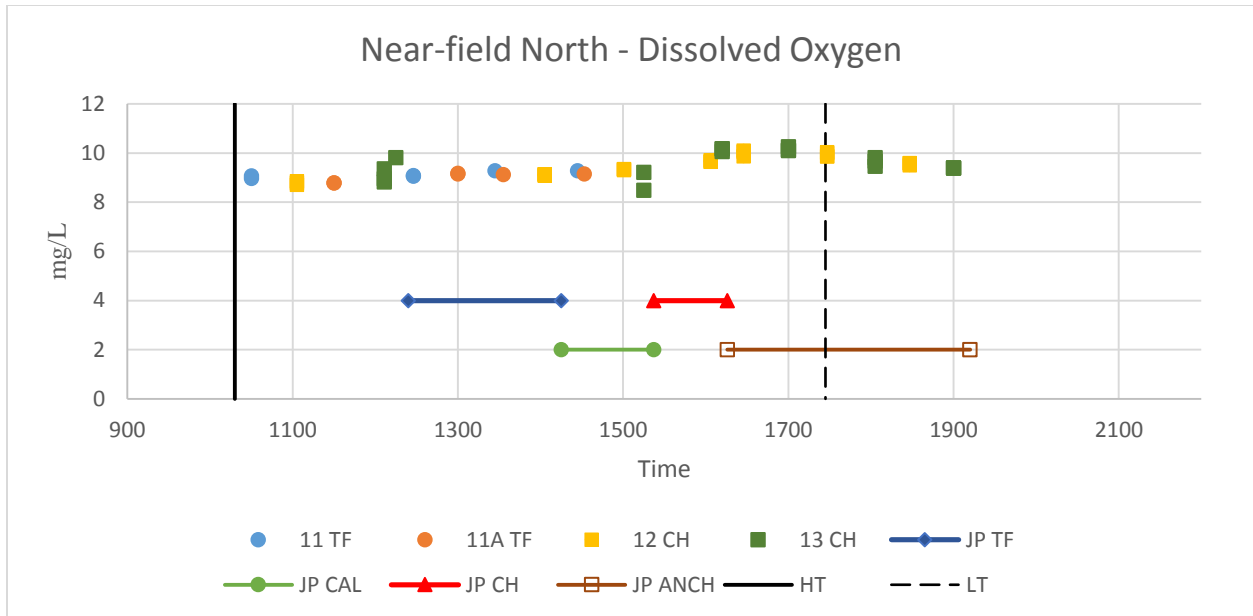


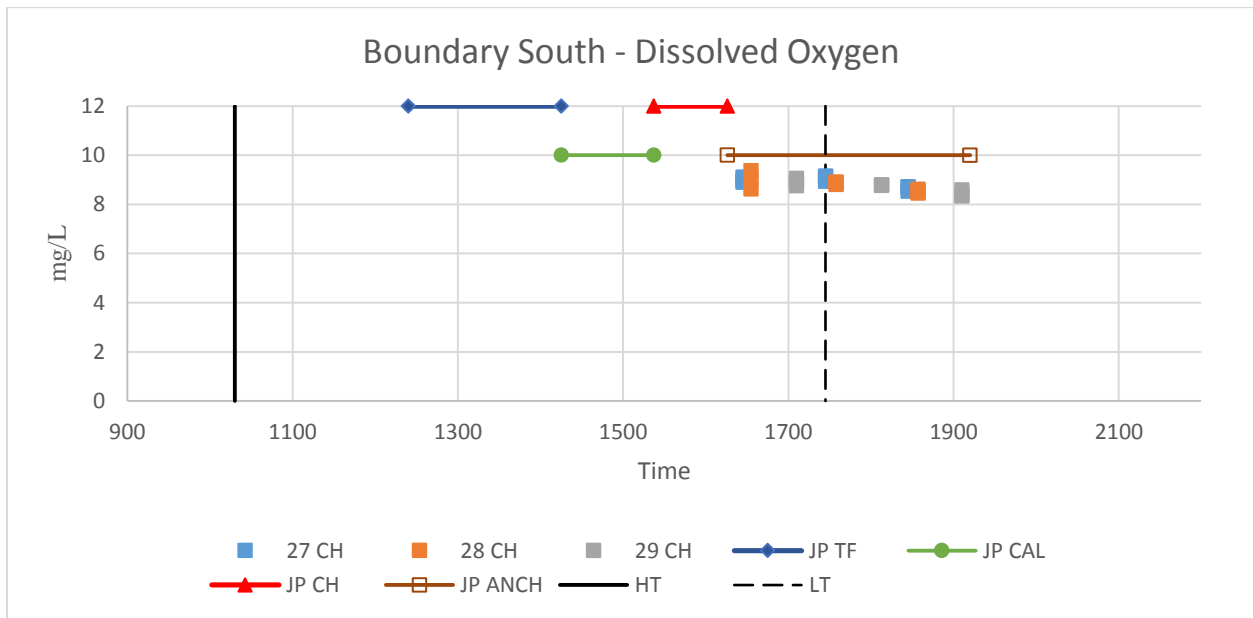
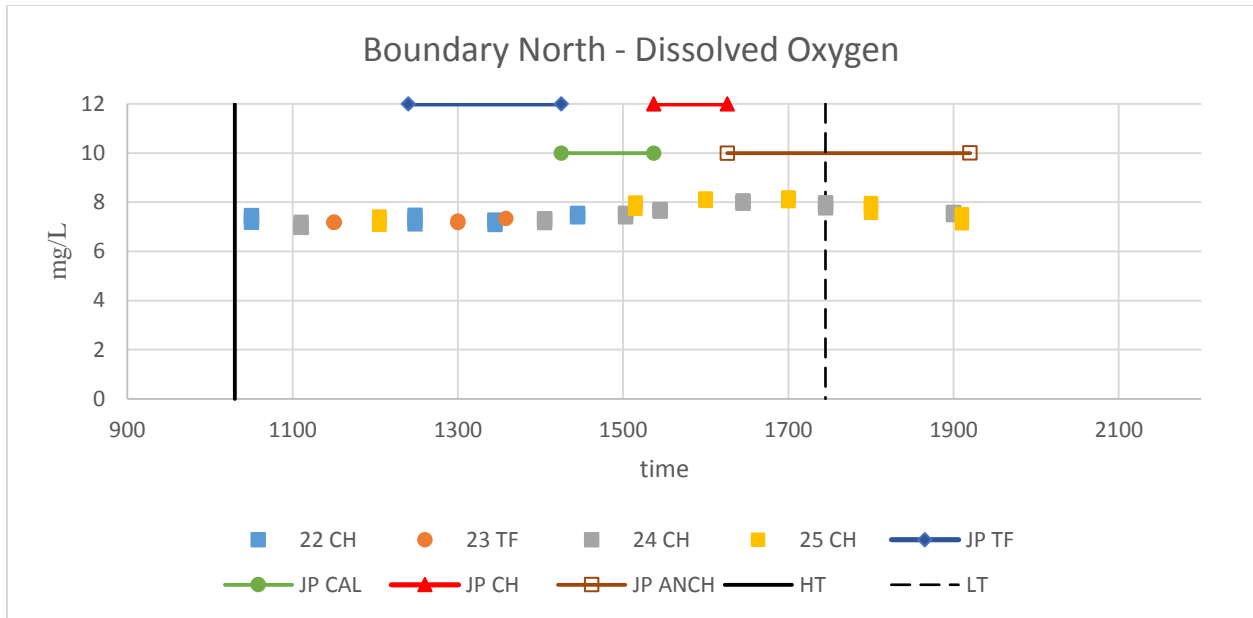
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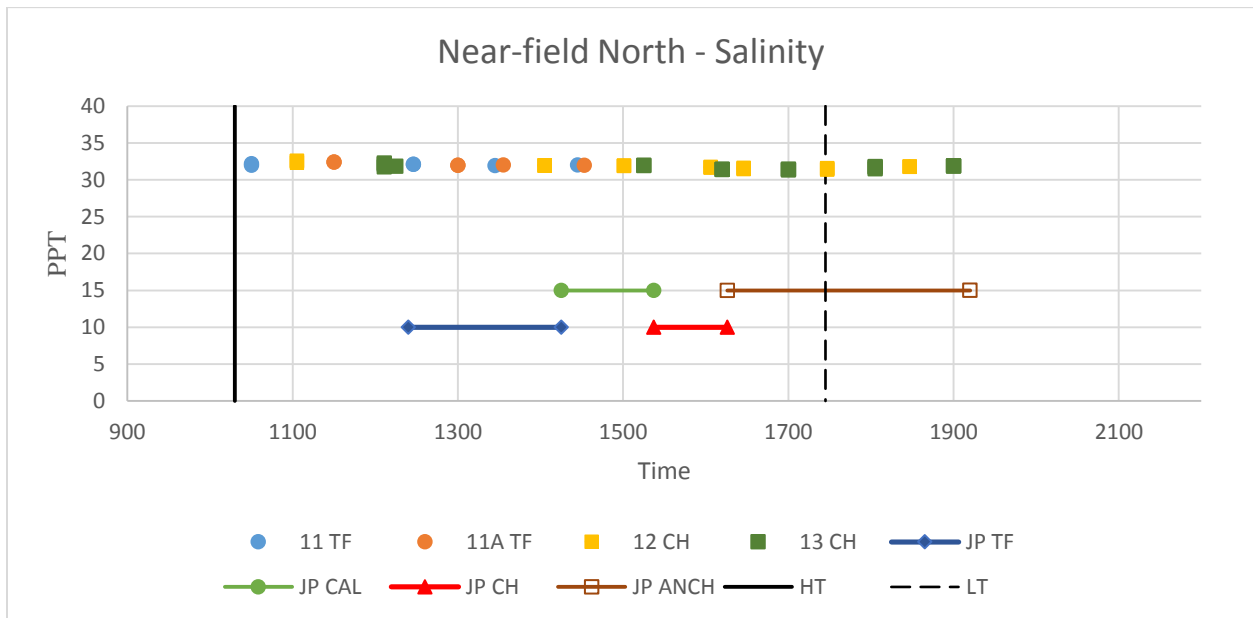
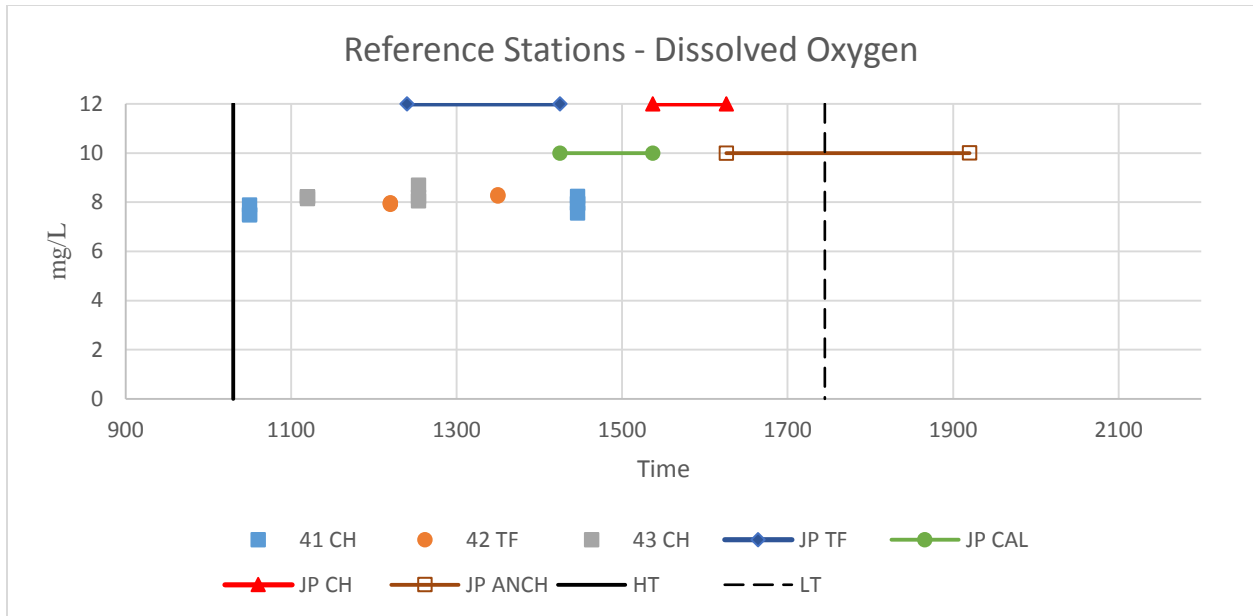


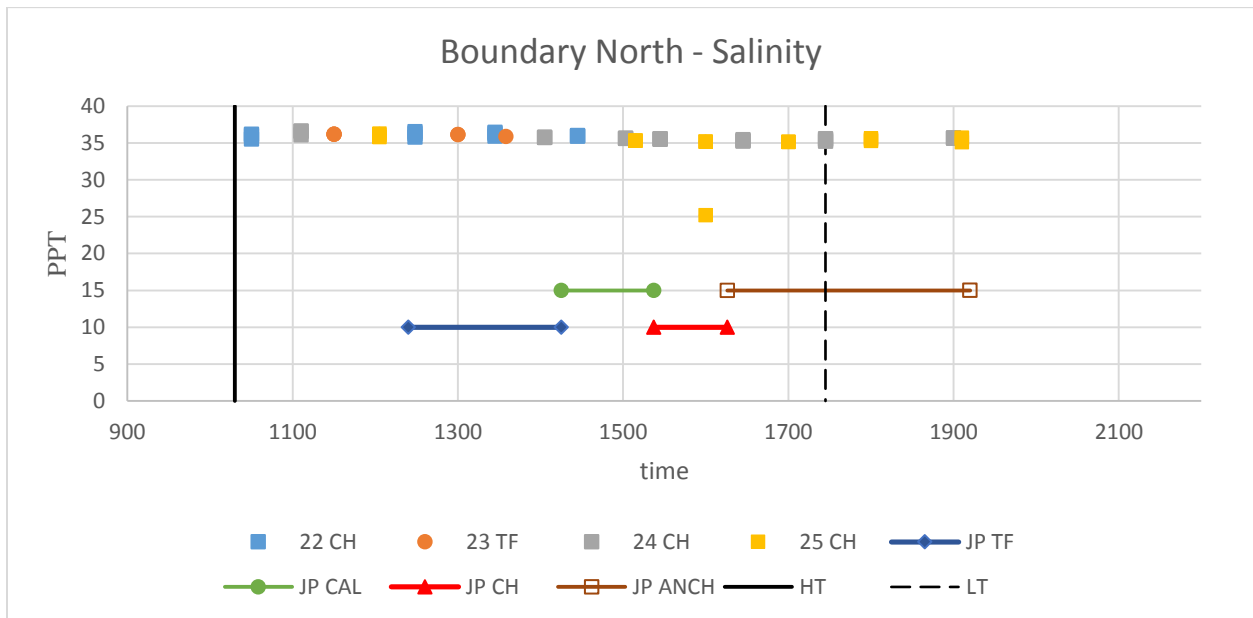
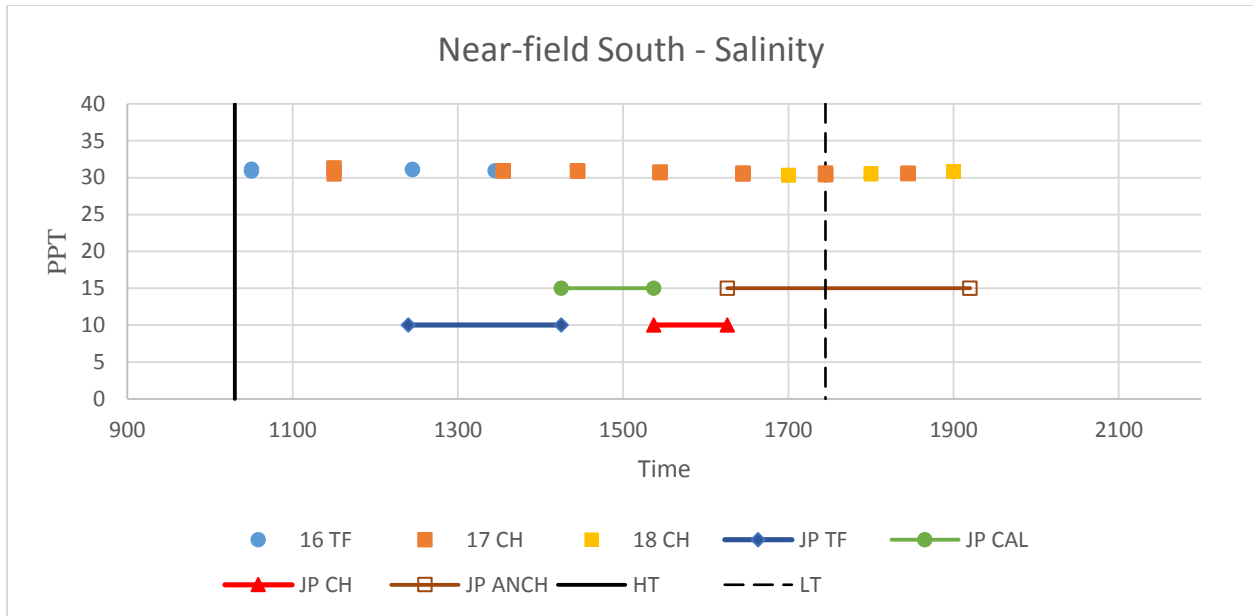


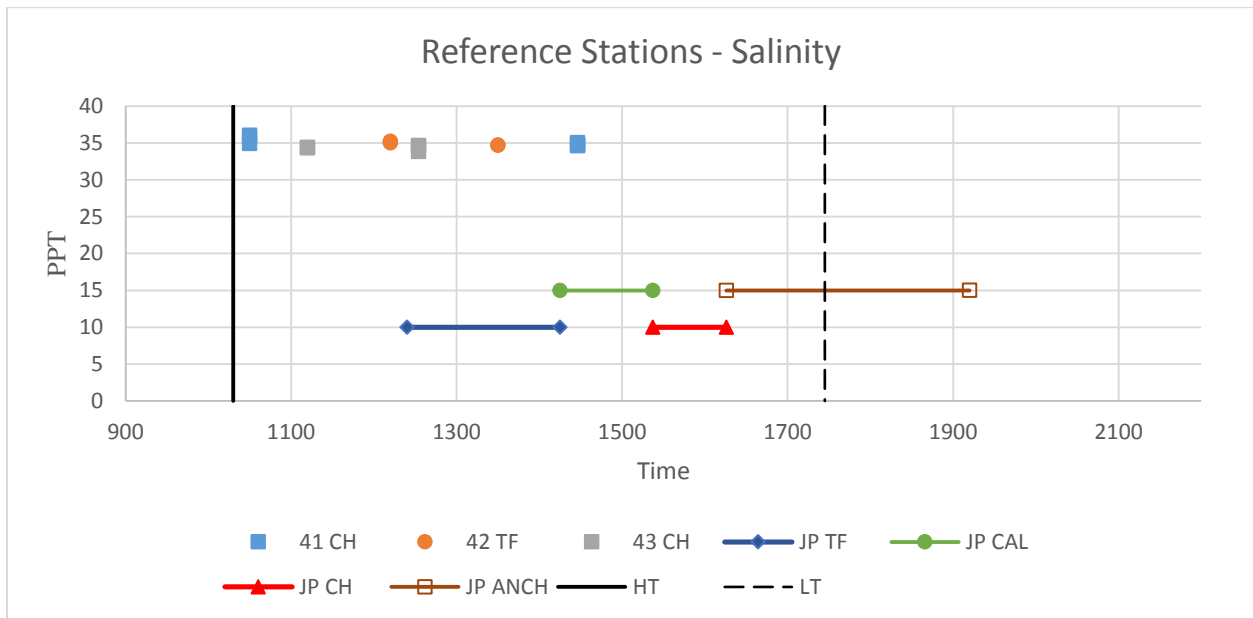
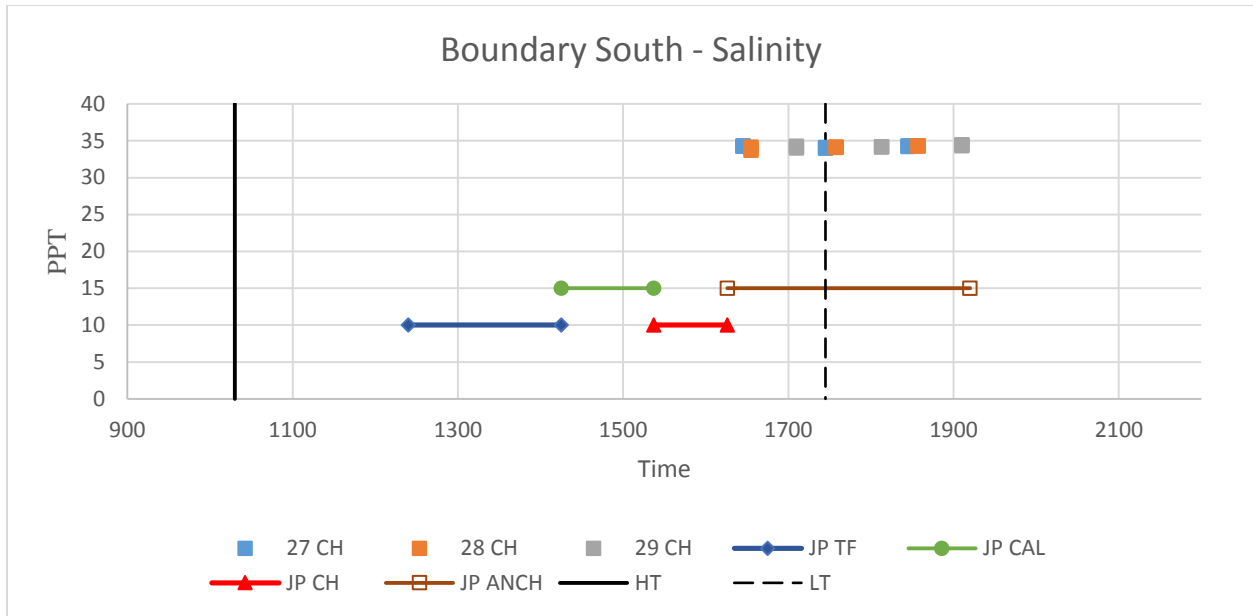
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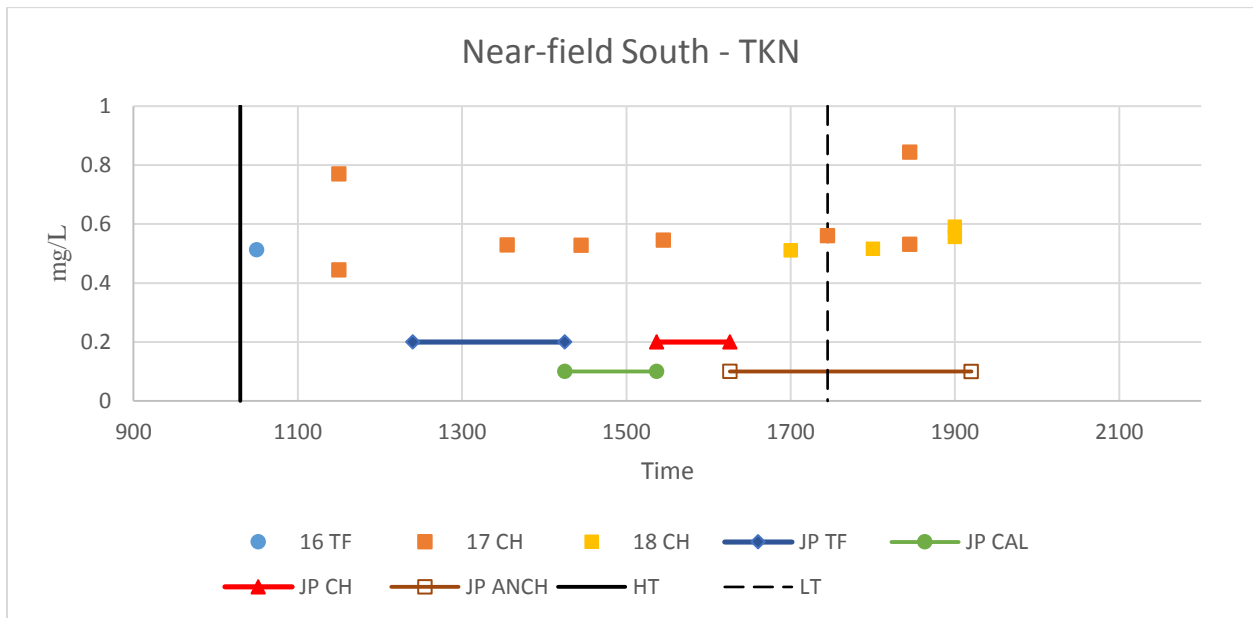
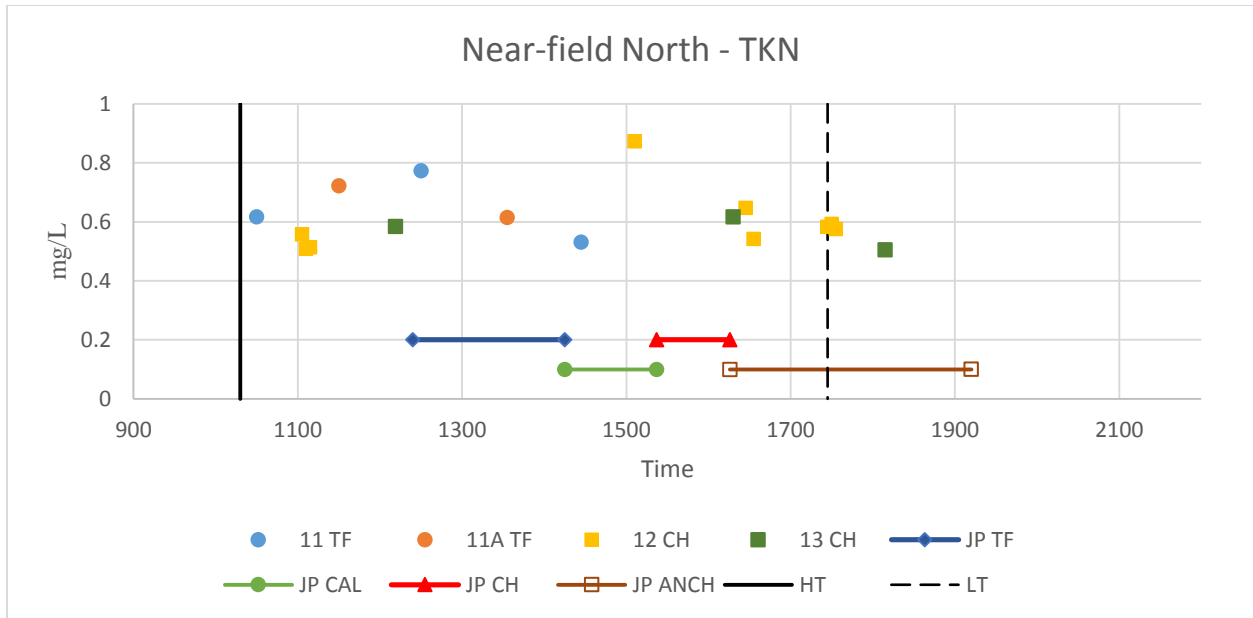




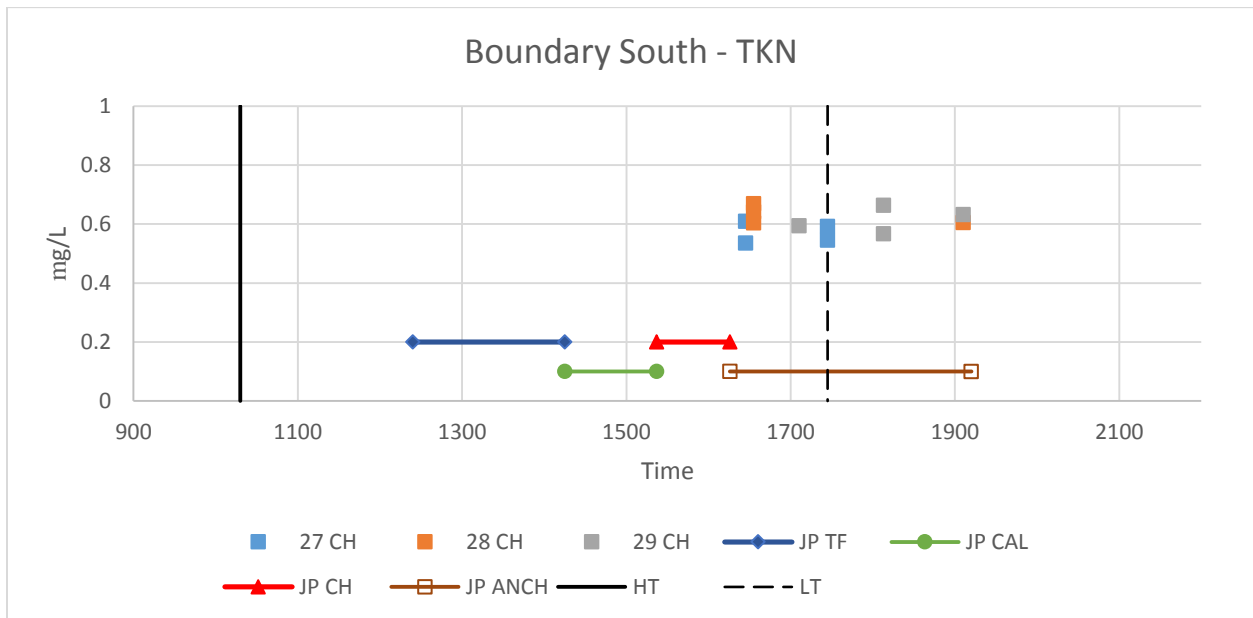
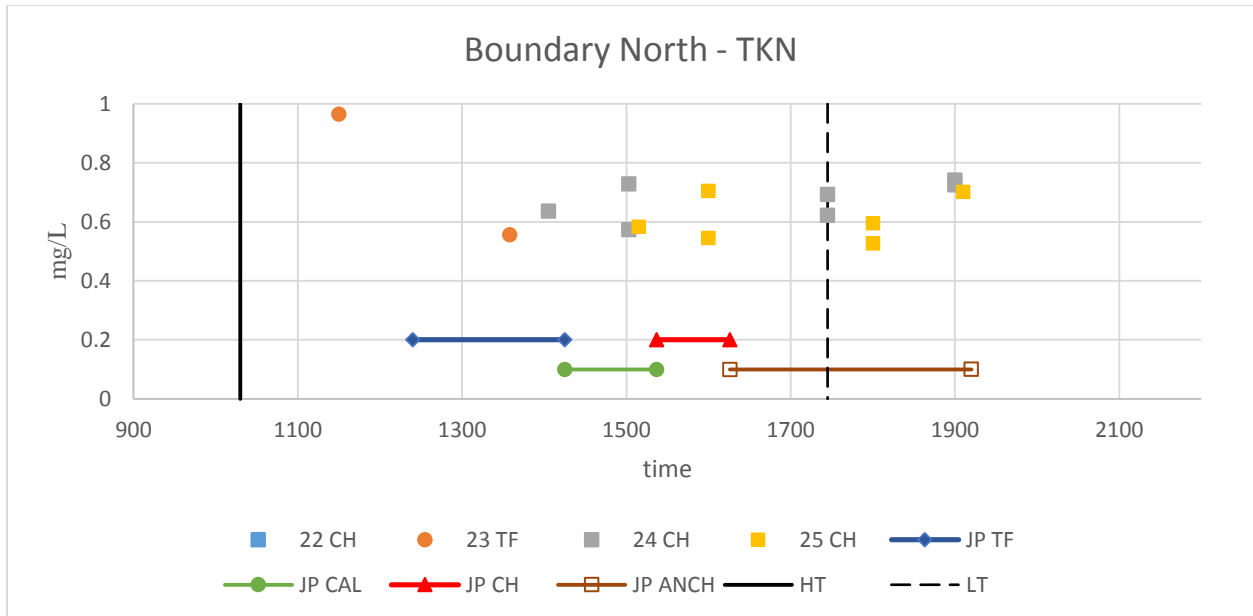


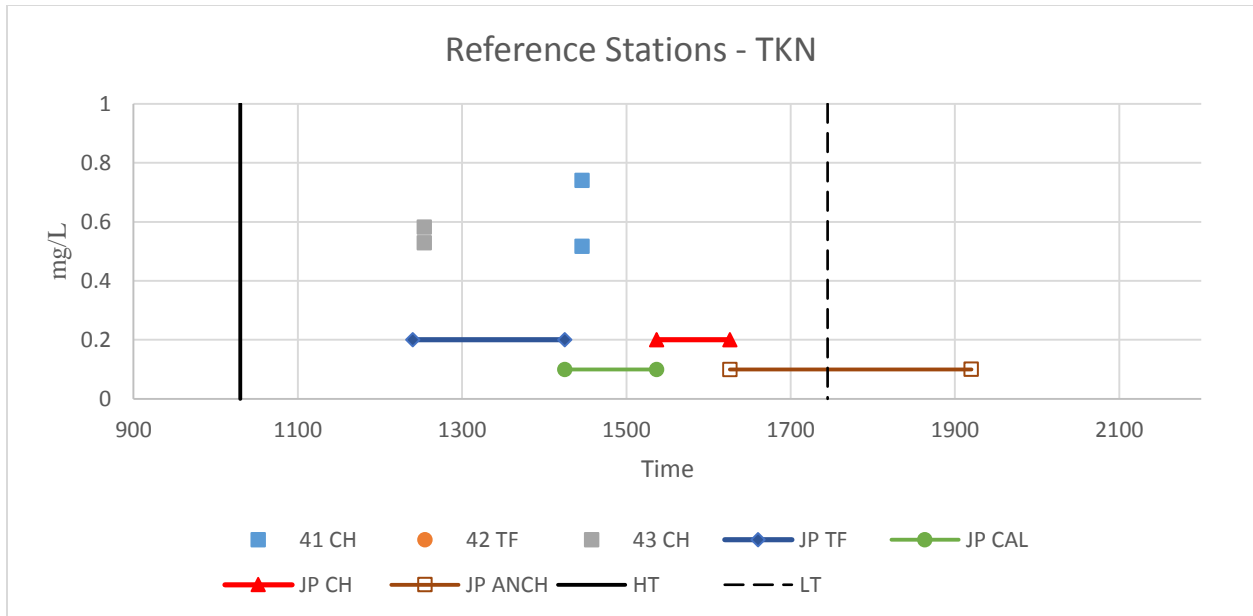




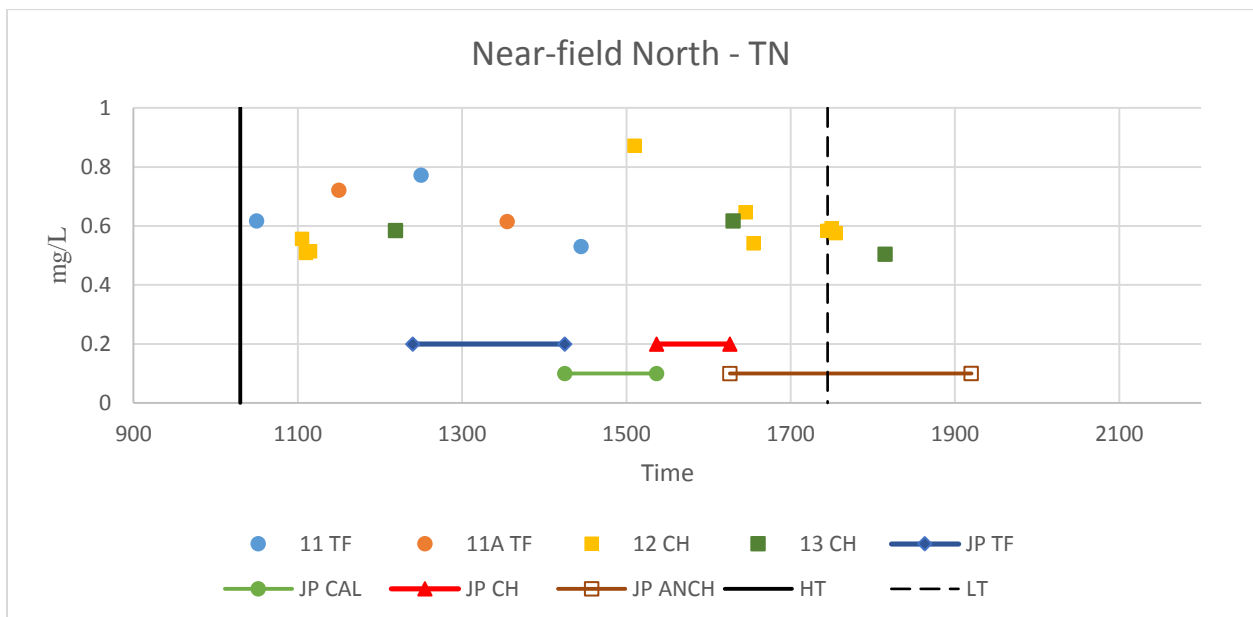


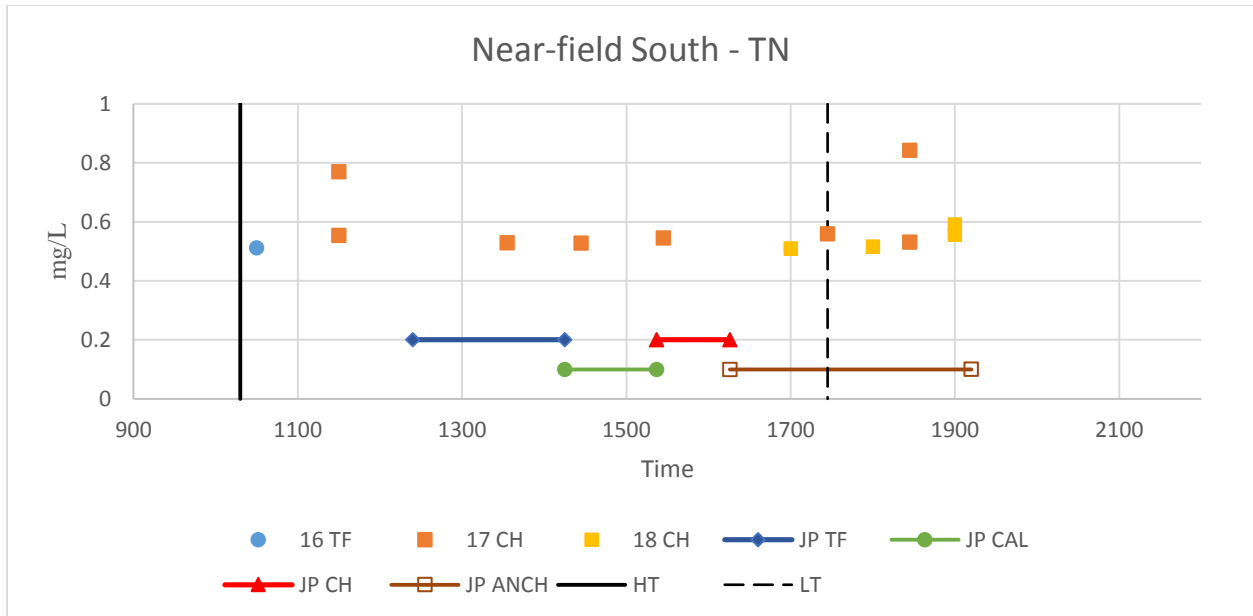
NOTE: Laboratory Reporting Limit = 0.5 mg/L



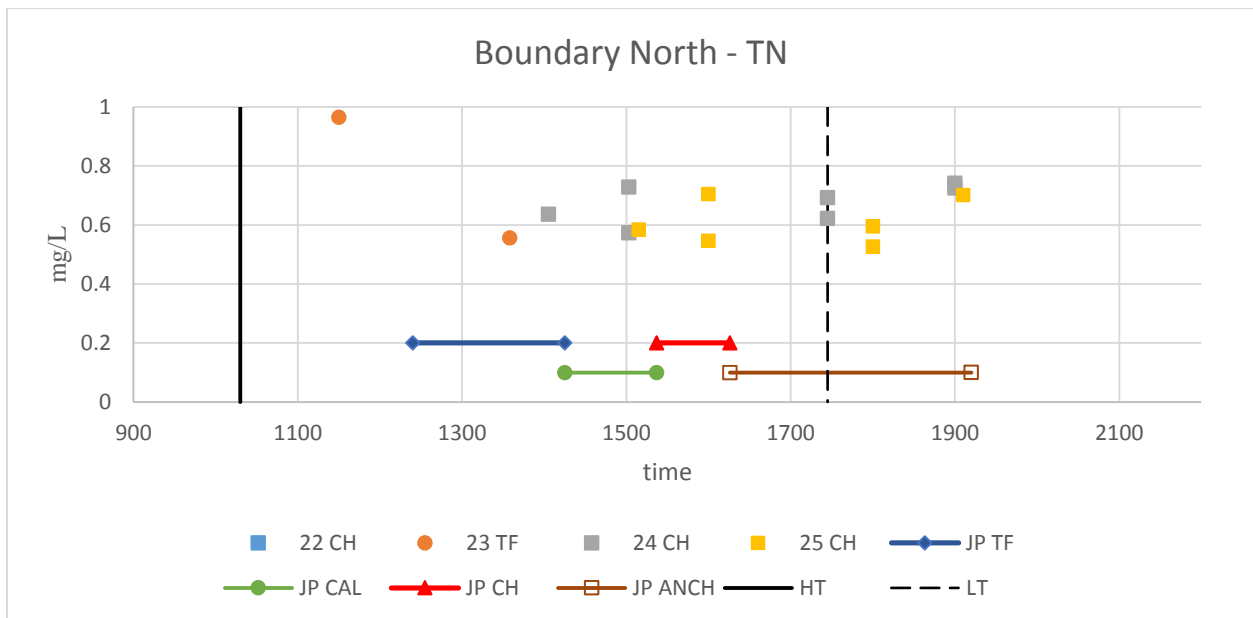


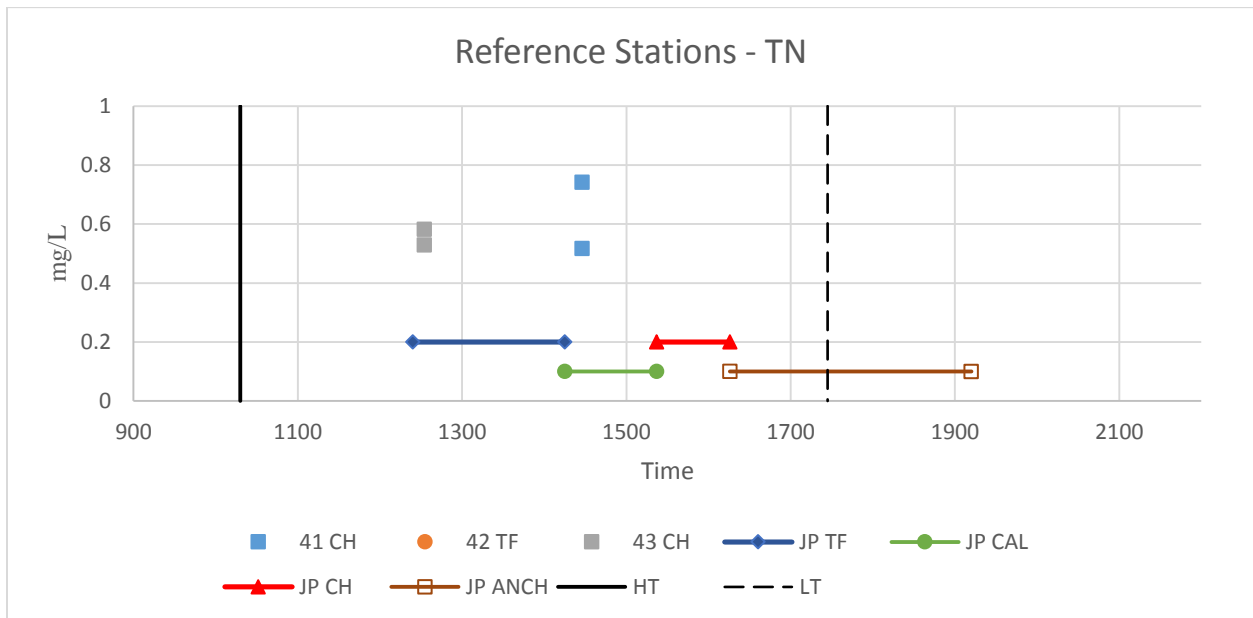
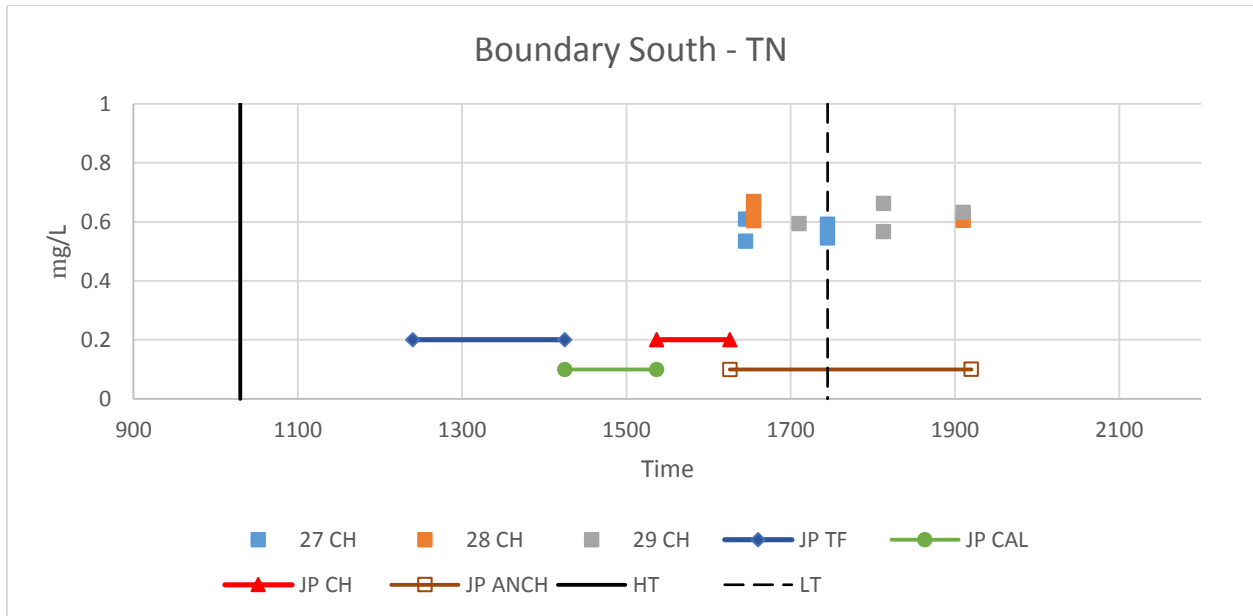
NOTE: Laboratory Reporting Limit = 0.5 mg/L



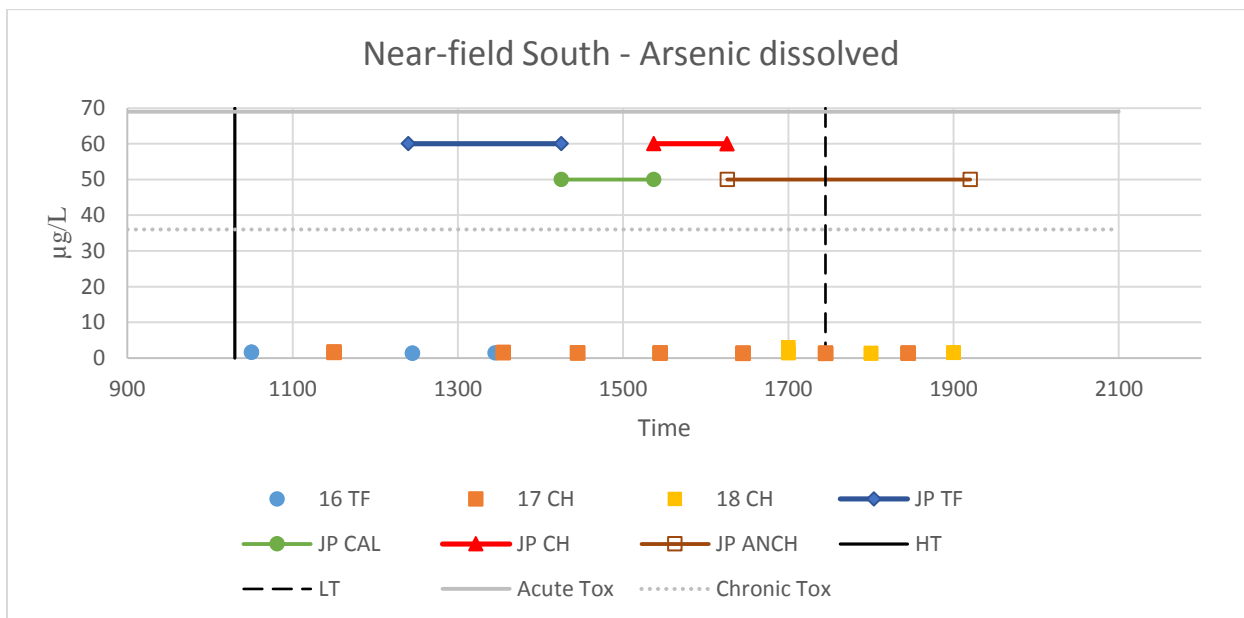
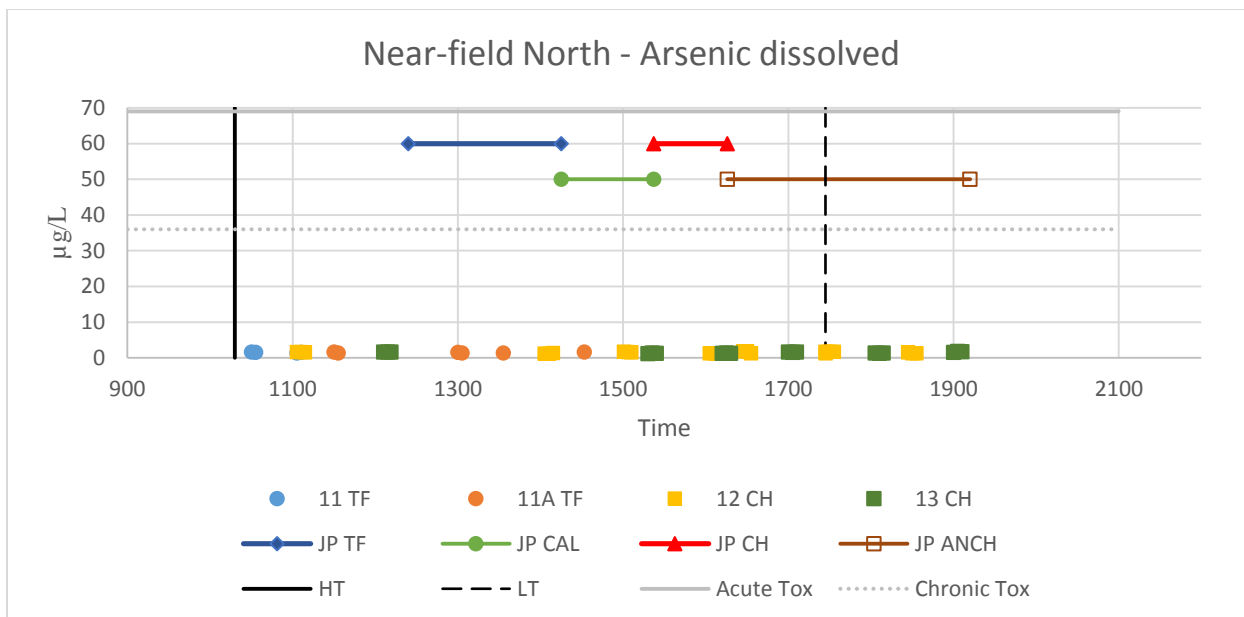


NOTE: Laboratory Reporting Limit = 0.5 mg/L

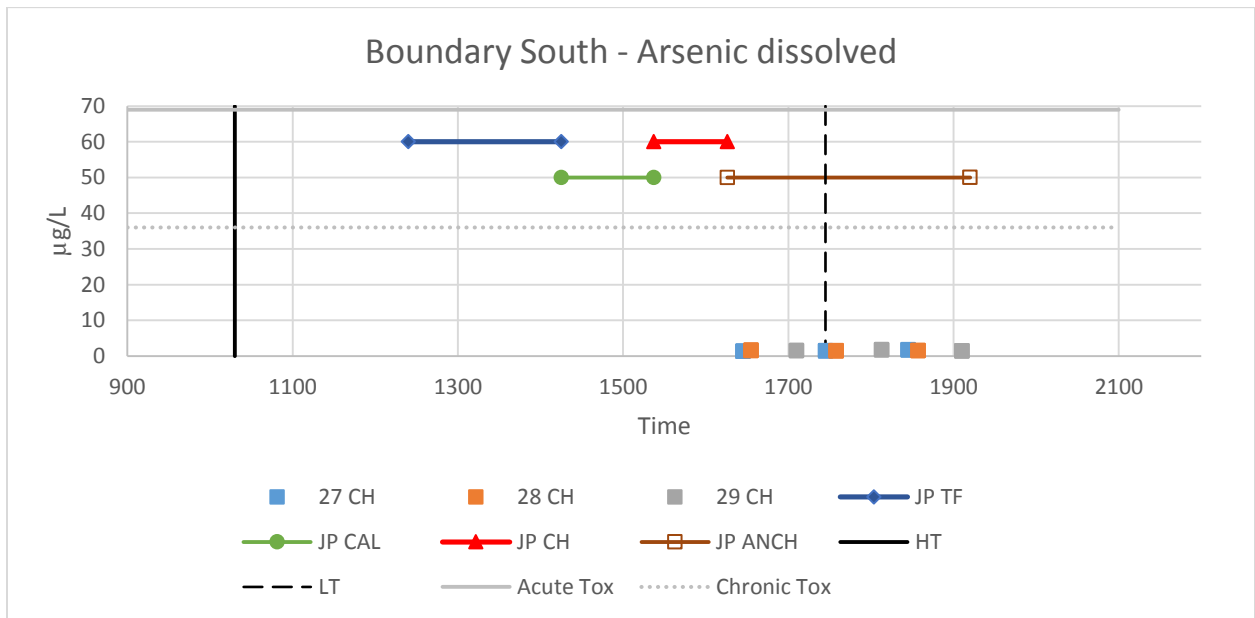
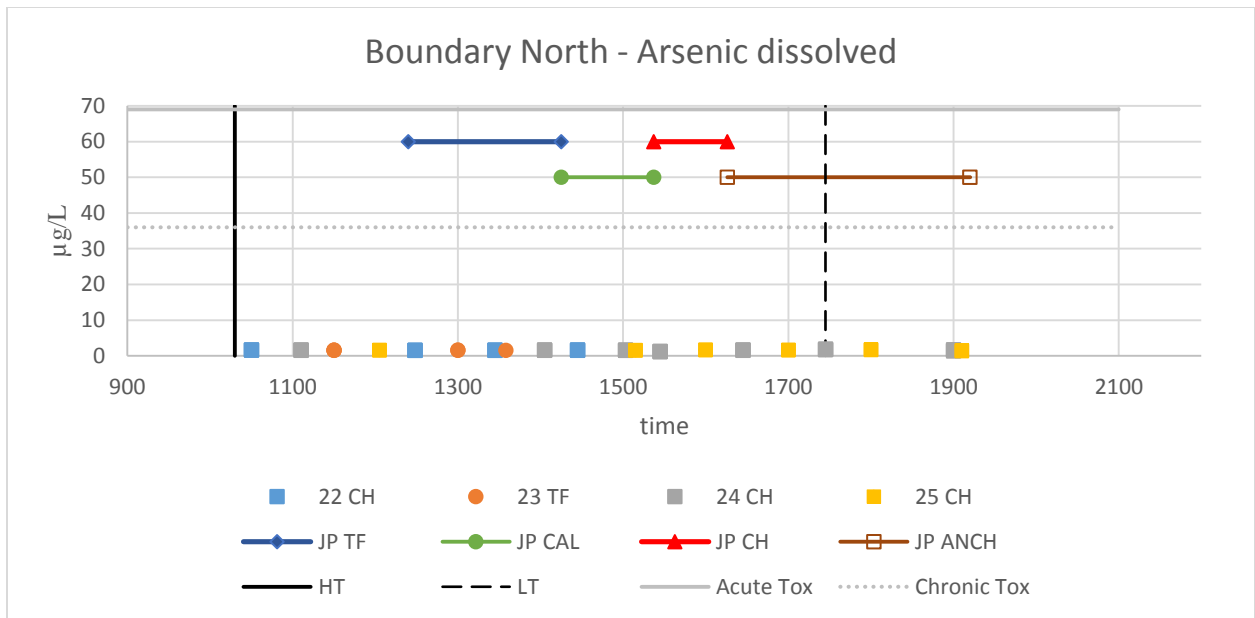


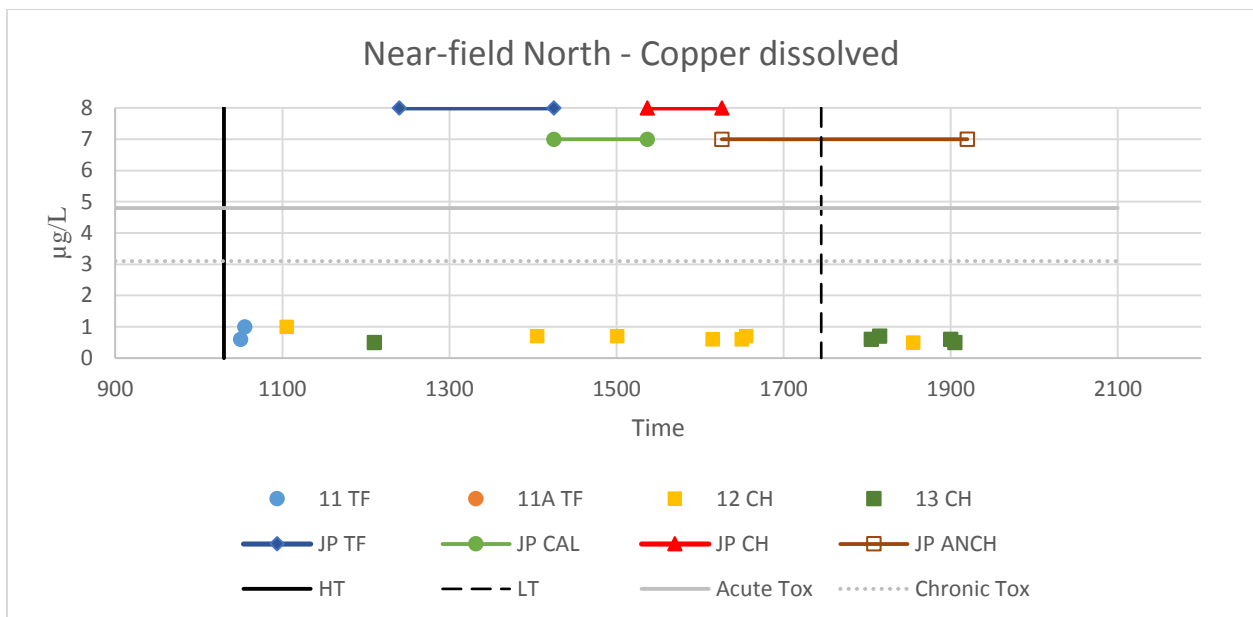
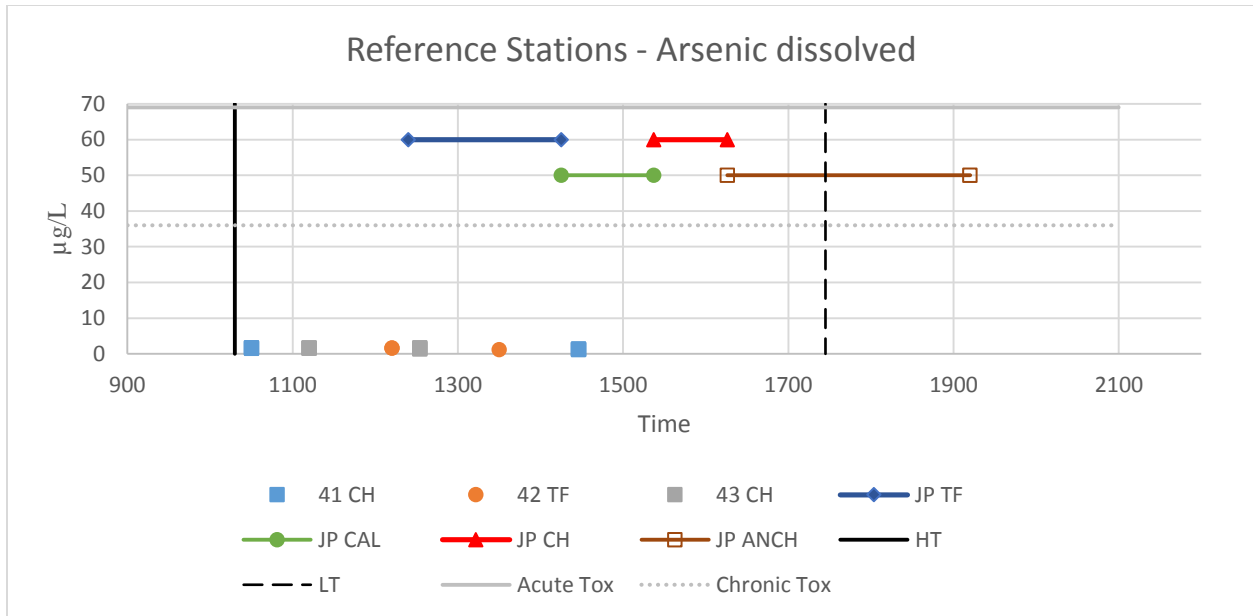


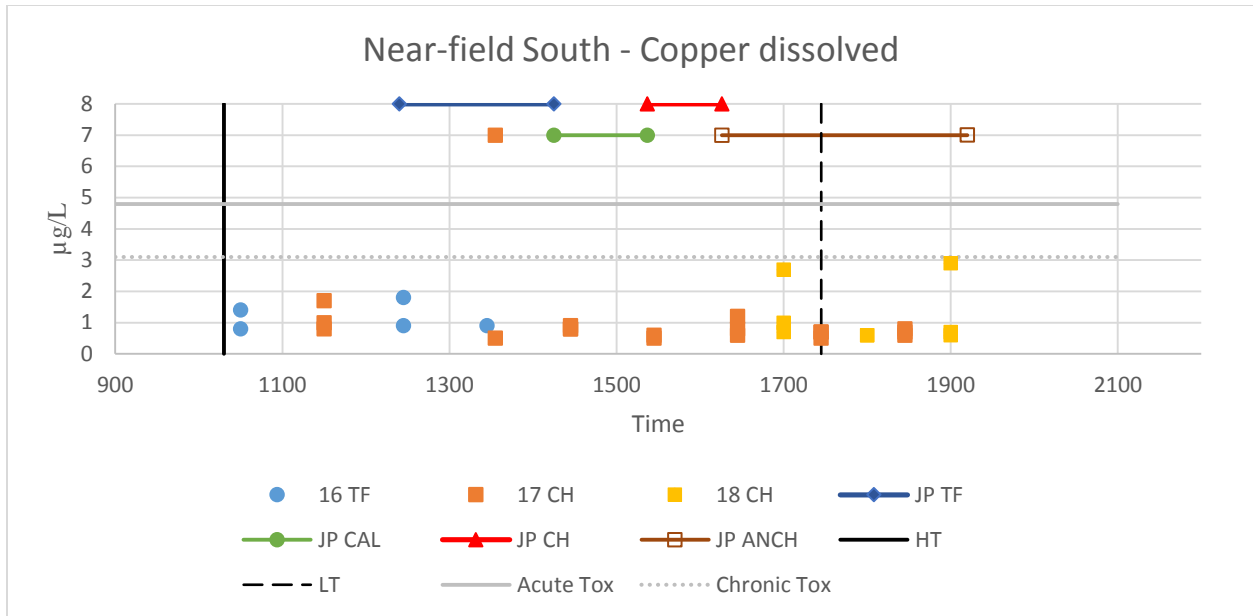
NOTE: Laboratory Reporting Limit = 0.5 mg/L



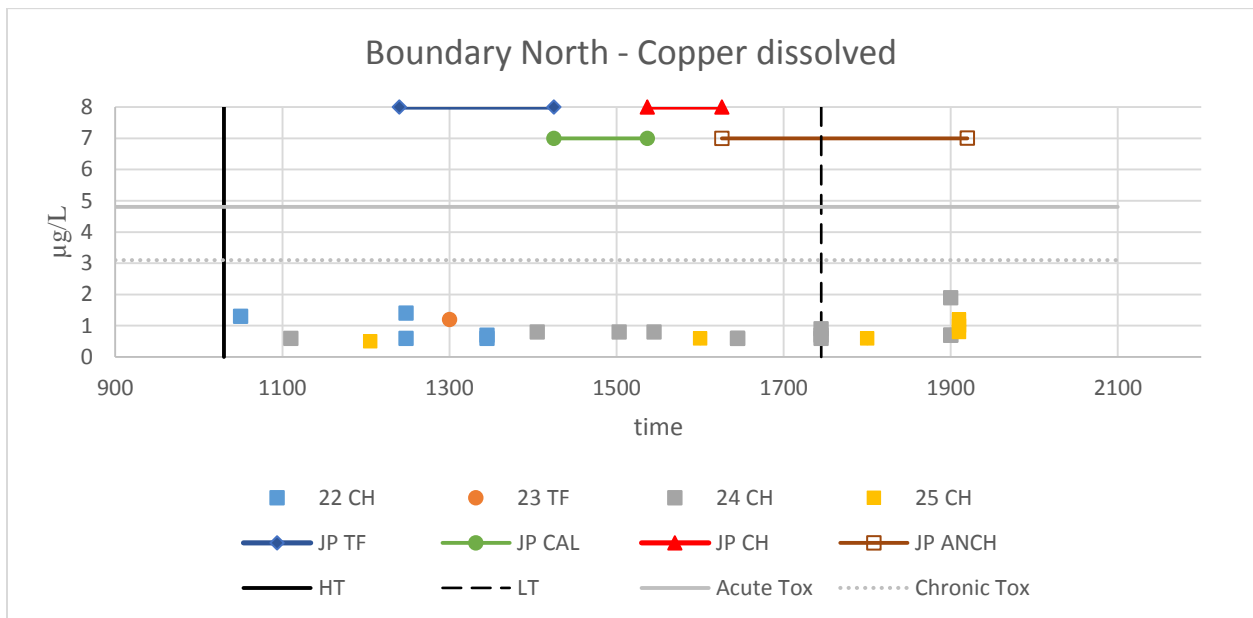
NOTE: Laboratory Reporting Limit = 0.5 µg/L

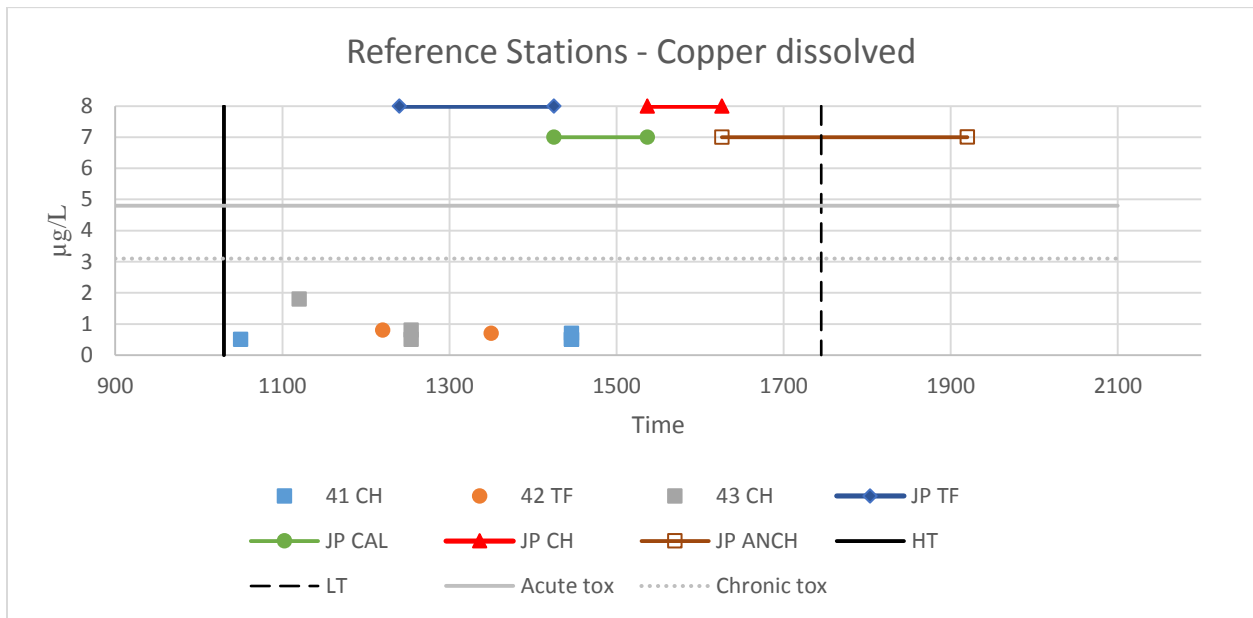
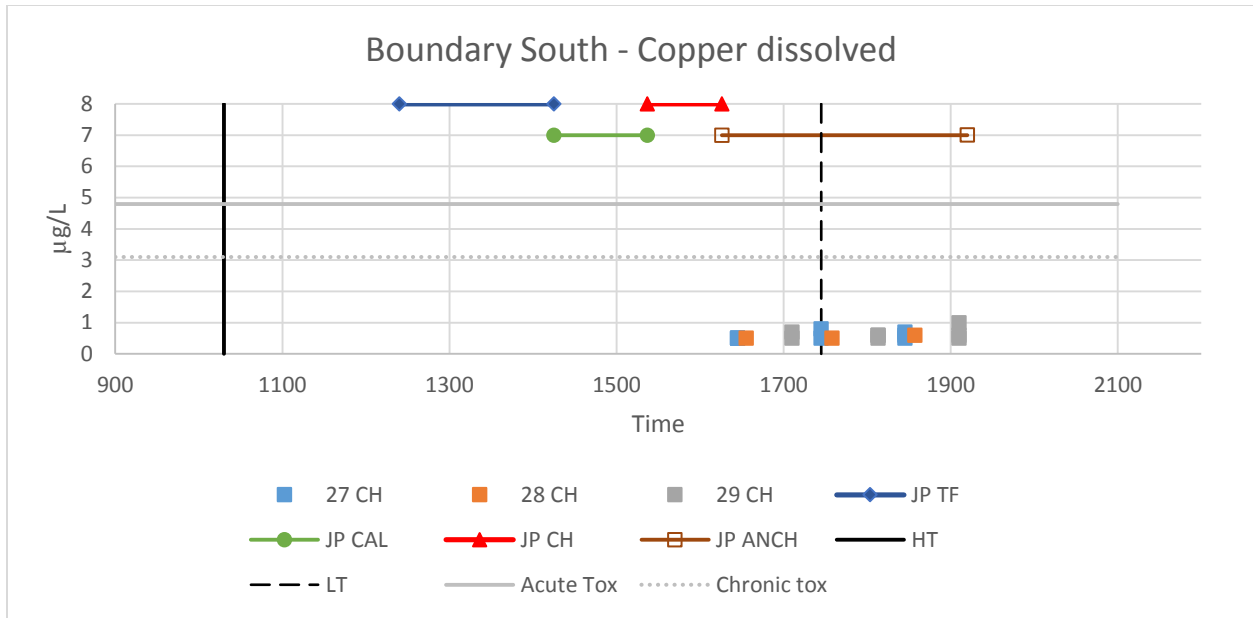




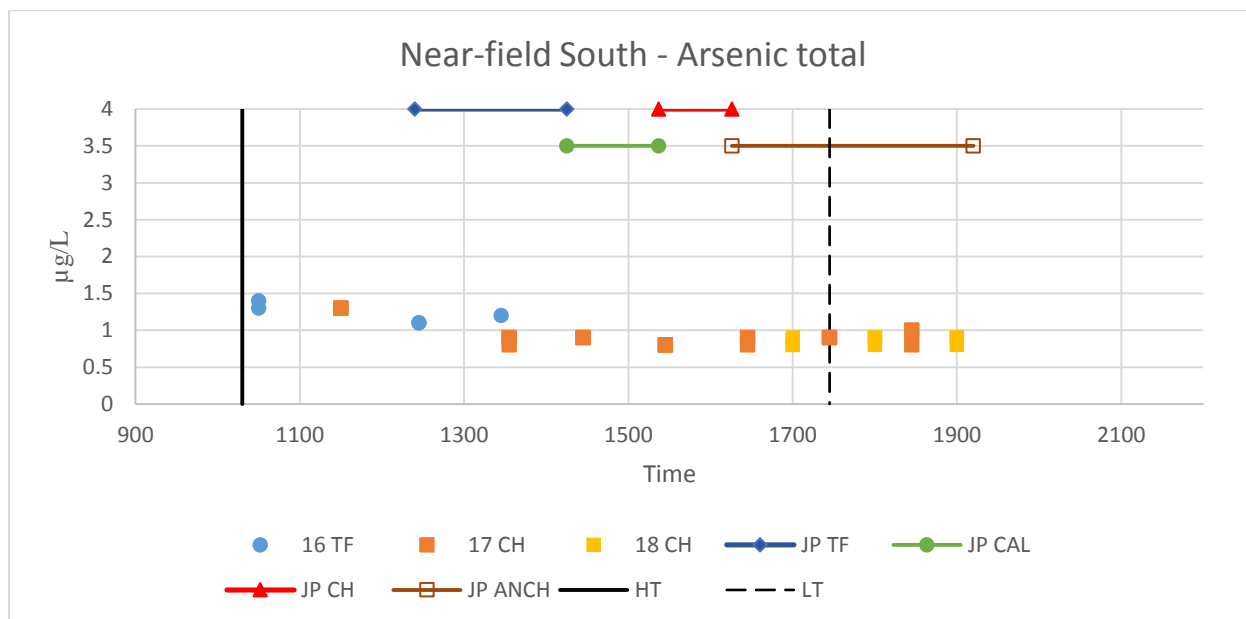
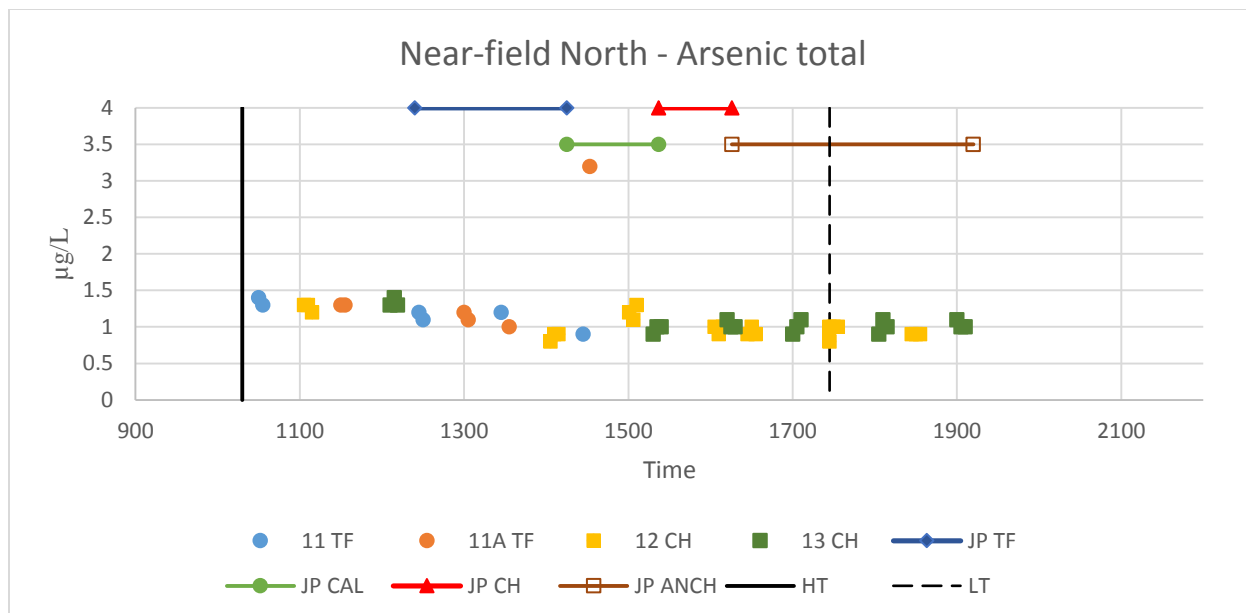


NOTE: Laboratory Reporting Limit = 0.5 µg/L

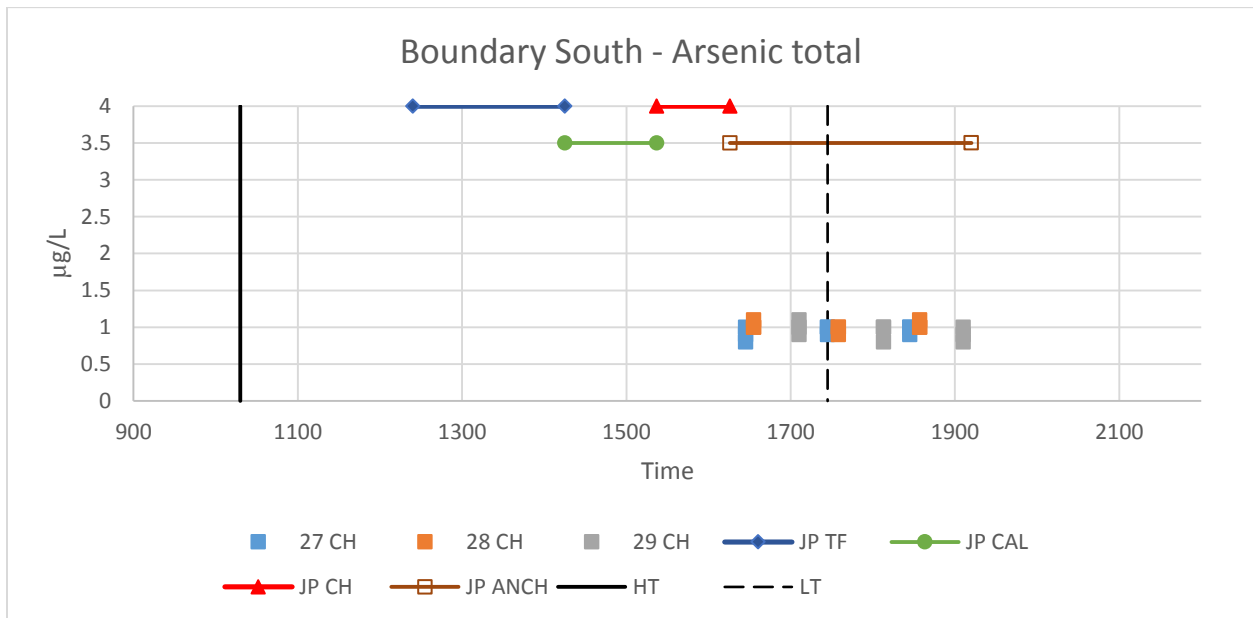
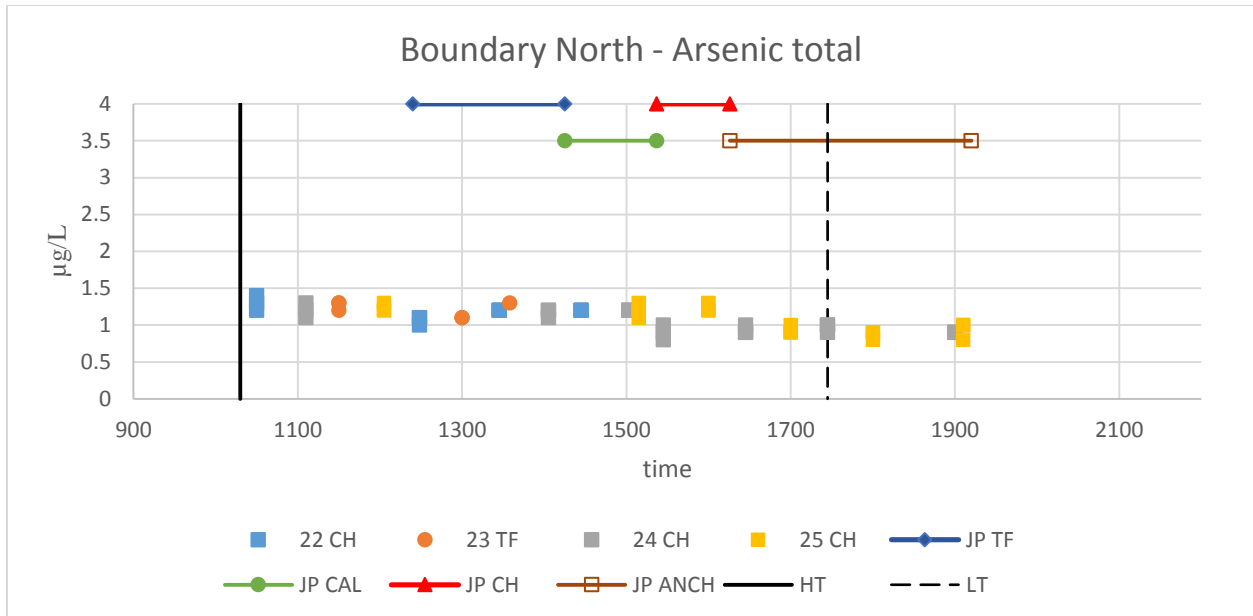


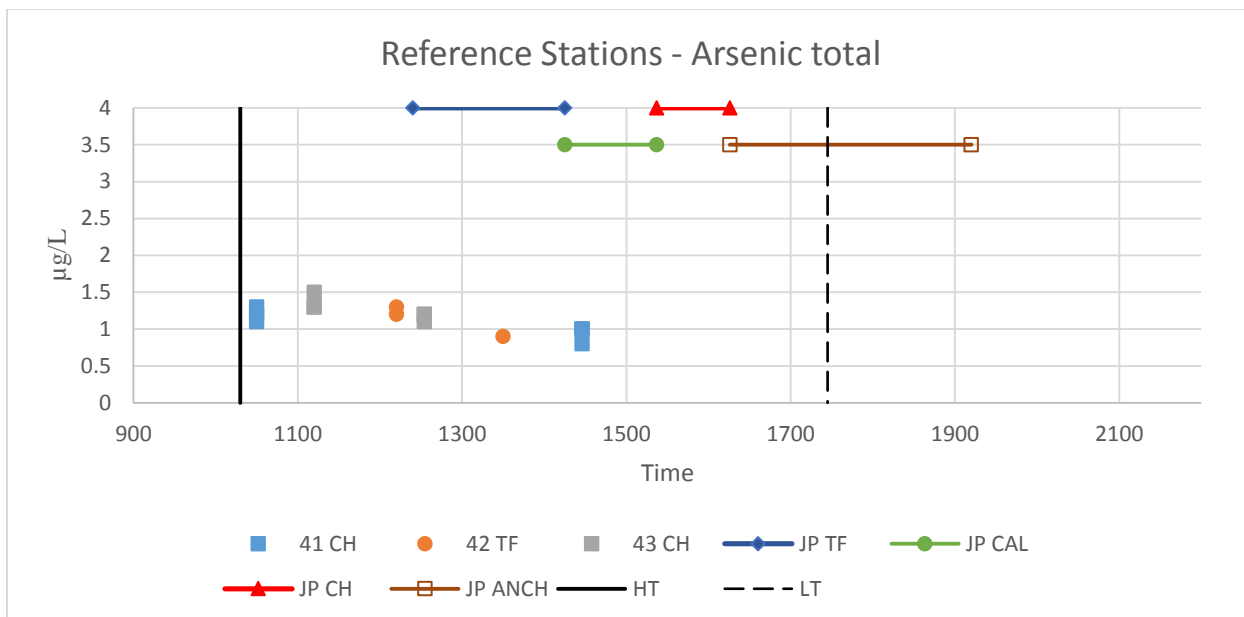


NOTE: Laboratory Reporting Limit = 0.5 µg/L

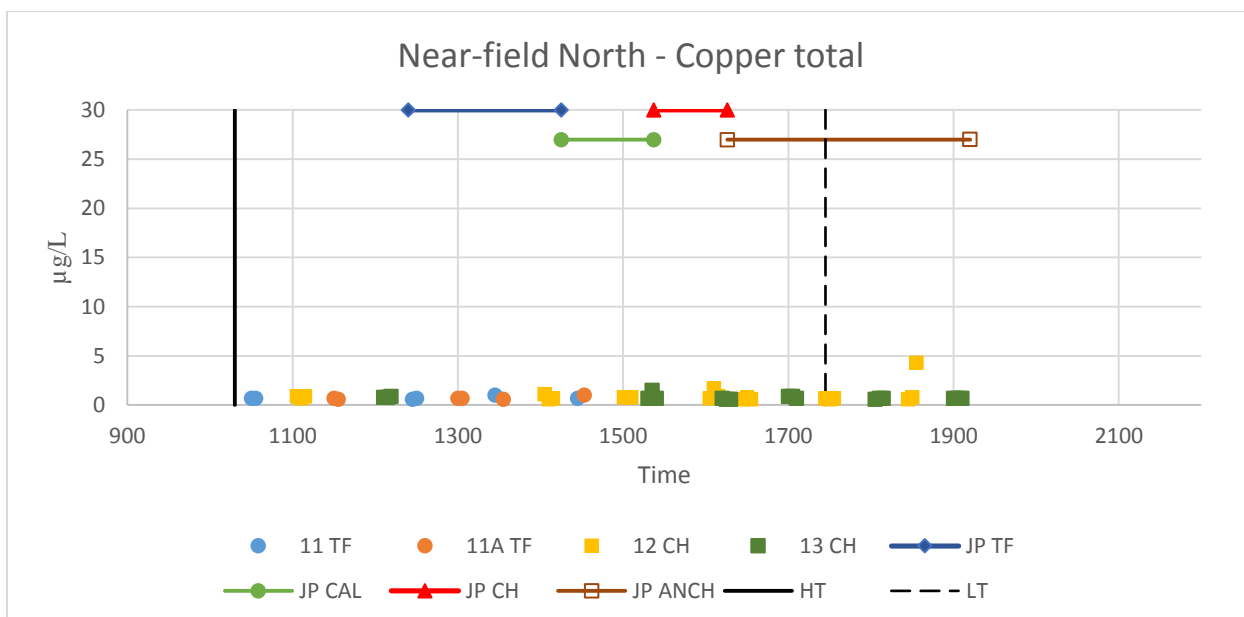


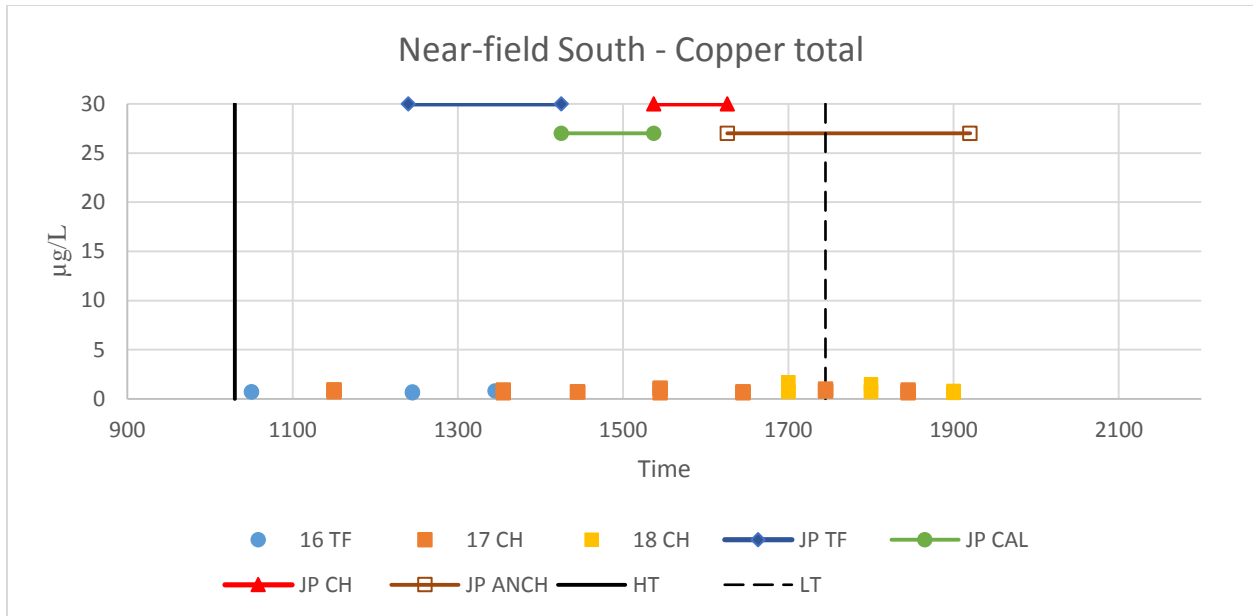
NOTE: Laboratory Reporting Limit = 0.5 µg/L



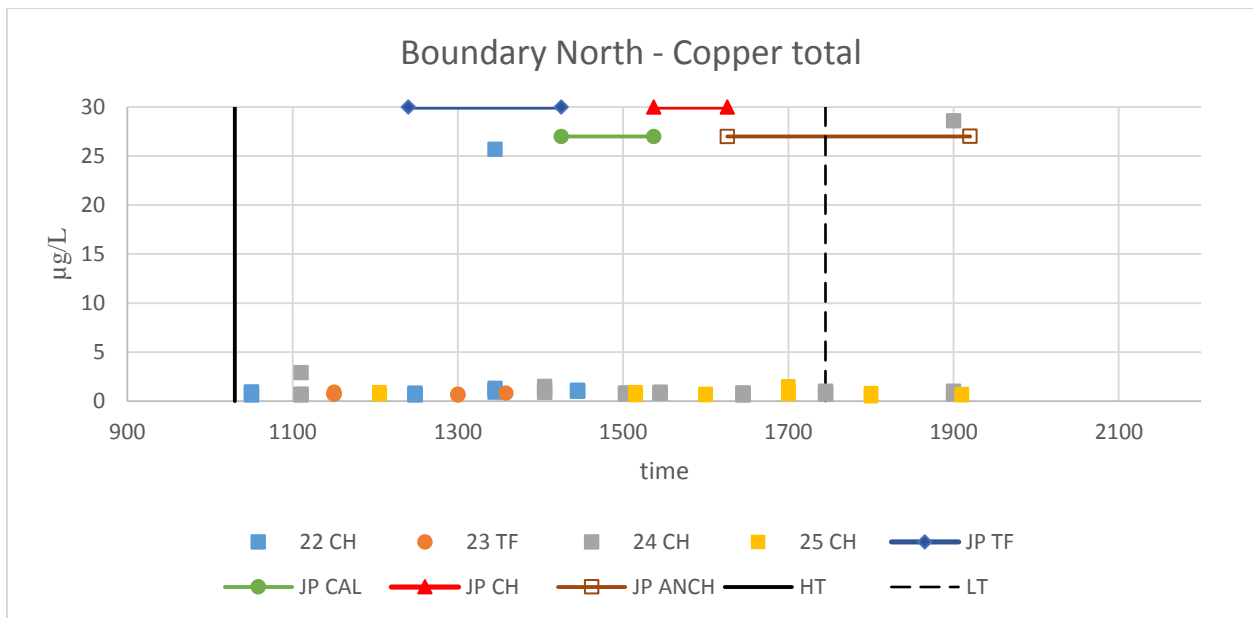


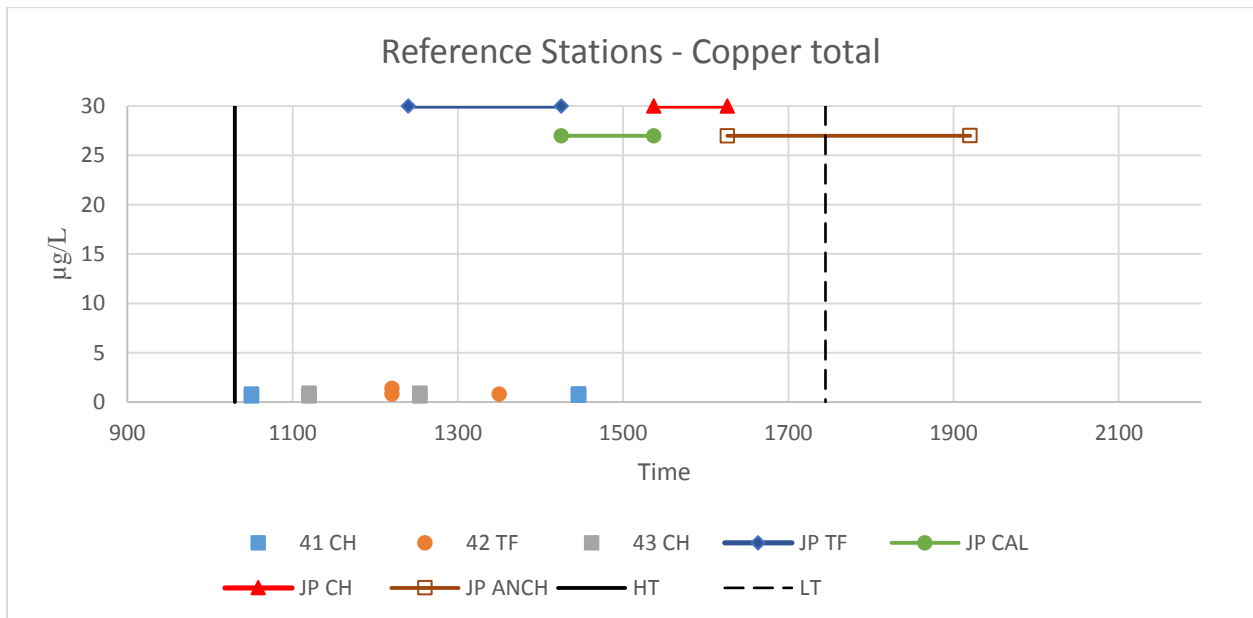
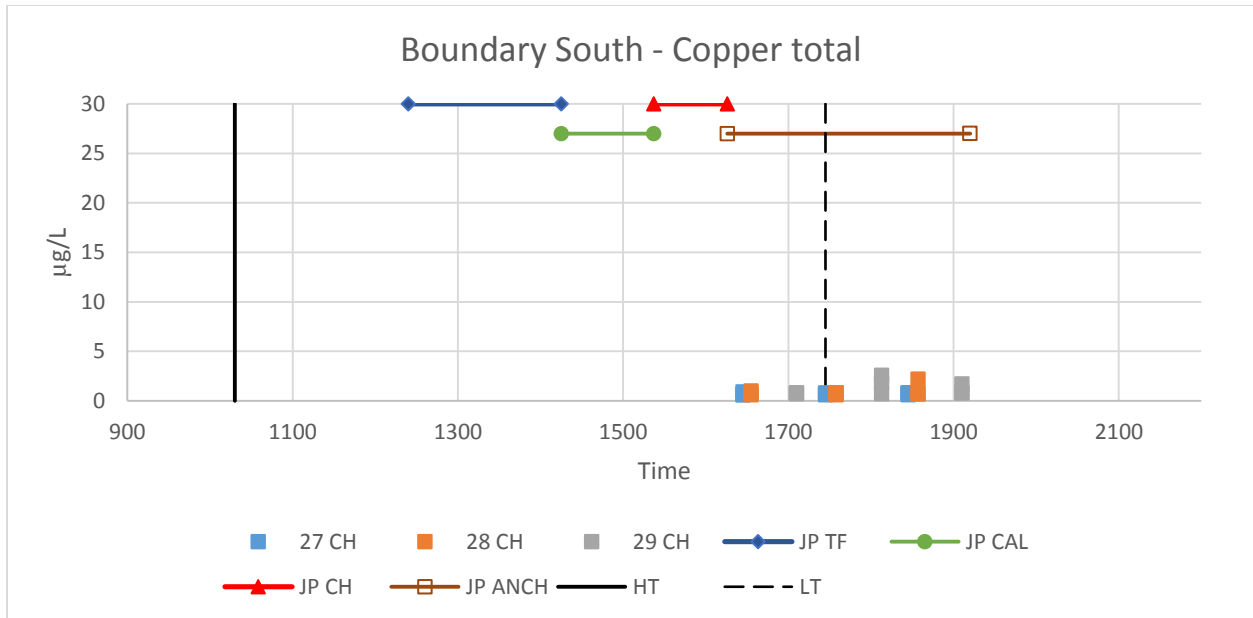
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