

**Data Validation Summary Report  
Groundwater Monitoring and Groundwater Extraction and  
Treatment System Performance Sampling  
July through December 2020  
Nevada Environmental Response Trust (NERT)  
Henderson, Nevada**

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## LIST OF ACRONYMS AND ABBREVIATIONS

DL	Detection Limit
DNR	Do Not Report
DQO	Data Quality Objectives
DUP	Duplicate
DVSR	Data Validation Summary Report
EB	Equipment Blank
EPA	Environmental Protection Agency
FB	Field Blank
FD	Field Duplicate
LCS/LCSD	Laboratory Control Sample / Laboratory Control Sample Duplicate
LDC	Laboratory Data Consultants, Inc.
MDL	Method Detection Limit
MS/MSD	Matrix Spike / Matrix Spike Duplicate
NDEP	Nevada Department of Environmental Protection
NERT	Nevada Environmental Response Trust
NFG	National Functional Guidelines
PARCCS	Precision, Accuracy, Representativeness, Comparability, Completeness, Sensitivity
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance / Quality Control
RPD	Relative Percent Difference
SAP	Sampling and Analysis Plan
SDG	Sample Delivery Group
SQL	Sample Quantitation Limit
TB	Trip Blank
TDS	Total Dissolved Solids
TIN	Total Inorganic Nitrogen
TOC	Total Organic Carbon
TOX	Total Organic Halides
TRP	Total Recoverable Phenolics
USEPA	United States Environmental Protection Agency
%R	Percent Recovery

## 1.0 INTRODUCTION

This data validation summary report (DVSR) has been prepared by Laboratory Data Consultants, Inc. (LDC) to assess the validity and usability of laboratory analytical data from the Groundwater Monitoring and Groundwater Extraction and Treatment System (GWETS) Performance Sampling conducted during July to December 2020 at the Nevada Environmental Response Trust (NERT) site in Henderson, Nevada. Data collection and management was performed in accordance with the *Remedial Performance Sampling and Analysis Plan, Revision 1, Nevada Environmental Response Trust Site, Henderson, Nevada* (SAP Revision 1) dated March 2020 and included the collection and analyses of 703 environmental and quality control (QC) samples. The analyses were performed by the following methods:

Metals by Environmental Protection Agency (EPA) Methods 200.7

Wet Chemistry:

Hexavalent Chromium by EPA Method 218.6

Chloride, Nitrate as Nitrogen, Nitrite as Nitrogen, Nitrate/Nitrite as Nitrogen, and Sulfate (Anions) by EPA Method 300.0

Nitrate/Nitrite as Nitrogen and Total Inorganic Nitrogen (TIN) by Calculation

Chlorate by EPA Method 300.1B

Perchlorate by EPA Method 314.0

Ammonia as Nitrogen by EPA Method 350.1

Total Recoverable Phenolics (TRP) by EPA Method 420.1

Conductivity by Standard Method 2510B

Total Dissolved Solids (TDS) by Standard Method 2540C

Total Organic Carbon (TOC) by Standard Method 5310C

Total Organic Halides (TOX) by EPA SW 846 Method 9020B

Field pH by Field Test Method

Laboratory analytical services were provided by Eurofins. Field pH readings were recorded on the chain-of-custody at the time of sampling and reported with the analytical data. The samples were grouped into sample delivery groups (SDGs). The water samples are associated with quality assurance and quality control (QA/QC) samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Table I is a cross-reference table listing each sample, analysis, SDG, collection date, laboratory sample number, matrix, and validation level. An individual sample may be on multiple rows if it is reported on more than one SDG. Table II is a reference table that identifies the QC elements reviewed for each validation level per method, as applicable.

The laboratory analytical data were validated in accordance with procedures described in the Nevada Division of Environmental Protection (NDEP) *Data Validation Guidance* established for the BMI Plant Sites and Common Areas Projects, Henderson, Nevada, July 13, 2018. Consistent with the NDEP requirements, one hundred percent of the analytical data were validated according to Stage 2A data validation procedures. The number of samples for each method is presented in Table III.

The analytical data were evaluated for QA/QC based on the following documents: SAP Revision 1 (March 2020), *USEPA National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017); and the *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste*, update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IV, February 2007; update V, July 2014.

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) relative to the project data quality objectives (DQOs). This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability.

PARCCS summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCCS criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 5.0 presents a summary of the PARCCS criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCCS criteria are also summarized in this section.

### **Precision and Accuracy of Environmental Data**

Environmental data quality depends on sample collection procedures, analytical methods and instrumentation, documentation, and sample matrix properties. Both sampling procedures and laboratory analyses contain potential sources of uncertainty, error, and/or bias, which affect the overall quality of a measurement. Errors for sample data may result from incomplete equipment decontamination, inappropriate sampling techniques, sample heterogeneity, improper filtering, and improper preservation. The accuracy of analytical results is dependent on selecting appropriate analytical methods, maintaining equipment properly, and complying with QC requirements. The sample matrix also is an important factor in the ability to obtain precise and accurate results within a given media.

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: trip blanks (TB), equipment blanks (EB), field blanks (FB), field duplicates (FD), method blanks, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), laboratory duplicates (DUP), and matrix spike/matrix spike duplicates (MS/MSD).

Before conducting the PARCCS evaluation, the analytical data were validated according to the NDEP Data Validation Guidance (July 2018), NFG (USEPA 2017), and EPA SW 846 Test Methods. Samples not meeting the acceptance criteria were qualified with a flag, an abbreviation indicating a deficiency with the data. The following are flags used in data validation.

- J- Estimated The associated numerical value is an estimated quantity with a negative bias. The analyte was detected but the reported value may not be accurate or precise.
- J+ Estimated The associated numerical value is an estimated quantity with a positive bias. The analyte was detected but the reported value may not be accurate or precise.
- J Estimated The associated numerical value is an estimated quantity. It is not possible to assess the direction of the potential bias. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data.
- R Rejected The data is unusable (the analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte.
- U Nondetected Analyses were performed for the analyte, but it was not detected.
- UJ Estimated/Nondetected Analyses were performed for the analyte, but it was not detected, and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, or other spike recovery.
- DNR Do Not Report A more appropriate result is reported from another analysis or dilution.

- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.

The hierarchy of flags is listed below:

- R > J The R flag will always take precedence over the J qualifier.
- J+ The high bias (J+) flag is applied only to detected results.
- J > J+ or J- A non-biased (J) flag will always supersede biased (J+ or J-) flags since it is not possible to assess the direction of the potential bias.
- J = J+ plus J- Adding biased (J+, J-) flags with opposite signs will result in a non-biased flag (J).
- UJ = U plus J The UJ flag is used when a non-detected (U) flag is added to a non-biased flag (J).

Table IV lists the reason codes used. Reason codes explain why flags have been applied and allow data users to assess if a result is usable with qualification due to QA/QC outliers or not usable when rejected due to QA/QC outliers. Reason codes are cumulative except when one of the flags is R then only the reason code associated to the R flag will be used.

Table V presents the overall qualified results after all the flags or validation qualifiers and associated reason codes have been applied.

Once the data are reviewed and qualified according to the NDEP Data Validation Guidance (July 2018), NFG, and EPA Test Methods, the data set is then evaluated using PARCCS criteria. PARCCS criteria provide an evaluation of overall data usability. The following is a discussion of PARCCS criteria as related to the project DQOs.

**Precision** is a measure of the agreement or reproducibility of analytical results under a given set of conditions. It is a quantity that cannot be measured directly but is calculated from reported concentrations.

Precision is expressed as the relative percent difference (RPD):

$$RPD = (D1-D2)/\{1/2(D1+D2)\} \times 100$$

where:

D1 = reported concentration for the sample

D2 = reported concentration for the duplicate

Precision is primarily assessed by calculating an RPD from the reported concentrations of the spiked compounds for each sample in the MS/MSD pair. In the absence of an MS/MSD pair, a laboratory duplicate or LCS/LCSD pair can be analyzed as an alternative means of assessing precision. An additional measure of sampling precision was obtained by collecting and analyzing field duplicate samples, which were compared using the RPD result as the evaluation criteria.

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. An LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared

using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. The LCS measures laboratory efficiency in recovering target analytes from an aqueous matrix in the absence of matrix interferences.

DUPs measure laboratory precision. DUPs are replicate samples and are prepared by taking two aliquots from one sample container. The analytical results for DUPs are reported as the RPD between the results of the two aliquots.

Laboratory and field sampling precision are evaluated by calculating RPDs for field sample duplicate pairs. The sampler collects two field samples at the same location and under identically controlled conditions. The laboratory then analyzes the samples under identical conditions.

An RPD outside the numerical QC limit in the LCS/LCSD, MS/MSD, DUPs, or field duplicates indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

Possible causes of poor precision include sample heterogeneity, improper sample collection or handling, inconsistent sample preparation, and poor instrument stability. In some duplicate pairs, results may be reported in either the primary or duplicate samples at levels below the practical quantitation limit (PQL) or non-detected. Since these values are considered to be estimates, RPD exceedances from these duplicate pairs do not suggest a significant impact on the data quality.

**Accuracy** is a measure of the agreement of an experimental determination and the true value of the parameter being measured. It is used to identify bias in a given measurement system. Recoveries outside acceptable QC limits may be caused by factors such as instrumentation, analyst error, or matrix interference. Accuracy is assessed through the analysis of MS, MSD, LCS, and samples containing surrogate spikes. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. Surrogate spikes are either isotopically labeled compounds or compounds that are not typically detected in the samples. Surrogate spikes are added to every blank, environmental sample, LCS, MS/MSD, and standard, for all applicable organic analyses. Accuracy of inorganic analyses is determined using the percent recoveries of MS and LCS analyses.

Percent recovery (%R) is calculated using the following equation:

$$\%R = (A-B)/C \times 100$$

where:

A = measured concentration in the spiked sample

B = measured concentration of the spike compound in the unspiked sample

C = concentration of the spike

The percent recovery of each analyte spiked in MS/MSD samples, LCS/LCSD, and surrogate compounds added to environmental samples is evaluated with the acceptance criteria specified by the previously noted documents. Spike recoveries outside the acceptable QC accuracy limits provide an indication of bias, where the reported data may overestimate or underestimate the actual concentration of compounds detected or quantitation limits reported for environmental samples.

**Representativeness** is a qualitative parameter that expresses the degree to which the sample data are characteristic of a population. It is evaluated by reviewing the QC results of blanks, samples and holding times. Positive detects of compounds in the blank samples identify compounds that may have been introduced into the samples during sample collection, transport, preparation, or analysis. The QA/QC blanks collected and analyzed are method blanks, EBs, and FBs.



A method blank is a laboratory grade water or solid matrix that contains the method reagents and has undergone the same preparation and analysis as the environmental samples. The method blank provides a measure of the combined contamination derived from the laboratory source water, glassware, instruments, reagents, and sample preparation steps. Method blanks are prepared for each sample of a similar matrix extracted by the same method at a similar concentration level.

Trip blanks are used to identify possible volatile organic contamination introduced into the sample during transport. A trip blank is a sample bottle filled in the laboratory with reagent-grade water and preserved to a pH less than 2 with hydrochloric acid or solid matrix. It is transported to the site, stored with the sample containers, and returned unopened to the laboratory for analysis.

Equipment blanks consist of analyte-free water poured over or through the sample collection equipment. The water is collected in a sample container for laboratory analysis. These blanks are collected after the sampling equipment is decontaminated and measure effectiveness of the decontamination procedure.

Field blanks consist of analyte-free source water stored at the sample collection site. The water is collected from each source water used during each sampling event.

Holding times are evaluated to assure that the sample integrity is intact for accurate sample preparation and analysis. Holding times will be specific for each method and matrix analyzed. Holding time exceedance can cause loss of sample constituents due to biodegradation, precipitation, volatilization, and chemical degradation.

**Comparability** is a qualitative expression of the confidence with which one data set may be compared to another. It provides an assessment of the equivalence of the analytical results to data obtained from other analyses. It is important that data sets be comparable if they are used in conjunction with other data sets. The factors affecting comparability include the following: sample collection and handling techniques, matrix type, and analytical method. If these aspects of sampling and analysis are carried out according to standard analytical procedures, the data are considered comparable. Comparability is also dependent upon other PARCCS criteria, because only when precision, accuracy, and representativeness are known can data sets be compared with confidence.

**Completeness** is defined as the percentage of acceptable sample results compared to the total number of sample results. Completeness is evaluated to determine if an acceptable amount of usable data were obtained so that a valid scientific site assessment can be completed. Completeness equals the total number of sample results for each fraction minus the total number of rejected sample results divided by the total number of sample results multiplied by 100. As specified in the project DQOs, the goal for completeness for target analytes in each analytical fraction is 90 percent.

Percent completeness is calculated using the following equation:

$$\%C = (T - R)/T \times 100$$

where:

%C = percent completeness

T = total number of sample results

R = total number of rejected sample results

Completeness is also determined by comparing the planned number of samples per method and matrix as specified in the SAP Revision 1 (March 2020), with the number determined above.

**Sensitivity** is the ability of an analytical method or instrument to discriminate between measurement responses representing different concentrations. This capability is established during the planning phase to meet the DQOs. It is important that detection limits (DLs), and PQLs presented in the SAP Revision 1

(March 2020) are achieved and that target analytes can be detected at concentrations necessary to support the DQOs. The method detection limits (MDLs) represent the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. Sample quantitation limits (SQLs) are adjusted MDL values that reflect sample specific actions, such as dilutions or varying aliquot sizes. PQLs are the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte. The laboratory is required to report detected analytes down to the SQL for this project. In addition, sample results are compared to method blank and field blank results to identify potential effects of laboratory background and field procedures on sensitivity.

The QA/QC criteria were met with the exceptions noted in the following sections for each analytical method.

## **2.0 METALS**

All metals data were assessed to be valid since none of the 532 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

### **2.1 Precision and Accuracy**

#### **2.1.1 MS/MSD Samples**

In instances where MS/MSD %Rs were above the laboratory acceptance criteria and the associated results were not detected or greater than 4X the spike concentration no data were qualified.

All MS/MSD RPDs met the laboratory acceptance criteria.

#### **2.1.2 LCS/LCSD Samples**

All LCS/LCSD %Rs and RPDs met the laboratory acceptance criteria.

#### **2.1.3 FD Samples**

Due to RPDs outside the acceptance criteria of  $\leq 30$ , two (2) chromium results that were reported above the PQL in field duplicate samples I-AR-20200811 and I-AR-20200811-FD were qualified as detected estimated (J). The details regarding the qualification of results are presented in Attachment A.

Given the additional uncertainty in results reported below the PQL, no data were qualified when the RPDs were outside the QAPP acceptance criteria and the associated results in either the primary or duplicate samples were below the PQL or not detected.

### **2.2 Representativeness**

#### **2.2.1 Sample Preservation and Holding Times**

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 180-day analysis holding time criteria.

#### **2.2.2 Blanks**

Method blanks, EBs, and FBs were analyzed to evaluate representativeness. The concentration for an individual target analyte in any of the types of QA/QC blanks was used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results based on the following criteria.

Results Below the PQL - If a sample result was less than the PQL, the sample result was qualified as estimated (J) at the reported concentration. Reason codes are applied to distinguish if the blank concentration was above or below the PQL.

Results Above the PQL - If a sample result and blank contaminant value were greater than the PQL and the sample result was less than 10 times the blank contaminant value, the sample result was qualified as detected estimated (J+) at the reported concentration. Reason codes are applied to distinguish if the blank concentration was above or below the PQL.

No Action - If blank contaminant values were less than the PQL and associated sample results were greater than the PQL, or if blank contaminant values were greater than the PQL and associated sample results were greater than 10 times the blank contaminant value, the result was not qualified.

#### **2.2.2.1 Method Blanks**

As a result of contamination found in the associated method blanks, eleven (11) chromium results were qualified as detected estimated (J). The details regarding the qualification of results are provided in Attachment A.

#### **2.2.2.2 EBs and FBs**

No data were qualified due to the contaminants detected in the equipment and field blanks.

### **2.3 Comparability**

The laboratory used standard analytical methods for all of the analyses. In all cases, the SQLs attained were at or below the PQLs. Target analytes detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the metals data is regarded as acceptable.

### **2.4 Completeness**

The completeness level attained for metal field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

### **2.5 Sensitivity**

The calibration was evaluated for instrument sensitivity and was determined to be technically acceptable. All laboratory PQLs were acceptable.

## **3.0 WET CHEMISTRY**

All wet chemistry data were assessed to be valid since none of the 2,954 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

### **3.1 Precision and Accuracy**

#### **3.1.1 Surrogate**

The chlorate result in samples LVW5.3-3-0.6-20201016 and M-14A-20201105 were qualified as detected estimated (J+) as a result of surrogate %Rs above the laboratory acceptance criteria. The details regarding the qualification of results are provided in Attachment B.

#### **3.1.2 MS/MSD Samples**

MS/MSD samples were evaluated for anions, ammonia as nitrogen, hexavalent chromium, chlorate, perchlorate, TOC, and TOX.

Twelve (12) chromium, 11 nitrate as nitrogen, and 10 perchlorate results were qualified as detected estimated (J-) due to MS/MSD %Rs below the laboratory acceptance criteria.

Twenty-seven nitrate as nitrogen, 20 perchlorate, and 15 chlorate results were qualified as detected estimated (J+) due to MS/MSD %Rs above the laboratory acceptance criteria.

All MS/MSD RPDs met the laboratory acceptance criteria

The details regarding the qualification of results are presented in Attachment B.

In instances where MS/MSD %Rs were above the laboratory acceptance criteria and the associated results were not detected or greater than 4X the spike concentration no data were qualified.

#### **3.1.3 DUP Samples**

DUP samples were evaluated for TDS, chlorate, and conductivity. All DUP RPDs met the laboratory criteria.

#### **3.1.4 LCS/LCSD Samples**

All LCS/LCSD %Rs and RPDs met the laboratory acceptance criteria

#### **3.1.5 FD Samples**

Due to RPDs outside the acceptance criteria of  $\leq 30$ , two (2) TDS results that were reported above the PQL in field duplicate samples I-G-20201110 and I-G-20201110-FD and four (4) perchlorate results that were reported above the PQL in field duplicate samples PC-156B-20201103 and PC-156B-20201103-FD5 and field duplicate samples E1-2-20201104 and E1-2-20201104-FD were qualified as detected estimated (J). The details regarding the qualification of results are presented in Attachment B.

Given the additional uncertainty in results reported below the PQL, no data were qualified when the RPDs were outside the QAPP acceptance criteria and the associated results in either the primary or duplicate samples were below the PQL or not detected.

### **3.2 Representativeness**

#### **3.2.1 Sample Preservation and Holding Times**

The evaluation of holding times to verify compliance with all wet chemistry methods was conducted. All water samples met the 24-hour analysis holding time criteria for hexavalent chromium, 48-hour analysis holding time criteria for nitrite as nitrogen, and the 28-day analysis holding time criteria for ammonia as

nitrogen, chloride, conductivity, phenolics, sulfate, TOC, and TOX.

Two (2) nitrate as nitrogen results were qualified as detected estimated (J-) as a result of exceeding the analysis holding time criteria of 48 hours, one (1) TDS result was qualified as detected estimated (J-) as a result of exceeding the analysis holding time criteria of seven days, and one (1) chlorate and one (1) perchlorate results were qualified as detected estimated (J-) or non-detected estimated (UJ) as a result of exceeding the analysis holding time criteria of 28 days.

### **3.2.2 Blanks**

Method blanks, EBs, and FBs were analyzed to evaluate representativeness.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation based on the criteria presented in Section 2.2.2.

#### **3.2.2.1 Method Blanks**

No data were qualified due to the contaminants detected in the method blanks.

#### **3.2.2.2 EBs and FBs**

No data were qualified due to the contaminants detected in the equipment and field blanks.

### **3.3 Comparability**

The laboratory used standard analytical methods for all of the analyses. In all cases, the SQLs attained were at or below the PQLs. Target analytes detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

In the case where more than one result was reported for an individual sample, the least technically acceptable results were deemed not reportable.

### **3.4 Completeness**

The completeness level attained for wet chemistry field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

### **3.5 Sensitivity**

The calibration was evaluated for instrument sensitivity and was determined to be technically acceptable. All laboratory PQLs were acceptable.

## **4.0 VARIANCES IN ANALYTICAL PERFORMANCE**

The laboratory used standard analytical methods for all analyses throughout the project. The analyses were conducted within all specifications of the method.

No systematic variances in analytical performance were noted in the laboratory case narratives.

## **5.0 SUMMARY OF PARCCS CRITERIA**

The validation reports present the PARCCS results for all SDGs. Each PARCCS criterion is discussed in

detail in the following sections.

### 5.1 Precision and Accuracy

Precision and accuracy were evaluated using data quality indicators such as surrogates, MS/MSD, DUP, LCS/LCSD, and field duplicates. The precision and accuracy of the data set were considered acceptable after integration of result qualification.

All surrogate, MS/MSD, DUP, LCS/LCSD, and field duplicate percent recoveries and RPDs met acceptance criteria with the exceptions noted in Sections 2.1.3, 3.1.1, 3.1.2, and 3.1.5.

### 5.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All holding times were met with the exception noted in Section 3.2.1. All samples were associated with a method blank in each individual SDG. The representativeness of the project data is considered acceptable after integration of result qualification due to blank contamination as noted in Section 2.2.2.1.

### 5.3 Comparability

Sampling frequency requirements were met in obtaining necessary field blanks and field duplicates. The laboratory used standard analytical methods for the analyses. The analytical results were reported in correct standard units. Sample integrity criteria were met and sample preservation and holding times were within QC criteria with the exception noted in Section 3.2.1. The overall comparability is considered acceptable after integration of result qualification.

### 5.4 Completeness

Of the 3,486 total analytes reported, none of the results were rejected. The completeness for the SDGs is as follows:

<b>Parameter</b>	<b>Total Number of Validated Results</b>	<b>Number of Rejected Results</b>	<b>Percent Completeness</b>
Metals	532	0	100
Wet Chemistry:			
CrVI	398	0	100
Anions	507	0	100
TIN	2	0	100
Chlorate	667	0	100
Perchlorate	681	0	100
Ammonia-N	2	0	100
Total Recoverable Phenolics	4	0	100
Conductivity	4	0	100
TDS	681	0	100
TOC	4	0	100
TOX	4	0	100
<b>Total</b>	<b>3,486</b>	<b>0</b>	<b>100</b>

The completeness percentage based on rejected data met the 90 percent DQO goal.

## **5.5 Sensitivity**

Sensitivity was achieved by the laboratory to support the DQOs. Calibration concentrations, metals, and wet chemistry PQLs met the project requirements and low-level contamination in the method blanks, equipment blanks, and field blanks did not affect sensitivity.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

The analytical data quality assessment for the water sample laboratory analytical results generated during the July to December 2020 Groundwater Monitoring and GWETS Performance Sampling at the NERT site in Henderson, Nevada established that the overall project requirements and completeness levels were met. No sample results included in this data set were rejected (R). Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Stage 2A data validation, all other results are considered valid and usable for all purposes.

## 7.0 REFERENCES

American Public Health Association 2012. Standard Method for the Examination of Water and Wastewater (22nd ed.). Washington, DC: American Public Health Association; Rice, Baird, Eaton, and Clesceri.

NDEP 2018. NDEP Data Validation Guidance. July.

NDEP. 2018b. Email from NDEP to the Trust regarding Multiple Results Reported. December 7.

Ramboll 2020. Remedial Performance Sampling and Analysis Plan, Nevada Environmental Response Trust Site, Henderson, Nevada. March 9. NDEP approved April 30, 2020.

Region 9 Superfund Data Evaluation/Validation Guidance, R6QA/006.1, Draft. December 2001.

USEPA 1983. EPA Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Cincinnati, Ohio. March.

USEPA 1996. EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste, update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IV, February 2007; update V, July 2014.+

USEPA 2017. USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review. January.



## **TABLES**

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
48837A	4402682491	E1-1-20200701	440-268249-1	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E1-2-20200701	440-268249-2	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E1-3-20200701	440-268249-3	07/01/20	Stage 2A	Water	FD1		X	X	X		X	X				X			X
48837A	4402682491	E2-1-20200701	440-268249-4	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E2-2-20200701	440-268249-5	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E2-3-20200701	440-268249-6	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E2-4-20200701	440-268249-7	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E2-5-20200701	440-268249-8	07/01/20	Stage 2A	Water			X	X	X		X	X				X			X
48837A	4402682491	E1-3-20200701 FD	440-268249-9	07/01/20	Stage 2A	Water	FD1		X	X	X		X	X				X			X
48837A	4402682491	E1-2-20200701 EB	440-268249-10	07/01/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
48837B	4402684161	LVW8.85-0.6-20200702	440-268416-1	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW7.2-0.8-20200702	440-268416-2	07/02/20	Stage 2A	Water	FD2						X	X				X			
48837B	4402684161	LVW7.2-0.8-20200702-FD	440-268416-3	07/02/20	Stage 2A	Water	FD2						X	X				X			
48837B	4402684161	LVW6.6-1-1.3-20200702	440-268416-4	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW6.6-2-1.5-20200702	440-268416-5	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW6.6-3-0.8-20200702	440-268416-6	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW6.05-0.5-20200702	440-268416-7	07/02/20	Stage 2A	Water	FD3						X	X				X			
48837B	4402684161	LVW6.05-0.5-20200702-FD	440-268416-8	07/02/20	Stage 2A	Water	FD3						X	X				X			
48837B	4402684161	LVW6.05-20200702-FB	440-268416-9	07/02/20	Stage 2A	Water	FB						X	X				X			
48837B	4402684161	C1-E-0.0-20200702	440-268416-10	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	C1-W-0.0-20200702	440-268416-11	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-1-2.8-20200702	440-268416-12	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-2-0.5-20200702	440-268416-13	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-3-0.5-20200702	440-268416-14	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-4-1.1-20200702	440-268416-15	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-5-0.4-20200702	440-268416-16	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW5.3-6-0.5-20200702	440-268416-17	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.75-1-1.0-20200702	440-268416-18	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.75-2-1.3-20200702	440-268416-19	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.75-3-0.8-20200702	440-268416-20	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.75-4-1.1-20200702	440-268416-21	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.75-5-1.0-20200702	440-268416-22	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.2-1-1.8-20200702	440-268416-23	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.2-2-2.3-20200702	440-268416-24	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.2-3-2.5-20200702	440-268416-25	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW4.2-4-1.7-20200702	440-268416-26	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW3.5-1-1.6-20200702	440-268416-27	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW3.5-2-1.0-20200702	440-268416-28	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW3.5-3-1.6-20200702	440-268416-29	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW3.5-4-1.2-20200702	440-268416-30	07/02/20	Stage 2A	Water							X	X				X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
48837B	4402684161	LVW3.5-5-1.7-20200702	440-268416-31	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW3.5-6-1.6-20200702	440-268416-32	07/02/20	Stage 2A	Water							X	X				X			
48837B	4402684161	LVW0.55-0.8-20200702	440-268416-33	07/02/20	Stage 2A	Water	FD4						X	X				X			
48837B	4402684161	LVW0.55-0.8-20200702-FD	440-268416-34	07/02/20	Stage 2A	Water	FD4						X	X				X			
48837B	4402684161	LVW0.55-20200702-FB	440-268416-35	07/02/20	Stage 2A	Water	FB						X	X				X			
48837C	4402684711	I-F-20200707	440-268471-1	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-X-20200707	440-268471-2	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-N-20200707	440-268471-3	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-E-20200707	440-268471-4	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-M-20200707	440-268471-5	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-D-20200707	440-268471-6	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837C	4402684711	I-C-20200707	440-268471-7	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-AA-20200707	440-268472-1	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-AB-20200707	440-268472-2	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-B-20200707	440-268472-3	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-R-20200707	440-268472-4	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-Y-20200707	440-268472-5	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-L-20200707	440-268472-6	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-S-20200707	440-268472-7	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837D	4402684721	I-AR-20200707	440-268472-8	07/07/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-AD-20200708	440-268566-1	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-AC-20200708	440-268566-2	07/08/20	Stage 2A	Water	FD5		X	X	X		X	X				X			X
48837E	4402685661	I-K-20200708	440-268566-3	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-J-20200708	440-268566-4	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-Z-20200708	440-268566-5	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-I-20200708	440-268566-6	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-V-20200708	440-268566-7	07/08/20	Stage 2A	Water		X	X	X			X	X				X			X
48837E	4402685661	I-AD-20200708-EB	440-268566-8	07/08/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
48837E	4402685661	I-AC-20200708-FD	440-268566-9	07/08/20	Stage 2A	Water	FD5		X	X	X		X	X				X			X
48837F	4402688241	PC-99R2/R3-20200713	440-268824-1	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-115R-20200713	440-268824-2	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-116R-20200713	440-268824-3	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-118-20200713	440-268824-4	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-119-20200713	440-268824-5	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-120-20200713	440-268824-6	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-121-20200713	440-268824-7	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-117-20200713	440-268824-8	07/13/20	Stage 2A	Water		X	X	X			X	X				X			X
48837F	4402688241	PC-133-20200713	440-268824-9	07/13/20	Stage 2A	Water	FD6		X	X	X		X	X				X			X
48837F	4402688241	PC-133-20200713-FD	440-268824-10	07/13/20	Stage 2A	Water	FD6		X	X	X		X	X				X			X
48837F	4402688241	PC-99R2/R3-20200713-EB	440-268824-11	07/13/20	Stage 2A	Water	EB		X	X	X		X	X				X			X

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
48837G	4402689131	ART-1A-20200714	440-268913-1	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-2/2A-20200714	440-268913-2	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-3A-20200714	440-268913-3	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-4-20200714	440-268913-4	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-7A-20200714	440-268913-5	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-8A-20200714	440-268913-6	07/14/20	Stage 2A	Water	FD7		X	X	X		X	X				X			X
48837G	4402689131	ART-9-20200714	440-268913-7	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	PC-150-20200714	440-268913-8	07/14/20	Stage 2A	Water			X	X	X		X	X				X			X
48837G	4402689131	ART-8A-20200714 FD	440-268913-9	07/14/20	Stage 2A	Water	FD7		X	X	X		X	X				X			X
48837G	4402689131	ART-9-20200714 EB	440-268913-10	07/14/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
48837H	4402689711	I-O-20200715	440-268971-1	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-W-20200715	440-268971-2	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-P-20200715	440-268971-3	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-H-20200715	440-268971-4	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-U-20200715	440-268971-5	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-T-20200715	440-268971-6	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-G-20200715	440-268971-7	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
48837H	4402689711	I-Q-20200715	440-268971-8	07/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49108A	4402698581	M-10-20200804	440-269858-1	08/04/20	Stage 2A	Water		X	X	X	X	X	X	X				X			
49108B	4402698591	M-6A-20200804	440-269859-1	08/04/20	Stage 2A	Water		X	X		X		X		X	X	X	X	X	X	
49108B	4402698591	M-7B-20200804	440-269859-2	08/04/20	Stage 2A	Water		X	X		X		X		X	X	X	X	X	X	
49108C	4402698601	M-11-20200804	440-269860-1	08/04/20	Stage 2A	Water			X	X			X					X			
49108C	4402698601	M-11-20200804-EB4	440-269860-2	08/04/20	Stage 2A	Water	EB		X	X			X					X			
49108C	4402698601	M-80-20200804	440-269860-3	08/04/20	Stage 2A	Water			X	X			X					X			
49108C	4402698601	M-12A-20200804	440-269860-4	08/04/20	Stage 2A	Water			X	X			X					X			
49108C	4402698601	M-12A-20200804-FB4	440-269860-5	08/04/20	Stage 2A	Water	FB		X	X			X					X			
49108C	4402698601	M-44-20200804	440-269860-6	08/04/20	Stage 2A	Water			X	X			X					X			
49108D	4402699281	E1-1-20200805	440-269928-1	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E1-2-20200805	440-269928-2	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E1-3-20200805	440-269928-3	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E2-1-20200805	440-269928-4	08/05/20	Stage 2A	Water	FD8		X	X	X		X	X				X			X
49108D	4402699281	E2-2-20200805	440-269928-5	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E2-3-20200805	440-269928-6	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E2-4-20200805	440-269928-7	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E2-5-20200805	440-269928-8	08/05/20	Stage 2A	Water			X	X	X		X	X				X			X
49108D	4402699281	E2-2-20200805-FD	440-269928-9	08/05/20	Stage 2A	Water	FD8		X	X	X		X	X				X			X
49108D	4402699281	E2-2-20200805-EB	440-269928-10	08/05/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49108E	4402699291	M-37-20200805	440-269929-1	08/05/20	Stage 2A	Water	FD9		X				X					X			
49108E	4402699291	M-37-20200805-FD4	440-269929-2	08/05/20	Stage 2A	Water	FD9		X				X					X			
49108E	4402699291	M-38-20200805	440-269929-3	08/05/20	Stage 2A	Water			X				X					X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49108F	4402699301	M-5A-20200805	440-269930-1	08/05/20	Stage 2A	Water		X	X		X			X		X	X	X	X	X	
49108F	4402699301	H-28A-20200805	440-269930-2	08/05/20	Stage 2A	Water		X	X		X			X		X	X	X	X	X	
49108G	4402700611	M-38-20200807	440-270061-1	08/07/20	Stage 2A	Water				X											
49108G	4402700611	M-37-20200807	440-270061-2	08/07/20	Stage 2A	Water	FD10			X											
49108G	4402700611	M-37-20200807-FD4	440-270061-3	08/07/20	Stage 2A	Water	FD10			X											
49108H	4402701781	I-AA-20200811	440-270178-1	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-AB-20200811	440-270178-2	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-B-20200811	440-270178-3	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-R-20200811	440-270178-4	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-Y-20200811	440-270178-5	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-L-20200811	440-270178-6	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-S-20200811	440-270178-7	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108H	4402701781	I-AR-20200811	440-270178-8	08/11/20	Stage 2A	Water	FD11		X	X	X		X	X				X			X
49108H	4402701781	I-AR-20200811-FD	440-270178-9	08/11/20	Stage 2A	Water	FD11		X	X	X		X	X				X			X
49108H	4402701781	I-B-20200811-EB	440-270178-10	08/11/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49108I	4402701791	I-C-20200811	440-270179-1	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-D-20200811	440-270179-2	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-M-20200811	440-270179-3	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-E-20200811	440-270179-4	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-N-20200811	440-270179-5	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-X-20200811	440-270179-6	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108I	4402701791	I-F-20200811	440-270179-7	08/11/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-99R2/R3-20200812	440-270285-1	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-115R-20200812	440-270285-2	08/12/20	Stage 2A	Water	FD12		X	X	X		X	X				X			X
49108J	4402702851	PC-116R-20200812	440-270285-3	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-117-20200812	440-270285-4	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-118-20200812	440-270285-5	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-119-20200812	440-270285-6	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-120-20200812	440-270285-7	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-121-20200812	440-270285-8	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-133-20200812	440-270285-9	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108J	4402702851	PC-115R-20200812-FD	440-270285-10	08/12/20	Stage 2A	Water	FD12		X	X	X		X	X				X			X
49108J	4402702851	PC-116R-20200812-EB	440-270285-11	08/12/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49108K	4402702861	ART-1A-20200812	440-270286-1	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-2/2A-20200812	440-270286-2	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-3A-20200812	440-270286-3	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-4-20200812	440-270286-4	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-7B-20200812	440-270286-5	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-8A-20200812	440-270286-6	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X
49108K	4402702861	ART-9-20200812	440-270286-7	08/12/20	Stage 2A	Water			X	X	X		X	X				X			X

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49108K	4402702861	PC-150-20200812	440-270286-8	08/12/20	Stage 2A	Water	FD13	X	X	X		X	X					X			X
49108K	4402702861	PC-150-20200812-FD	440-270286-9	08/12/20	Stage 2A	Water	FD13	X	X	X		X	X					X			X
49108K	4402702861	ART-1A-20200812-EB	440-270286-10	08/12/20	Stage 2A	Water	EB	X	X	X		X	X					X			X
49108L	4402703531	I-AD-20200813	440-270353-1	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-AC-20200813	440-270353-2	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-K-20200813	440-270353-3	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-J-20200813	440-270353-4	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-Z-20200813	440-270353-5	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-I-20200813	440-270353-6	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108L	4402703531	I-V-20200813	440-270353-7	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-Q-20200813	440-270355-1	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-W-20200813	440-270355-2	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-P-20200813	440-270355-3	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-H-20200813	440-270355-4	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-U-20200813	440-270355-5	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-T-20200813	440-270355-6	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-G-20200813	440-270355-7	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108M	4402703551	I-O-20200813	440-270355-8	08/13/20	Stage 2A	Water		X	X	X		X	X					X			X
49108N	4402705631	I-R-20200818	440-270563-1	08/18/20	Stage 2A	Water				X											X
49373A	4402711951	E1-1-20200901	440-271195-1	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E1-2-20200901	440-271195-2	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E1-3-20200901	440-271195-3	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E2-1-20200901	440-271195-4	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E2-2-20200901	440-271195-5	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E2-3-20200901	440-271195-6	09/01/20	Stage 2A	Water	FD14	X	X	X		X	X					X			X
49373A	4402711951	E2-4-20200901	440-271195-7	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E2-5-20200901	440-271195-8	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373A	4402711951	E2-3-20200901-FD	440-271195-9	09/01/20	Stage 2A	Water	FD14	X	X	X		X	X					X			X
49373A	4402711951	E2-4-20200901-EB	440-271195-10	09/01/20	Stage 2A	Water	EB	X	X	X		X	X					X			X
49373B	4402711961	I-O-20200901	440-271196-1	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-W-20200901	440-271196-2	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-P-20200901	440-271196-3	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-H-20200901	440-271196-4	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-U-20200901	440-271196-5	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-T-20200901	440-271196-6	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-G-20200901	440-271196-7	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373B	4402711961	I-Q-20200901	440-271196-8	09/01/20	Stage 2A	Water		X	X	X		X	X					X			X
49373C	4402713551	PC-99R2/R3-20200903	440-271355-1	09/03/20	Stage 2A	Water		X	X	X		X	X					X			X
49373C	4402713551	PC-115R-20200903	440-271355-2	09/03/20	Stage 2A	Water		X	X	X		X	X					X			X
49373C	4402713551	PC-116R-20200903	440-271355-3	09/03/20	Stage 2A	Water		X	X	X		X	X					X			X

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49373C	4402713551	PC-117-20200903	440-271355-4	09/03/20	Stage 2A	Water	FD15		X	X	X		X	X				X			X
49373C	4402713551	PC-118-20200903	440-271355-5	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373C	4402713551	PC-119-20200903	440-271355-6	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373C	4402713551	PC-120-20200903	440-271355-7	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373C	4402713551	PC-121-20200903	440-271355-8	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373C	4402713551	PC-133-20200903	440-271355-9	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373C	4402713551	PC-117-20200903-FD	440-271355-10	09/03/20	Stage 2A	Water	FD15		X	X	X		X	X				X			X
49373C	4402713551	PC-118-20200903-EB	440-271355-11	09/03/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49373D	4402713571	ART-1A-20200903	440-271357-1	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-2/2A-20200903	440-271357-2	09/03/20	Stage 2A	Water	FD16		X	X	X		X	X				X			X
49373D	4402713571	ART-3A-20200903	440-271357-3	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-4-20200903	440-271357-4	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-7B-20200903	440-271357-5	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-8A-20200903	440-271357-6	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-9-20200903	440-271357-7	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	PC-150-20200903	440-271357-8	09/03/20	Stage 2A	Water			X	X	X		X	X				X			X
49373D	4402713571	ART-2/2A-20200903-FD	440-271357-9	09/03/20	Stage 2A	Water	FD16		X	X	X		X	X				X			X
49373D	4402713571	ART-3A-20200903-EB	440-271357-10	09/03/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49373E	4402715661	I-AA-20200909	440-271566-1	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-AB-20200909	440-271566-2	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-B-20200909	440-271566-3	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-R-20200909	440-271566-4	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-Y-20200909	440-271566-5	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-L-20200909	440-271566-6	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-S-20200909	440-271566-7	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-AR-20200909	440-271566-8	09/09/20	Stage 2A	Water			X		X		X	X				X			X
49373E	4402715661	I-F-20200909	440-271566-9	09/09/20	Stage 2A	Water			X	X	X		X	X				X			X
49373E	4402715661	I-X-20200909	440-271566-10	09/09/20	Stage 2A	Water			X	X	X		X	X				X			X
49373E	4402715661	I-N-20200909	440-271566-11	09/09/20	Stage 2A	Water			X	X	X		X	X				X			X
49373F	4402716611	LVW8.85-0.5-20200908	440-271661-1	09/08/20	Stage 2A	Water	FD17						X	X				X			
49373F	4402716611	LVW8.85-0.5-20200908-FD	440-271661-2	09/08/20	Stage 2A	Water	FD17						X	X				X			
49373F	4402716611	LVW7.2-1.0-20200908	440-271661-3	09/08/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW6.6-1-1.2-20200909	440-271661-4	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW6.6-2-2.7-20200909	440-271661-5	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW6.6-3-0.9-20200909	440-271661-6	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW6.05-0.7-20200909	440-271661-7	09/09/20	Stage 2A	Water	FD18						X	X				X			
49373F	4402716611	LVW6.05-0.7-20200909-FD	440-271661-8	09/09/20	Stage 2A	Water	FD18						X	X				X			
49373F	4402716611	LVW6.05-20200909-FB	440-271661-9	09/09/20	Stage 2A	Water	FB						X	X				X			
49373F	4402716611	C1-E-0.0-20200909	440-271661-10	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	C1-W-0.0-20200909	440-271661-11	09/09/20	Stage 2A	Water							X	X				X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49373F	4402716611	LVW5.3-1-2.8-20200909	440-271661-12	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW5.3-2-0.4-20200909	440-271661-13	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW5.3-3-0.4-20200909	440-271661-14	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW5.3-4-0.3-20200909	440-271661-15	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW5.3-5-0.5-20200909	440-271661-16	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW5.3-6-0.5-20200909	440-271661-17	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.75-1-0.9-20200909	440-271661-18	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.75-2-1.4-20200909	440-271661-19	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.75-3-1.0-20200909	440-271661-20	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.75-4-1.2-20200909	440-271661-21	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.75-5-1.1-20200909	440-271661-22	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.2-1-1.5-20200909	440-271661-23	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.2-2-3.4-20200909	440-271661-24	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.2-3-2.4-20200909	440-271661-25	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW4.2-4-1.9-20200909	440-271661-26	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-1-1.7-20200909	440-271661-27	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-2-0.9-20200909	440-271661-28	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-3-1.7-20200909	440-271661-29	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-4-1.7-20200909	440-271661-30	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-5-1.7-20200909	440-271661-31	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW3.5-6-1.6-20200909	440-271661-32	09/09/20	Stage 2A	Water							X	X				X			
49373F	4402716611	LVW0.55-1.0-20200909	440-271661-33	09/09/20	Stage 2A	Water	FD19						X	X				X			
49373F	4402716611	LVW0.55-1.0-20200909-FD	440-271661-34	09/09/20	Stage 2A	Water	FD19						X	X				X			
49373F	4402716611	LVW0.55-20200909-FB	440-271661-35	09/09/20	Stage 2A	Water	FB						X	X				X			
49373G	4402718411	I-C-20200915	440-271841-1	09/15/20	Stage 2A	Water	FD20	X	X	X			X	X				X			X
49373G	4402718411	I-D-20200915	440-271841-2	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373G	4402718411	I-M-20200915	440-271841-3	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373G	4402718411	I-E-20200915	440-271841-4	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373G	4402718411	I-C-20200915-FD	440-271841-5	09/15/20	Stage 2A	Water	FD20	X	X	X			X	X				X			X
49373G	4402718411	I-D-20200915-EB	440-271841-6	09/15/20	Stage 2A	Water	EB	X	X	X			X	X				X			X
49373H	4402718431	I-AD-20200915	440-271843-1	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-AC-20200915	440-271843-2	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-K-20200915	440-271843-3	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-J-20200915	440-271843-4	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-Z-20200915	440-271843-5	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-L-20200915	440-271843-6	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373H	4402718431	I-V-20200915	440-271843-7	09/15/20	Stage 2A	Water		X	X	X			X	X				X			X
49373I	4402722171	I-AA-20200923	440-272217-1	09/23/20	Stage 2A	Water				X											
49373I	4402722171	I-AB-20200923	440-272217-2	09/23/20	Stage 2A	Water				X											
49373I	4402722171	I-B-20200923	440-272217-3	09/23/20	Stage 2A	Water				X											



Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH	
49373I	440272217I	I-R-20200923	440-272217-4	09/23/20	Stage 2A	Water				X												
49373I	440272217I	I-Y-20200923	440-272217-5	09/23/20	Stage 2A	Water				X												
49373I	440272217I	I-L-20200923	440-272217-6	09/23/20	Stage 2A	Water				X												
49373I	440272217I	I-S-20200923	440-272217-7	09/23/20	Stage 2A	Water				X												
49373I	440272217I	I-AR-20200923	440-272217-8	09/23/20	Stage 2A	Water				X												
49831A	440273504I	LVW8.85-0.6-20201015	440-273504-1	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW7.2-1.0-20201015	440-273504-2	10/15/20	Stage 2A	Water	FD21						X	X					X			
49831A	440273504I	LVW7.2-1.0-20201015-FD	440-273504-3	10/15/20	Stage 2A	Water	FD21						X	X					X			
49831A	440273504I	LVW6.6-1-1.4-20201015	440-273504-4	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW6.6-2-2.9-20201015	440-273504-5	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW6.6-3-0.7-20201015	440-273504-6	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW6.05-0.7-20201015	440-273504-7	10/15/20	Stage 2A	Water	FD22						X	X					X			
49831A	440273504I	LVW6.05-0.7-20201015-FD	440-273504-8	10/15/20	Stage 2A	Water	FD22						X	X					X			
49831A	440273504I	LVW6.05-20201015-FB	440-273504-9	10/15/20	Stage 2A	Water	FB						X	X					X			
49831A	440273504I	C1-E-0.0-20201015	440-273504-10	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	C1-W-0.0-20201015	440-273504-11	10/15/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-1-2.9-20201016	440-273504-12	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-2-0.7-20201016	440-273504-13	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-3-0.6-20201016	440-273504-14	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-4-0.4-20201016	440-273504-15	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-5-0.5-20201016	440-273504-16	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW5.3-6-0.5-20201016	440-273504-17	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.75-1-0.9-20201016	440-273504-18	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.75-2-1.3-20201016	440-273504-19	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.75-3-0.8-20201016	440-273504-20	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.75-4-1.2-20201016	440-273504-21	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.75-5-1.0-20201016	440-273504-22	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.2-1-1.3-20201016	440-273504-23	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.2-2-2.2-20201016	440-273504-24	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.2-3-2.8-20201016	440-273504-25	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW4.2-4-1.7-20201016	440-273504-26	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-1-1.8-20201016	440-273504-27	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-2-1.1-20201016	440-273504-28	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-3-1.4-20201016	440-273504-29	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-4-1.4-20201016	440-273504-30	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-5-1.8-20201016	440-273504-31	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW3.5-6-1.8-20201016	440-273504-32	10/16/20	Stage 2A	Water							X	X					X			
49831A	440273504I	LVW0.55-1.4-20201016	440-273504-33	10/16/20	Stage 2A	Water	FD23						X	X					X			
49831A	440273504I	LVW0.55-1.4-20201016-FD	440-273504-34	10/16/20	Stage 2A	Water	FD23						X	X					X			
49831A	440273504I	LVW0.55-20201016-FB	440-273504-35	10/16/20	Stage 2A	Water	FB						X	X					X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49831B	5501503101	E1-1-20201006	550-150310-1	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E1-2-20201006	550-150310-2	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E1-3-20201006	550-150310-3	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E2-1-20201006	550-150310-4	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E2-2-20201006	550-150310-5	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E2-3-20201006	550-150310-6	10/06/20	Stage 2A	Water			X	X	X		X	X				X			X
49831B	5501503101	E2-4-20201006	550-150310-7	10/06/20	Stage 2A	Water			X	X	X		X	X							X
49831B	5501503101	E2-5-20201006	550-150310-8	10/06/20	Stage 2A	Water	FD24		X	X	X		X	X				X			X
49831B	5501503101	E2-5-20201006 - FD	550-150310-9	10/06/20	Stage 2A	Water	FD24		X	X	X		X	X				X			X
49831B	5501503101	E1-1-20201006 - EB	550-150310-10	10/06/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49831C	5501508751	PC-99R2/R3-20201013	550-150875-1	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-115R-20201013	550-150875-2	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-116R-20201013	550-150875-3	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-117-20201013	550-150875-4	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-118-20201013	550-150875-5	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-119-20201013	550-150875-6	10/13/20	Stage 2A	Water	FD25		X	X	X		X	X				X			X
49831C	5501508751	PC-120-20201013	550-150875-7	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-121-20201013	550-150875-8	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-133-20201013	550-150875-9	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831C	5501508751	PC-119-20201013-FD	550-150875-10	10/13/20	Stage 2A	Water	FD25		X	X	X		X	X				X			X
49831C	5501508751	PC-120-20201013-EB	550-150875-11	10/13/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49831D	5501508781	ART-1A-20201013	550-150878-1	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831D	5501508781	ART-2/2A-20201013	550-150878-2	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831D	5501508781	ART-3A-20201013	550-150878-3	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831D	5501508781	ART-4-20201013	550-150878-4	10/13/20	Stage 2A	Water	FD26		X	X	X		X	X				X			X
49831D	5501508781	ART-7B-20201013	550-150878-5	10/13/20	Stage 2A	Water			X	X	X		X	X				X			X
49831D	5501508781	ART-8A-20201013	550-150878-6	10/13/20	Stage 2A	Water			X		X		X	X				X			X
49831D	5501508781	ART-9-20201013	550-150878-7	10/13/20	Stage 2A	Water			X		X		X	X				X			X
49831D	5501508781	PC-150-20201013	550-150878-8	10/13/20	Stage 2A	Water			X		X		X	X				X			X
49831D	5501508781	ART-4-20201013-FD	550-150878-9	10/13/20	Stage 2A	Water	FD26		X	X	X		X	X				X			X
49831D	5501508781	ART-7B-20201013-EB	550-150878-10	10/13/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49831E	5501509881	I-AA-20201014	550-150988-1	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-AB-20201014	550-150988-2	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-B-20201014	550-150988-3	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-R-20201014	550-150988-4	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-Y-20201014	550-150988-5	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-L-20201014	550-150988-6	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-S-20201014	550-150988-7	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831E	5501509881	I-AR-20201014	550-150988-8	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-Q-20201014	550-150989-1	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
49831F	5501509891	I-G-20201014	550-150989-2	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-T-20201014	550-150989-3	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-U-20201014	550-150989-4	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-H-20201014	550-150989-5	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-P-20201014	550-150989-6	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-W-20201014	550-150989-7	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831F	5501509891	I-O-20201014	550-150989-8	10/14/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-C-20201015	550-151055-1	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-F-20201015	550-151055-2	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-X-20201015	550-151055-3	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-N-20201015	550-151055-4	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-E-20201015	550-151055-5	10/15/20	Stage 2A	Water	FD27		X	X	X		X	X				X			X
49831G	5501510551	I-M-20201015	550-151055-6	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-D-20201015	550-151055-7	10/15/20	Stage 2A	Water			X	X	X		X	X				X			X
49831G	5501510551	I-E-20201015-FD	550-151055-8	10/15/20	Stage 2A	Water	FD27		X	X	X		X	X				X			X
49831G	5501510551	I-F-20201015-EB	550-151055-9	10/15/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
49831H	5501513221	ART-8A-20201019	550-151322-1	10/19/20	Stage 2A	Water				X											
49831H	5501513221	ART-9-20201019	550-151322-2	10/19/20	Stage 2A	Water				X											
49831H	5501513221	PC-150-20201019	550-151322-3	10/19/20	Stage 2A	Water				X											
49831I	5501513651	I-AC-20201020	550-151365-1	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-AD-20201020	550-151365-2	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-K-20201020	550-151365-3	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-J-20201020	550-151365-4	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-Z-20201020	550-151365-5	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-L-20201020	550-151365-6	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831I	5501513651	I-V-20201020	550-151365-7	10/20/20	Stage 2A	Water			X	X	X		X	X				X			X
49831J	5501521171	E2-4-20201030	550-152117-1	10/30/20	Stage 2A	Water												X			
50101A	5501521781	PC-56-20201102	550-152178-1	11/02/20	Stage 2A	Water			X		X		X	X				X			
50101A	5501521781	PC-86-20201102	550-152178-2	11/02/20	Stage 2A	Water			X		X		X	X				X			
50101A	5501521781	PC-86-20201102-FB5	550-152178-3	11/02/20	Stage 2A	Water	FB		X		X		X	X				X			
50101A	5501521781	PC-94-20201102	550-152178-4	11/02/20	Stage 2A	Water			X		X		X	X				X			
50101A	5501521781	PC-94-20201102-EB6	550-152178-5	11/02/20	Stage 2A	Water	EB		X		X		X	X				X			
50101A	5501521781	PC-156A-20201102	550-152178-6	11/02/20	Stage 2A	Water			X		X		X	X				X			
50101B	5501522881	PC-99R2/R3-20201103	550-152288-1	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-115R-20201103	550-152288-2	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-116R-20201103	550-152288-3	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-117-20201103	550-152288-4	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-118-20201103	550-152288-5	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-119-20201103	550-152288-6	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-120-20201103	550-152288-7	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X

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LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
50101B	5501522881	PC-121-20201103	550-152288-8	11/03/20	Stage 2A	Water	FD28		X	X	X		X	X				X			X
50101B	5501522881	PC-133-20201103	550-152288-9	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101B	5501522881	PC-121-20201103-FD	550-152288-10	11/03/20	Stage 2A	Water	FD28		X	X	X		X	X				X			X
50101B	5501522881	PC-133-20201103-EB	550-152288-11	11/03/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
50101C	5501522882	ART-1A-20201103	550-152288-12	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-2/2A-20201103	550-152288-13	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-3A-20201103	550-152288-14	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-4-20201103	550-152288-15	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-7B-20201103	550-152288-16	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-8A-20201103	550-152288-17	11/03/20	Stage 2A	Water	FD29		X	X	X		X	X				X			X
50101C	5501522882	ART-9-20201103	550-152288-18	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	PC-150-20201103	550-152288-19	11/03/20	Stage 2A	Water			X	X	X		X	X				X			X
50101C	5501522882	ART-8A-20201103-FD	550-152288-20	11/03/20	Stage 2A	Water	FD29		X	X	X		X	X				X			X
50101C	5501522882	ART-9-20201103-EB	550-152288-21	11/03/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
50101D	5501523111	PC-157A-20201103	550-152311-1	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-157B-20201103	550-152311-2	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-97-20201103	550-152311-3	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-144-20201103	550-152311-4	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-135A-20201103	550-152311-5	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-53-20201103	550-152311-6	11/03/20	Stage 2A	Water	FD30		X		X		X	X				X			
50101D	5501523111	PC-53-20201103-FD6	550-152311-7	11/03/20	Stage 2A	Water	FD30		X		X		X	X				X			
50101D	5501523111	MW-K5-20201103	550-152311-8	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-58-20201103	550-152311-9	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	ARP-7-20201103	550-152311-10	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	ARP-2A-20201103	550-152311-11	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	ARP-3A-20201103	550-152311-12	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	MW-K4-20201103	550-152311-13	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-158-20201103	550-152311-14	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-62-20201103	550-152311-15	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-62-20201103-EB5	550-152311-16	11/03/20	Stage 2A	Water	EB		X		X		X	X				X			
50101D	5501523111	PC-98R-20201103	550-152311-17	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-59-20201103-FB6	550-152311-18	11/03/20	Stage 2A	Water	FB		X		X		X	X				X			
50101D	5501523111	PC-59-20201103	550-152311-19	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-91-20201103	550-152311-20	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-90-20201103	550-152311-21	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	PC-156B-20201103	550-152311-22	11/03/20	Stage 2A	Water	FD31		X		X		X	X				X			
50101D	5501523111	PC-156B-20201103-FD5	550-152311-23	11/03/20	Stage 2A	Water	FD31		X		X		X	X				X			
50101D	5501523111	ARP-6B-20201103	550-152311-24	11/03/20	Stage 2A	Water			X		X		X	X				X			
50101D	5501523111	ARP-6B-20201103-FB7	550-152311-25	11/03/20	Stage 2A	Water	FB		X		X		X	X				X			
50101D	5501523111	ARP-5A-20201103	550-152311-26	11/03/20	Stage 2A	Water			X		X		X	X				X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH	
50101D	5501523111	PC-101R-20201103	550-152311-27	11/03/20	Stage 2A	Water			X		X		X	X					X			
50101E	5501523801	E1-1-20201104	550-152380-1	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E1-2-20201104	550-152380-2	11/04/20	Stage 2A	Water	FD32		X	X	X		X	X					X			X
50101E	5501523801	E1-3-20201104	550-152380-3	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E2-1-20201104	550-152380-4	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E2-2-20201104	550-152380-5	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E2-3-20201104	550-152380-6	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E2-4-20201104	550-152380-7	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E2-5-20201104	550-152380-8	11/04/20	Stage 2A	Water			X	X	X		X	X					X			X
50101E	5501523801	E1-2-20201104-FD	550-152380-9	11/04/20	Stage 2A	Water	FD32		X	X	X		X	X					X			X
50101E	5501523801	E1-3-20201104-EB	550-152380-10	11/04/20	Stage 2A	Water	EB		X	X	X		X	X					X			X
50101F	5501524121	PC-125-20201104	550-152412-1	11/04/20	Stage 2A	Water	FD33		X		X		X	X					X			
50101F	5501524121	PC-125-20201104-FD7	550-152412-2	11/04/20	Stage 2A	Water	FD33		X		X		X	X					X			
50101F	5501524121	PC-130-20201104	550-152412-3	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-152-20201104	550-152412-4	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-136-20201104	550-152412-5	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	ART-6-20201104	550-152412-6	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-137D-20201104	550-152412-7	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-149-20201104	550-152412-8	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-149-20201104-FB9	550-152412-9	11/04/20	Stage 2A	Water	FB		X		X		X	X					X			
50101F	5501524121	PC-126-20201104	550-152412-10	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-127-20201104	550-152412-11	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-153R-20201104	550-152412-12	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-151-20201104	550-152412-13	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-154-20201104	550-152412-14	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-160-20201104	550-152412-15	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-160-20201104-FB8	550-152412-16	11/04/20	Stage 2A	Water	FB		X		X		X	X					X			
50101F	5501524121	PC-132-20201104	550-152412-17	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-132-20201104-EB7	550-152412-18	11/04/20	Stage 2A	Water	EB		X		X		X	X					X			
50101F	5501524121	PC-131-20201104	550-152412-19	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-123-20201104	550-152412-20	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-148-20201104	550-152412-21	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	M-192-20201104	550-152412-22	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	M-31A-20201104	550-152412-23	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	M-81A-20201104-EB8	550-152412-24	11/04/20	Stage 2A	Water	EB		X		X		X	X					X			
50101F	5501524121	M-81A-20201104	550-152412-25	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	M-73-20201104	550-152412-26	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-134D-20201104	550-152412-27	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-124-20201104	550-152412-28	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-128-20201104	550-152412-29	11/04/20	Stage 2A	Water	FD34		X		X		X	X					X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH	
50101F	5501524121	PC-128-20201104-FD8	550-152412-30	11/04/20	Stage 2A	Water	FD34		X		X		X	X					X			
50101F	5501524121	PC-129-20201104	550-152412-31	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-18-20201104	550-152412-32	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101F	5501524121	PC-55-20201104	550-152412-33	11/04/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-191-20201105	550-152494-1	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-189-20201105	550-152494-2	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-35-20201105	550-152494-3	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-11-20201105	550-152494-4	11/05/20	Stage 2A	Water	FD35		X	X	X		X	X					X			
50101G	5501524941	M-11-20201105-FD4	550-152494-5	11/05/20	Stage 2A	Water	FD35		X	X	X		X	X					X			
50101G	5501524941	M-12A-20201105	550-152494-6	11/05/20	Stage 2A	Water			X	X	X		X	X					X			
50101G	5501524941	M-12A-20201105-FB4	550-152494-7	11/05/20	Stage 2A	Water	FB		X	X	X		X	X					X			
50101G	5501524941	M-190-20201105	550-152494-8	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-193-20201105	550-152494-9	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	PC-72-20201105	550-152494-10	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	PC-71-20201105	550-152494-11	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-44-20201105	550-152494-12	11/05/20	Stage 2A	Water			X	X	X		X	X					X			
50101G	5501524941	PC-54-20201105	550-152494-13	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-48A-20201105	550-152494-14	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	PC-159-20201105	550-152494-15	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-72-20201105	550-152494-16	11/05/20	Stage 2A	Water	FD36		X		X		X	X					X			
50101G	5501524941	M-72-20201105-FD9	550-152494-17	11/05/20	Stage 2A	Water	FD36		X		X		X	X					X			
50101G	5501524941	M-79-20201105	550-152494-18	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-135-20201105	550-152494-19	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-69-20201105	550-152494-20	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-70-20201105	550-152494-21	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-71-20201105	550-152494-22	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-74-20201105	550-152494-23	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-83-20201105	550-152494-24	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-67-20201105-FB9	550-152494-25	11/05/20	Stage 2A	Water	FB		X		X		X	X					X			
50101G	5501524941	M-80-20201105	550-152494-26	11/05/20	Stage 2A	Water			X	X	X		X	X					X			
50101G	5501524941	M-68-20201105	550-152494-27	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-67-20201105	550-152494-28	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-161D-20201105	550-152494-29	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-14A-20201105	550-152494-30	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-66-20201105	550-152494-31	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101G	5501524941	M-38-20201105-EB4	550-152494-32	11/05/20	Stage 2A	Water	EB		X	X	X		X	X					X			
50101G	5501524941	M-38-20201105	550-152494-33	11/05/20	Stage 2A	Water			X	X	X		X	X					X			
50101G	5501524941	M-37-20201105	550-152494-34	11/05/20	Stage 2A	Water			X	X	X		X	X					X			
50101G	5501524941	M-22A-20201105	550-152494-35	11/05/20	Stage 2A	Water			X		X		X	X					X			
50101H	5501526221	M-162D-20201106	550-152622-1	11/06/20	Stage 2A	Water			X		X		X	X					X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
50101H	5501526221	M-186D-20201106	550-152622-2	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	PC-103-20201106	550-152622-3	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-23-20201106	550-152622-4	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-65-20201106	550-152622-5	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	ARP-1-20201106	550-152622-6	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-64-20201106	550-152622-7	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-57A-20201106	550-152622-8	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-52-20201106	550-152622-9	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-19-20201106	550-152622-10	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	PC-60-20201106	550-152622-11	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101H	5501526221	M-25-20201106	550-152622-12	11/06/20	Stage 2A	Water			X		X		X	X				X			
50101I	5501527581	I-C-20201110	550-152758-1	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-F-20201110	550-152758-2	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-X-20201110	550-152758-3	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-N-20201110	550-152758-4	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-E-20201110	550-152758-5	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-M-20201110	550-152758-6	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101I	5501527581	I-D-20201110	550-152758-7	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-Q-20201110	550-152760-1	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-G-20201110	550-152760-2	11/10/20	Stage 2A	Water	FD37		X	X	X		X	X				X			X
50101J	5501527601	I-T-20201110	550-152760-3	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-U-20201110	550-152760-4	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-H-20201110	550-152760-5	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-P-20201110	550-152760-6	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-W-20201110	550-152760-7	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-O-20201110	550-152760-8	11/10/20	Stage 2A	Water			X	X	X		X	X				X			X
50101J	5501527601	I-G-20201110-FD	550-152760-9	11/10/20	Stage 2A	Water	FD37		X	X	X		X	X				X			X
50101J	5501527601	I-H-20201110-EB	550-152760-10	11/10/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
50101K	5501529121	I-AA-20201112	550-152912-1	11/12/20	Stage 2A	Water			X	X	X		X	X				X			X
50101K	5501529121	I-AB-20201112	550-152912-2	11/12/20	Stage 2A	Water			X	X	X		X	X				X			X
50101K	5501529121	I-B-20201112	550-152912-3	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101K	5501529121	I-R-20201112	550-152912-4	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101K	5501529121	I-Y-20201112	550-152912-5	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101K	5501529121	I-L-20201112	550-152912-6	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101K	5501529121	I-S-20201112	550-152912-7	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101K	5501529121	I-AR-20201112	550-152912-8	11/12/20	Stage 2A	Water			X	X			X	X				X			X
50101L	5501530361	LVW8.85-0.6-20201112	550-153036-1	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW7.2-1.0-20201112	550-153036-2	11/12/20	Stage 2A	Water	FD38						X	X				X			
50101L	5501530361	LVW7.2-1.0-20201112-FD	550-153036-3	11/12/20	Stage 2A	Water	FD38						X	X				X			
50101L	5501530361	LVW7.2-20201112-FB	550-153036-4	11/12/20	Stage 2A	Water	FB						X	X				X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
50101L	5501530361	LVW6.6-1-1.5-20201112	550-153036-5	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW6.6-2-2.6-20201112	550-153036-6	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW6.6-3-0.5-20201112	550-153036-7	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW6.05-0.8-20201112	550-153036-8	11/12/20	Stage 2A	Water	FD39						X	X				X			
50101L	5501530361	LVW6.05-0.8-20201112-FD	550-153036-9	11/12/20	Stage 2A	Water	FD39						X	X				X			
50101L	5501530361	LVW6.05-20201112-FB	550-153036-10	11/12/20	Stage 2A	Water	FB						X	X				X			
50101L	5501530361	C1-E-0.0-20201113	550-153036-11	11/13/20	Stage 2A	Water							X	X				X			
50101L	5501530361	C1-W-0.0-20201113	550-153036-12	11/13/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-1-3.0-20201112	550-153036-13	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-2-0.5-20201112	550-153036-14	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-3-0.7-20201112	550-153036-15	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-4-0.4-20201112	550-153036-16	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-5-0.4-20201112	550-153036-17	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW5.3-6-0.6-20201112	550-153036-18	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.75-1-1.5-20201112	550-153036-19	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.75-2-1.2-20201112	550-153036-20	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.75-3-1.0-20201112	550-153036-21	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.75-4-0.8-20201112	550-153036-22	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.75-5-0.9-20201112	550-153036-23	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.2-1-1.7-20201112	550-153036-24	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.2-2-2.1-20201112	550-153036-25	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.2-3-3.5-20201112	550-153036-26	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW4.2-4-1.8-20201112	550-153036-27	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-1-1.6-20201112	550-153036-28	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-2-1.1-20201112	550-153036-29	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-3-1.8-20201112	550-153036-30	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-4-1.3-20201112	550-153036-31	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-5-1.8-20201112	550-153036-32	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW3.5-6-1.8-20201112	550-153036-33	11/12/20	Stage 2A	Water							X	X				X			
50101L	5501530361	LVW0.55-1.2-20201112	550-153036-34	11/12/20	Stage 2A	Water	FD40						X	X				X			
50101L	5501530361	LVW0.55-1.2-20201112-FD	550-153036-35	11/12/20	Stage 2A	Water	FD40						X	X				X			
50101M	5501532821	I-AC-20201118	550-153282-1	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-AD-20201118	550-153282-2	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-K-20201118	550-153282-3	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-J-20201118	550-153282-4	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-Z-20201118	550-153282-5	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-I-20201118	550-153282-6	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101M	5501532821	I-V-20201118	550-153282-7	11/18/20	Stage 2A	Water			X	X	X		X	X				X			X
50101N	5501534071	I-B-20201119	550-153407-1	11/19/20	Stage 2A	Water					X										
50101N	5501534071	I-R-20201119	550-153407-2	11/19/20	Stage 2A	Water					X										



Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH	
50101N	5501534071	I-Y-20201119	550-153407-3	11/19/20	Stage 2A	Water					X											
50101N	5501534071	I-L-20201119	550-153407-4	11/19/20	Stage 2A	Water					X											
50101N	5501534071	I-S-20201119	550-153407-5	11/19/20	Stage 2A	Water					X											
50101N	5501534071	I-AR-20201119	550-153407-6	11/19/20	Stage 2A	Water					X											
50302A	5501539521	E1-1-20201202	550-153952-1	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E1-2-20201202	550-153952-2	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E1-3-20201202	550-153952-3	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E2-1-20201202	550-153952-4	12/02/20	Stage 2A	Water	FD41		X	X	X		X	X				X				X
50302A	5501539521	E2-2-20201202	550-153952-5	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E2-3-20201202	550-153952-6	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E2-4-20201202	550-153952-7	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E2-5-20201202	550-153952-8	12/02/20	Stage 2A	Water			X	X	X		X	X				X				X
50302A	5501539521	E2-1-20201202-FD	550-153952-9	12/02/20	Stage 2A	Water	FD41		X	X	X		X	X				X				X
50302A	5501539521	E2-2-20201202-EB	550-153952-10	12/02/20	Stage 2A	Water	EB		X	X	X		X	X				X				X
50302B	5501540241	PC-99R2/R3-20201203	550-154024-1	12/03/20	Stage 2A	Water	FD42		X	X	X		X	X				X				X
50302B	5501540241	PC-115R-20201203	550-154024-2	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-116R-20201203	550-154024-3	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-117-20201203	550-154024-4	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-118-20201203	550-154024-5	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-119-20201203	550-154024-6	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-120-20201203	550-154024-7	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-121-20201203	550-154024-8	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-133-20201203	550-154024-9	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302B	5501540241	PC-99R2/R3-20201203-FD	550-154024-10	12/03/20	Stage 2A	Water	FD42		X	X	X		X	X				X				X
50302B	5501540241	PC-115R-20201203-EB	550-154024-11	12/03/20	Stage 2A	Water	EB		X	X	X		X	X				X				X
50302C	5501540251	ART-1A-20201203	550-154025-1	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-2/A-20201203	550-154025-2	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-3A-20201203	550-154025-3	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-4-20201203	550-154025-4	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-7B-20201203	550-154025-5	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-8A-20201203	550-154025-6	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	ART-9-20201203	550-154025-7	12/03/20	Stage 2A	Water			X	X	X		X	X				X				X
50302C	5501540251	PC-150-20201203	550-154025-8	12/03/20	Stage 2A	Water	FD43		X	X	X		X	X				X				X
50302C	5501540251	PC-150-20201203-FD	550-154025-9	12/03/20	Stage 2A	Water	FD43		X	X	X		X	X				X				X
50302C	5501540251	ART-1A-20201203-EB	550-154025-10	12/03/20	Stage 2A	Water	EB		X	X	X		X	X				X				X
50302D	5501542901	I-AA-20201208	550-154290-1	12/08/20	Stage 2A	Water			X	X	X		X	X				X				X
50302D	5501542901	I-AB-20201208	550-154290-2	12/08/20	Stage 2A	Water			X	X	X		X	X				X				X
50302D	5501542901	I-B-20201208	550-154290-3	12/08/20	Stage 2A	Water			X	X	X		X	X				X				X
50302D	5501542901	I-R-20201208	550-154290-4	12/08/20	Stage 2A	Water			X	X	X		X	X				X				X
50302D	5501542901	I-Y-20201208	550-154290-5	12/08/20	Stage 2A	Water			X	X	X		X	X				X				X

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LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH
50302D	5501542901	I-L-20201208	550-154290-6	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302D	5501542901	I-S-20201208	550-154290-7	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302D	5501542901	I-AR-20201208	550-154290-8	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-C-20201208	550-154293-1	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-F-20201208	550-154293-2	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-X-20201208	550-154293-3	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-N-20201208	550-154293-4	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-E-20201208	550-154293-5	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-M-20201208	550-154293-6	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302E	5501542931	I-D-20201208	550-154293-7	12/08/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-AD-20201209	550-154393-1	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-K-20201209	550-154393-2	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-J-20201209	550-154393-3	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-Z-20201209	550-154393-4	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-I-20201209	550-154393-5	12/09/20	Stage 2A	Water	FD44		X	X	X		X	X				X			X
50302F	5501543931	I-V-20201209	550-154393-6	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302F	5501543931	I-I-20201209-FD	550-154393-7	12/09/20	Stage 2A	Water	FD44		X	X	X		X	X				X			X
50302F	5501543931	I-J-20201209-EB	550-154393-8	12/09/20	Stage 2A	Water	EB		X	X	X		X	X				X			X
50302G	5501543961	I-Q-20201209	550-154396-1	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-G-20201209	550-154396-2	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-T-20201209	550-154396-3	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-U-20201209	550-154396-4	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-H-20201209	550-154396-5	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-P-20201209	550-154396-6	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-W-20201209	550-154396-7	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302G	5501543961	I-O-20201209	550-154396-8	12/09/20	Stage 2A	Water			X	X	X		X	X				X			X
50302H	5501546061	LVW8.85-0.4-20201210	550-154606-1	12/10/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW7.2-1.1-20201210	550-154606-2	12/10/20	Stage 2A	Water	FD45						X	X				X			
50302H	5501546061	LVW7.2-1.1-20201210-FD	550-154606-3	12/10/20	Stage 2A	Water	FD45						X	X				X			
50302H	5501546061	LVW6.6-1-1.3-20201211	550-154606-4	12/11/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW6.6-2-2.2-20201211	550-154606-5	12/11/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW6.6-3-0.7-20201211	550-154606-6	12/11/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW6.05-0.7-20201210	550-154606-7	12/10/20	Stage 2A	Water	FD46						X	X				X			
50302H	5501546061	LVW6.05-0.7-20201210-FD	550-154606-8	12/10/20	Stage 2A	Water	FD46						X	X				X			
50302H	5501546061	LVW6.05-20201210-FB	550-154606-9	12/10/20	Stage 2A	Water	FB						X	X				X			
50302H	5501546061	C1-E-0.0-20201210	550-154606-10	12/10/20	Stage 2A	Water							X	X				X			
50302H	5501546061	C1-W-0.0-20201210	550-154606-11	12/10/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW5.3-1-2.8-20201211	550-154606-12	12/11/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW5.3-2-0.8-20201211	550-154606-13	12/11/20	Stage 2A	Water							X	X				X			
50302H	5501546061	LVW5.3-3-0.5-20201211	550-154606-14	12/11/20	Stage 2A	Water							X	X				X			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	Metals (200.7)	Cr (200.7)	CrVI (218.6)	Anions (300.0 or Calculation Method)	Total Inorganic Nitrogen (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.1)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOX (9020B)	Field pH	
50302H	5501546061	LVW5.3-4-0.4-20201211	550-154606-15	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW5.3-5-0.5-20201211	550-154606-16	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW5.3-6-0.6-20201211	550-154606-17	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.75-1-0.9-20201211	550-154606-18	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.75-2-1.3-20201211	550-154606-19	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.75-3-0.8-20201211	550-154606-20	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.75-4-1.3-20201211	550-154606-21	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.75-5-1.0-20201211	550-154606-22	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.2-1-1.6-20201211	550-154606-23	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.2-2-2.5-20201211	550-154606-24	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.2-3-2.6-20201211	550-154606-25	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW4.2-4-1.7-20201211	550-154606-26	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-1-1.7-20201211	550-154606-27	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-2-0.9-20201211	550-154606-28	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-3-1.0-20201211	550-154606-29	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-4-1.2-20201211	550-154606-30	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-5-1.8-20201211	550-154606-31	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW3.5-6-1.7-20201211	550-154606-32	12/11/20	Stage 2A	Water							X	X				X				
50302H	5501546061	LVW0.55-0.9-20201211	550-154606-33	12/11/20	Stage 2A	Water	FD47						X	X				X				
50302H	5501546061	LVW0.55-0.9-20201211-FD	550-154606-34	12/11/20	Stage 2A	Water	FD47						X	X				X				
50302H	5501546061	LVW7.2-20201210-FB	550-154606-35	12/10/20	Stage 2A	Water	FB						X	X				X				
50302I	5501547871	I-AC-20201215	550-154787-1	12/15/20	Stage 2A	Water			X	X	X		X	X				X				X
50302J	5501553731	M-10-20201228	550-155373-1	12/28/20	Stage 2A	Water		X	X	X	X	X	X	X	X			X				

**Table II. Stage 2A Validation Elements**

Quality Control Elements	Stage 2A	
	Metals	Wet Chemistry
Sample Receipt & Technical Holding Time	√	√
Instrument Performance Check	-	-
Initial Calibration (ICAL)	-	-
Initial Calibration Verification (ICV)	-	-
Continuing Calibration Verification (CCV)	-	-
Laboratory Blanks	√	√
Initial Calibration Blank and Continuing Calibration Blank (ICB/CCB)	-	-
Field Blanks	√	√
Inductively Coupled Plasma (ICP) Interference Check Sample	-	N/A
Surrogate Spikes	N/A	√
Matrix Spike (MS)/ Matrix Spike Duplicate (MSD)	√	√
Laboratory Duplicate (DUP)	N/A	√
Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD)	√	√
Serial Dilution	-	N/A
Internal Standards	-	N/A
Field Duplicate	√	√
Project Quantitation Limits (QLs) <sup>1</sup>	√	√
Multiple Results for One Sample	√	√
Compound Quantitation/ Sample Result Verification	-	-
Overall Data Usability Assessment	√	√

√ = Reviewed for Stage 2A review

N/A = Not applicable to method or not performed during this sampling event

- = Not applicable for Stage 2A review

<sup>1</sup>PQLs verified for all methods.

**Table III. Stage 2A Validation Percentages**

<b>Parameter</b>	<b>Stage 2A Results</b>	<b>Total Results</b>	<b>Stage 2A (%)</b>
Metals	532	532	100
Hexavalent Chromium	398	398	100
Chloride, Nitrate-N, Nitrite-N, Nitrate/Nitrite-N and Sulfate	507	507	100
Total Inorganic Nitrogen - Calculation	2	2	100
Chlorate	667	667	100
Perchlorate	681	681	100
Ammonia-N	2	2	100
Total Recoverable Phenolics	4	4	100
Conductivity	4	4	100
TDS	681	681	100
TOC	4	4	100
TOX	4	4	100

**Table IV. Reason Codes and Definitions**

<b>Reason Code</b>	<b>Explanation</b>
a	qualified due to low abundance ( radiochemical activity)
ba	blank contamination above PQL
bb	blank contamination below PQL
be	qualified due to equipment blank contamination
bf	qualified due to field blank contamination
bl	qualified due to lab blank contamination
bt	qualified due to trip blank contamination
bp	qualified due to pump blank contamination (wells w/o dedicated pumps, when contamination is detected in the Pump Blk)
br	qualified due to filter blank contamination (aqueous Hexavalent Chromium and Dissolved sample fractions)
c	qualified due to calibration problems
cp	qualified due to insufficient ingrowth (radiochemical only)
dc	dual column confirmation RPD exceeded
e	concentration exceeded the calibration range
fd	qualified due to field duplicate imprecision
h	qualified due to holding time exceedance
i	qualified due to internal standard areas
k	qualified as Estimated Maximum Possible Concentrations (dioxins and PCB congeners)
l	qualified due to LCS recoveries
ld	qualified due to lab duplicate imprecision (matrix duplicate, MSD, LCSD)
m	qualified due to matrix spike recoveries
nb	qualified due to negative lab blank contamination (nondetect results only)
nd	qualified due to non-detected target analyte
o	other
orr	other result reported
p	qualified as a false positive due to contamination during shipping
pH	sample preservation not within acceptance range
q	qualified due to quantitation problem
s	qualified due to surrogate recoveries
sd	serial dilution did not meet control criteria
sp	detected value reported >SQL <PQL
st	sample receipt temperature exceeded
t	qualified due to elevated helium tracer concentrations
vh	volatile headspace detected in aqueous sample containers submitted for VOC analysis
x	qualified due to low % solids
z	qualified due to ICS results

Table V. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	SQL	PQL	Units	Validator Qualifier	Reason Code	Data Quality Indicator	Qualification Finding	Acceptance Criteria
4402684161	LVW6.6-1-1.3-20200702	07/02/20	E314.0	14797-73-0	Perchlorate	2.8	J	0.95	4.0	ug/l	J	sp	< PQL		
4402684161	LVW6.6-2-1.5-20200702	07/02/20	E314.0	14797-73-0	Perchlorate	1.1	J	0.95	4.0	ug/l	J	sp	< PQL		
4402684161	LVW6.6-3-0.8-20200702	07/02/20	E314.0	14797-73-0	Perchlorate	3.3	J	0.95	4.0	ug/l	J	sp	< PQL		
4402684161	LVW8.85-0.6-20200702	07/02/20	E314.0	14797-73-0	Perchlorate	1.1	J	0.95	4.0	ug/l	J	sp	< PQL		
4402684711	I-C-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	54		0.55	1.1	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-D-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	58		1.1	2.2	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-E-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	44		0.55	1.1	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-F-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	51	Fl	1.1	2.2	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-M-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	39		0.55	1.1	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-N-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	120		5.5	11	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402684711	I-X-20200707	07/07/20	E300	14797-55-8_N	Nitrate as N	160		1.1	2.2	mg/l	J+	m	MS/MSD %R	132, 131	80-120 %
4402688241	PC-115R-20200713	07/13/20	E200.7	7440-47-3	Chromium (total)	0.0025	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402688241	PC-121-20200713	07/13/20	E300	14797-55-8_N	Nitrate as N	0.086	J	0.055	0.11	mg/l	J	sp	< PQL		
4402688241	PC-99R2/R3-20200713	07/13/20	E218.6	18540-29-9	Chromium VI	0.00038	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402689131	ART-1A-20200714	07/14/20	E218.6	18540-29-9	Chromium VI	0.00046	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402698591	M-6A-20200804	08/04/20	E200.7	7439-89-6	Iron	0.077	J	0.050	0.10	mg/l	J	sp	< PQL		
4402701781	I-AA-20200811	08/11/20	E300	14797-55-8_N	Nitrate as N	13	Fl	0.55	1.1	mg/l	J+	m	MS/MSD %R	139, 134	80-120 %
4402701781	I-AB-20200811	08/11/20	E300	14797-55-8_N	Nitrate as N	35		0.55	1.1	mg/l	J+	m	MS/MSD %R	139, 134	80-120 %
4402701781	I-AR-20200811	08/11/20	E200.7	7440-47-3	Chromium (total)	24		0.0025	0.0050	mg/l	J	fd	FD RPD	85	30 %
4402701781	I-AR-20200811-FD	08/11/20	E200.7	7440-47-3	Chromium (total)	9.7		0.0025	0.0050	mg/l	J	fd	FD RPD	85	30 %
4402701781	I-B-20200811	08/11/20	E300	14797-55-8_N	Nitrate as N	71		1.1	2.2	mg/l	J+	m	MS/MSD %R	139, 134	80-120 %
4402701781	I-B-20200811-EB	08/11/20	E200.7	7440-47-3	Chromium (total)	0.0042	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402702851	PC-119-20200812	08/12/20	E300.1	14866-68-3	Chlorate	18	J	2.0	20	ug/l	J	sp	< PQL		
4402702851	PC-99R2/R3-20200812	08/12/20	E218.6	18540-29-9	Chromium VI	0.00033	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402702861	PC-150-20200812-FD	08/12/20	E300	14797-55-8_N	Nitrate as N	8.9	Fl	0.55	1.1	mg/l	J+	m	MS/MSD %R	122, -	80-120 %
4402703531	I-AC-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	11		0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-AD-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	9.6	Fl	0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-I-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	22		0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-J-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	7.0		0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-K-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	10		0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-V-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	56		1.1	2.2	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402703531	I-Z-20200813	08/13/20	E300	14797-55-8_N	Nitrate as N	12		0.55	1.1	mg/l	J+	m	MS/MSD %R	128, 132	80-120 %
4402711961	I-G-20200901	09/01/20	E300	14797-55-8_N	Nitrate as N	62		2.8	5.5	mg/l	J-	m	MS/MSD %R	-, 78	80-120 %
4402711961	I-Q-20200901	09/01/20	E300	14797-55-8_N	Nitrate as N	58		2.8	5.5	mg/l	J-	m	MS/MSD %R	-, 78	80-120 %
4402711961	I-T-20200901	09/01/20	E300	14797-55-8_N	Nitrate as N	68		2.8	5.5	mg/l	J-	m	MS/MSD %R	-, 78	80-120 %
4402711961	I-U-20200901	09/01/20	E300	14797-55-8_N	Nitrate as N	82	Fl	2.8	5.5	mg/l	J-	m	MS/MSD %R	-, 78	80-120 %
4402713551	PC-115R-20200903	09/03/20	E300	14797-55-8_N	Nitrate as N	3.5		0.28	0.55	mg/l	J+	m	MS/MSD %R	-, 123	80-120 %
4402713551	PC-116R-20200903	09/03/20	E300	14797-55-8_N	Nitrate as N	6.8		0.55	1.1	mg/l	J+	m	MS/MSD %R	-, 123	80-120 %
4402713551	PC-117-20200903	09/03/20	E300	14797-55-8_N	Nitrate as N	4.5		0.28	0.55	mg/l	J+	m	MS/MSD %R	-, 123	80-120 %
4402713551	PC-118-20200903	09/03/20	E300	14797-55-8_N	Nitrate as N	1.9		0.28	0.55	mg/l	J+	m	MS/MSD %R	-, 123	80-120 %
4402713551	PC-119-20200903	09/03/20	E300.1	14866-68-3	Chlorate	23	J	4.0	40	ug/l	J	sp	< PQL		
4402713551	PC-99R2/R3-20200903	09/03/20	E218.6	18540-29-9	Chromium VI	0.00049	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402713551	PC-99R2/R3-20200903	09/03/20	E300	14797-55-8_N	Nitrate as N	8.1	Fl	0.55	1.1	mg/l	J+	m	MS/MSD %R	-, 123	80-120 %
4402713571	ART-1A-20200903	09/03/20	E200.7	7440-47-3	Chromium (total)	0.0028	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402716611	LVW0.55-1.0-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	73		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW0.55-1.0-20200909-FD	09/09/20	E314.0	14797-73-0	Perchlorate	72		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-1-1.7-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	82		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-2-0.9-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	81		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-3-1.7-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	79		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-4-1.7-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	80		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-5-1.7-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	80		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW3.5-6-1.6-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	77		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.2-1-1.5-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	85		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.2-2-3.4-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	62		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.2-3-2.4-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	53		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.2-4-1.9-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	49		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.75-1-0.9-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	79	Fl	0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.75-2-1.4-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	81		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.75-3-1.0-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	77		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.75-4-1.2-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	48		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW4.75-5-1.1-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	52		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %

Table V. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	SQL	PQL	Units	Validator Qualifier	Reason Code	Data Quality Indicator	Qualification Finding	Acceptance Criteria
4402716611	LVW5.3-4-0.3-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	30		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW5.3-5-0.5-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	30		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW5.3-6-0.5-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	30		0.95	4.0	ug/l	J+	m	MS/MSD %R	124, -	80-120 %
4402716611	LVW6.6-2-2.7-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	2.1	J	0.95	4.0	ug/l	J	sp	< PQL		
4402716611	LVW6.6-3-0.9-20200909	09/09/20	E314.0	14797-73-0	Perchlorate	2.3	J	0.95	4.0	ug/l	J	sp	< PQL		
4402718411	I-D-20200915-EB	09/15/20	E200.7	7440-47-3	Chromium (total)	0.0033	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402718431	I-I-20200915	09/15/20	E300	14797-55-8_N	Nitrate as N	19		1.1	2.2	mg/l	J+	m	MS/MSD %R	133, 131	80-120 %
4402718431	I-J-20200915	09/15/20	E300	14797-55-8_N	Nitrate as N	6.6	F1	0.55	1.1	mg/l	J+	m	MS/MSD %R	133, 131	80-120 %
4402718431	I-V-20200915	09/15/20	E300	14797-55-8_N	Nitrate as N	47		1.1	2.2	mg/l	J+	m	MS/MSD %R	133, 131	80-120 %
4402718431	I-Z-20200915	09/15/20	E300	14797-55-8_N	Nitrate as N	11		1.1	2.2	mg/l	J+	m	MS/MSD %R	133, 131	80-120 %
4402722171	I-AB-20200923	09/23/20	E218.6	18540-29-9	Chromium VI	0.00026	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402735041	LVW5.3-3-0.6-20201016	10/16/20	E300.1	14866-68-3	Chlorate	180		4.0	40	ug/l	J+	s	Surrogate %R	121	90-115 %
4402735041	LVW7.2-1.0-20201015	10/15/20	E314.0	14797-73-0	Perchlorate	0.98	J	0.95	4.0	ug/l	J	sp	< PQL		
4402735041	LVW7.2-1.0-20201015-FD	10/15/20	E314.0	14797-73-0	Perchlorate	0.98	J	0.95	4.0	ug/l	J	sp	< PQL		
5501503101	E1-1-20201006 - EB	10/06/20	E314.0	14797-73-0	Perchlorate	0.68	J	0.31	1.0	ug/l	J	sp	< PQL		
5501503101	E2-5-20201006 - FD	10/06/20	SM2540C	TDS	Dissolved Solids (total)	4400	HD	100	100	mg/l	J-	h	Holding Times	9	7 days
5501508751	PC-116R-20201013	10/13/20	E200.7	7440-47-3	Chromium (total)	0.0058	JB	0.00030	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00038	0.0038 mg/L
5501508751	PC-117-20201013	10/13/20	E200.7	7440-47-3	Chromium (total)	0.0065	JB	0.00030	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00038	0.0038 mg/L
5501508751	PC-119-20201013	10/13/20	E300.1	14866-68-3	Chlorate	21	J	10	100	ug/l	J	sp	< PQL		
5501508751	PC-120-20201013-EB	10/13/20	E200.7	7440-47-3	Chromium (total)	0.00050	JB	0.00030	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00038	0.0038 mg/L
5501508751	PC-120-20201013-EB	10/13/20	E314.0	14797-73-0	Perchlorate	0.63	J	0.31	1.0	ug/l	J	sp	< PQL		
5501508751	PC-121-20201013	10/13/20	E300	14797-55-8_N	Nitrate as N	0.015	J	0.014	0.050	mg/l	J	sp	< PQL		
5501508751	PC-133-20201013	10/13/20	E300	14797-55-8_N	Nitrate as N	0.048	J	0.014	0.050	mg/l	J	sp	< PQL		
5501508751	PC-99R2/R3-20201013	10/13/20	E218.6	18540-29-9	Chromium VI	0.00035	J	0.00025	0.0010	mg/l	J	sp	< PQL		
5501508781	ART-2/2A-20201013	10/13/20	E314.0	14797-73-0	Perchlorate	11000	J	6300	20000	ug/l	J	sp	< PQL		
5501508781	ART-8A-20201013	10/13/20	E218.6	18540-29-9	Chromium VI	0.074	H	0.0013	0.0050	mg/l	J	DNR	orr		
5501508781	ART-9-20201013	10/13/20	E218.6	18540-29-9	Chromium VI	0.65	H	0.0025	0.010	mg/l	J	DNR	orr		
5501508781	PC-150-20201013	10/13/20	E218.6	18540-29-9	Chromium VI	0.038	H	0.00050	0.0020	mg/l	J	DNR	orr		
5501509891	I-Q-20201014	10/14/20	E314.0	14797-73-0	Perchlorate	610000	cn	16000	50000	ug/l	J	DNR	orr		
5501509891	I-T-20201014	10/14/20	E314.0	14797-73-0	Perchlorate	840000	cn	16000	50000	ug/l	J	DNR	orr		
5501509891	I-U-20201014	10/14/20	E314.0	14797-73-0	Perchlorate	920000	cn	16000	50000	ug/l	J	DNR	orr		
5501510551	I-F-20201015-EB	10/15/20	E200.7	7440-47-3	Chromium (total)	0.0045	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501521781	PC-56-20201102	11/02/20	E200.7	7440-47-3	Chromium (total)	0.0097	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501521781	PC-56-20201102	11/02/20	E314.0	14797-73-0	Perchlorate	19000	F1	160	500	ug/l	J-	m	MS/MSD %R	71, 69	80-120 %
5501521781	PC-94-20201102	11/02/20	E200.7	7440-47-3	Chromium (total)	0.0072	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501522881	PC-115R-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	8000		63	200	ug/l	J-	m	MS/MSD %R	71, 69	80-120 %
5501522881	PC-116R-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0045	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501522881	PC-117-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0059	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501522881	PC-117-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	8700		63	200	ug/l	J-	m	MS/MSD %R	71, 69	80-120 %
5501522881	PC-118-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	2300		63	200	ug/l	J-	m	MS/MSD %R	71, 69	80-120 %
5501522881	PC-119-20201103	11/03/20	E300.1	14866-68-3	Chlorate	19	J	10	100	ug/l	J	sp	< PQL		
5501522881	PC-121-20201103-FD	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0011	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501522881	PC-121-20201103-FD	11/03/20	E300.1	14866-68-3	Chlorate		U	100	1000	ug/l	J	DNR	orr		
5501522881	PC-121-20201103-FD	11/03/20	E300.1	14866-68-3	Chlorate		UH	10	100	ug/l	J	h	Holding Times	43	28 days
5501522881	PC-133-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.00088	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501522881	PC-133-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	1100		63	200	ug/l	J-	m	MS/MSD %R	71, 69	80-120 %
5501522881	PC-133-20201103-EB	11/03/20	E314.0	14797-73-0	Perchlorate	0.87	J	0.31	1.0	ug/l	J	sp	< PQL		
5501522881	PC-99R2/R3-20201103	11/03/20	E218.6	18540-29-9	Chromium VI	0.00038	J	0.00025	0.0010	mg/l	J	sp	< PQL		
5501522882	ART-9-20201103-EB	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0011	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	ARP-2A-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0031	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	ARP-3A-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0061	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	MW-K4-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	23000	F1	160	500	ug/l	J-	m	MS/MSD %R	69, 63	80-120 %
5501523111	MW-K5-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0019	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	PC-101R-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0076	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501523111	PC-156B-20201103	11/03/20	E300.1	14866-68-3	Chlorate	5.0	J	2.0	20	ug/l	J	sp	< PQL		
5501523111	PC-156B-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	660		63	200	ug/l	J	fd	FD RPD	32	30 %
5501523111	PC-156B-20201103-FD5	11/03/20	E300.1	14866-68-3	Chlorate	4.9	J	2.0	20	ug/l	J	sp	< PQL		
5501523111	PC-156B-20201103-FD5	11/03/20	E314.0	14797-73-0	Perchlorate	480		63	200	ug/l	J	fd	FD RPD	32	30 %
5501523111	PC-157A-20201103	11/03/20	E300.1	14866-68-3	Chlorate	16	J	10	100	ug/l	J	sp	< PQL		
5501523111	PC-158-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0067	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	PC-58-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0097	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L



Table V. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	SQL	PQL	Units	Validator Qualifier	Reason Code	Data Quality Indicator	Qualification Finding	Acceptance Criteria
5501523111	PC-59-20201103	11/03/20	E300.1	14866-68-3	Chlorate	63	J	10	100	ug/l	J	sp	< PQL		
5501523111	PC-62-20201103	11/03/20	E300	14797-55-8_N	Nitrate as N	0.018	J	0.014	0.050	mg/l	J	sp	< PQL		
5501523111	PC-90-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0011	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501523111	PC-91-20201103	11/03/20	E300.1	14866-68-3	Chlorate	88	J	10	100	ug/l	J	sp	< PQL		
5501523111	PC-97-20201103	11/03/20	E200.7	7440-47-3	Chromium (total)	0.0021	J	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00089	0.0089 mg/L
5501523111	PC-98R-20201103	11/03/20	E314.0	14797-73-0	Perchlorate	15000		160	500	ug/l	J-	m	MS/MSD %R	69, 63	80-120 %
5501523801	E1-2-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	1000000		31000	100000	ug/l	J	fd	FD RPD	86	30 %
5501523801	E1-2-20201104-FD	11/04/20	E314.0	14797-73-0	Perchlorate	2500000		16000	50000	ug/l	J	fd	FD RPD	86	30 %
5501523801	E1-3-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	430000		6300	20000	ug/l	J-	m	MS/MSD %R	69, 63	80-120 %
5501523801	E1-3-20201104-EB	11/04/20	E314.0	14797-73-0	Perchlorate	0.99	J	0.31	1.0	ug/l	J	sp	< PQL		
5501523801	E2-1-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	100000		6300	20000	ug/l	J-	m	MS/MSD %R	69, 63	80-120 %
5501523801	E2-2-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	530000	Hcn	63000	200000	ug/l	J-	h	Holding Times	35	28 days
5501523801	E2-2-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	520000	Hcn	63000	200000	ug/l	DNR	orr			
5501523801	E2-3-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	760000		6300	20000	ug/l	J-	m	MS/MSD %R	69, 63	80-120 %
5501524121	M-81A-20201104	11/04/20	E300	14797-55-8_N	Nitrate as N	43	E	0.028	0.10	mg/l	DNR	orr			
5501524121	M-81A-20201104	11/04/20	E300	14797-55-8_N	Nitrate as N	43	H	0.14	0.50	mg/l	J-	h	Holding Times	55.00	48 hours
5501524121	PC-123-20201104	11/04/20	E300	14797-55-8_N	Nitrate as N	24	E	0.014	0.050	mg/l	DNR	orr			
5501524121	PC-123-20201104	11/04/20	E300	14797-55-8_N	Nitrate as N	27	H	0.14	0.50	mg/l	J-	h	Holding Times	54.75	48 hours
5501524121	PC-131-20201104	11/04/20	E300.1	14866-68-3	Chlorate	42	J	20	200	ug/l	J	sp	< PQL		
5501524121	PC-132-20201104	11/04/20	E314.0	14797-73-0	Perchlorate	0.88	J	0.31	1.0	ug/l	J	sp	< PQL		
5501524121	PC-134D-20201104	11/04/20	E200.7	7440-47-3	Chromium (total)	0.0065	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501524121	PC-137D-20201104	11/04/20	E200.7	7440-47-3	Chromium (total)	0.0011	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501524121	PC-153R-20201104	11/04/20	E200.7	7440-47-3	Chromium (total)	0.0021	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501524121	PC-160-20201104-FB8	11/04/20	E300	14797-55-8_N	Nitrate as N	0.045	J	0.014	0.050	mg/l	J	sp	< PQL		
5501524941	M-11-20201105	11/05/20	E218.6	18540-29-9	Chromium VI	550	F1	5.0	20	ug/l	J-	m	MS/MSD %R	85, 87	90-110 %
5501524941	M-11-20201105-FD4	11/05/20	E218.6	18540-29-9	Chromium VI	550		5.0	20	ug/l	J-	m	MS/MSD %R	85, 87	90-110 %
5501524941	M-12A-20201105	11/05/20	E218.6	18540-29-9	Chromium VI	6400		130	500	ug/l	J-	m	MS/MSD %R	85, 87	90-110 %
5501524941	M-12A-20201105-FB4	11/05/20	E200.7	7440-47-3	Chromium (total)	0.0035	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501524941	M-14A-20201105	11/05/20	E300.1	14866-68-3	Chlorate	14000		200	2000	ug/l	J+	s	Surrogate %R	121	90-115 %
5501524941	M-38-20201105	11/05/20	E218.6	18540-29-9	Chromium VI	11000		130	500	ug/l	J-	m	MS/MSD %R	85, 87	90-110 %
5501524941	M-44-20201105	11/05/20	E218.6	18540-29-9	Chromium VI	680		5.0	20	ug/l	J-	m	MS/MSD %R	85, 87	90-110 %
5501524941	PC-159-20201105	11/05/20	E200.7	7440-47-3	Chromium (total)	0.0029	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501526221	ARP-1-20201106	11/06/20	E200.7	7440-47-3	Chromium (total)	0.0094	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501526221	PC-60-20201106	11/06/20	E200.7	7440-47-3	Chromium (total)	0.0016	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501527601	I-G-20201110	11/10/20	SM2540C	TDS	Dissolved Solids (total)	4300	D	100	100	mg/l	J	fd	FD RPD	72	30 %
5501527601	I-G-20201110-FD	11/10/20	SM2540C	TDS	Dissolved Solids (total)	9100	D	100	100	mg/l	J	fd	FD RPD	72	30 %
5501527601	I-H-20201110-EB	11/10/20	E200.7	7440-47-3	Chromium (total)	0.0054	JB	0.00085	0.010	mg/l	J	bl,bb,sp	Blank Contamination below PQL; <PQL	0.00146	0.0146 mg/L
5501530361	LVW7.2-1.0-20201112	11/12/20	E314.0	14797-73-0	Perchlorate	0.49	J	0.31	1.0	ug/l	J	sp	< PQL		
5501530361	LVW8.85-0.6-20201112	11/12/20	E314.0	14797-73-0	Perchlorate	0.49	J	0.31	1.0	ug/l	J	sp	< PQL		
5501532821	I-AC-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	1.5	F1	0.013	0.050	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-AD-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	1.6		0.013	0.050	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-I-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	7.6		0.13	0.50	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-J-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	3.9		0.025	0.10	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-K-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	2.2		0.013	0.050	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-V-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	9.4		0.13	0.50	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501532821	I-Z-20201118	11/18/20	E218.6	18540-29-9	Chromium VI	7.0		0.13	0.50	mg/l	J-	m	MS/MSD %R	66, 69	90-110 %
5501540241	PC-116R-20201203	12/03/20	E200.7	7440-47-3	Chromium (total)	0.0026	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501540241	PC-117-20201203	12/03/20	E200.7	7440-47-3	Chromium (total)	0.0048	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501540241	PC-99R2/R3-20201203	12/03/20	E218.6	18540-29-9	Chromium VI	0.00026	J	0.00025	0.0010	mg/l	J	sp	< PQL		
5501540241	PC-99R2/R3-20201203-FD	12/03/20	E218.6	18540-29-9	Chromium VI	0.00026	J	0.00025	0.0010	mg/l	J	sp	< PQL		
5501540251	ART-2/2A-20201203	12/03/20	E300	14797-55-8_N	Nitrate as N	1.5	J	1.1	2.2	mg/l	J	sp	< PQL		
5501543931	I-I-20201209-FD	12/09/20	E300	14797-55-8_N	Nitrate as N	19		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543931	I-J-20201209-EB	12/09/20	E200.7	7440-47-3	Chromium (total)	0.0017	J	0.00085	0.010	mg/l	J	sp	< PQL		
5501543961	I-G-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	76		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543961	I-H-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	120		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543961	I-P-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	110		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543961	I-Q-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	89	F1	0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543961	I-T-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	93		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501543961	I-U-20201209	12/09/20	E300	14797-55-8_N	Nitrate as N	110		0.14	0.50	mg/l	J-	m	MS/MSD %R	62, 56	80-120 %
5501546061	C1-E-0.0-20201210	12/10/20	E300.1	14866-68-3	Chlorate	4500		100	1000	ug/l	J+	m	MS/MSD %R	- , 130	75-125 %
5501546061	C1-W-0.0-20201210	12/10/20	E300.1	14866-68-3	Chlorate	4400		100	1000	ug/l	J+	m	MS/MSD %R	- , 130	75-125 %

Table V. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	SQL	PQL	Units	Validator Qualifier	Reason Code	Data Quality Indicator	Qualification Finding	Acceptance Criteria
5501546061	LVW3.5-1-1.7-20201211	12/11/20	E300.1	14866-68-3	Chlorate	240		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW3.5-2-0.9-20201211	12/11/20	E300.1	14866-68-3	Chlorate	230		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW3.5-3-1.0-20201211	12/11/20	E300.1	14866-68-3	Chlorate	230		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW3.5-4-1.2-20201211	12/11/20	E300.1	14866-68-3	Chlorate	220		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.2-1-1.6-20201211	12/11/20	E300.1	14866-68-3	Chlorate	280		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.2-2-2.5-20201211	12/11/20	E300.1	14866-68-3	Chlorate	260		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.2-3-2.6-20201211	12/11/20	E300.1	14866-68-3	Chlorate	170		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.2-4-1.7-20201211	12/11/20	E300.1	14866-68-3	Chlorate	150		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.75-1-0.9-20201211	12/11/20	E300.1	14866-68-3	Chlorate	290		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.75-2-1.3-20201211	12/11/20	E300.1	14866-68-3	Chlorate	260		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.75-3-0.8-20201211	12/11/20	E300.1	14866-68-3	Chlorate	210		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.75-4-1.3-20201211	12/11/20	E300.1	14866-68-3	Chlorate	150	F1	10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501546061	LVW4.75-5-1.0-20201211	12/11/20	E300.1	14866-68-3	Chlorate	150		10	100	ug/l	J+	m	MS/MSD %R	-, 130	75-125 %
5501553731	M-10-20201228	12/28/20	E200.7	7782-49-2	Selenium	0.0035	J	0.0025	0.10	mg/l	J	sp	< PQL		
5501553731	M-10-20201228	12/28/20	E200.7	7440-38-2	Arsenic	0.020	J	0.0039	0.10	mg/l	J	sp	< PQL		

**ATTACHMENT A**

**Metals Data Validation Report**

## Arsenic, Boron, Chromium, Iron, Manganese, Selenium, and Sodium by Environmental Protection Agency (EPA) Method 200.7

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

### II. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

SDG	Blank ID	Analyte	Maximum Concentration	Associated Samples
440-268971-1	PB (prep blank)	Chromium	0.0128 mg/L	I-O 20200715 I-W 20200715 I-P 20200715 I-H 20200715 I-U 20200715 I-T 20200715 I-G 20200715 I-Q 20200715
550-150310-1	PB (prep blank)	Chromium	0.000660 mg/L	E1-1 20201006 E1-2 20201006 E1-3 20201006 E2-1 20201006 E2-2 20201006 E2-3 20201006 E2-4 20201006 E2-5 20201006 E2-5 20201006-FD E1-1 20201006-EB
550-150875-1	PB (prep blank)	Chromium	0.000380 mg/L	PC-99R2/R3 20201013 PC-115R 20201013 PC-116R 20201013 PC-117 20201013 PC-118 20201013 PC-119 20201013 PC-120 20201013 PC-121 20201013 PC-133 20201013 PC-119 20201013-FD PC-120 20201013-EB
550-152288-2	PB (prep blank)	Chromium	0.000890 mg/L	ART-9 20201103-EB

SDG	Blank ID	Analyte	Maximum Concentration	Associated Samples
550-152311-1	PB (prep blank)	Chromium	0.000890 mg/L	PC-157A-20201103 PC-157B-20201103 PC-97-20201103 PC-144-20201103 PC-135A-20201103 PC-53-20201103 PC-53-20201103-FD6 MW-K5-20201103 PC-58-20201103 ARP-7-20201103 ARP-2A-20201103 ARP-3A-20201103 MW-K4-20201103 PC-158-20201103 PC-62-20201103 PC-62-20201103-EB5 PC-98R-20201103 PC-59-20201103-FB6 PC-59-20201103
550-152494-1	PB (prep blank)	Chromium	0.00637 mg/L	M-69-20201105 M-70-20201105 M-71-20201105 M-74-20201105 M-83-20201105 M-67-20201105-FB9 M-80-20201105 M-68-20201105 M-67-20201105 M-161D-20201105 M-14A-20201105 M-66-20201105 M-38-20201105-EB4 M-38-20201105 M-37-20201105 M-22A-20201105
550-152760-1	PB (prep blank)	Chromium	0.00146 mg/L	I-Q 20201110 I-G 20201110 I-T 20201110 I-U 20201110 I-H 20201110 I-P 20201110 I-W 20201110 I-O 20201110 I-G 20201110-FD I-H 20201110-EB
550-155373-1	PB (prep blank)	Manganese	0.000580 mg/L	M-10-20201228

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater than the concentrations found in the associated laboratory blanks with the following exceptions:

SDG	Sample	Analyte	Reported Concentration	Modified Final Concentration
550-150875-1	PC-116R 20201013	Chromium	0.0058 mg/L	0.0058J mg/L

SDG	Sample	Analyte	Reported Concentration	Modified Final Concentration
550-150875-1	PC-117 20201013	Chromium	0.0065 mg/L	0.0065J mg/L
550-150875-1	PC-120 20201013-EB	Chromium	0.00050 mg/L	0.00050J mg/L
550-152288-2	ART-9 20201103-EB	Chromium	0.0011 mg/L	0.0011J mg/L
550-152311-1	PC-97-20201103	Chromium	0.0021 mg/L	0.0021J mg/L
550-152311-1	MW-K5-20201103	Chromium	0.0019 mg/L	0.0019J mg/L
550-152311-1	PC-58-20201103	Chromium	0.0097 mg/L	0.0097J mg/L
550-152311-1	ARP-2A-20201103	Chromium	0.0031 mg/L	0.0031J mg/L
550-152311-1	ARP-3A-20201103	Chromium	0.0061 mg/L	0.0061J mg/L
550-152311-1	PC-158-20201103	Chromium	0.0067 mg/L	0.0067J mg/L
550-152760-1	I-H 20201110-EB	Chromium	0.0054 mg/L	0.0054J mg/L

### III. Field Blanks

Samples E1-2 20200701 EB (from SDG 440-268249-1), I-AD 20200708-EB (from SDG 440-268566-1), PC-99R2/R3 20200713-EB (from SDG 440-268824-1), ART-9 20200714 EB (from SDG 440-268913-1), M-11-20200804-EB4 (from SDG 440-269860-1), E2-2 20200805-EB (from SDG 440-269928-1), I-B 20200811-EB (from SDG 440-270178-1), PC-116R-20200812-EB (from SDG 440-270285-1), ART-1A 20200812-EB (from SDG 440-270286-1), E2-4 20200901-EB (from SDG 440-271195-1), PC-118 20200903-EB (from SDG 440-271355-1), ART-3A 20200903-EB (from SDG 440-271357-1), I-D 20200915-EB (from SDG 440-271841-1), E1-1 20201006-EB (from SDG 550-150310-1), PC-120 20201013-EB (from SDG 550-150875-1), ART-7B 20201013-EB (from SDG 550-150878-1), I-F 20201015-EB (from SDG 550-151055-1), PC-94-20201102-EB6 (from SDG 550-152178-1), PC-133 20201103-EB (from SDG 550-152288-1), ART-9 20201103-EB (from SDG 550-152288-2), PC-62-20201103-EB5 (from SDG 550-152311-1), E1-3 20201104-EB (from SDG 550-152380-1), PC-132-20201104-EB7, M-81A-20201104-EB8 (both from SDG 550-152412-1), M-38-20201105-EB4 (from SDG 550-152494-1), I-H 20201110-EB (from SDG 550-152760-1), E2-2 20201202-EB (from SDG 550-153952-1), PC-115R 20201203-EB (from SDG 550-154024-1), ART-1A 20201203-EB (from SDG 550-154025-1), and I-J 20201209-EB (from SDG 550-154393-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
440-270178-1	I-B 20200811-EB	08/11/20	Chromium	0.0042 mg/L	I-B 20200811
440-271841-1	I-D 20200915-EB	09/15/20	Chromium	0.0033 mg/L	I-D 20200915
550-150875-1	PC-120 20201013-EB	10/13/20	Chromium	0.00050 mg/L	PC-120 20201013
550-151055-1	I-F 20201015-EB	10/15/20	Chromium	0.0045 mg/L	I-F 20201015
550-152288-2	ART-9 20201103-EB	11/03/20	Chromium	0.0011 mg/L	ART-9 20201103
550-152494-1	M-38-20201105-EB4	11/05/20	Chromium	0.019 mg/L	M-38-20201105
550-152760-1	I-H 20201110-EB	11/10/20	Chromium	0.0054 mg/L	I-H 20201110
550-154393-1	I-J 20201209-EB	12/09/20	Chromium	0.0017 mg/L	I-J 20201209

Samples M12A-20200804-FB4 (from SDG 440-269860-1), PC-86-20201102-FB5 (from SDG 550-152178-1), PC-59-20201103-FB6, ARP-6B-20201103-FB7 (both from SDG 550-152311-1), PC-149-20201104-FB9, PC-160-20201104-FB8 (both from SDG 550-152412-1), M-12A-20201105-FB4, and M-67-20201105-FB9 (both from SDG 550-152494-1) were identified as a field blank. No contaminants were found were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
550-152494-1	M-12A-20201105-FB4	11/05/20	Chromium	0.0035 mg/L	M-12A-20201105

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater than the concentrations found in the associated field blanks.

#### IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. For M-6A-20200804MS/MSD (from SDG 440-269859-1) and M-5A-20200805MS/MSD (from SDG 440-269930-1), no data were qualified for sodium percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration. For I-P 20200813MS/MSD (from SDG 440-270355-1), I-O 20200901MS/MSD (from SDG 440-271196-1), I-N 20200909MS/MSD (from SDG 440-271566-1), and I-C 20200915MS/MSD (from SDG 440-271841-1), no data were qualified for chromium percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration. Relative percent differences (RPD) were within QC limits.

## **V. Duplicate Sample Analysis**

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in these SDGs, and therefore duplicate analyses were not performed for these SDGs.

## **VI. Serial Dilution**

Serial dilution was not performed for these SDGs.

## **VII. Laboratory Control Samples**

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **VIII. Field Duplicates**

Samples E1-3 20200701 and E1-3 20200701 FD (both from SDG 440-268249-1), samples I-AC 20200708 and I-AC 20200708-FD (both from SDG 440-268566-1), samples PC-133 20200713 and PC-133 20200713-FD (both from SDG 440-268824-1), samples ART-8A 20200714 and ART-8A 20200714 FD (both from SDG 440-268913-1), samples E2-1 20200805 and E2-1 20200805-FD (both from SDG 440-269928-1), samples M-37-20200805 and M-37-20200805-FD4 (both from SDG 440-269929-1), samples I-AR 20200811 and I-AR 20200811-FD (both from SDG 440-270178-1), samples PC-115R-20200812 and PC-115R-20200812-FD (both from SDG 440-270285-1), samples PC-150 20200812 and PC-150 20200812-FD (both from SDG 440-270286-1), samples E2-3 20200901 and E2-3 20200901-FD (both from SDG 440-271195-1), samples PC-117 20200903 and PC-117 20200903-FD (both from SDG 440-271355-1), samples ART-2/2A 20200903 and ART-2/2A 20200903-FD (both from SDG 440-271357-1), samples I-C 20200915 and I-C 20200915-FD (both from SDG 440-271841-1), samples E2-5 20201006 and E2-5 20201006-FD (both from SDG 550-150310-1), samples PC-119 20201013 and PC-119 20201013-FD (both from SDG 550-150875-1), samples ART-4 20201013 and ART-4 20201013-FD (both from SDG 550-150878-1), samples I-E 20201015 and I-E 20201015-FD (both from SDG 550-151055-1), samples PC-121 20201103 and PC-121 20201103-FD (both from SDG 550-152288-1), samples ART-8A 20201103 and ART-8A 20201103-FD (both from SDG 550-152288-2), samples PC-53-20201103 and PC-53-20201103-FD6 (both from SDG 550-152311-1), samples PC-156B-20201103 and PC-156B-20201103-FD5 (both from SDG 550-152311-1), samples E1-2 20201104 and E1-2 20201104-FD (both from SDG 550-152380-1), samples PC-125-20201104 and PC-125-20201104-FD7 (both from SDG 550-152412-1), samples PC-128-20201104 and PC-128-20201104-FD8 (both from SDG 550-152412-1), samples M-11-20201105 and M-11-20201105-FD4 (both from SDG 550-152494-1), samples M-72-20201105 and M-72-20201105-FD9 (both from SDG 550-152494-1), samples I-G 20201110 and I-G 20201110-FD (both from SDG 550-152760-1), samples E2-1 20201202 and E2-1 20201202-FD (both from SDG 550-153952-1), samples PC-99R2/R3 20201203 and PC-99R2/R3 20201203-FD (both from SDG 550-154024-1), samples PC-150 20201203 and PC-150 20201203-FD (both from SDG 550-154025-1), and samples I-I 20201209 and I-I 20201209-FD (both from SDG 550-



154393-1) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E1-3 20200701	E1-3 20200701 FD			
440-268249-1	Chromium	0.53	0.51	4 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-AC 20200708	I-AC 20200708-FD			
440-268566-1	Chromium	2.4	2.3	4 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-8A 20200714	ART-8A 20200714 FD			
440-268913-1	Chromium	0.081	0.079	3 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-1 20200805	E2-1 20200805-FD			
440-269928-1	Chromium	0.038	0.034	11 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-37-20200805	M-37-20200805-FD4			
440-269929-1	Chromium	0.36	0.36	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-AR 20200811	I-AR 20200811-FD			
440-270178-1	Chromium	24	9.7	85 (≤30)	J (all detects)	A

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-150 20200812	PC-150 20200812-FD			
440-270286-1	Chromium	0.052	0.052	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-3 20200901	E2-3 20200901-FD			
440-271195-1	Chromium	0.052	0.052	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-117 20200903	PC-117 20200903-FD			
440-271355-1	Chromium	0.0079	0.0094	17 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-2/2A 20200903	ART-2/2A 20200903-FD			
440-271357-1	Chromium	0.0062	0.0084	30 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-C 20200915	I-C 20200915-FD			
440-271841-1	Chromium	3.1	2.9	7 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-5 20201006	E2-5 20201006-FD			
550-150310-1	Chromium	0.15	0.14	7 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-4 20201013	ART-4 20201013-FD			
550-150878-1	Chromium	0.16	0.15	6 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-E 20201015	I-E 20201015-FD			
550-151055-1	Chromium	5.1	5.0	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-121 20201103	PC-121 20201103-FD			
550-152288-1	Chromium	0.010U	0.0011	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-8A 20201103	ART-8A 20201103-FD			
550-152288-2	Chromium	0.068	0.069	1 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-53-20201103	PC-53-20201103-FD6			
550-152311-1	Chromium	0.23	0.23	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E1-2 20201104	E1-2 20201104-FD			
550-152380-1	Chromium	0.37	0.37	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-125-20201104	PC-125-20201104-FD7			
550-152412-1	Chromium	0.074	0.068	8 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-128-20201104	PC-128-20201104-FD8			
550-152412-1	Chromium	0.14	0.15	7 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-11-20201105	M-11-20201105-FD4			
550-152494-1	Chromium	1.4	1.4	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-72-20201105	M-72-20201105-FD9			
550-152494-1	Chromium	11	10	10 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-G 20201110	I-G 20201110-FD			
550-152760-1	Chromium	13	14	7 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-1 20201202	E2-1 20201202-FD			
550-153952-1	Chromium	0.029	0.029	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-150 20201203	PC-150 20201203-FD			
550-154025-1	Chromium	0.041	0.042	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-I 20201209	I-I 20201209-FD			
550-154393-1	Chromium	8.5	8.4	1 (≤30)	-	-

NQ = No data were qualified when either the primary or duplicate result was not detected or was below the practical quantitation limit (PQL).

### IX. Sample Result Verification

Raw data were not reviewed for Stage 2A validation.

### X. Overall Assessment of Data

The analysis was conducted within all specifications of the method.

Due to field duplicate RPD, data were qualified as estimated in two samples.

Due to laboratory blank contamination, data were qualified as estimated in eleven samples.

No results were rejected in these SDGs.

**NERT GWM Performance Sampling, July through December 2020**

**Metals - Data Qualification Summary - SDGs 440-268249-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271841-1, 440-271843-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151365-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153282-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154787-1, 550-155373-1**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-270178-1	I-AR 20200811 I-AR 20200811-FD	Chromium	J (all detects)	A	Field duplicates (RPD) (fd)

**NERT GWM Performance Sampling, July through December 2020**

**Metals - Laboratory Blank Data Qualification Summary - SDGs 440-268249-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271841-1, 440-271843-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151365-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153282-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154787-1, 550-155373-1**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
550-150875-1	PC-116R 20201013	Chromium	0.0058J mg/L	A	bl, bb
550-150875-1	PC-117 20201013	Chromium	0.0065J mg/L	A	bl, bb
550-150875-1	PC-120 20201013-EB	Chromium	0.00050J mg/L	A	bl, bb
550-152288-2	ART-9 20201103-EB	Chromium	0.0011J mg/L	A	bl, bb
550-152311-1	PC-97-20201103	Chromium	0.0021J mg/L	A	bl, bb
550-152311-1	MW-K5-20201103	Chromium	0.0019J mg/L	A	bl, bb
550-152311-1	PC-58-20201103	Chromium	0.0097J mg/L	A	bl, bb

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
550-152311-1	ARP-2A-20201103	Chromium	0.0031J mg/L	A	bl, bb
550-152311-1	ARP-3A-20201103	Chromium	0.0061J mg/L	A	bl, bb
550-152311-1	PC-158-20201103	Chromium	0.0067J mg/L	A	bl, bb
550-152760-1	I-H 20201110-EB	Chromium	0.0054J mg/L	A	bl, bb

**NERT GWM Performance Sampling, July through December 2020**

**Metals - Field Blank Data Qualification Summary - SDGs 440-268249-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271841-1, 440-271843-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151365-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153282-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154787-1, 550-155373-1**

No Sample Data Qualified in these SDGs

**ATTACHMENT B**

**Wet Chemistry Data Validation Report**

**Ammonia as Nitrogen by Environmental Protection Agency (EPA) Method 350.1**  
**Chloride, Nitrate as Nitrogen, Nitrite as Nitrogen, Nitrate/Nitrite as Nitrogen, and Sulfate by EPA Method 300.0**  
**Chlorate by EPA Method 300.1B**  
**Field pH**  
**Hexavalent Chromium by EPA Method 218.6**  
**Nitrate/Nitrite as Nitrogen by Calculation**  
**Perchlorate by EPA Method 314.0**  
**Conductivity by Standard Method 2510B**  
**Total Dissolved Solids by Standard Method 2540C**  
**Total Inorganic Nitrogen by Calculation**  
**Total Organic Carbon by Standard Method 5310C**  
**Total Recoverable Phenolics by EPA Method 420.1**  
**Toxic Organic Halides by EPA Method 9020B**

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met with the following exceptions:

SDG	Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
550-150310-1	E2-5 20201006-FD	Total dissolved solids	9 days	7 days	J- (all detects)	P
550-150878-1	ART-8A 20201013	Hexavalent chromium	24.05 hours	24 hours	J- (all detects)	A
550-150878-1	ART-9 20201013	Hexavalent chromium	24.02 hours	24 hours	J- (all detects)	A
550-150878-1	PC-150 20201013	Hexavalent chromium	24.10 hours	24 hours	J- (all detects)	A
550-152288-1	PC-121 20201103-FDRE	Chlorate	43 days	28 days	UJ (all non-detects)	A
550-152380-1	E2-2 20201104 E2-2 20201104RE	Perchlorate	35 days	28 days	J- (all detects)	P
550-152412-1	PC-123-20201104DL	Nitrate as N	54.75 hours	48 hours	J- (all detects)	A
550-152412-1	M-81A-20201104DL	Nitrate as N	55.00 hours	48 hours	J- (all detects)	A

## II. Laboratory Blanks

Laboratory blanks were analyzed as required by the methods. No contaminants were found in the laboratory blanks with the following exceptions:



SDG	Blank ID	Analyte	Maximum Concentration	Associated Samples
440-270178-1	MB 440-620495/6	Perchlorate	0.000552 mg/L	I-AA 20200811
440-270286-1	MB 440-620495/6	Perchlorate	0.000552 mg/L	ART-1A 20200812 ART-2/2A 20200812 ART-7B 20200812 ART-8A 20200812 PC-150 20200812 PC-150 20200812-FD ART-1A 20200812-EB

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater than the concentrations found in the associated laboratory blanks.

### III. Field Blanks

Samples E1-2 20200701 EB (from SDG 440-268249-1), I-AD 20200708-EB (from SDG 440-268566-1), PC-99R2/R3 20200713-EB (from SDG 440-268824-1), ART-9 20200714 EB (from SDG 440-268913-1), M-11-20200804-EB4 (from SDG 440-269860-1), E2-2 20200805-EB (from SDG 440-269928-1), I-B 20200811-EB (from SDG 440-270178-1), PC-116R-20200812-EB (from SDG 440-270285-1), ART-1A 20200812-EB (from SDG 440-270286-1), E2-4 20200901-EB (from SDG 440-271195-1), PC-118 20200903-EB (from SDG 440-271355-1), ART-3A 20200903-EB (from SDG 440-271357-1), I-D 20200915-EB (from SDG 440-271841-1), E1-1 20201006-EB (from SDG 550-150310-1), PC-120 20201013-EB (from SDG 550-150875-1), ART-7B 20201013-EB (from SDG 550-150878-1), I-F 20201015-EB (from SDG 550-151055-1), PC-94-20201102-EB6 (from SDG 550-152178-1), PC-133 20201103-EB (from SDG 550-152288-1), ART-9 20201103-EB (from SDG 550-152288-2), PC-62-20201103-EB5 (from SDG 550-152311-1), E1-3 20201104-EB (from SDG 550-152380-1), PC-132-20201104-EB7, M-81A-20201104-EB8 (both from SDG 550-152412-1), M-38-20201105-EB4 (from SDG 550-152494-1), I-H 20201110-EB (from SDG 550-152760-1), E2-2 20201202-EB (from SDG 550-153952-1), PC-115R 20201203-EB (from SDG 550-154024-1), ART-1A 20201203-EB (from SDG 550-154025-1), and I-J 20201209-EB (from SDG 550-154393-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
550-150310-1	E1-1 20201006-EB	10/06/20	Perchlorate	0.68 ug/L	E1-1 20201006
550-150875-1	PC-120 20201013-EB	10/13/20	Perchlorate	0.63 ug/L	PC-120 20201013
550-150878-1	ART-7B 20201013-EB	10/13/20	Perchlorate	1.3 ug/L	ART-7B 20201013
550-152288-1	PC-133 20201103-EB	11/03/20	Perchlorate	0.87 ug/L	PC-133 20201103

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
550-152380-1	E1-3 20201104-EB	11/04/20	Perchlorate	0.99 ug/L	E1-3 20201104
550-154393-1	I-J 20201209-EB	12/09/20	Nitrate as N Perchlorate	0.17 ug/L 14 ug/L	I-J 20201209

Samples LVW6.05-20200702-FB, LVW0.55-20200702-FB (both from SDG 440-268416-1), M12A-20200804-FB4 (from SDG 440-269860-1), LVW6.05-20200909-FB, LVW0.55-20200909-FB (both from SDG 440-271661-1), LVW6.05-20201015-FB, LVW0.55-20201016-FB (both from SDG 440-273504-1), PC-86-20201102-FB5 (from SDG 550-152178-1), PC-59-20201103-FB6, ARP-6B-20201103-FB7 (both from SDG 550-152311-1), PC-149-20201104-FB9, PC-160-20201104-FB8 (both from SDG 550-152412-1), M-12A-20201105-FB4, M-67-20201105-FB9 (both from SDG 550-152494-1), LVW7.2-20201112-FB, LVW6.05-20201112-FB (both from SDG 550-153036-1), LVW6.05-20201210-FB, and LVW7.2-20201211-FB (both from SDG 550-154606-1) were identified as field blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
550-152412-1	PC-160-20201104-FB8	11/04/20	Nitrate as N	0.045 mg/L	PC-160-20201104

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater than the concentrations found in the associated field blanks.

#### IV. Surrogates

Surrogates were added to all samples as required by Method 300.1B. All surrogate recoveries (%R) were within QC limits with the following exceptions:

SDG	Sample	Surrogate	%R (Limits)	Affected Analyte	Flag	A or P
440-273504-1	LVW5.3-3-0.6-20201016	Dichloroacetic acid	121 (90-115)	Chlorate	J+ (all detects)	P
550-152494-1	M-14A-20201105	Dichloroacetic acid	121 (90-115)	Chlorate	J+ (all detects)	P

#### V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-268471-1	I-F 20200707MS/MSD (I-F 20200707 I-X 20200707 I-N 20200707 I-E 20200707 I-M 20200707 I-D 20200707 I-C 20200707)	Nitrate as N	132 (80-120)	131 (80-120)	J+ (all detects)	A
440-270178-1	I-AA 20200811MS/MSD (I-AA 20200811 I-AB 20200811 I-B 20200811)	Nitrate as N	139 (80-120)	134 (80-120)	J+ (all detects)	A
440-270286-1	PC-150 20200812-FDMS/MSD (PC-150 20200812-FD)	Nitrate as N	122 (80-120)	-	J+ (all detects)	A
440-270353-1	I-AD 20200813MS/MSD (I-AD 20200813 I-AC 20200813 I-K 20200813 I-J 20200813 I-Z 20200813 I-I 20200813 I-V 20200813)	Nitrate as N	128 (80-120)	132 (80-120)	J+ (all detects)	A
440-271196-1	I-U 20200901MS/MSD (I-U 20200901 I-T 20200901 I-G 20200901 I-Q 20200901)	Nitrate as N	-	78 (80-120)	J- (all detects)	A
440-271355-1	PC-99R2/R3 20200903MS/MSD (PC-99R2/R3 20200903 PC-115R 20200903 PC-116R 20200903 PC-117 20200903 PC-118 20200903)	Nitrate as N	-	123 (80-120)	J+ (all detects)	A
440-271661-1	LVW4.75-1-0.9-20200909MS/MSD (LVW5.3-4-0.3-20200909 LVW5.3-5-0.5-20200909 LVW5.3-6-0.5-20200909 LVW4.75-1-0.9-20200909 LVW4.75-2-1.4-20200909 LVW4.75-3-1.0-20200909 LVW4.75-4-1.2-20200909 LVW4.75-5-1.1-20200909 LVW4.2-1-1.5-20200909 LVW4.2-2-3.4-20200909 LVW4.2-3-2.4-20200909 LVW4.2-4-1.9-20200909 LVW3.5-1-1.7-20200909 LVW3.5-2-0.9-20200909 LVW3.5-3-1.7-20200909 LVW3.5-4-1.7-20200909 LVW3.5-5-1.7-20200909 LVW3.5-6-1.6-20200909 LVW0.55-1.0-20200909 LVW0.55-1.0-20200909-FD)	Perchlorate	124 (80-120)	-	J+ (all detects)	A

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-271843-1	I-J 20200915MS/MSD (I-J 20200915 I-Z 20200915 I-I 20200915 I-V 20200915)	Nitrate as N	133 (80-120)	131 (80-120)	J+ (all detects)	A
550-152178-1	PC-56-20201102MS/MSD (PC-56-20201102)	Perchlorate	71 (80-120)	69 (80-120)	J- (all detects)	A
550-152288-1	PC-56-20201102MS/MSD (PC-115R 20201103 PC-117 20201103 PC-118 20201103 PC-133 20201103)	Perchlorate	71 (80-120)	69 (80-120)	J- (all detects)	A
550-152311-1	MW-K4-20201103MS/MSD (MW-K4-20201103 PC-98R-20201103)	Perchlorate	69 (80-120)	63 (80-120)	J- (all detects)	A
550-152380-1	MW-K4-20201103MS/MSD (E1-3 20201104 E2-1 20201104 E2-3 20201104)	Perchlorate	69 (80-120)	63 (80-120)	J- (all detects)	A
550-152494-1	M-11-20201105MS/MSD (M-11-20201105 M-11-20201105-FD4 M-12A-20201105 M-44-20201105 M-38-20201105)	Hexavalent chromium	85 (90-110)	87 (90-110)	J- (all detects)	A
550-153282-1	I-AC 20201118MS/MSD (I-AC 20201118 I-AD 20201118 I-K 20201118 I-J 20201118 I-Z 20201118 I-I 20201118 I-V 20201118)	Hexavalent chromium	66 (90-110)	69 (90-110)	J- (all detects)	A
550-154393-1	I-Q 20201209MS/MSD (I-I 20201209-FD)	Nitrate as N	62 (80-120)	56 (80-120)	J- (all detects)	A
550-154396-1	I-Q 20201209MS/MSD (I-Q 20201209 I-G 20201209 I-T 20201209 I-U 20201209 I-H 20201209 I-P 20201209)	Nitrate as N	62 (80-120)	56 (80-120)	J- (all detects)	A

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
550-154606-1	LVW4.75-4-1.3-20201211MS/MSD (C1-E-0.0-20201210 C1-W-0.0-20201210 LVW4.75-1-0.9-20201211 LVW4.75-2-1.3-20201211 LVW4.75-3-0.8-20201211 LVW4.75-4-1.3-20201211 LVW4.75-5-1.0-20201211 LVW4.2-1-1.6-20201211 LVW4.2-2-2.5-20201211 LVW4.2-3-2.6-20201211 LVW4.2-4-1.7-20201211 LVW3.5-1-1.7-20201211 LVW3.5-2-0.9-20201211 LVW3.5-3-1.0-20201211 LVW3.5-4-1.2-20201211)	Chlorate	-	130 (75-125)	J+ (all detects)	A

For I-AC 20200708-FDMS/MSD (from SDG 440-268566-1), M-44-20200804MS/MSD (from SDG 440-269860-1), I-J 20200813MS/MSD (from SDG 440-270353-1), I-J 20200915MS/MSD (from SDG 440-271843-1), I-L 20200923MS/MSD (from SDG 440-272217-1), I-AC 20201020MS/MSD, I-AD 20201020MS/MSD (both from SDG 550-151365-1), and I-W 20201209MS/MSD (from SDG 550-154396-1), no data were qualified for hexavalent chromium percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

For PC-118 20200713MS/MSD (from SDG 440-268824-1), E2-1 20200805MS/MSD, E2-1 20200805-FDMS/MSD (both from SDG 440-269928-1), I-AA 20200811MS/MSD, I-Y 20200811MS/MSD (both from SDG 440-270178-1), PC-118-20200812MS/MSD (from SDG 440-270285-1), I-Q 20200813MS/MSD (from SDG 440-270355-1), PC-150 20200903MS/MSD (from SDG 440-271357-1), ART-2/2A 20200903-FDMS/MSD (from SDG 440-271357-1), PC-99R2/R3 20201103MS/MSD (from SDG 550-152288-1), PC-152-20201104MS/MSD, PC-149-20201104MS/MSD, PC-154-20201104MS/MSD, PC-148-20201104MS/MSD, PC-55-20201104MS/MSD (all five from SDG 550-152412-1), M-11-20201105MS/MSD, M-11-20201105-FD4MS/MSD, M-189-20201105MS/MSD, M-69-20201105MS/MSD (all four from SDG 550-152494-1), I-AC 20201118MS/MSD (from SDG 550-153282-1), E2-1 20201202-FDMS/MSD (from SDG 550-153952-1), PC-115R 20201203MS/MSD (from SDG 550-154024-1), ART-1A 20201203MS/MSD (from SDG 550-154025-1), and I-M 20201208MS/MSD (from SDG 550-154293-1), no data were qualified for chlorate percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

For ART-1A 20200903MS/MSD (from SDG 440-271357-1) and I-AA 20200909MS/MSD (from SDG 440-271566-1), no data were qualified for perchlorate percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

For M-7B-20200804MS/MSD (from SDG 440-269859-1), no data were qualified for toxic organic halides percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

For I-R 20200818MS/MSD (from SDG 440-270563-1), I-AB 20201014MS/MSD (from SDG 550-150988-1), and E1-1 20201202MS/MSD (from SDG 550-153952-1), no data were qualified for nitrate as nitrogen percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

Relative percent differences (RPD) were within QC limits.

## **VI. Duplicate Sample Analysis**

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

## **VII. Laboratory Control Samples**

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the methods. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **VIII. Field Duplicates**

Samples E1-3 20200701 and E1-3 20200701 FD (both from SDG 440-268249-1), samples LVW7.2-0.8-20200702 and LVW7.2-0.8-20200702-FD (both from SDG 440-268416-1), samples LVW6.05-0.5-20200702 and LVW6.05-0.5-20200702-FD (both from SDG 440-268416-1), samples LVW0.55-0.8-20200702 and LVW0.55-0.8-20200702-FD (both from SDG 440-268416-1), samples I-AC 20200708 and I-AC 20200708-FD (both from SDG 440-268566-1), samples PC-133 20200713 and PC-133 20200713-FD (both from SDG 440-268824-1), samples ART-8A 20200714 and ART-8A 20200714 FD (both from SDG 440-268913-1), Samples E2-1 20200805 and E2-1 20200805-FD (both from SDG 440-269928-1), M-37-20200805 and M-37-20200805-FD4 (both from SDG 440-269929-1), samples M-37-20200807 and M-37-20200807-FD4 (both from SDG 440-270061-1), samples I-AR 20200811 and I-AR 20200811-FD (from SDG 440-270178-1), samples PC-115R-20200812 and PC-115R-20200812-FD (both from SDG 440-270285-1), samples PC-150 20200812 and PC-150 20200812-FD (both from SDG 440-270286-1), samples E2-3 20200901 and E2-3 20200901-FD (both from SDG 440-271195-1), samples PC-117 20200903 and PC-117 20200903-FD (both from SDG 440-271355-1), samples ART-2/2A 20200903 and ART-2/2A 20200903-FD (both from SDG 440-271357-1), samples LVW8.85-0.5-20200908 and LVW8.85-0.5-20200908-FD (both from SDG 440-271661-1), samples LVW6.05-0.7-20200909 and LVW6.05-0.7-20200909-FD (both from SDG 440-271661-1), samples LVW0.55-1.0-20200909 and LVW0.55-1.0-20200909-FD (both from SDG 440-271661-1), samples I-C 20200915 and I-C 20200915-FD (both from SDG 440-271841-1), samples LVW7.2-1.0-20201015 and LVW7.2-1.0-20201015-FD (both from SDG 440-273504-1), samples LVW6.05-0.7-20201015 and LVW6.05-0.7-20201015-FD (both from SDG 440-273504-1), samples LVW0.55-1.4-20201016 and LVW0.55-1.4-20201016-FD (both from SDG 440-273504-1), samples E2-5 20201006 and E2-5 20201006-FD (both from SDG 550-150310-1), samples PC-119 20201013 and PC-119 20201013-FD (both from SDG 550-150875-1), samples ART-4 20201013 and ART-4 20201013-FD (both from SDG 550-150878-1), samples I-E 20201015 and I-E 20201015-FD (both from SDG 550-151055-1), samples PC-121 20201103 and PC-121 20201103-FD (both from SDG 550-152288-

1), samples ART-8A 20201103 and ART-8A 20201103-FD (both from SDG 550-152288-2), samples PC-53-20201103 and PC-53-20201103-FD6 (both from SDG 550-152311-1), samples PC-156B-20201103 and PC-156B-20201103-FD5 (both from SDG 550-152311-1), samples E1-2 20201104 and E1-2 20201104-FD (both from SDG 550-152380-1), samples PC-125-20201104 and PC-125-20201104-FD7 (both from SDG 550-152412-1), samples PC-128-20201104 and PC-128-20201104-FD8 (both from SDG 550-152412-1), samples M-11-20201105 and M-11-20201105-FD4 (both from SDG 550-152494-1), samples M-72-20201105 and M-72-20201105-FD9 (both from SDG 550-152494-1), samples I-G 20201110 and I-G 20201110-FD (both from SDG 550-152760-1), samples LVW7.2-1.0-20201112 and LVW7.2-1.0-20201112-FD (both from SDG 550-153036-1), samples LVW6.05-0.8-20201112 and LVW6.05-0.8-20201112-FD (both from SDG 550-153036-1), samples LVW0.55-1.2-20201112 and LVW0.55-1.2-20201112-FD (both from SDG 550-153036-1), samples E2-1 20201202 and E2-1 20201202-FD (both from SDG 550-153952-1), samples PC-99R2/R3 20201203 and PC-99R2/R3 20201203-FD (both from SDG 550-154024-1), samples PC-150 20201203 and PC-150 20201203-FD (both from SDG 550-154025-1), samples I-I 20201209 and I-I 20201209-FD (both from SDG 550-154393-1), samples LVW7.2-1.1-20201210 and LVW7.2-1.1-20201210-FD (both from SDG 550-154606-1), samples LVW6.05-0.7-20201210 and LVW6.05-0.7-20201210-FD (both from SDG 550-154606-1), and samples LVW0.55-0.9-20201211 and LVW0.55-0.9-20201211-FD (both from SDG 550-154606-1) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E1-3 20200701	E1-3 20200701 FD			
440-268249-1	Hexavalent chromium	0.52 mg/L	0.52 mg/L	0 (≤30)	-	-
	Nitrate as N	81 mg/L	85 mg/L	5 (≤30)	-	-
	Chlorate	140000 ug/L	140000 ug/L	0 (≤30)	-	-
	Perchlorate	440 mg/L	410 mg/L	7 (≤30)	-	-
	Total dissolved solids	4000 mg/L	4000 mg/L	0 (≤30)	-	-
	pH	7.11 SU	7.10 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-0.8-20200702	LVW7.2-0.8-20200702-FD			
440-268416-1	Chlorate	150 ug/L	140 ug/L	7 (≤30)	-	-
	Total dissolved solids	1100 mg/L	1100 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.5-20200702	LVW6.05-0.5-20200702-FD			
440-268416-1	Chlorate	140 ug/L	160 ug/L	13 (≤30)	-	-
	Perchlorate	21 ug/L	21 ug/L	0 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.8-20200702	LVW0.55-0.8-20200702-FD			
440-268416-1	Chlorate	310 ug/L	300 ug/L	3 (≤30)	-	-
	Perchlorate	68 ug/L	71 ug/L	4 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-AC 20200708	I-AC 20200708-FD			
440-268566-1	Hexavalent chromium	2.3 mg/L	2.3 mg/L	0 (≤30)	-	-
	Nitrate as N	10 mg/L	12 mg/L	18 (≤30)	-	-
	Chlorate	620000 ug/L	610000 ug/L	2 (≤30)	-	-
	Perchlorate	250 mg/L	250 mg/L	0 (≤30)	-	-
	Total dissolved solids	6300 mg/L	6300 mg/L	0 (≤30)	-	-
	pH	7.19 SU	7.33 SU	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-133 20200713	PC-133 20200713-FD			
440-268824-1	Chlorate	340 ug/L	330 ug/L	3 (≤30)	-	-
	Perchlorate	0.60 mg/L	0.55 mg/L	9 (≤30)	-	-
	Total dissolved solids	1800 mg/L	1800 mg/L	0 (≤30)	-	-
	pH	7.48 SU	7.45 SU	0 (≤30)	-	-



SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-8A 20200714	ART-8A 20200714 FD			
440-268913-1	Hexavalent chromium	0.081 mg/L	0.080 mg/L	1 (≤30)	-	-
	Nitrate as N	7.9 mg/L	7.9 mg/L	0 (≤30)	-	-
	Chlorate	64000 ug/L	52000 ug/L	21 (≤30)	-	-
	Perchlorate	70 mg/L	70 mg/L	0 (≤30)	-	-
	Total dissolved solids	8500 mg/L	8400 mg/L	1 (≤30)	-	-
	pH	7.42 SU	7.42 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-1 20200805	E2-1 20200805-FD			
440-269928-1	Hexavalent chromium	0.028 mg/L	0.030 mg/L	7 (≤30)	-	-
	Nitrate as N	13 mg/L	13 mg/L	0 (≤30)	-	-
	Chlorate	14000 ug/L	12000 ug/L	15 (≤30)	-	-
	Perchlorate	94 mg/L	88 mg/L	7 (≤30)	-	-
	Total dissolved solids	2900 mg/L	2900 mg/L	0 (≤30)	-	-
	pH	7.10 SU	7.08 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-37-20200805	M-37-20200805-FD4			
440-269929-1	Perchlorate	150000 ug/L	150000 ug/L	0 (≤30)	-	-
	Total dissolved solids	3700 mg/L	3700 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		M-37-20200807	M-37-20200807-FD4			
440-270061-1	Hexavalent chromium	370	360	3 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-AR 20200811	I-AR 20200811-FD			
440-270178-1	Hexavalent chromium	0.69 mg/L	0.69 mg/L	0 (≤30)	-	-
	Nitrate as N	90 mg/L	90 mg/L	0 (≤30)	-	-
	Chlorate	220000 ug/L	200000 ug/L	10 (≤30)	-	-
	Perchlorate	460 mg/L	460 mg/L	0 (≤30)	-	-
	Total dissolved solids	4100 mg/L	4100 mg/L	0 (≤30)	-	-
	pH	7.30 SU	7.29 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-115R-20200812	PC-115R-20200812-FD			
440-270285-1	Nitrate as N	3.7 mg/L	3.4 mg/L	8 (≤30)	-	-
	Chlorate	3400 ug/L	3400 ug/L	0 (≤30)	-	-
	Perchlorate	7.3 mg/L	7.5 mg/L	3 (≤30)	-	-
	Total dissolved solids	2100 mg/L	2100 mg/L	0 (≤30)	-	-
	pH	7.38 SU	7.35 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-150 20200812	PC-150 20200812-FD			
440-270286-1	Hexavalent chromium	0.054 mg/L	0.052 mg/L	4 (≤30)	-	-
	Nitrate as N	9.4 mg/L	8.9 mg/L	5 (≤30)	-	-
	Chlorate	60000 ug/L	61000 ug/L	2 (≤30)	-	-
	Perchlorate	55 mg/L	55 mg/L	0 (≤30)	-	-
	Total dissolved solids	4800 mg/L	4800 mg/L	0 (≤30)	-	-
	pH	7.75 SU	7.74 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-3 20200901	E2-3 20200901-FD			
440-271195-1	Hexavalent chromium	0.053 mg/L	0.050 mg/L	6 (≤30)	-	-
	Nitrate as N	50 mg/L	55 mg/L	10 (≤30)	-	-
	Chlorate	19000 ug/L	19000 ug/L	0 (≤30)	-	-
	Perchlorate	700 mg/L	690 mg/L	1 (≤30)	-	-
	Total dissolved solids	3700 mg/L	3700 mg/L	0 (≤30)	-	-
	pH	7.18 SU	7.16 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-117 20200903	PC-117 20200903-FD			
440-271355-1	Hexavalent chromium	0.0078 mg/L	0.0079 mg/L	1 (≤30)	-	-
	Nitrate as N	4.5 mg/L	4.4 mg/L	2 (≤30)	-	-
	Chlorate	16000 ug/L	15000 ug/L	6 (≤30)	-	-
	Perchlorate	8.0 mg/L	7.7 mg/L	4 (≤30)	-	-
	Total dissolved solids	2700 mg/L	2700 mg/L	0 (≤30)	-	-
	pH	7.24 SU	7.26 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-2/2A 20200903	ART-2/2A 20200903-FD			
440-271357-1	Hexavalent chromium	0.0036 mg/L	0.0037 mg/L	3 (≤30)	-	-
	Chlorate	7100 ug/L	7200 ug/L	1 (≤30)	-	-
	Perchlorate	9.8 mg/L	9.6 mg/L	2 (≤30)	-	-
	Total dissolved solids	8600 mg/L	8600 mg/L	0 (≤30)	-	-
	pH	7.35 SU	7.34 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW8.85-0.5-20200908	LVW8.85-0.5-20200908-FD			
440-271661-1	Chlorate	140 ug/L	140 ug/L	0 (≤30)	-	-
	Total dissolved solids	1000 mg/L	1000 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.7-20200909	LVW6.05-0.7-20200909-FD			
440-271661-1	Chlorate	140 ug/L	140 ug/L	0 (≤30)	-	-
	Perchlorate	23 ug/L	24 ug/L	4 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-1.0-20200909	LVW0.55-1.0-20200909-FD			
440-271661-1	Chlorate	390 ug/L	3900 ug/L	0 (≤30)	-	-
	Perchlorate	73 ug/L	72 ug/L	1 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-C 20200915	I-C 20200915-FD			
440-271841-1	Hexavalent chromium	2.9 mg/L	2.8 mg/L	4 (≤30)	-	-
	Nitrate as N	51 mg/L	51 mg/L	0 (≤30)	-	-
	Chlorate	860000 ug/L	820000 ug/L	5 (≤30)	-	-
	Perchlorate	400 mg/L	440 mg/L	10 (≤30)	-	-
	Total dissolved solids	5700 mg/L	5700 mg/L	0 (≤30)	-	-
	pH	7.57 SU	7.57 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-1.0-20201015	LVW7.2-1.0-20201015-FD			
440-273504-1	Chlorate	110 ug/L	110 ug/L	0 (≤30)	-	-
	Perchlorate	0.98 ug/L	0.98 ug/L	0 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.7-20201015	LVW6.05-0.7-20201015-FD			
440-273504-1	Chlorate	120 ug/L	120 ug/L	0 (≤30)	-	-
	Perchlorate	11 ug/L	10 ug/L	10 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-1.4-20201016	LVW0.55-1.4-20201016-FD			
440-273504-1	Chlorate	290 ug/L	280 ug/L	4 (≤30)	-	-
	Perchlorate	69 ug/L	70 ug/L	1 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-5 20201006	E2-5 20201006-FD			
550-150310-1	Hexavalent chromium	0.14 mg/L	0.14 mg/L	0 (≤30)	-	-
	Nitrate as N	87 mg/L	86 mg/L	1 (≤30)	-	-
	Chlorate	39000 ug/L	38000 ug/L	3 (≤30)	-	-
	Perchlorate	1500000 ug/L	1400000 ug/L	7 (≤30)	-	-
	Total dissolved solids	4500 mg/L	4400 mg/L	2 (≤30)	-	-
	pH	6.92 SU	6.90 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-119 20201013	PC-119 20201013-FD			
550-150875-1	Nitrate as N	0.33 mg/L	0.31 mg/L	6 (≤30)	-	-
	Chlorate	21 ug/L	100U ug/L	200 (≤30)	NQ	-
	Perchlorate	290 ug/L	320 ug/L	10 (≤30)	-	-
	Total dissolved solids	1600 mg/L	1500 mg/L	6 (≤30)	-	-
	pH	7.34 SU	7.29 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-4 20201013	ART-4 20201013-FD			
550-150878-1	Hexavalent chromium	0.16 mg/L	0.16 mg/L	0 (≤30)	-	-
	Nitrate as N	14 mg/L	13 mg/L	7 (≤30)	-	-
	Chlorate	150000 ug/L	150000 ug/L	0 (≤30)	-	-
	Perchlorate	120000 ug/L	160000 ug/L	29 (≤30)	-	-
	Total dissolved solids	5100 mg/L	5100 mg/L	0 (≤30)	-	-
	pH	7.49 SU	7.49 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-E 20201015	I-E 20201015-FD			
550-151055-1	Hexavalent chromium	5.4 mg/L	5.5 mg/L	2 (≤30)	-	-
	Nitrate as N	43 mg/L	51 mg/L	17 (≤30)	-	-
	Chlorate	1300000 ug/L	1300000 ug/L	0 (≤30)	-	-
	Perchlorate	310000 ug/L	290000 ug/L	7 (≤30)	-	-
	Total dissolved solids	6300 mg/L	6300 mg/L	0 (≤30)	-	-
	pH	7.47 SU	7.34 SU	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-121 20201103	PC-121 20201103-FD			
550-152288-1	Perchlorate	2.0 ug/L	2.0 ug/L	0 (≤30)	-	-
	Total dissolved solids	1500 mg/L	1500 mg/L	0 (≤30)	-	-
	pH	7.51 SU	7.51 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-8A 20201103	ART-8A 20201103-FD			
550-152288-2	Hexavalent chromium	0.068 mg/L	0.069 mg/L	1 (≤30)	-	-
	Nitrate as N	8.2 mg/L	8.5 mg/L	4 (≤30)	-	-
	Chlorate	61000 ug/L	61000 ug/L	0 (≤30)	-	-
	Perchlorate	65000 ug/L	70000 ug/L	7 (≤30)	-	-
	Total dissolved solids	8200 mg/L	8300 mg/L	1 (≤30)	-	-
	pH	7.37 SU	7.36 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-53-20201103	PC-53-20201103-FD6			
550-152311-1	Nitrate as N	17 mg/L	17 mg/L	0 (≤30)	-	-
	Chlorate	270000 ug/L	260000 ug/L	4 (≤30)	-	-
	Perchlorate	1000 ug/L	1300 ug/L	26 (≤30)	-	-
	Total dissolved solids	5700 mg/L	6000 mg/L	5 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-156B-20201103	PC-156B-20201103-FD5			
550-152311-1	Nitrate as N	0.14 mg/L	0.14 mg/L	0 (≤30)	-	-
	Chlorate	5.0 ug/L	4.9 ug/L	2 (≤30)	-	-
	Perchlorate	660 ug/L	480 ug/L	32 (≤30)	J (all detects)	A

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-156B-20201103	PC-156B-20201103-FD5			
550-152311-1	Total dissolved solids	2100 mg/L	2200 mg/L	5 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E1-2 20201104	E1-2 20201104-FD			
550-152380-1	Hexavalent chromium	0.39 mg/L	0.39 mg/L	0 (≤30)	-	-
	Nitrate as N	120 mg/L	110 mg/L	9 (≤30)	-	-
	Chlorate	140000 ug/L	140000 ug/L	0 (≤30)	-	-
	Perchlorate	1000000 ug/L	2500000 ug/L	86 (≤30)	J (all detects)	A
	Total dissolved solids	5600 mg/L	5200 mg/L	7 (≤30)	-	-
	pH	7.22 SU	7.19 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-125-20201104	PC-125-20201104-FD7			
550-152412-1	Nitrate as N	25 mg/L	26 mg/L	4 (≤30)	-	-
	Chlorate	140000 ug/L	140000 ug/L	0 (≤30)	-	-
	Perchlorate	7100 ug/L	7200 ug/L	1 (≤30)	-	-
	Total dissolved solids	7400 mg/L	7700 mg/L	4 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-128-20201104	PC-128-20201104-FD8			
550-152412-1	Nitrate as N	14 mg/L	13 mg/L	7 (≤30)	-	-
	Chlorate	140000 ug/L	140000 ug/L	0 (≤30)	-	-
	Perchlorate	83000 ug/L	83000 ug/L	0 (≤30)	-	-
	Total dissolved solids	5100 mg/L	5100 mg/L	0 (≤30)	-	-



SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-11-20201105	M-11-20201105-FD4			
550-152494-1	Hexavalent chromium	550 ug/L	550 ug/L	0 (≤30)	-	-
	Nitrate as N	3.5 mg/L	3.5 mg/L	0 (≤30)	-	-
	Chlorate	270000 ug/L	260000 ug/L	4 (≤30)	-	-
	Perchlorate	22000 ug/L	22000 ug/L	0 (≤30)	-	-
	Total dissolved solids	3200 mg/L	3200 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-72-20201105	M-72-20201105-FD9			
550-152494-1	Nitrate as N	55 mg/L	55 mg/L	0 (≤30)	-	-
	Chlorate	3400000 ug/L	3200000 ug/L	6 (≤30)	-	-
	Perchlorate	900000 ug/L	1100000 ug/L	20 (≤30)	-	-
	Total dissolved solids	10000 mg/L	11000 mg/L	10 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-G 20201110	I-G 20201110-FD			
550-152760-1	Hexavalent chromium	13 mg/L	13 mg/L	0 (≤30)	-	-
	Nitrate as N	78 mg/L	80 mg/L	3 (≤30)	-	-
	Chlorate	3100000 ug/L	3100000 ug/L	0 (≤30)	-	-
	Perchlorate	760000 ug/L	740000 ug/L	3 (≤30)	-	-
	Total dissolved solids	4300 mg/L	9100 mg/L	72 (≤30)	J (all detects)	A
	pH	7.18 SU	7.17 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-1.0-20201112	LVW7.2-1.0-20201112-FD			
550-153036-1	Chlorate	110 ug/L	110 ug/L	0 (≤30)	-	-
	Perchlorate	0.49 ug/L	1.1 ug/L	77 (≤30)	NQ	-
	Total dissolved solids	1300 mg/L	1200 mg/L	8 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.8-20201112	LVW6.05-0.8-20201112-FD			
550-153036-1	Chlorate	100 ug/L	100 ug/L	0 (≤30)	-	-
	Perchlorate	13 ug/L	13 ug/L	0 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1200 mg/L	8 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-1.2-20201112	LVW0.55-1.2-20201112-FD			
550-153036-1	Chlorate	190 ug/L	180 ug/L	5 (≤30)	-	-
	Perchlorate	81 ug/L	82 ug/L	1 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-1 20201202	E2-1 20201202-FD			
550-153952-1	Hexavalent chromium	0.029 mg/L	0.024 mg/L	19 (≤30)	-	-
	Nitrate as N	15 mg/L	14 mg/L	7 (≤30)	-	-
	Chlorate	14000 ug/L	14000 ug/L	0 (≤30)	-	-
	Perchlorate	94000 ug/L	94000 ug/L	0 (≤30)	-	-
	Total dissolved solids	2800 mg/L	2800 mg/L	0 (≤30)	-	-
	pH	7.20 SU	7.17 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-99R2/R3 20201203	PC-99R2/R3 20201203-FD			
550-154024-1	Hexavalent chromium	0.00026 mg/L	0.00026 mg/L	0 (≤30)	-	-
	Nitrate as N	6.2 mg/L	5.8 mg/L	7 (≤30)	-	-
	Chlorate	13000 ug/L	13000 ug/L	0 (≤30)	-	-
	Perchlorate	17000 ug/L	22000 ug/L	26 (≤30)	-	-
	Total dissolved solids	3000 mg/L	2900 mg/L	3 (≤30)	-	-
	pH	7.51 SU	7.49 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-150 20201203	PC-150 20201203-FD			
550-154025-1	Hexavalent chromium	0.043 mg/L	0.044 mg/L	2 (≤30)	-	-
	Nitrate as N	9.7 mg/L	10 mg/L	3 (≤30)	-	-
	Chlorate	48000 ug/L	48000 ug/L	0 (≤30)	-	-
	Perchlorate	66000 ug/L	54000 ug/L	20 (≤30)	-	-
	Total dissolved solids	4800 mg/L	4700 mg/L	2 (≤30)	-	-
	pH	7.63 SU	7.59 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-I 20201209	I-I 20201209-FD			
550-154393-1	Hexavalent chromium	7.8 mg/L	7.7 mg/L	1 (≤30)	-	-
	Nitrate as N	20 mg/L	19 mg/L	5 (≤30)	-	-
	Chlorate	1400000 ug/L	1200000 ug/L	15 (≤30)	-	-
	Perchlorate	610000 ug/L	690000 ug/L	12 (≤30)	-	-
	Total dissolved solids	5300 mg/L	5600 mg/L	6 (≤30)	-	-
	pH	7.61 SU	7.60 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-1.1-20201210	LVW7.2-1.1-20201210-FD			
550-154606-1	Chlorate	250 ug/L	240 ug/L	4 (≤30)	-	-
	Perchlorate	1.4 ug/L	1.8 ug/L	25 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1400 mg/L	7 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.7-20201210	LVW6.05-0.7-20201210-FD			
550-154606-1	Chlorate	210 ug/L	220 ug/L	5 (≤30)	-	-
	Perchlorate	66 ug/L	65 ug/L	2 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.9-20201211	LVW0.55-0.9-20201211-FD			
550-154606-1	Chlorate	210 ug/L	210 ug/L	0 (≤30)	-	-
	Perchlorate	46 ug/L	46 ug/L	0 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

NQ = No data were qualified when either the primary or duplicate result was not detected or was below the practical quantitation limit (PQL).

### IX. Sample Result Verification

Raw data were not reviewed for Stage 2A validation.

### X. Overall Assessment of Data

The analysis was conducted within all specifications of the methods.

In the case where more than one result was reported for an individual sample, the least technically acceptable results were deemed not reportable as follows:

<b>SDG</b>	<b>Sample</b>	<b>Compound</b>	<b>Reason</b>	<b>Flag</b>	<b>A or P</b>
550-150878-1	ART-8A 20201013 ART-9 20201013 PC-150 20201013	Hexavalent chromium	Result from re-analysis was more usable.	DNR	-
550-150989-1	I-Q 20201014RE I-T 20201014RE I-U 20201014RE	Perchlorate	Result from original analysis was more usable.	DNR	-
550-152288-1	PC-121 20201103-FDDL	Chlorate	Result from reanalysis was more usable.	DNR	-
550-152380-1	E2-2 20201104RE	Perchlorate	Result from original analysis was more usable.	DNR	-
550-152412-1	PC-123-20201104 M-81A-20201104	Nitrate as N	Results exceeded calibration range.	DNR	-

Due to technical holding time, surrogate %R, MS/MSD %R, and field duplicate RPD, data were qualified as estimated in one hundred eight samples.

No results were rejected in these SDGs.

**NERT GWM Performance Sampling, July through December 2020**

**Wet Chemistry - Data Qualification Summary - SDGs 440-268249-1, 440-268416-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270061-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-270563-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271661-1, 440-271841-1, 440-271843-1, 440-272217-1, 440-273504-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151322-1, 550-151365-1, 550-152117-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153036-1, 550-153282-1, 550-153407-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154606-1, 550-154787-1, 550-155373-1**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
550-150310-1	E2-5 20201006-FD	Total dissolved solids	J- (all detects)	A	Technical holding times (h)
550-152288-1	PC-121 20201103-FDRE	Chlorate	UJ (all non-detects)	A	Technical holding times (h)
550-152380-1	E2-2 20201104	Perchlorate	J- (all detects)	P	Technical holding times (h)
550-152412-1	PC-123-20201104DL M-81A-20201104DL	Nitrate as N	J- (all detects)	A	Technical holding times (h)
440-273504-1	LVW5.3-3-0.6-20201016	Chlorate	J+ (all detects)	P	Surrogates (%R) (s)
550-152494-1	M-14A-20201105	Chlorate	J+ (all detects)	P	Surrogates (%R) (s)
440-268471-1	I-F 20200707 I-X 20200707 I-N 20200707 I-E 20200707 I-M 20200707 I-D 20200707 I-C 20200707	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-270178-1	I-AA 20200811 I-AB 20200811 I-B 20200811	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-270286-1	PC-150 20200812-FD	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-270353-1	I-AD 20200813 I-AC 20200813 I-K 20200813 I-J 20200813 I-Z 20200813 I-I 20200813 I-V 20200813	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-271196-1	I-U 20200901 I-T 20200901 I-G 20200901 I-Q 20200901	Nitrate as N	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-271355-1	PC-99R2/R3 20200903 PC-115R 20200903 PC-116R 20200903 PC-117 20200903 PC-118 20200903	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-271661-1	LVW5.3-4-0.3-20200909 LVW5.3-5-0.5-20200909 LVW5.3-6-0.5-20200909 LVW4.75-1-0.9-20200909 LVW4.75-2-1.4-20200909 LVW4.75-3-1.0-20200909 LVW4.75-4-1.2-20200909 LVW4.75-5-1.1-20200909 LVW4.2-1-1.5-20200909 LVW4.2-2-3.4-20200909 LVW4.2-3-2.4-20200909 LVW4.2-4-1.9-20200909 LVW3.5-1-1.7-20200909 LVW3.5-2-0.9-20200909 LVW3.5-3-1.7-20200909 LVW3.5-4-1.7-20200909 LVW3.5-5-1.7-20200909 LVW3.5-6-1.6-20200909 LVW0.55-1.0-20200909 LVW0.55-1.0-20200909-FD	Perchlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-271843-1	I-J 20200915 I-Z 20200915 I-I 20200915 I-V 20200915	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-152178-1	PC-56-20201102	Perchlorate	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-152288-1	PC-115R 20201103 PC-117 20201103 PC-118 20201103 PC-133 20201103	Perchlorate	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-152311-1	MW-K4-20201103 PC-98R-20201103	Perchlorate	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-152380-1	E1-3 20201104 E2-1 20201104 E2-3 20201104	Perchlorate	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
550-152494-1	M-11-20201105 M-11-20201105-FD4 M-12A-20201105 M-44-20201105 M-38-20201105	Hexavalent chromium	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-153282-1	I-AC 20201118 I-AD 20201118 I-K 20201118 I-J 20201118 I-Z 20201118 I-I 20201118 I-V 20201118	Hexavalent chromium	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-154393-1	I-I 20201209-FD	Nitrate as N	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-154396-1	I-Q 20201209 I-G 20201209 I-T 20201209 I-U 20201209 I-H 20201209 I-P 20201209	Nitrate as N	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-154606-1	C1-E-0.0-20201210 C1-W-0.0-20201210 LVW4.75-1-0.9-20201211 LVW4.75-2-1.3-20201211 LVW4.75-3-0.8-20201211 LVW4.75-4-1.3-20201211 LVW4.75-5-1.0-20201211 LVW4.2-1-1.6-20201211 LVW4.2-2-2.5-20201211 LVW4.2-3-2.6-20201211 LVW4.2-4-1.7-20201211 LVW3.5-1-1.7-20201211 LVW3.5-2-0.9-20201211 LVW3.5-3-1.0-20201211 LVW3.5-4-1.2-20201211	Chlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
550-152311-1	PC-156B-20201103 PC-156B-20201103-FD5	Perchlorate	J (all detects)	A	Field duplicates (RPD) (fd)
550-152380-1	E1-2 20201104 E1-2 20201104-FD	Perchlorate	J (all detects)	A	Field duplicates (RPD) (fd)
550-152760-1	I-G 20201110 I-G 20201110-FD	Total dissolved solids	J (all detects)	A	Field duplicates (RPD) (fd)
550-150878-1	ART-8A 20201013 ART-9 20201013 PC-150 20201013	Hexavalent chromium	DNR	-	Overall assessment of data (orr)
550-150989-1	I-Q 20201014RE I-T 20201014RE I-U 20201014RE	Perchlorate	DNR	-	Overall assessment of data (orr)



SDG	Sample	Analyte	Flag	A or P	Reason (Code)
550-152288-1	PC-121 20201103-FDDL	Chlorate	DNR	-	Overall assessment of data (orr)
550-152380-1	E2-2 20201104RE	Perchlorate	DNR	-	Overall assessment of data (orr)
550-152412-1	PC-123-20201104 M-81A-20201104	Nitrate as N	DNR	-	Overall assessment of data (orr)

**NERT GWM Performance Sampling, July through December 2020**

**Wet Chemistry - Laboratory Blank Data Qualification Summary – SDGs 440-268249-1, 440-268416-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270061-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-270563-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271661-1, 440-271841-1, 440-271843-1, 440-272217-1, 440-273504-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151322-1, 550-151365-1, 550-152117-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153036-1, 550-153282-1, 550-153407-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154606-1, 550-154787-1, 550-155373-1**

No Sample Data Qualified in these SDGs

**NERT GWM Performance Sampling, July through December 2020**

**Wet Chemistry - Field Blank Data Qualification Summary - SDGs 440-268249-1, 440-268416-1, 440-268471-1, 440-268472-1, 440-268566-1, 440-268824-1, 440-268913-1, 440-268971-1, 440-269858-1, 440-269859-1, 440-269860-1, 440-269928-1, 440-269929-1, 440-269930-1, 440-270061-1, 440-270178-1, 440-270179-1, 440-270285-1, 440-270286-1, 440-270353-1, 440-270355-1, 440-270563-1, 440-271195-1, 440-271196-1, 440-271355-1, 440-271357-1, 440-271566-1, 440-271661-1, 440-271841-1, 440-271843-1, 440-272217-1, 440-273504-1, 550-150310-1, 550-150875-1, 550-150878-1, 550-150988-1, 550-150989-1, 550-151055-1, 550-151322-1, 550-151365-1, 550-152117-1, 550-152178-1, 550-152288-1, 550-152288-2, 550-152311-1, 550-152380-1, 550-152412-1, 550-152494-1, 550-152622-1, 550-152758-1, 550-152760-1, 550-152912-1, 550-153036-1, 550-153282-1, 550-153407-1, 550-153952-1, 550-154024-1, 550-154025-1, 550-154290-1, 550-154293-1, 550-154393-1, 550-154396-1, 550-154606-1, 550-154787-1, 550-155373-1**

No Sample Data Qualified in these SDGs