

**Data Validation Summary Report, Revision 1
Semi-Annual Remedial Performance Sampling
July through December 2018
Nevada Environmental Response Trust (NERT)
Henderson, Nevada**

Prepared for

Ramboll
Emeryville, California

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Avenue West, Suite 220
Carlsbad, California 92010

July 16, 2019

Response to NDEP comments on the
2018 Semi-Annual Remedial Performance Memo DVSR and EDD
Nevada Environmental Response Trust Site
Henderson, Nevada

**Response to NDEP Comments on the
2018 Semi-Annual Remedial Performance Memo DVSR and EDD**

**Nevada Environmental Response Trust
Site (Former Tronox LLC Site)
Henderson, Nevada**

Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the system(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

Signature: Jay A. Steinberg **Not Individually, but Solely
as President of the Trustee**

Name: Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

Title: Solely as President and not individually

Company: Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

Date: 7/16/19

Response to NDEP comments on the
2018 Semi-Annual Remedial Performance Memo DVSR and EDD
Nevada Environmental Response Trust Site
Henderson, Nevada

**Response to NDEP comments on the
2018 Semi-Annual Remedial Performance Memo DVSR and EDD**

**Nevada Environmental Response Trust
Site (Former Tronox LLC Site)
Henderson, Nevada**

Responsible Certified Environmental Manager (CEM) for this project

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.



John M. Pekala, PG
Principal

July 16, 2019

Date

Certified Environmental Manager
Ramboll US Corporation
CEM Certificate Number: 2347
CEM Expiration Date: September 20, 2020

Table of Contents

Section	Title	Page No.
1.0	INTRODUCTION	4
2.0	METALS.....	9
2.1	Precision and Accuracy.....	9
2.2	Representativeness	9
2.3	Comparability	10
2.4	Completeness	10
2.5	Sensitivity	10
3.0	WET CHEMISTRY	10
3.1	Precision and Accuracy.....	11
3.2	Representativeness	11
3.3	Comparability	12
3.4	Completeness	12
3.5	Sensitivity	12
4.0	VARIANCES IN ANALYTICAL PERFORMANCE	12
5.0	SUMMARY OF PARCCS CRITERIA	12
5.1	Precision and Accuracy.....	13
5.2	Representativeness	13
5.3	Comparability	13
5.4	Completeness	13
5.5	Sensitivity	13
6.0	CONCLUSIONS AND RECOMMENDATIONS	13
7.0	REFERENCES	14

LIST OF TABLES

TABLE I –	Sample Cross-Reference
TABLE II –	Stage 2A Validation Elements
TABLE III –	Stage 2A Validation Percentages
TABLE IV –	Reason Codes and Definitions
TABLE V –	Overall Qualified Results

ATTACHMENTS

ATTACHMENT A –	Metals Data Validation Report
ATTACHMENT B –	Wet Chemistry Data Validation Report

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
ICV	Initial Calibration Verification
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
QAPP	Quality Assurance Project Plan
RPD	Relative Percent Difference
SDG	Sample Delivery Group
SQL	Sample Quantitation Limit
TDS	Total Dissolved Solids
TIN	Total Inorganic Nitrogen
TOC	Total Organic Carbon
TOH	Toxic Organic Halides
TRP	Total Recoverable Phenolics
USEPA	United States Environmental Protection Agency
ug/L	Micrograms per Liter
mg/L	Milligram per Liter
%RSD	Percent Relative Standard Deviation
%D	Percent Difference
%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 Semi-Annual Remedial Performance Sampling conducted at the Nevada Environmental Response Trust (NERT) site in Henderson, Nevada. The assessment was performed by Ramboll as a part of the *Quality Assurance Project Plan, Revision 1, Nevada Environmental Response Trust Site, Henderson, Nevada* dated July 2014 and included the collection and analyses of 709 environmental and quality control (QC) samples. The analyses were performed by the following methods:

Metals by EPA Methods 200.7

Wet Chemistry:

Hexavalent Chromium by EPA Method 218.6

Chloride, Nitrate as Nitrogen, 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 420.4

Conductivity by Standard Method 2510B

Total Dissolved Solids (TDS) by Standard Method 2540C

Total Organic Carbon (TOC) by Standard Method 5310C

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

Field pH by Field Test Method

Laboratory analytical services were provided by TestAmerica, Inc. for all parameters and Asset Laboratories performed additional hexavalent chromium analyses. 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 subgroup 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: *Quality Assurance Project Plan, Revision 1, NERT Site, Henderson, Nevada*, July 2014; *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: equipment blanks (EB), field blanks (FB), field duplicates (FD), laboratory 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), QAPP (July 2014), 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 QAPP, 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, initial calibration blanks (ICB), continuing calibration blanks (CCB), 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.

Calibration blanks consist of acidified laboratory grade water, which are injected at the beginning and at a regular frequency during each 12 - hour sample analysis run. These blanks estimate residual contaminants from the previous sample or standards analysis and measure baseline shifts that commonly occur in emission and absorption spectroscopy.

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 efficiency 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 QAPP, 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 calibration requirements, detection limits (DLs), and PQLs

presented in the QAPP 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

A total of six water samples were analyzed for metals and 507 water samples were analyzed for chromium by EPA Method 200.7. All metals data were assessed to be valid since none of the 539 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

All MS/MSD %Rs and RPDs met the QAPP acceptance criteria.

2.1.2 LCS/LCSD Samples

All LCS %Rs met the laboratory acceptance criteria.

2.1.3 FD Samples

RPDs met the QAPP acceptance criteria for 31 field duplicate pairs.

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, ICB/CCBs, EBs, and FBs were collected and 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 and the blank contaminant value was either less than or greater than the PQL, the sample result was qualified as estimated (J) at the concentration reported in the sample results.

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 concentration reported in the sample results.

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 and Calibration Blanks

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

2.2.2.2 EBs and FBs

No data were qualified due to a contaminant detected in one equipment blank. No contaminants were detected in the 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 met the specified requirements described in the QAPP.

3.0 WET CHEMISTRY

A total of 403 water samples were analyzed for hexavalent chromium by EPA Method 218.6; 505 water samples were analyzed for anions by EPA Method 300.0; two water samples were analyzed for ammonia as nitrogen by EPA Method 350.1, nitrate/nitrite as nitrogen by Calculation Method and TIN by Calculation Method; 692 water samples were analyzed for chlorate by EPA Method 300.1B; 705 water samples were analyzed for perchlorate by EPA Method 314.0 and TDS by Standard Method 2540C; four water samples were analyzed for total recoverable phenolics by EPA Method 420.4, conductivity by Standard Method 2510B, TOC by Standard Method 5310C, and TOH by EPA SW-846 Method 9020B. Field pH readings were recorded for 376 water samples. All wet chemistry data were assessed to be valid

since none of the 3,040 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

No data were qualified due to a high surrogate %R for sample PC-121 20181210 in the chlorate analysis, since the associate sample result was non-detected.

3.1.2 MS/MSD Samples

MS/MSD samples were evaluated for anions, chlorate, hexavalent chromium, perchlorate, phenolics, TOC and TOH. One hundred nineteen (119) results were qualified as detected estimated (J+) due to MS/MSD %Rs above the QAPP acceptance criteria. Positive bias was removed for five (5) of 119 results since these results were also qualified due to MS/MSD RPD above the QAPP acceptance criteria

Seven (7) hexavalent chromium and one TOH results were qualified as detected estimated (J-) or non-detected estimated (UJ) due to MS/MSD %Rs below the QAPP acceptance criteria.

Six (6) nitrate as nitrogen results were qualified as detected estimated (J) or non-detected estimated (UJ) due to an MS/MSD RPD above the QAPP acceptance criteria.

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

3.1.3 DUP Samples

DUP samples were evaluated for conductivity and TDS. All DUP RPDs met the QAPP acceptance criteria.

3.1.4 LCS Samples

All LCS %Rs met the laboratory acceptance criteria

3.1.5 FD Samples

RPDs met the QAPP acceptance criteria for 48 field duplicate pairs.

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, the 48-hour analysis holding time criteria for nitrite as nitrogen, and the 28-day analysis holding time criteria for ammonia as nitrogen, chlorate, chloride, conductivity, perchlorate, phenolics, sulfate, TOC, and TOH.

The nitrate as nitrogen result for sample E2-3-20181211 was qualified as detected estimated (J-) as a result of exceeding the analysis holding time criteria of 48 hours and 10 TDS results were qualified as detected estimated (J-) or non-detected estimated (UJ) as a result of exceeding the analysis holding time criteria of seven days. The details regarding the qualification of results are presented in Attachment B.

3.2.2 Blanks

Method blanks, and ICB/CCBs EBs, and FBs were collected and 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 and Calibration 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 blanks. No contaminants were detected in the 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.

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 met the specified requirements described in the QAPP.

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, and field duplicate percent recoveries and RPDs met acceptance criteria with the exceptions noted in Sections 3.1.2.

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.

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. Sample preservation and holding times were within QC criteria with the exception noted in Section 3.2.1. The overall comparability is considered acceptable.

5.4 Completeness

Of the 3,579 total analytes reported, none was rejected. The completeness for the SDGs is as follows:

Parameter	Total Analytes	No. of Rejects	% Completeness
Metals	539	0	100
Wet Chemistry	3,040	0	100
Total	3,579	0	100

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 and equipment 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 2018 Semi-Annual Remedial Performance Sampling at the NERT site in Henderson, Nevada established that the overall project requirements and completeness levels were met. 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

Environ 2014. Quality Assurance Project Plan, Revision 1, Nevada Environmental Response Trust Site, Henderson, Nevada. July 18.

NDEP 2018. NDEP Data Validation Guidance established for the BMI Plant Sites and Common Areas Projects, Henderson, Nevada. July.

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

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

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

_____.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.

(Eaton et al., 1998) *Standard Method for the Examination of Water and Wastewater* (20th ed.). Washington, DC: American Public Health Association.

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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
42950	4402154641	I-AD-20180710	440-215464-1	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-AC-20180710	440-215464-2	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-K-20180710	440-215464-3	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-J-20180710	440-215464-4	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-Z-20180710	440-215464-5	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-I-20180710	440-215464-6	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-V-20180710	440-215464-7	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-AR-20180710	440-215464-8	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-AA-20180710	440-215464-9	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-AB-20180710	440-215464-10	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-B-20180710	440-215464-11	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-R-20180710	440-215464-12	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-Y-20180710	440-215464-13	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154641	I-L-20180710	440-215464-14	7/10/2018	Stage 2A	Water	FD1		X		X		X	X				X			X
42950	4402154641	I-L-20180710-FD	440-215464-15	7/10/2018	Stage 2A	Water	FD1		X		X		X	X				X			X
42950	4402154641	I-S-20180710	440-215464-16	7/10/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402154891	I-AD-20180710	440-215489-1	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-AC-20180710	440-215489-2	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-K-20180710	440-215489-3	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-J-20180710	440-215489-4	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-Z-20180710	440-215489-5	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-I-20180710	440-215489-6	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-V-20180710	440-215489-7	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-AR-20180710	440-215489-8	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-AA-20180710	440-215489-9	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-AB-20180710	440-215489-10	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-B-20180710	440-215489-11	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-R-20180710	440-215489-12	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-Y-20180710	440-215489-13	7/10/2018	Stage 2A	Water				X											
42950	4402154891	I-L-20180710	440-215489-14	7/10/2018	Stage 2A	Water	FD1			X											
42950	4402154891	I-L-20180710-FD	440-215489-15	7/10/2018	Stage 2A	Water	FD1			X											
42950	4402154891	I-S-20180710	440-215489-16	7/10/2018	Stage 2A	Water				X											
42950	4402155071	I-F-20180711	440-215507-1	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-X-20180711	440-215507-2	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-N-20180711	440-215507-3	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-E-20180711	440-215507-4	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-M-20180711	440-215507-5	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-D-20180711	440-215507-6	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-C-20180711	440-215507-7	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-M-20180711-EB	440-215507-8	7/11/2018	Stage 2A	Water	EB		X		X		X	X				X			X
42950	4402155071	I-O-20180711	440-215507-9	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-W-20180711	440-215507-10	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-P-20180711	440-215507-11	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-H-20180711	440-215507-12	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-U-20180711	440-215507-13	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-T-20180711	440-215507-14	7/11/2018	Stage 2A	Water			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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
42950	4402155071	I-G-20180711	440-215507-15	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402155071	I-Q-20180711	440-215507-16	7/11/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402157131	I-F-20180711	440-215713-1	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-X-20180711	440-215713-2	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-N-20180711	440-215713-3	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-E-20180711	440-215713-4	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-M-20180711	440-215713-5	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-D-20180711	440-215713-6	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-C-20180711	440-215713-7	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-M-20180711-EB	440-215713-8	7/11/2018	Stage 2A	Water	EB			X											
42950	4402157131	I-O-20180711	440-215713-9	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-W-20180711	440-215713-10	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-P-20180711	440-215713-11	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-H-20180711	440-215713-12	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-U-20180711	440-215713-13	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-T-20180711	440-215713-14	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-G-20180711	440-215713-15	7/11/2018	Stage 2A	Water				X											
42950	4402157131	I-Q-20180711	440-215713-16	7/11/2018	Stage 2A	Water				X											
42950	4402160491	ART-1A-20180717	440-216049-1	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-2-20180717	440-216049-2	7/17/2018	Stage 2A	Water	FD2		X		X		X	X				X			X
42950	4402160491	ART-3A-20180717	440-216049-3	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-4-20180717	440-216049-4	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-7B-20180717	440-216049-5	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-8A-20180717	440-216049-6	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-9-20180717	440-216049-7	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	PC-150-20180717	440-216049-8	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402160491	ART-3A-20180717-EB	440-216049-9	7/17/2018	Stage 2A	Water	EB		X		X		X	X				X			X
42950	4402160491	ART-2-20180717-FD	440-216049-10	7/17/2018	Stage 2A	Water	FD2		X		X		X	X				X			X
42950	4402160491	ART-6-20180717	440-216049-11	7/17/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161151	ART-1A-20180717	440-216115-1	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-2-20180717	440-216115-2	7/17/2018	Stage 2A	Water	FD2			X											
42950	4402161151	ART-3A-20180717	440-216115-3	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-4-20180717	440-216115-4	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-7B-20180717	440-216115-5	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-8A-20180717	440-216115-6	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-9-20180717	440-216115-7	7/17/2018	Stage 2A	Water				X											
42950	4402161151	PC-150-20180717	440-216115-8	7/17/2018	Stage 2A	Water				X											
42950	4402161151	ART-3A-20180717-EB	440-216115-9	7/17/2018	Stage 2A	Water	EB			X											
42950	4402161151	ART-2-20180717-FD	440-216115-10	7/17/2018	Stage 2A	Water	FD2			X											
42950	4402161151	ART-6-20180717	440-216115-11	7/17/2018	Stage 2A	Water				X											
42950	4402161421	PC-99R2/R3-20180718	440-216142-1	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-115R-20180718	440-216142-2	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-116R-20180718	440-216142-3	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-118-20180718	440-216142-4	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-119-20180718	440-216142-5	7/18/2018	Stage 2A	Water	FD3		X		X		X	X				X			X
42950	4402161421	PC-120-20180718	440-216142-6	7/18/2018	Stage 2A	Water			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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
42950	4402161421	PC-121-20180718	440-216142-7	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-117-20180718	440-216142-8	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-119-20180718-FD	440-216142-9	7/18/2018	Stage 2A	Water	FD3		X		X		X	X				X			X
42950	4402161421	PC-133-20180718	440-216142-10	7/18/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402161421	PC-120-20180718-EB	440-216142-11	7/18/2018	Stage 2A	Water	EB		X		X		X	X				X			X
42950	4402162721	E1-1-20180719	440-216272-1	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E1-2-20180719	440-216272-2	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E1-3-20180719	440-216272-3	7/19/2018	Stage 2A	Water	FD4		X		X		X	X				X			X
42950	4402162721	E2-1-20180719	440-216272-4	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E2-2-20180719	440-216272-5	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E2-3-20180719	440-216272-6	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E2-4-20180719	440-216272-7	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E2-5-20180719	440-216272-8	7/19/2018	Stage 2A	Water			X		X		X	X				X			X
42950	4402162721	E1-3-20180719-FD	440-216272-9	7/19/2018	Stage 2A	Water	FD4		X		X		X	X				X			X
42950	4402162721	E2-1-20180719-EB	440-216272-10	7/19/2018	Stage 2A	Water	EB		X		X		X	X				X			X
42950	4402163441	E1-1-20180719	440-216344-1	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E1-2-20180719	440-216344-2	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E1-3-20180719	440-216344-3	7/19/2018	Stage 2A	Water	FD4			X											
42950	4402163441	E2-1-20180719	440-216344-4	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E2-2-20180719	440-216344-5	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E2-3-20180719	440-216344-6	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E2-4-20180719	440-216344-7	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E2-5-20180719	440-216344-8	7/19/2018	Stage 2A	Water				X											
42950	4402163441	E1-3-20180719-FD	440-216344-9	7/19/2018	Stage 2A	Water	FD4			X											
42950	4402163441	E2-1-20180719-EB	440-216344-10	7/19/2018	Stage 2A	Water	EB			X											
42950	4402165091	LVW0.55-0.5-20180723	440-216509-1	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-1-1.0-20180723	440-216509-2	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-2-1.5-20180723	440-216509-3	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-3-1.75-20180723	440-216509-4	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-4-1.75-20180723	440-216509-5	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-5-2.0-20180723	440-216509-6	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW3.5-6-2.0-20180723	440-216509-7	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW4.2-1-1.5-20180723	440-216509-8	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW4.2-2-2.0-20180723	440-216509-9	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW4.2-3-2.5-20180723	440-216509-10	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165091	LVW4.2-4-2.0-20180723	440-216509-11	7/23/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW4.75-1-1.5-20180724	440-216598-1	7/24/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW4.75-2-1.25-20180724	440-216598-2	7/24/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW4.75-3-1.0-20180724	440-216598-3	7/24/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW4.75-4-1.0-20180724	440-216598-4	7/24/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW4.75-5-1.0-20180724	440-216598-5	7/24/2018	Stage 2A	Water							X	X				X			
42950	4402165981	LVW6.05-0.5-20180724	440-216598-6	7/24/2018	Stage 2A	Water	FD5						X	X				X			
42950	4402165981	LVW6.05-0.5-20180724-FD	440-216598-7	7/24/2018	Stage 2A	Water	FD5						X	X				X			
42950	4402165981	LVW6.05-0.5-20180724-FB	440-216598-8	7/24/2018	Stage 2A	Water	FB						X	X				X			
42950	4402167011	LVW5.3-1-3.0-20180725	440-216701-1	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW5.3-2-0.75-20180725	440-216701-2	7/25/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
42950	4402167011	LVW5.3-3-0.5-20180725	440-216701-3	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW6.6-1-1.0-20180725	440-216701-4	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW6.6-2-1.0-20180725	440-216701-5	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW6.6-3-1.25-20180725	440-216701-6	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW7.2-1.0-20180725	440-216701-7	7/25/2018	Stage 2A	Water							X	X				X			
42950	4402167011	LVW8.85-1.0-20180725	440-216701-8	7/25/2018	Stage 2A	Water	FD6						X	X				X			
42950	4402167011	LVW8.85-1.0-20180725-FD	440-216701-9	7/25/2018	Stage 2A	Water	FD6						X	X				X			
42950	4402167011	LVW8.85-1.0-20180725-FB	440-216701-10	7/25/2018	Stage 2A	Water	FB						X	X				X			
42950	4402169721	PC-99R2/R3-20180718	440-216972-1	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-115R-20180718	440-216972-2	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-116R-20180718	440-216972-3	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-118-20180718	440-216972-4	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-119-20180718	440-216972-5	7/18/2018	Stage 2A	Water	FD3			X											
42950	4402169721	PC-120-20180718	440-216972-6	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-121-20180718	440-216972-7	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-117-20180718	440-216972-8	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-119-20180718-FD	440-216972-9	7/18/2018	Stage 2A	Water	FD3			X											
42950	4402169721	PC-133-20180718	440-216972-10	7/18/2018	Stage 2A	Water				X											
42950	4402169721	PC-120-20180718-EB	440-216972-11	7/18/2018	Stage 2A	Water	EB			X											
43141	4402175881	M-80-20180807	440-217588-1	8/7/2018	Stage 2A	Water			X	X				X				X			
43141	4402175881	M-11-20180807	440-217588-2	8/7/2018	Stage 2A	Water			X	X				X				X			
43141	4402175881	M-44-20180807	440-217588-3	8/7/2018	Stage 2A	Water	FD7		X					X				X			
43141	4402175881	M-44-20180807-FD4	440-217588-4	8/7/2018	Stage 2A	Water	FD7		X					X				X			
43141	4402175881	M-44-20180807-EB4	440-217588-5	8/7/2018	Stage 2A	Water	EB		X	X				X				X			
43141	4402175881	M-12A-20180807	440-217588-6	8/7/2018	Stage 2A	Water			X	X				X				X			
43141	4402175881	M-38-20180807	440-217588-7	8/7/2018	Stage 2A	Water			X	X				X				X			
43141	4402175881	M-38-20180807-FB4	440-217588-8	8/7/2018	Stage 2A	Water	FB		X	X				X				X			
43141	4402175891	M-5A-20180807	440-217589-1	8/7/2018	Stage 2A	Water		X			X			X		X	X	X	X	X	
43141	4402175891	M-6A-20180807	440-217589-2	8/7/2018	Stage 2A	Water		X			X			X		X	X	X	X	X	
43141	4402175891	M-7B-20180807	440-217589-3	8/7/2018	Stage 2A	Water		X			X			X		X	X	X	X	X	
43141	4402175901	M-10-20180807	440-217590-1	8/7/2018	Stage 2A	Water		X		X	X	X		X	X			X			
43141	4402178051	M-44-20180809	440-217805-1	8/9/2018	Stage 2A	Water	FD8			X											
43141	4402178051	M-44-20180809-FD4	440-217805-2	8/9/2018	Stage 2A	Water	FD8			X											
43141	4402179491	LVW0.55-0.5-20180809	440-217949-1	8/9/2018	Stage 2A	Water	FD9						X	X				X			
43141	4402179491	LVW0.55-0.5-20180809-FD	440-217949-2	8/9/2018	Stage 2A	Water	FD9						X	X				X			
43141	4402179491	LVW3.5-1-1.0-20180809	440-217949-3	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW3.5-2-1.0-20180809	440-217949-4	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW3.5-3-2.0-20180809	440-217949-5	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW3.5-4-2.0-20180809	440-217949-6	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW3.5-5-2.0-20180809	440-217949-7	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW3.5-6-2.0-20180809	440-217949-8	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.2-1-1.5-20180809	440-217949-9	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.2-2-1.75-20180809	440-217949-10	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.2-3-2.5-20180809	440-217949-11	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.2-4-2.0-20180809	440-217949-12	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.75-1-1.25-20180809	440-217949-13	8/9/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43141	4402179491	LVW4.75-2-1.0-20180809	440-217949-14	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.75-3-0.75-20180809	440-217949-15	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.75-4-1.5-20180809	440-217949-16	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW4.75-5-1.0-20180809	440-217949-17	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW5.3-1-3.0-20180809	440-217949-18	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW5.3-2-0.75-20180809	440-217949-19	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW5.3-3-1.0-20180809	440-217949-20	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW6.05-0.75-20180809	440-217949-21	8/9/2018	Stage 2A	Water	FD10						X	X				X			
43141	4402179491	LVW6.05-0.75-20180809-FD	440-217949-22	8/9/2018	Stage 2A	Water	FD10						X	X				X			
43141	4402179491	LVW6.05-0.75-20180809-FB	440-217949-23	8/9/2018	Stage 2A	Water	FB						X	X				X			
43141	4402179491	LVW6.6-1-1.0-20180809	440-217949-24	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW6.6-2-1.0-20180809	440-217949-25	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW6.6-3-1.5-20180809	440-217949-26	8/9/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW7.2-1.0-20180810	440-217949-27	8/10/2018	Stage 2A	Water							X	X				X			
43141	4402179491	LVW8.85-1.0-20180810	440-217949-28	8/10/2018	Stage 2A	Water							X	X				X			
43141	4402181221	ART-1A-20180814	440-218122-1	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-2-20180814	440-218122-2	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-3A-20180814	440-218122-3	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-4-20180814	440-218122-4	8/14/2018	Stage 2A	Water	FD11		X		X		X	X				X			X
43141	4402181221	ART-6-20180814	440-218122-5	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-7B-20180814	440-218122-6	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-8A-20180814	440-218122-7	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-9-20180814	440-218122-8	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-150-20180814	440-218122-9	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	ART-6-20180814 EB	440-218122-10	8/14/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43141	4402181221	ART-4-20180814 FD	440-218122-11	8/14/2018	Stage 2A	Water	FD11		X		X		X	X				X			X
43141	4402181221	PC-99R2/R3-20180814	440-218122-12	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-115R-20180814	440-218122-13	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-116R-20180814	440-218122-14	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-117-20180814	440-218122-15	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-118-20180814	440-218122-16	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-119-20180814	440-218122-17	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-120-20180814	440-218122-18	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-121-20180814	440-218122-19	8/14/2018	Stage 2A	Water	FD12		X		X		X	X				X			X
43141	4402181221	PC-133-20180814	440-218122-20	8/14/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402181221	PC-121-20180814 FD	440-218122-21	8/14/2018	Stage 2A	Water	FD12		X		X		X	X				X			X
43141	4402181221	PC-133-20180814 EB	440-218122-22	8/14/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43141	4402183041	E1-1-20180816	440-218304-1	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E1-2-20180816	440-218304-2	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E1-3-20180816	440-218304-3	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E2-1-20180816	440-218304-4	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E2-2-20180816	440-218304-5	8/16/2018	Stage 2A	Water	FD13		X		X		X	X				X			X
43141	4402183041	E2-3-20180816	440-218304-6	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E2-4-20180816	440-218304-7	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E2-5-20180816	440-218304-8	8/16/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402183041	E2-2-20180816-FD	440-218304-9	8/16/2018	Stage 2A	Water	FD13		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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH	
43141	4402183041	E2-3-20180816-EB	440-218304-10	8/16/2018	Stage 2A	Water	EB		X		X		X	X				X				X
43141	4402183351	H-28A-20180816	440-218335-1	8/16/2018	Stage 2A	Water		X			X			X		X	X	X	X	X		
43141	4402183611	E1-1-20180816	440-218361-1	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E1-2-20180816	440-218361-2	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E1-3-20180816	440-218361-3	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E2-1-20180816	440-218361-4	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E2-2-20180816	440-218361-5	8/16/2018	Stage 2A	Water	FD13			X												
43141	4402183611	E2-3-20180816	440-218361-6	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E2-4-20180816	440-218361-7	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E2-5-20180816	440-218361-8	8/16/2018	Stage 2A	Water				X												
43141	4402183611	E2-2-20180816-FD	440-218361-9	8/16/2018	Stage 2A	Water	FD13			X												
43141	4402183611	E2-3-20180816-EB	440-218361-10	8/16/2018	Stage 2A	Water	EB			X												
43141	4402184271	ART-1-20180814	440-218427-1	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-2-20180814	440-218427-2	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-3A-20180814	440-218427-3	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-4-20180814	440-218427-4	8/14/2018	Stage 2A	Water	FD11			X												
43141	4402184271	ART-6-20180814	440-218427-5	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-7B-20180814	440-218427-6	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-8A-20180814	440-218427-7	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-9-20180814	440-218427-8	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-150-20180814	440-218427-9	8/14/2018	Stage 2A	Water				X												
43141	4402184271	ART-6-20180814 EB	440-218427-10	8/14/2018	Stage 2A	Water	EB			X												
43141	4402184271	ART-4-20180814 FD	440-218427-11	8/14/2018	Stage 2A	Water	FD11			X												
43141	4402184271	PC-99R2/R3-20180814	440-218427-12	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-115R-20180814	440-218427-13	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-116R-20180814	440-218427-14	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-117-20180814	440-218427-15	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-118-20180814	440-218427-16	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-119-20180814	440-218427-17	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-120-20180814	440-218427-18	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-121-20180814	440-218427-19	8/14/2018	Stage 2A	Water	FD12			X												
43141	4402184271	PC-133-20180814	440-218427-20	8/14/2018	Stage 2A	Water				X												
43141	4402184271	PC-121-20180814 FD	440-218427-21	8/14/2018	Stage 2A	Water	FD12			X												
43141	4402184271	PC-133-20180814 EB	440-218427-22	8/14/2018	Stage 2A	Water	EB			X												
43141	4402185961	I-AA-20180821	440-218596-1	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-AB-20180821	440-218596-2	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-B-20180821	440-218596-3	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-R-20180821	440-218596-4	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-Y-20180821	440-218596-5	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-L-20180821	440-218596-6	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-S-20180821	440-218596-7	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-F-20180821	440-218596-8	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-X-20180821	440-218596-9	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-N-20180821	440-218596-10	8/21/2018	Stage 2A	Water	FD14		X		X		X	X					X			X
43141	4402185961	I-E-20180821	440-218596-11	8/21/2018	Stage 2A	Water			X		X		X	X					X			X
43141	4402185961	I-M-20180821	440-218596-12	8/21/2018	Stage 2A	Water			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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43141	4402185961	I-D-20180821	440-218596-13	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-C-20180821	440-218596-14	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-N-20180821-FD	440-218596-15	8/21/2018	Stage 2A	Water	FD14		X		X		X	X				X			X
43141	4402185961	I-O-20180821	440-218596-16	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-W-20180821	440-218596-17	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-P-20180821	440-218596-18	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-H-20180821	440-218596-19	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-U-20180821	440-218596-20	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-T-20180821	440-218596-21	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-G-20180821	440-218596-22	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-Q-20180821	440-218596-23	8/21/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402185961	I-O-20180821-EB	440-218596-24	8/21/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43141	4402186361	I-AD-20180822	440-218636-1	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-AC-20180822	440-218636-2	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-K-20180822	440-218636-3	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-J-20180822	440-218636-4	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-Z-20180822	440-218636-5	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-I-20180822	440-218636-6	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-V-20180822	440-218636-7	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186361	I-AR-20180822	440-218636-8	8/22/2018	Stage 2A	Water			X		X		X	X				X			X
43141	4402186591	I-AA-20180821	440-218659-1	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-AB-20180821	440-218659-2	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-B-20180821	440-218659-3	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-R-20180821	440-218659-4	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-Y-20180821	440-218659-5	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-L-20180821	440-218659-6	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-S-20180821	440-218659-7	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-O-20180821	440-218659-8	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-W-20180821	440-218659-9	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-P-20180821	440-218659-10	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-H-20180821	440-218659-11	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-U-20180821	440-218659-12	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-T-20180821	440-218659-13	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-G-20180821	440-218659-14	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-Q-20180821	440-218659-15	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-O-20180821-EB	440-218659-16	8/21/2018	Stage 2A	Water	EB			X											
43141	4402186591	I-F-20180821	440-218659-17	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-X-20180821	440-218659-18	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-N-20180821	440-218659-19	8/21/2018	Stage 2A	Water	FD14			X											
43141	4402186591	I-E-20180821	440-218659-20	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-M-20180821	440-218659-21	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-D-20180821	440-218659-22	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-C-20180821	440-218659-23	8/21/2018	Stage 2A	Water				X											
43141	4402186591	I-N-20180821-FD	440-218659-24	8/21/2018	Stage 2A	Water	FD14			X											
43209	4402195401	PC-99R2/R3-20180906	440-219540-1	9/6/2018	Stage 2A	Water	FD15		X		X		X	X				X			X
43209	4402195401	PC-115R-20180906	440-219540-2	9/6/2018	Stage 2A	Water			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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43209	4402195401	PC-116R-20180906	440-219540-3	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-118-20180906	440-219540-4	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-119-20180906	440-219540-5	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-120-20180906	440-219540-6	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-121-20180906	440-219540-7	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-117-20180906	440-219540-8	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-99R2/R3-20180906-FD	440-219540-9	9/6/2018	Stage 2A	Water	FD15		X		X		X	X				X			X
43209	4402195401	PC-133-20180906	440-219540-10	9/6/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402195401	PC-115R-20180906-EB	440-219540-11	9/6/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43141	4402195541	I-AD-20180822	440-219554-1	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-AC-20180822	440-219554-2	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-K-20180822	440-219554-3	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-J-20180822	440-219554-4	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-Z-20180822	440-219554-5	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-I-20180822	440-219554-6	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-V-20180822	440-219554-7	8/22/2018	Stage 2A	Water				X											
43141	4402195541	I-AR-20180822	440-219554-8	8/22/2018	Stage 2A	Water				X											
43209	4402196841	LVW0.55-0.5-20180906	440-219684-1	9/6/2018	Stage 2A	Water	FD16						X	X				X			
43209	4402196841	LVW0.55-0.5-20180906-FD	440-219684-2	9/6/2018	Stage 2A	Water	FD16						X	X				X			
43209	4402196841	LVW3.5-1-1.0-20180906	440-219684-3	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW3.5-2-1.0-20180906	440-219684-4	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW3.5-3-1.0-20180906	440-219684-5	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW3.5-4-2.0-20180906	440-219684-6	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW3.5-5-2.0-20180906	440-219684-7	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW3.5-6-2.0-20180906	440-219684-8	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.2-1-2.0-20180906	440-219684-9	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.2-2-2.0-20180906	440-219684-10	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.2-3-2.5-20180906	440-219684-11	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.2-4-3.0-20180906	440-219684-12	9/6/2018	Stage 2A	Water	FD17						X	X				X			
43209	4402196841	LVW4.2-4-3.0-20180906-FD	440-219684-13	9/6/2018	Stage 2A	Water	FD17						X	X				X			
43209	4402196841	LVW4.75-1-1.25-20180906	440-219684-14	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.75-2-1.25-20180906	440-219684-15	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.75-3-1.5-20180906	440-219684-16	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.75-4-1.5-20180906	440-219684-17	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW4.75-5-0.75-20180906	440-219684-18	9/6/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW6.05-0.5-20180907	440-219684-19	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW6.05-0.5-20180907-FB	440-219684-20	9/7/2018	Stage 2A	Water	FB						X	X				X			
43209	4402196841	LVW8.85-1.0-20180907	440-219684-21	9/7/2018	Stage 2A	Water	FD18						X	X				X			
43209	4402196841	LVW8.85-1.0-20180907-FD	440-219684-22	9/7/2018	Stage 2A	Water	FD18						X	X				X			
43209	4402196841	LVW8.85-1.0-20180907-FB	440-219684-23	9/7/2018	Stage 2A	Water	FB						X	X				X			
43209	4402196841	LVW6.6-1-0.5-20180907	440-219684-24	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW6.6-2-0.5-20180907	440-219684-25	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW6.6-3-0.25-20180907	440-219684-26	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW7.2-0.75-20180907	440-219684-27	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW5.3-1-2.5-20180907	440-219684-28	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402196841	LVW5.3-2-0.75-20180907	440-219684-29	9/7/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43209	4402196841	LVW5.3-3-0.5-20180907	440-219684-30	9/7/2018	Stage 2A	Water							X	X				X			
43209	4402198981	ART-1A-20180911	440-219898-1	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-2-20180911	440-219898-2	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-3A-20180911	440-219898-3	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-4-20180911	440-219898-4	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-7B-20180911	440-219898-5	9/11/2018	Stage 2A	Water	FD19		X		X		X	X				X			X
43209	4402198981	ART-8A-20180911	440-219898-6	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-9-20180911	440-219898-7	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	PC-150-20180911	440-219898-8	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402198981	ART-8A-20180911-EB	440-219898-9	9/11/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43209	4402198981	ART-7B-20180911-FD	440-219898-10	9/11/2018	Stage 2A	Water	FD19		X		X		X	X				X			X
43209	4402198981	ART-6-20180911	440-219898-11	9/11/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-F-20180912	440-220024-1	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-X-20180912	440-220024-2	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-N-20180912	440-220024-3	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-E-20180912	440-220024-4	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-M-20180912	440-220024-5	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-D-20180912	440-220024-6	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-C-20180912	440-220024-7	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-AA-20180912	440-220024-8	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-AB-20180912	440-220024-9	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-B-20180912	440-220024-10	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-R-20180912	440-220024-11	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-Y-20180912	440-220024-12	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-L-20180912	440-220024-13	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402200241	I-S-20180912	440-220024-14	9/12/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-O-20180913	440-220115-1	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-W-20180913	440-220115-2	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-P-20180913	440-220115-3	9/13/2018	Stage 2A	Water	FD20		X		X		X	X				X			X
43209	4402201151	I-H-20180913	440-220115-4	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-U-20180913	440-220115-5	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-T-20180913	440-220115-6	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-G-20180913	440-220115-7	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-Q-20180913	440-220115-8	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-Q-20180913-EB	440-220115-9	9/13/2018	Stage 2A	Water	EB		X		X		X	X				X			X
43209	4402201151	I-AR-20180913	440-220115-10	9/13/2018	Stage 2A	Water			X		X		X	X				X			X
43209	4402201151	I-P-20180913-FD	440-220115-11	9/13/2018	Stage 2A	Water	FD20		X		X		X	X				X			X
43209	4402201561	I-O-20180913	440-220156-1	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-W-20180913	440-220156-2	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-P-20180913	440-220156-3	9/13/2018	Stage 2A	Water	FD20				X										
43209	4402201561	I-H-20180913	440-220156-4	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-U-20180913	440-220156-5	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-T-20180913	440-220156-6	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-G-20180913	440-220156-7	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-Q-20180913	440-220156-8	9/13/2018	Stage 2A	Water					X										
43209	4402201561	I-Q-20180913-EB	440-220156-9	9/13/2018	Stage 2A	Water	EB				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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH	
43209	4402201561	I-AR-20180913	440-220156-10	9/13/2018	Stage 2A	Water				X												
43209	4402201561	I-P-20180913-FD	440-220156-11	9/13/2018	Stage 2A	Water	FD20			X												
43209	4402204081	I-AD-20180918	440-220408-1	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-AC-20180918	440-220408-2	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-K-20180918	440-220408-3	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-J-20180918	440-220408-4	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-Z-20180918	440-220408-5	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-I-20180918	440-220408-6	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204081	I-V-20180918	440-220408-7	9/18/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204171	I-AD-20180918	440-220417-1	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-AC-20180918	440-220417-2	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-K-20180918	440-220417-3	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-J-20180918	440-220417-4	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-Z-20180918	440-220417-5	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-I-20180918	440-220417-6	9/18/2018	Stage 2A	Water				X												
43209	4402204171	I-V-20180918	440-220417-7	9/18/2018	Stage 2A	Water				X												
43209	4402204501	E1-1-20180919	440-220450-1	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E1-2-20180919	440-220450-2	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E1-3-20180919	440-220450-3	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E2-2-20180919	440-220450-4	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E2-3-20180919	440-220450-5	9/19/2018	Stage 2A	Water	FD21		X		X		X	X					X			X
43209	4402204501	E2-4-20180919	440-220450-6	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E2-5-20180919	440-220450-7	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204501	E2-3-20180919-FD	440-220450-8	9/19/2018	Stage 2A	Water	FD21		X		X		X	X					X			X
43209	4402204501	E2-4-20180919-EB	440-220450-9	9/19/2018	Stage 2A	Water	EB		X		X		X	X					X			X
43209	4402204501	E2-1-20180919	440-220450-10	9/19/2018	Stage 2A	Water			X		X		X	X					X			X
43209	4402204991	E1-1-20180919	440-220499-1	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E1-2-20180919	440-220499-2	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E1-3-20180919	440-220499-3	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E2-1-20180919	440-220499-4	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E2-2-20180919	440-220499-5	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E2-3-20180919	440-220499-6	9/19/2018	Stage 2A	Water	FD21			X												
43209	4402204991	E2-4-20180919	440-220499-7	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E2-5-20180919	440-220499-8	9/19/2018	Stage 2A	Water				X												
43209	4402204991	E2-3-20180919-FD	440-220499-9	9/19/2018	Stage 2A	Water	FD21			X												
43209	4402204991	E2-4-20180919-EB	440-220499-10	9/19/2018	Stage 2A	Water	EB			X												
43209	4402214911	ART-1A-20180911	440-221491-1	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-2-20180911	440-221491-2	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-3A-20180911	440-221491-3	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-4-20180911	440-221491-4	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-7B-20180911	440-221491-5	9/11/2018	Stage 2A	Water	FD19			X												
43209	4402214911	ART-8A-20180911	440-221491-6	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-9-20180911	440-221491-7	9/11/2018	Stage 2A	Water				X												
43209	4402214911	PC-150-20180911	440-221491-8	9/11/2018	Stage 2A	Water				X												
43209	4402214911	ART-8A-20180911-EB	440-221491-9	9/11/2018	Stage 2A	Water	EB			X												
43209	4402214911	ART-7B-20180911-FD	440-221491-10	9/11/2018	Stage 2A	Water	FD19			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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH	
43209	4402214911	ART-6-20180911	440-221491-11	9/11/2018	Stage 2A	Water				X												
43209	4402214971	PC-99R2/R3-20180906	440-221497-1	9/6/2018	Stage 2A	Water	FD15			X												
43209	4402214971	PC-115R-20180906	440-221497-2	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-116R-20180906	440-221497-3	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-118-20180906	440-221497-4	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-119-20180906	440-221497-5	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-120-20180906	440-221497-6	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-121-20180906	440-221497-7	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-117-20180906	440-221497-8	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-99R2/R3-20180906-FD	440-221497-9	9/6/2018	Stage 2A	Water	FD15			X												
43209	4402214971	PC-133-20180906	440-221497-10	9/6/2018	Stage 2A	Water				X												
43209	4402214971	PC-115R-20180906-EB	440-221497-11	9/6/2018	Stage 2A	Water	EB			X												
43209	4402215001	I-F-20180912	440-221500-1	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-X-20180912	440-221500-2	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-N-20180912	440-221500-3	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-E-20180912	440-221500-4	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-M-20180912	440-221500-5	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-D-20180912	440-221500-6	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-C-20180912	440-221500-7	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-AA-20180912	440-221500-8	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-AB-20180912	440-221500-9	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-B-20180912	440-221500-10	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-R-20180912	440-221500-11	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-Y-20180912	440-221500-12	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-L-20180912	440-221500-13	9/12/2018	Stage 2A	Water				X												
43209	4402215001	I-S-20180912	440-221500-14	9/12/2018	Stage 2A	Water				X												
43925	4402216361	LVW0.55-0.5-20181004	440-221636-1	10/4/2018	Stage 2A	Water	FD22						X	X					X			
43925	4402216361	LVW0.55-0.5-20181004-FD	440-221636-2	10/4/2018	Stage 2A	Water	FD22						X	X					X			
43925	4402216361	LVW3.5-1-0.5-20181004	440-221636-3	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW3.5-2-1.25-20181004	440-221636-4	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW3.5-3-1.5-20181004	440-221636-5	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW3.5-4-2.0-20181004	440-221636-6	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW3.5-5-2.0-20181004	440-221636-7	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW3.5-6-2.0-20181004	440-221636-8	10/4/2018	Stage 2A	Water	FD23						X	X					X			
43925	4402216361	LVW3.5-6-2.0-20181004-FD	440-221636-9	10/4/2018	Stage 2A	Water	FD23						X	X					X			
43925	4402216361	LVW3.5-6-2.0-20181004-FB	440-221636-10	10/4/2018	Stage 2A	Water	FB						X	X					X			
43925	4402216361	LVW4.2-1-1.5-20181004	440-221636-11	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.2-2-0.75-20181004	440-221636-12	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.2-3-1.0-20181004	440-221636-13	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.2-4-2.0-20181004	440-221636-14	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.75-1-1.0-20181004	440-221636-15	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.75-2-1.0-20181004	440-221636-16	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.75-3-1.0-20181004	440-221636-17	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.75-4-1.0-20181004	440-221636-18	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW4.75-5-0.75-20181004	440-221636-19	10/4/2018	Stage 2A	Water							X	X					X			
43925	4402216361	LVW5.3-1-2.5-20181004	440-221636-20	10/4/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43925	4402216361	LVW5.3-2-1.0-20181004	440-221636-21	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW5.3-3-1.0-20181004	440-221636-22	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW5.3-4-0.5-20181004	440-221636-23	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW5.3-5-0.5-20181004	440-221636-24	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW5.3-6-0.5-20181004	440-221636-25	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	C1-E-0.0-20181004	440-221636-26	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	C1-W-0.0-20181004	440-221636-27	10/4/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW8.85-1.0-20181005	440-221636-28	10/5/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW7.2-1.0-20181005	440-221636-29	10/5/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW6.6-1-1.0-20181005	440-221636-30	10/5/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW6.6-2-0.75-20181005	440-221636-31	10/5/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW6.6-3-0.5-20181005	440-221636-32	10/5/2018	Stage 2A	Water							X	X				X			
43925	4402216361	LVW6.05-0.5-20181005	440-221636-33	10/5/2018	Stage 2A	Water	FD24						X	X				X			
43925	4402216361	LVW6.05-0.5-20181005-FD	440-221636-34	10/5/2018	Stage 2A	Water	FD24						X	X				X			
43925	4402216361	LVW6.05-0.5-20181005-FB	440-221636-35	10/5/2018	Stage 2A	Water	FB						X	X				X			
43925	4402218321	PC-99R2/R3-20181009	440-221832-1	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-115R-20181009	440-221832-2	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-116R-20181009	440-221832-3	10/9/2018	Stage 2A	Water	FD25		X	X	X		X	X				X			X
43925	4402218321	PC-118-20181009	440-221832-4	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-119-20181009	440-221832-5	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-120-20181009	440-221832-6	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-121-20181009	440-221832-7	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-117-20181009	440-221832-8	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-116R-20181009-FD	440-221832-9	10/9/2018	Stage 2A	Water	FD25		X	X	X		X	X				X			X
43925	4402218321	PC-133-20181009	440-221832-10	10/9/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402218321	PC-117-20181009-EB	440-221832-11	10/9/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
43925	4402219071	ART-1A-20181010	440-221907-1	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-2-20181010	440-221907-2	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-3A-20181010	440-221907-3	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-4-20181010	440-221907-4	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-7B-20181010	440-221907-5	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-8A-20181010	440-221907-6	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	ART-9-20181010	440-221907-7	10/10/2018	Stage 2A	Water	FD26		X	X	X		X	X				X			X
43925	4402219071	PC-150-20181010	440-221907-8	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402219071	PC-150-20181010-EB	440-221907-9	10/10/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
43925	4402219071	ART-9-20181010-FD	440-221907-10	10/10/2018	Stage 2A	Water	FD26		X	X	X		X	X				X			X
43925	4402219071	ART-6-20181010	440-221907-11	10/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-O-20181011	440-222060-1	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-W-20181011	440-222060-2	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-P-20181011	440-222060-3	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-H-20181011	440-222060-4	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-U-20181011	440-222060-5	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-T-20181011	440-222060-6	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-G-20181011	440-222060-7	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-Q-20181011	440-222060-8	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-F-20181011	440-222060-9	10/11/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
43925	4402220601	I-X-20181011	440-222060-10	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-N-20181011	440-222060-11	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-E-20181011	440-222060-12	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-M-20181011	440-222060-13	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-D-20181011	440-222060-14	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402220601	I-C-20181011	440-222060-15	10/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-AA-20181016	440-222403-1	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-AB-20181016	440-222403-2	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-B-20181016	440-222403-3	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-R-20181016	440-222403-4	10/16/2018	Stage 2A	Water	FD27		X	X	X		X	X				X			X
43925	4402224031	I-Y-20181016	440-222403-5	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-L-20181016	440-222403-6	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-S-20181016	440-222403-7	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402224031	I-R-20181016 FD	440-222403-8	10/16/2018	Stage 2A	Water	FD27		X	X	X		X	X				X			X
43925	4402224031	I-S-20181016-EB	440-222403-9	10/16/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
43925	4402224031	I-AR-20181016	440-222403-10	10/16/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-AD-20181017	440-222514-1	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-AC-20181017	440-222514-2	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-K-20181017	440-222514-3	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-J-20181017	440-222514-4	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-Z-20181017	440-222514-5	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-I-20181017	440-222514-6	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402225141	I-V-20181017	440-222514-7	10/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E1-1-20181023	440-222875-1	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E1-2-20181023	440-222875-2	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E1-3-20181023	440-222875-3	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E2-1-20181023	440-222875-4	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E2-2-20181023	440-222875-5	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E2-3-20181023	440-222875-6	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E2-4-20181023	440-222875-7	10/23/2018	Stage 2A	Water			X	X	X		X	X				X			X
43925	4402228751	E2-5-20181023	440-222875-8	10/23/2018	Stage 2A	Water	FD28		X	X	X		X	X				X			X
43925	4402228751	E2-5-20181023-FD	440-222875-9	10/23/2018	Stage 2A	Water	FD28		X	X	X		X	X				X			X
43925	4402228751	E1-1-20181023-EB	440-222875-10	10/23/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44004	4402236471	LVW0.55-0.5-20181101	440-223647-1	11/1/2018	Stage 2A	Water	FD29						X	X				X			
44004	4402236471	LVW0.55-0.5-20181101-FD	440-223647-2	11/1/2018	Stage 2A	Water	FD29						X	X				X			
44004	4402236471	LVW3.5-1-0.9-20181101	440-223647-3	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW3.5-2-1.0-20181101	440-223647-4	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW3.5-3-1.9-20181101	440-223647-5	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW3.5-4-2.0-20181101	440-223647-6	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW3.5-5-2.0-20181101	440-223647-7	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW3.5-6-1.7-20181101	440-223647-8	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.2-1-2.1-20181101	440-223647-9	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.2-2-1.8-20181101	440-223647-10	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.2-3-2.0-20181101	440-223647-11	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.2-4-1.9-20181101	440-223647-12	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.75-1-1.3-20181101	440-223647-13	11/1/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44004	4402236471	LVW4.75-2-1.2-20181101	440-223647-14	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.75-3-0.7-20181101	440-223647-15	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.75-4-0.8-20181101	440-223647-16	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW4.75-5-0.9-20181101	440-223647-17	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-1-3.3-20181101	440-223647-18	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-2-1.2-20181101	440-223647-19	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-3-0.7-20181101	440-223647-20	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-4-0.5-20181101	440-223647-21	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-5-0.5-20181101	440-223647-22	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW5.3-6-0.5-20181101	440-223647-23	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	C1-E-0.0-20181101	440-223647-24	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	C1-W-0.0-20181101	440-223647-25	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW6.05-0.8-20181101	440-223647-26	11/1/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW6.05-0.8-20181101-FB	440-223647-27	11/1/2018	Stage 2A	Water	FB						X	X				X			
44004	4402236471	LVW8.85-0.6-20181102	440-223647-28	11/2/2018	Stage 2A	Water	FD30						X	X				X			
44004	4402236471	LVW8.85-0.6-20181102-FD	440-223647-29	11/2/2018	Stage 2A	Water	FD30						X	X				X			
44004	4402236471	LVW6.6-1-0.5-20181102	440-223647-30	11/2/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW6.6-2-0.5-20181102	440-223647-31	11/2/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW6.6-3-0.9-20181102	440-223647-32	11/2/2018	Stage 2A	Water							X	X				X			
44004	4402236471	LVW7.2-0.8-20181102	440-223647-33	11/2/2018	Stage 2A	Water	FD31						X	X				X			
44004	4402236471	LVW7.2-0.8-20181102-FD	440-223647-34	11/2/2018	Stage 2A	Water	FD31						X	X				X			
44004	4402236471	LVW7.2-0.8-20181102-FB	440-223647-35	11/2/2018	Stage 2A	Water	FB						X	X				X			
44004	4402237451	PC-156B-20181105	440-223745-1	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC-156A-20181105	440-223745-2	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC-156A-20181105-FB5	440-223745-3	11/5/2018	Stage 2A	Water	FB		X		X		X	X				X			
44004	4402237451	PC-157A-20181105	440-223745-4	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC-157B-20181105	440-223745-5	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC-86-20181105	440-223745-6	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC-97-20181105	440-223745-7	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237451	PC86-20181105-EB5	440-223745-8	11/5/2018	Stage 2A	Water	EB		X		X		X	X				X			
44004	4402237471	PC-91-20181105	440-223747-1	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237471	PC-90-20181105	440-223747-2	11/5/2018	Stage 2A	Water	FD32		X		X		X	X				X			
44004	4402237471	PC-90-20181105-FD6	440-223747-3	11/5/2018	Stage 2A	Water	FD32		X		X		X	X				X			
44004	4402237471	PC-94-20181105	440-223747-4	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402237501	PC-155A-20181105	440-223750-1	11/5/2018	Stage 2A	Water	FD33		X		X		X	X				X			
44004	4402237501	PC-155A-20181105-FD5	440-223750-2	11/5/2018	Stage 2A	Water	FD33		X		X		X	X				X			
44004	4402237501	PC-155B-20181105	440-223750-3	11/5/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-58-20181106	440-223852-1	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-59-20181106	440-223852-2	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-59-20181106-EB6	440-223852-3	11/6/2018	Stage 2A	Water	EB		X		X		X	X				X			
44004	4402238521	ARP-6B-20181106	440-223852-4	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	ARP-5A-20181106	440-223852-5	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-62-20181106	440-223852-6	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-98R-20181106	440-223852-7	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-137D-20181106	440-223852-8	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-154-20181106	440-223852-9	11/6/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44004	4402238521	PC-56-20181106	440-223852-10	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-122-20181106	440-223852-11	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-136-20181106	440-223852-12	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	ARP-7-20181106	440-223852-13	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	ARP-1-20181106	440-223852-14	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-144-20181106	440-223852-15	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-135A-20181106	440-223852-16	11/6/2018	Stage 2A	Water	FD34		X		X		X	X				X			
44004	4402238521	PC-135A-20181106-FD7	440-223852-17	11/6/2018	Stage 2A	Water	FD34		X		X		X	X				X			
44004	4402238521	MW-K5-20181106	440-223852-18	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-103-20181106	440-223852-19	11/6/2018	Stage 2A	Water			X		X		X					X			
44004	4402238521	PC-134D-20181106	440-223852-20	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-101R-20181106	440-223852-21	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-158-20181106	440-223852-22	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	M-69-20181106	440-223852-23	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	PC-53-20181106	440-223852-24	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	MW-K4-20181106	440-223852-25	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	ARP-3A-20181106	440-223852-26	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	ARP-3A-20181106-EB7	440-223852-27	11/6/2018	Stage 2A	Water	EB		X		X		X	X				X			
44004	4402238521	ARP-2A-20181106	440-223852-28	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	M-79-20181106	440-223852-29	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402238521	M-72-20181106	440-223852-30	11/6/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239321	PC-99R2/R3-20181107	440-223932-1	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-115R-20181107	440-223932-2	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-116R-20181107	440-223932-3	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-118-20181107	440-223932-4	11/7/2018	Stage 2A	Water	FD35		X	X	X		X	X				X			X
44004	4402239321	PC-119-20181107	440-223932-5	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-120-20181107	440-223932-6	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-121-20181107	440-223932-7	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-117-20181107	440-223932-8	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-118-20181107-FD	440-223932-9	11/7/2018	Stage 2A	Water	FD35		X	X	X		X	X				X			X
44004	4402239321	PC-133-20181107	440-223932-10	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402239321	PC-119-20181107-EB	440-223932-11	11/7/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44004	4402239351	PC-160-20181107	440-223935-1	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-129-20181107	440-223935-2	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-151-20181107	440-223935-3	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	M-19-20181107	440-223935-4	11/7/2018	Stage 2A	Water	FD36		X		X		X	X				X			
44004	4402239351	M-19-20181107-FD9	440-223935-5	11/7/2018	Stage 2A	Water	FD36		X		X		X	X				X			
44004	4402239351	M-67-20181107	440-223935-6	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-159-20181107	440-223935-7	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-55-20181107	440-223935-8	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-124-20181107	440-223935-9	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-72-20181107	440-223935-10	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-72-20181107-FB6	440-223935-11	11/7/2018	Stage 2A	Water	FB		X		X		X	X				X			
44004	4402239351	PC-126-20181107	440-223935-12	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-127-20181107	440-223935-13	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-149-20181107	440-223935-14	11/7/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44004	4402239351	PC-54-20181107	440-223935-15	11/7/2018	Stage 2A	Water	FD37		X		X		X	X				X			
44004	4402239351	PC-54-20181107-FD8	440-223935-16	11/7/2018	Stage 2A	Water	FD37		X		X		X	X				X			
44004	4402239351	PC-123-20181107	440-223935-17	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-123-20181107-EB8	440-223935-18	11/7/2018	Stage 2A	Water	EB		X		X		X	X				X			
44004	4402239351	PC-152-20181107	440-223935-19	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-128-20181107	440-223935-20	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	M-193-20181107	440-223935-21	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	M-48A-20181107	440-223935-22	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-125-20181107	440-223935-23	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-125-20181107-FB7	440-223935-24	11/7/2018	Stage 2A	Water	FB		X		X		X	X				X			
44004	4402239351	PC-130-20181107	440-223935-25	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-71-20181107	440-223935-26	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	M-44-20181107	440-223935-27	11/7/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402239351	PC-131-20181107	440-223935-28	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-132-20181107	440-223935-29	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-153R-20181107	440-223935-30	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	PC-60-20181107	440-223935-31	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402239351	M-23-20181107	440-223935-32	11/7/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-14A-20181108	440-224035-1	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-65-20181108	440-224035-2	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-190-20181108	440-224035-3	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-31A-20181108	440-224035-4	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-12A-20181108	440-224035-5	11/8/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402240351	M-12A-20181108-FB4	440-224035-6	11/8/2018	Stage 2A	Water	FB		X	X	X		X	X				X			
44004	4402240351	M-189-20181108	440-224035-7	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-81A-20181108	440-224035-8	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-73-20181108	440-224035-9	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-191-20181108	440-224035-10	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-83-20181108	440-224035-11	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-74-20181108	440-224035-12	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-68-20181108	440-224035-13	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-52-20181108	440-224035-14	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-192-20181108	440-224035-15	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-192-20181108-FB8	440-224035-16	11/8/2018	Stage 2A	Water	FB		X		X		X	X				X			
44004	4402240351	M-161D-20181108	440-224035-17	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-135-20181108	440-224035-18	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-38-20181108	440-224035-19	11/8/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402240351	M-38-20181108-EB4	440-224035-20	11/8/2018	Stage 2A	Water	EB		X	X	X		X	X				X			
44004	4402240351	M-37-20181108	440-224035-21	11/8/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402240351	M-71-20181108	440-224035-22	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-162D-20181108	440-224035-23	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-25-20181108	440-224035-24	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-25-20181108-EB9	440-224035-25	11/8/2018	Stage 2A	Water	EB		X		X		X	X				X			
44004	4402240351	M-57A-20181108	440-224035-26	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-11-20181108	440-224035-27	11/8/2018	Stage 2A	Water	FD38		X	X	X		X	X				X			
44004	4402240351	M-11-20181108-FD4	440-224035-28	11/8/2018	Stage 2A	Water	FD38		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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44004	4402240351	M-80-20181108	440-224035-29	11/8/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402240351	M-35-20181108	440-224035-30	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240351	M-186D-20181108	440-224035-31	11/8/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402240361	M-10-20181108	440-224036-1	11/8/2018	Stage 2A	Water		X		X	X	X	X	X	X			X			
44004	4402241011	M-22A-20181109	440-224101-1	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402241011	M-64-20181109	440-224101-2	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402241011	M-70-20181109	440-224101-3	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402241011	M-70-20181109-FB9	440-224101-4	11/9/2018	Stage 2A	Water	FB		X		X		X	X				X			
44004	4402241011	M-66-20181109	440-224101-5	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402241011	PC-148-20181109	440-224101-6	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402241011	PC-18-20181109	440-224101-7	11/9/2018	Stage 2A	Water			X		X		X	X				X			
44004	4402243071	E1-1-20181113	440-224307-1	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E1-2-20181113	440-224307-2	11/13/2018	Stage 2A	Water	FD39		X	X	X		X	X				X			X
44004	4402243071	E1-3-20181113	440-224307-3	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E2-1-20181113	440-224307-4	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E2-2-20181113	440-224307-5	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E2-3-20181113	440-224307-6	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E2-4-20181113	440-224307-7	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E2-5-20181113	440-224307-8	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243071	E1-2-20181113-FD	440-224307-9	11/13/2018	Stage 2A	Water	FD39		X	X	X		X	X				X			X
44004	4402243071	E1-3-20181113-EB	440-224307-10	11/13/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44004	4402243072	ART-1A-20181113	440-224307-11	11/13/2018	Stage 2A	Water	FD40		X	X	X		X	X				X			X
44004	4402243072	ART-2-20181113	440-224307-12	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-3A-20181113	440-224307-13	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-4-20181113	440-224307-14	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-7B-20181113	440-224307-15	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-8A-20181113	440-224307-16	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-9-20181113	440-224307-17	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	PC-150-20181113	440-224307-18	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402243072	ART-2-20181113-EB	440-224307-19	11/13/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44004	4402243072	ART-1A-20181113-FD	440-224307-20	11/13/2018	Stage 2A	Water	FD40		X	X	X		X	X				X			X
44004	4402243072	ART-6-20181113	440-224307-21	11/13/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402244271	I-AD-20181114	440-224427-1	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-AC-20181114	440-224427-2	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-K-20181114	440-224427-3	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-J-20181114	440-224427-4	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-Z-20181114	440-224427-5	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-I-20181114	440-224427-6	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-V-20181114	440-224427-7	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402244271	I-AR-20181114	440-224427-8	11/14/2018	Stage 2A	Water			X	X	X		X	X				X			
44004	4402245411	I-AA-20181115	440-224541-1	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-B-20181115	440-224541-2	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-R-20181115	440-224541-3	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-Y-20181115	440-224541-4	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-L-20181115	440-224541-5	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-S-20181115	440-224541-6	11/15/2018	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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44004	4402245411	I-F-20181115	440-224541-7	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-X-20181115	440-224541-8	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-N-20181115	440-224541-9	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-E-20181115	440-224541-10	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-M-20181115	440-224541-11	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-D-20181115	440-224541-12	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402245411	I-C-20181115	440-224541-13	11/15/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402247421	PC-103-20181119	440-224742-1	11/19/2018	Stage 2A	Water								X							
44004	4402248411	I-O-20181120	440-224841-1	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-W-20181120	440-224841-2	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-P-20181120	440-224841-3	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-H-20181120	440-224841-4	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-U-20181120	440-224841-5	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-T-20181120	440-224841-6	11/20/2018	Stage 2A	Water	FD41		X	X	X		X	X				X			X
44004	4402248411	I-G-20181120	440-224841-7	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-Q-20181120	440-224841-8	11/20/2018	Stage 2A	Water			X	X	X		X	X				X			X
44004	4402248411	I-U-20181120-EB	440-224841-9	11/20/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44004	4402248411	I-T-20181120-FD	440-224841-10	11/20/2018	Stage 2A	Water	FD41		X	X	X		X	X				X			X
44004	4402250261	I-AB-20181126	440-225026-1	11/26/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402266611	LVW0.55-05-20181204	440-226661-1	12/4/2018	Stage 2A	Water	FD42						X	X				X			
44221	4402266611	LVW0.55-05-20181204-FD	440-226661-2	12/4/2018	Stage 2A	Water	FD42						X	X				X			
44221	4402266611	LVW3.5-1-1.0-20181204	440-226661-3	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW3.5-2-1.2-20181204	440-226661-4	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW3.5-3-1.3-20181204	440-226661-5	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW3.5-4-1.8-20181204	440-226661-6	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW3.5-5-2.5-20181204	440-226661-7	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW3.5-6-2.0-20181204	440-226661-8	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.2-1-1.6-20181204	440-226661-9	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.2-2-2.5-20181204	440-226661-10	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.2-3-3.6-20181204	440-226661-11	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.2-4-2.3-20181204	440-226661-12	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.75-1-1.4-20181204	440-226661-13	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.75-2-1.0-20181204	440-226661-14	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.75-3-0.9-20181204	440-226661-15	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.75-4-1.3-20181204	440-226661-16	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW4.75-5-1.1-20181204	440-226661-17	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-1-3.0-20181204	440-226661-18	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-2-1.0-20181204	440-226661-19	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-3-0.9-20181204	440-226661-20	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-4-0.4-20181204	440-226661-21	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-5-0.6-20181204	440-226661-22	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW5.3-6-0.7-20181204	440-226661-23	12/4/2018	Stage 2A	Water							X	X				X			
44221	4402266611	C1-E-0.03-20181205	440-226661-24	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402266611	C1-W-0.07-20181205	440-226661-25	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW6.05-0.7-20181205	440-226661-26	12/5/2018	Stage 2A	Water	FD43						X	X				X			
44221	4402266611	LVW6.05-0.7-20181205-FD	440-226661-27	12/5/2018	Stage 2A	Water	FD43						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)	NO ₃ /NO ₂ as N & TTN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44221	4402266611	LVW6.05-0.7-20181205-FB	440-226661-28	12/5/2018	Stage 2A	Water	FB						X	X				X			
44221	4402266611	LVW6.6-1-0.5-20181205	440-226661-29	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW6.6-2-0.5-20181205	440-226661-30	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW6.6-3-0.9-20181205	440-226661-31	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402266611	LVW7.2-0.7-20181205	440-226661-32	12/5/2018	Stage 2A	Water	FD44						X	X				X			
44221	4402266611	LVW7.2-0.7-20181205-FD	440-226661-33	12/5/2018	Stage 2A	Water	FD44						X	X				X			
44221	4402266611	LVW7.2-0.7-20181205-FB	440-226661-34	12/5/2018	Stage 2A	Water	FB						X	X				X			
44221	4402266611	LVW8.85-0.8-20181205	440-226661-35	12/5/2018	Stage 2A	Water							X	X				X			
44221	4402271801	PC-99R2/R3-20181210	440-227180-1	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-115R-20181210	440-227180-2	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-116R-20181210	440-227180-3	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-118-20181210	440-227180-4	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-119-20181210	440-227180-5	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-120-20181210	440-227180-6	12/10/2018	Stage 2A	Water	FD45		X	X	X		X	X				X			X
44221	4402271801	PC-121-20181210	440-227180-7	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-117-20181210	440-227180-8	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-120-20181210-FD	440-227180-9	12/10/2018	Stage 2A	Water	FD45		X	X	X		X	X				X			X
44221	4402271801	PC-133-20181210	440-227180-10	12/10/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402271801	PC-121-20181210-EB	440-227180-11	12/10/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44221	4402273921	E1-1-20181211	440-227392-1	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E1-2-20181211	440-227392-2	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E1-3-20181211	440-227392-3	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E2-1-20181211	440-227392-4	12/11/2018	Stage 2A	Water	FD46		X	X	X		X	X				X			X
44221	4402273921	E2-2-20181211	440-227392-5	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E2-3-20181211	440-227392-6	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E2-4-20181211	440-227392-7	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E2-5-20181211	440-227392-8	12/11/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402273921	E2-1-20181211-FD	440-227392-9	12/11/2018	Stage 2A	Water	FD46		X	X	X		X	X				X			X
44221	4402273921	E2-2-20181211-EB	440-227392-10	12/11/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44221	4402280891	I-O-20181217	440-228089-1	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-W-20181217	440-228089-2	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-P-20181217	440-228089-3	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-H-20181217	440-228089-4	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-U-20181217	440-228089-5	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-T-20181217	440-228089-6	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-G-20181217	440-228089-7	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-Q-20181217	440-228089-8	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-W-20181217-EB	440-228089-9	12/17/2018	Stage 2A	Water	EB		X	X	X		X	X				X			X
44221	4402280891	I-F-20181217	440-228089-10	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-X-20181217	440-228089-11	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-N-20181217	440-228089-12	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-E-20181217	440-228089-13	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-M-20181217	440-228089-14	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-D-20181217	440-228089-15	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-C-20181217	440-228089-16	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-AA-20181217	440-228089-17	12/17/2018	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)	NO ₃ /NO ₂ as N & TIN (Calc)	Chlorate (300.1B)	Perchlorate (314.0)	Ammonia as N (350.1)	TRP (420.4)	Conductivity (2510B)	TDS (2540C)	TOC (5310C)	TOH (9020B)	Field pH
44221	4402280891	I-AB-20181217	440-228089-18	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-B-20181217	440-228089-19	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-R-20181217	440-228089-20	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-Y-20181217	440-228089-21	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-L-20181217	440-228089-22	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-S-20181217	440-228089-23	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402280891	I-AR-20181217	440-228089-24	12/17/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-AD-20181218	440-228215-1	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-AC-20181218	440-228215-2	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-K-20181218	440-228215-3	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-J-20181218	440-228215-4	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-Z-20181218	440-228215-5	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-I-20181218	440-228215-6	12/18/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402282151	I-V-20181218	440-228215-7	12/18/2018	Stage 2A	Water	FD47		X	X	X		X	X				X			X
44221	4402282151	I-V-20181218-FD	440-228215-8	12/18/2018	Stage 2A	Water	FD47		X	X	X		X	X				X			X
44221	4402283291	ART-1A-20181219	440-228329-1	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-2-20181219	440-228329-2	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-3A-20181219	440-228329-3	12/19/2018	Stage 2A	Water	FD48		X	X	X		X	X				X			X
44221	4402283291	ART-4-20181219	440-228329-4	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-7B-20181219	440-228329-5	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-8A-20181219	440-228329-6	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-9-20181219	440-228329-7	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	PC-150-20181219	440-228329-8	12/19/2018	Stage 2A	Water			X	X	X		X	X				X			X
44221	4402283291	ART-4-20181219 EB	440-228329-9	12/19/2018	Stage 2A	Water	EB		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)	√	√
Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD)	√	√
Serial Dilution	-	N/A
Internal Standards	-	N/A
Field Duplicate	√	√
Project Quantitation Limits (QLs) ¹	√	√
Multiple Results for One Sample	√	√
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

¹PQLs verified for all methods.

Table III. Stage 2A Validation Percentages

Parameter	Stage 2A	Total	Stage 2A (%)
Metals	6	6	100
Chromium	507	507	100
Hexavalent Chromium	403	403	100
Anions	505	505	100
Nitrate/Nitrite-N and Total Inorganic Nitrogen	2	2	100
Chlorate	692	692	100
Perchlorate	705	705	100
Ammonia-N	2	2	100
Total Recoverable Phenolics	4	4	100
Conductivity	4	4	100
TDS	705	705	100
TOC	4	4	100
TOH	4	4	100

Table IV. Reason Codes and Definitions

Reason Code	Explanation
a	qualified due to low abundance (radiochemical activity)
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
4402161421	PC-116R-20180718	7/18/2018	E200.7	7440-47-3	Chromium (total)	0.0044	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402162721	E2-1-20180719-EB	7/19/2018	E200.7	7440-47-3	Chromium (total)	0.0027	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402181221	PC-116R-20180814	8/14/2018	E200.7	7440-47-3	Chromium (total)	0.0038	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402181221	PC-117-20180814	8/14/2018	E200.7	7440-47-3	Chromium (total)	0.0045	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402195401	PC-116R-20180906	9/6/2018	E200.7	7440-47-3	Chromium (total)	0.0046	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402195401	PC-99R2/R3-20180906	9/6/2018	E200.7	7440-47-3	Chromium (total)	0.0028	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402218321	PC-116R-20181009	10/9/2018	E200.7	7440-47-3	Chromium (total)	0.0040	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402218321	PC-116R-20181009-FD	10/9/2018	E200.7	7440-47-3	Chromium (total)	0.0037	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402218321	PC-117-20181009	10/9/2018	E200.7	7440-47-3	Chromium (total)	0.0049	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402237471	PC-90-20181105-FD6	11/5/2018	E200.7	7440-47-3	Chromium (total)	0.0026	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402238521	ARP-2A-20181106	11/6/2018	E200.7	7440-47-3	Chromium (total)	0.0042	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402238521	PC-98R-20181106	11/6/2018	E200.7	7440-47-3	Chromium (total)	0.0044	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402239321	PC-116R-20181107	11/7/2018	E200.7	7440-47-3	Chromium (total)	0.0046	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402239321	PC-117-20181107	11/7/2018	E200.7	7440-47-3	Chromium (total)	0.0042	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402239351	PC-152-20181107	11/7/2018	E200.7	7440-47-3	Chromium (total)	0.0042	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402239351	PC-159-20181107	11/7/2018	E200.7	7440-47-3	Chromium (total)	0.0039	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402239351	PC-60-20181107	11/7/2018	E200.7	7440-47-3	Chromium (total)	0.0030	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402243072	ART-1A-20181113	11/13/2018	E200.7	7440-47-3	Chromium (total)	0.0033	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402271801	PC-116R-20181210	12/10/2018	E200.7	7440-47-3	Chromium (total)	0.0039	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402271801	PC-117-20181210	12/10/2018	E200.7	7440-47-3	Chromium (total)	0.0040	J	0.0025	0.0050	mg/l	J	sp	< PQL		
4402218321	PC-99R2/R3-20181009	10/9/2018	E218.6	18540-29-9	Chromium VI	0.00036	J	0.00025	0.0010	mg/l	J	sp	< PQL		
440220601	I-E-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	5.6	F1	0.025	0.10	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-F-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	12		0.13	0.50	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-H-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	14		0.13	0.50	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-N-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	6.3		0.025	0.10	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-P-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	14		0.13	0.50	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-U-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	17		0.13	0.50	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
440220601	I-X-20181011	10/11/2018	E218.6	18540-29-9	Chromium VI	8.8		0.13	0.50	mg/l	J-	m	MS/MSD % R	85.83	90-110 %
4402239321	PC-99R2/R3-20181107	11/7/2018	E218.6	18540-29-9	Chromium VI	0.00031	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402243072	ART-2-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	0.0083		0.00025	0.0010	mg/l	J+	m	MS/MSD % R	112,111	90-110 %
4402243072	ART-3A-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	0.38		0.0050	0.020	mg/l	J+	m	MS/MSD % R	112,111	90-110 %
4402243072	ART-4-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	0.18		0.0050	0.020	mg/l	J+	m	MS/MSD % R	112,111	90-110 %
4402243072	ART-6-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	6400		25	100	ug/l	J+	m	MS/MSD % R	112,111	90-110 %
4402243072	ART-7B-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	0.54		0.0050	0.020	mg/l	J+	m	MS/MSD % R	112,111	90-110 %
4402243072	ART-8A-20181113	11/13/2018	E218.6	18540-29-9	Chromium VI	0.11		0.0025	0.010	mg/l	J+	m	MS/MSD % R	112,111	90-110 %
4402250261	I-AB-20181126	11/26/2018	E218.6	18540-29-9	Chromium VI	0.00090	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402271801	PC-99R2/R3-20181210	12/10/2018	E218.6	18540-29-9	Chromium VI	0.00032	J	0.00025	0.0010	mg/l	J	sp	< PQL		
4402280891	I-C-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	2.9		0.050	0.20	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402280891	I-D-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	5.3		0.050	0.20	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402280891	I-F-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	13		0.050	0.20	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402280891	I-L-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	1.3		0.025	0.10	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402280891	I-S-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	1.7		0.025	0.10	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402280891	I-Y-20181217	12/17/2018	E218.6	18540-29-9	Chromium VI	1.2	F1	0.025	0.10	mg/l	J+	m	MS/MSD % R	123,121	90-110 %
4402160491	ART-2-20180717-FD	7/17/2018	E300	14797-55-8_N	Nitrate as N	2.9	J	2.8	5.5	mg/l	J	sp	< PQL		
4402161421	PC-117-20180718	7/18/2018	E300	14797-55-8_N	Nitrate as N	4.8		0.28	0.55	mg/l	J+	m	MS/MSD % R	124,125	80-120 %
4402161421	PC-119-20180718-FD	7/18/2018	E300	14797-55-8_N	Nitrate as N	0.33		0.055	0.11	mg/l	J+	m	MS/MSD % R	124,125	80-120 %
4402161421	PC-133-20180718	7/18/2018	E300	14797-55-8_N	Nitrate as N	0.25		0.055	0.11	mg/l	J+	m	MS/MSD % R	124,125	80-120 %
4402181221	ART-2-20180814	8/14/2018	E300	14797-55-8_N	Nitrate as N	3.0	J	2.8	5.5	mg/l	J	sp	< PQL		
4402185961	I-E-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	39		0.55	1.1	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402185961	I-F-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	53		1.1	2.2	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402185961	I-M-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	44	F1	0.55	1.1	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402185961	I-N-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	84		5.5	11	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402185961	I-S-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	79		0.55	1.1	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402185961	I-X-20180821	8/21/2018	E300	14797-55-8_N	Nitrate as N	94		5.5	11	mg/l	J+	m	MS/MSD % R	172,174	80-120 %
4402195401	PC-115R-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N	4.4		0.28	0.55	mg/l	J	m,ld	MS/MSD % R, RPD	129,-:32	80-120:20 %
4402195401	PC-116R-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N	7.6		0.28	0.55	mg/l	J	m,ld	MS/MSD % R, RPD	129,-:32	80-120:20 %
4402195401	PC-118-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N	2.6		0.11	0.22	mg/l	J	m,ld	MS/MSD % R, RPD	129,-:32	80-120:20 %

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
4402195401	PC-119-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N	0.29		0.055	0.11	mg/l	J	m,ld	MS/MSD %R, RPD	129,-;32	80-120;20 %
4402195401	PC-120-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N		UF1F2	0.055	0.11	mg/l	UJ	ld	MS/MSD RPD	32	20 %
4402195401	PC-99R2/R3-20180906	9/6/2018	E300	14797-55-8_N	Nitrate as N	8.5		0.28	0.55	mg/l	J	m,ld	MS/MSD %R, RPD	129,-;32	80-120;20 %
4402198981	ART-2-20180911	9/11/2018	E300	14797-55-8_N	Nitrate as N	1.8	J	1.1	2.2	mg/l	J	sp	< PQL		
4402204081	I-I-20180918	9/18/2018	E300	14797-55-8_N	Nitrate as N	15		0.55	1.1	mg/l	J+	m	MS/MSD %R	124,138	80-120 %
4402204081	I-J-20180918	9/18/2018	E300	14797-55-8_N	Nitrate as N	9.2		0.55	1.1	mg/l	J+	m	MS/MSD %R	124,138	80-120 %
4402204081	I-K-20180918	9/18/2018	E300	14797-55-8_N	Nitrate as N	11		0.55	1.1	mg/l	J+	m	MS/MSD %R	124,138	80-120 %
4402204081	I-V-20180918	9/18/2018	E300	14797-55-8_N	Nitrate as N	25	F1	1.1	2.2	mg/l	J+	m	MS/MSD %R	124,138	80-120 %
4402204081	I-Z-20180918	9/18/2018	E300	14797-55-8_N	Nitrate as N	10		0.55	1.1	mg/l	J+	m	MS/MSD %R	124,138	80-120 %
4402218321	PC-116R-20181009-FD	10/9/2018	E300	14797-55-8_N	Nitrate as N	7.7		0.55	1.1	mg/l	J+	m	MS/MSD %R	121,-	80-120 %
4402218321	PC-117-20181009	10/9/2018	E300	14797-55-8_N	Nitrate as N	4.4		0.28	0.55	mg/l	J+	m	MS/MSD %R	121,-	80-120 %
4402219071	ART-2-20181010	10/10/2018	E300	14797-55-8_N	Nitrate as N	3.0	J	2.8	5.5	mg/l	J	sp	< PQL		
4402220601	I-H-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	120		2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402220601	I-O-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	44	F1	2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402220601	I-P-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	63		2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402220601	I-T-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	74		2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402220601	I-U-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	65		2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402220601	I-W-20181011	10/11/2018	E300	14797-55-8_N	Nitrate as N	45		2.8	5.5	mg/l	J+	m	MS/MSD %R	-,129	80-120 %
4402228751	E2-3-20181023	10/23/2018	E300	14797-55-8_N	Nitrate as N	46		0.55	1.1	mg/l	J+	m	MS/MSD %R	131,155	80-120 %
4402228751	E2-4-20181023	10/23/2018	E300	14797-55-8_N	Nitrate as N	65	F1	1.1	2.2	mg/l	J+	m	MS/MSD %R	131,155	80-120 %
4402228751	E2-5-20181023	10/23/2018	E300	14797-55-8_N	Nitrate as N	79		1.1	2.2	mg/l	J+	m	MS/MSD %R	131,155	80-120 %
4402228751	E2-5-20181023-FD	10/23/2018	E300	14797-55-8_N	Nitrate as N	80		1.1	2.2	mg/l	J+	m	MS/MSD %R	131,155	80-120 %
4402238521	M-69-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	25		0.55	1.1	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402238521	PC-122-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	22		1.1	2.2	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402238521	PC-136-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	14		1.1	2.2	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402238521	PC-158-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	9.6		0.55	1.1	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402238521	PC-53-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	12		0.55	1.1	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402238521	PC-56-20181106	11/6/2018	E300	14797-55-8_N	Nitrate as N	7.5	F1	0.11	0.22	mg/l	J+	m	MS/MSD %R	132,131	80-120 %
4402239351	M-193-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	3.2		0.28	0.55	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402239351	M-48A-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	16		0.55	1.1	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402239351	PC-124-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	21		1.1	2.2	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402239351	PC-125-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	16		1.1	2.2	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402239351	PC-149-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	0.35	J	0.28	0.55	mg/l	J	sp	< PQL		
4402239351	PC-153R-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	1.2	J	1.1	2.2	mg/l	J	sp	< PQL		
4402239351	PC-159-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	6.7	F1	0.55	1.1	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402239351	PC-55-20181107	11/7/2018	E300	14797-55-8_N	Nitrate as N	2.0		0.55	1.1	mg/l	J+	m	MS/MSD %R	121,121	80-120 %
4402241011	PC-148-20181109	11/9/2018	E300	14797-55-8_N	Nitrate as N	1.3	J	1.1	2.2	mg/l	J	sp	< PQL		
4402273921	E1-1-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	33	F1	0.55	1.1	mg/l	J+	m	MS/MSD %R	-,121	80-120 %
4402273921	E1-2-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	87		5.5	11	mg/l	J+	m	MS/MSD %R	-,121	80-120 %
4402273921	E1-3-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	85		5.5	11	mg/l	J+	m	MS/MSD %R	-,121	80-120 %
4402273921	E2-1-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	16		0.55	1.1	mg/l	J+	m	MS/MSD %R	-,121	80-120 %
4402273921	E2-2-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	27		0.28	0.55	mg/l	J+	m	MS/MSD %R	-,121	80-120 %
4402273921	E2-3-20181211	12/11/2018	E300	14797-55-8_N	Nitrate as N	45	H	2.8	5.5	mg/l	J-	h	Holding time		48 hours
4402283291	ART-2-20181219	12/19/2018	E300	14797-55-8_N	Nitrate as N	1.6	J	1.1	2.2	mg/l	J	sp	< PQL		
4402283291	ART-4-20181219 EB	12/19/2018	E300	14797-55-8_N	Nitrate as N	0.069	J	0.055	0.11	mg/l	J	sp	< PQL		
4402196841	LVW0.55-0.5-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	230		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW0.55-0.5-20180906-FD	9/6/2018	E300.1	14866-68-3	Chlorate	260		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-1-1.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	270	F1	10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-2-1.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	240		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-3-1.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	240		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-4-2.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	240		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-5-2.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	240		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW3.5-6-2.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	220		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.2-1-2.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	300		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.2-2-2.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	300		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.2-3-2.5-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	280		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.2-4-3.0-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	160		10	100	ug/l	J+	m	MS/MSD %R	129,-	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
4402196841	LVW4.2-4-3.0-20180906-FD	9/6/2018	E300.1	14866-68-3	Chlorate	150		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.75-1-1.25-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	290		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.75-2-1.25-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	310		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.75-3-1.5-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	370		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.75-4-1.5-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	150		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW4.75-5-0.75-20180906	9/6/2018	E300.1	14866-68-3	Chlorate	150		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW6.05-0.5-20180907	9/7/2018	E300.1	14866-68-3	Chlorate	130		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402196841	LVW8.85-1.0-20180907	9/7/2018	E300.1	14866-68-3	Chlorate	110		10	100	ug/l	J+	m	MS/MSD %R	129,-	75-125 %
4402237451	PC-156B-20181105	11/5/2018	E300.1	14866-68-3	Chlorate	11	J	4.0	40	ug/l	J	sp	< PQL		
4402238521	PC-103-20181106	11/6/2018	E300.1	14866-68-3	Chlorate	5.7	J	2.0	20	ug/l	J	sp	< PQL		
4402239321	PC-120-20181107	11/7/2018	E300.1	14866-68-3	Chlorate	4.0	J	2.0	20	ug/l	J	sp	< PQL		
4402239321	PC-121-20181107	11/7/2018	E300.1	14866-68-3	Chlorate	4.2	J	2.0	20	ug/l	J	sp	< PQL		
4402239351	PC-131-20181107	11/7/2018	E300.1	14866-68-3	Chlorate	49	J	20	200	ug/l	J	sp	< PQL		
4402240351	M-38-20181108-EB4	11/8/2018	E300.1	14866-68-3	Chlorate	19	J	2.0	20	ug/l	J	sp	< PQL		
4402266611	LVW6.6-3-0.9-20181205	12/5/2018	E300.1	14866-68-3	Chlorate	80	J	10	100	ug/l	J	sp	< PQL		
4402266611	LVW7.2-0.7-20181205	12/5/2018	E300.1	14866-68-3	Chlorate	77	J	10	100	ug/l	J	sp	< PQL		
4402266611	LVW7.2-0.7-20181205-FD	12/5/2018	E300.1	14866-68-3	Chlorate	79	J	10	100	ug/l	J	sp	< PQL		
4402271801	PC-120-20181210	12/10/2018	E300.1	14866-68-3	Chlorate	4.3	J	2.0	20	ug/l	J	sp	< PQL		
4402271801	PC-120-20181210-FD	12/10/2018	E300.1	14866-68-3	Chlorate	5.4	J	2.0	20	ug/l	J	sp	< PQL		
4402161421	PC-120-20180718-EB	7/18/2018	E314.0	14797-73-0	Perchlorate	0.00079	J	0.00050	0.0010	mg/l	J	sp	< PQL		
4402167011	LVW5.3-2-0.75-20180725	7/25/2018	E314.0	14797-73-0	Perchlorate	1.7	J	0.95	4.0	ug/l	J	sp	< PQL		
4402167011	LVW5.3-3-0.5-20180725	7/25/2018	E314.0	14797-73-0	Perchlorate	1.6	J	0.95	4.0	ug/l	J	sp	< PQL		
4402167011	LVW6.6-1-1.0-20180725	7/25/2018	E314.0	14797-73-0	Perchlorate	1.9	J	0.95	4.0	ug/l	J	sp	< PQL		
4402196841	LVW0.55-0.5-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	37	F1	0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW0.55-0.5-20180906-FD	9/6/2018	E314.0	14797-73-0	Perchlorate	36		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-1-1.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	47		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-2-1.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	43		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-3-1.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	43		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-4-2.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	41		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-5-2.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	43		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW3.5-6-2.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	39		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.2-1-2.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	53		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.2-2-2.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	48		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.2-3-2.5-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	47		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.2-4-3.0-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	24		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.2-4-3.0-20180906-FD	9/6/2018	E314.0	14797-73-0	Perchlorate	22		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.75-1-1.25-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	48		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.75-2-1.25-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	54		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.75-3-1.5-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	65		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.75-4-1.5-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	26		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW4.75-5-0.75-20180906	9/6/2018	E314.0	14797-73-0	Perchlorate	22		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW6.05-0.5-20180907	9/7/2018	E314.0	14797-73-0	Perchlorate	12		0.95	4.0	ug/l	J+	m	MS/MSD %R	-,122	80-120 %
4402196841	LVW6.6-2-0.5-20180907	9/7/2018	E314.0	14797-73-0	Perchlorate	1.0	J	0.95	4.0	ug/l	J	sp	< PQL		
4402196841	LVW7.2-0.75-20180907	9/7/2018	E314.0	14797-73-0	Perchlorate	1.7	J	0.95	4.0	ug/l	J	sp	< PQL		
4402196841	LVW8.85-1.0-20180907-FD	9/7/2018	E314.0	14797-73-0	Perchlorate	0.96	J	0.95	4.0	ug/l	J	sp	< PQL		
4402204501	E2-4-20180919-EB	9/19/2018	E314.0	14797-73-0	Perchlorate	0.00055	J	0.00050	0.0010	mg/l	J	sp	< PQL		
4402216361	LVW0.55-0.5-20181004	10/4/2018	E314.0	14797-73-0	Perchlorate	36	F1	0.95	4.0	ug/l	J+	m	MS/MSD %R	132,135	80-120 %
4402216361	LVW0.55-0.5-20181004-FD	10/4/2018	E314.0	14797-73-0	Perchlorate	36	F1	0.95	4.0	ug/l	J+	m	MS/MSD %R	128,133	80-120 %
4402216361	LVW6.6-2-0.75-20181005	10/5/2018	E314.0	14797-73-0	Perchlorate	3.3	J	0.95	4.0	ug/l	J	sp	< PQL		
4402236471	LVW0.55-0.5-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	42	F1	0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW0.55-0.5-20181101-FD	11/1/2018	E314.0	14797-73-0	Perchlorate	40		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-1-0.9-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	52		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-2-1.0-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	49		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-3-1.9-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	51		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-4-2.0-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	51		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-5-2.0-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	44		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW3.5-6-1.7-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	43		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	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
4402236471	LVW4.2-1-2.1-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	59		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.2-2-1.8-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	50		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.2-3-2.0-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	24		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.2-4-1.9-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	20		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.75-1-1.3-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	55		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.75-2-1.2-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	54		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.75-3-0.7-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	23		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.75-4-0.8-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	22		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW4.75-5-0.9-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	24		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW5.3-1-3.3-20181101	11/1/2018	E314.0	14797-73-0	Perchlorate	30		0.95	4.0	ug/l	J+	m	MS/MSD %R	139,143	80-120 %
4402236471	LVW6.6-3-0.9-20181102	11/2/2018	E314.0	14797-73-0	Perchlorate	2.8	J	0.95	4.0	ug/l	J	sp	< PQL		
4402236471	LVW7.2-0.8-20181102	11/2/2018	E314.0	14797-73-0	Perchlorate	1.7	J	0.95	4.0	ug/l	J	sp	< PQL		
4402236471	LVW7.2-0.8-20181102-FD	11/2/2018	E314.0	14797-73-0	Perchlorate	2.6	J	0.95	4.0	ug/l	J	sp	< PQL		
4402266611	LVW6.6-3-0.9-20181205	12/5/2018	E314.0	14797-73-0	Perchlorate	2.3	J	0.95	4.0	ug/l	J	sp	< PQL		
4402283291	ART-4-20181219 EB	12/19/2018	E314.0	14797-73-0	Perchlorate	0.00086	J	0.00050	0.0010	mg/l	J	sp	< PQL		
4402162721	E1-1-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	4300	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E1-2-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	5600	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E1-3-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	5100	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E1-3-20180719-FD	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	5100	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E2-1-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	3200	H	25	50	mg/l	J-	h	Holding time		7 days
4402162721	E2-1-20180719-EB	7/19/2018	SM2540C	TDS	Dissolved Solids (total)		UH	5.0	10	mg/l	UJ	h	Holding time		7 days
4402162721	E2-2-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	4000	H	25	50	mg/l	J-	h	Holding time		7 days
4402162721	E2-3-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	5200	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E2-4-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	5000	H	50	100	mg/l	J-	h	Holding time		7 days
4402162721	E2-5-20180719	7/19/2018	SM2540C	TDS	Dissolved Solids (total)	6400	H	50	100	mg/l	J-	h	Holding time		7 days
4402175891	M-5A-20180807	8/7/2018	SW9020	TOH	Organic Halides (total)	5000	J	1900	7500	ug/l	J	sp	< PQL		
4402175891	M-6A-20180807	8/7/2018	SW9020	TOH	Organic Halides (total)	2500	J	1500	6000	ug/l	J	sp	< PQL		
4402175891	M-7B-20180807	8/7/2018	SW9020	TOH	Organic Halides (total)		UF1	15	60	ug/l	UJ	m	MS/MSD %R	52,49	78-114 %
4402183351	H-28A-20180816	8/16/2018	SW9020	TOH	Organic Halides (total)	3700	J	1500	6000	ug/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. Instrument Calibration

Instrument calibration data were not reviewed for Stage 2A validation.

III. ICP Interference Check Sample Analysis

ICP Interference check sample (ICS) analysis data were not reviewed for Stage 2A validation.

IV. 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
440-218335-1	PB (prep blank)	Sodium	0.366 mg/L	All samples in SDG 440-218335-1
440-222514-1	PB (prep blank)	Chromium	0.0131 mg/L	All samples in SDG 440-222514-1

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

V. Field Blanks

Samples I-M 20180711-EB (from SDG 440-215507-1), ART-3A 20180717-EB (from SDG 440-216049-1), PC-120 20180718-EB (from SDG 440-216142-1), E2-1 20180719-EB (from SDG 440-216272-1), M-44-20180807-EB4 (from SDG 440-217588-1), ART-6-20180814-EB, PC-133-20180814-EB (both from SDG 440-218122-1), E2-3-20180816-EB (from SDG 440-218304-1), I-O-20180821-EB (from SDG 440-218596-1), PC-115R 20180906-EB (from SDG 440-219540-1), ART-8A 20180911-EB (from SDG 440-219898-1), I-Q 20180913-EB (from SDG 440-220115-1), E2-4 20180919-EB (from SDG 440-220450-1), PC-117 20181009-EB (from SDG 440-221832-1), PC-150 20181010-EB (from SDG 440-221907-1), I-S 20181016-EB (from SDG 440-222403-1), PC-86-20181105-EB5 (from SDG 440-223745-1), PC-59-20181106-EB6, ARP-3A-20181106-EB7 (both from SDG 440-223852-1), PC-119 20181107-EB (from SDG 440-223932-1), PC-123-20181107-EB8 (from SDG 440-223935-1), M-38-20181108-EB4, M-25-

20181108-EB9 (both from SDG 440-224035-1), E1-3 20181113-EB (from SDG 440-224307-1), ART-2 20181113-EB (from SDG 440-224307-2), I-U 20181120-EB (from SDG 440-224841-1), PC-121 20181210-EB (from SDG 440-227180-1), E2-2-20181211-EB (from SDG 440-227392-1), I-W 20181217-EB (from SDG 440-228089-1), and ART-4 20181219 EB (from SDG 440-228329-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
440-216272-1	E2-1 20180719-EB	07/19/18	Chromium	0.0027 mg/L	E2-1 20180719

Samples M-38-20180807-FB4 (from SDG 440-217588-1), PC-156A-20181105-FB5 (from SDG 440-223745-1), PC-72-20181107-FB6, PC-125-20181107-FB7 (both from SDG 440-223935-1), M-12A-20181108-FB4, M-192-20181108-FB8 (both from SDG 440-224035-1), and M-70-20181109-FB9 (from SDG 440-224101-1) were identified as field blanks. No contaminants were found.

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.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. For I-N 20180711MS/MSD, I-O 20180711MS/MSD, I-T 20180711MS/MSD (all three from SDG 440-215507-1), ART-6 20180717MS/MSD (from SDG 440-216049-1), I-E-20180821MS/MSD (from SDG 440-218596-1), ART-6 20180911MS/MSD (from SDG 440-219898-1), I-F 20180912MS/MSD (from SDG 440-220024-1), I-O 20180913MS/MSD, I-P 20180913-FDMS/MSD (both from SDG 440-220115-1), I-I 20180918MS/MSD (from SDG 440-220408-1), ART-6 20181010MS/MSD (from SDG 440-221907-1), I-O 20181011MS/MSD (from SDG 440-222060-1), I-N 20181011MS/MSD (from SDG 440-222060-1), I-O 20181217MS/MSD, I-X 20181217MS/MSD (both from SDG 440-228089-1), and I-V 20181218-FDMS/MSD (from SDG 440-228215-1), 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.

VII. 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.

VIII. Serial Dilution

Serial dilution was not performed for these SDGs.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples I-L 20180710 and I-L 20180710-FD (both from SDG 440-215464-1), samples ART-2 20180717 and ART-2 20180717-FD (both from SDG 440-216049-1), samples PC-119 20180718 and PC-119 20180718-FD (both from SDG 440-216142-1), samples E1-3 20180719 and E1-3 20180719-FD (both from SDG 440-216272-1), samples M-44-20180807 and M-44-20180807-FD4 (both from SDG 440-217588-1), samples ART-4-20180814 and ART-4-20180814-FD (both from SDG 440-218122-1), samples PC-121-20180814 and PC-121-20180814-FD (both from SDG 440-218122-1), samples E2-2-20180816 and E2-2-20180816-FD (both from SDG 440-218304-1), samples I-N-20180821 and I-N-20180821-FD (both from SDG 440-218596-1), samples PC-99R2/R3 20180906 and PC-99R2/R3 20180906-FD (both from SDG 440-219540-1), samples ART-7B 20180911 and ART-7B 20180911-FD (both from SDG 440-219898-1), samples I-P 20180913 and I-P 20180913-FD (both from SDG 440-220115-1), E2-3 20180919 and E2-3 20180919-FD (both from SDG 440-220450-1), samples PC-116R 20181009 and PC-116R 20181009-FD (both from SDG 440-221832-1), samples ART-9 20181010 and ART-9 20181010-FD (both from SDG 440-221907-1), samples I-R 20181016 and I-R 20181016-FD (both from SDG 440-222403-1), samples E2-5-20181023 and E2-5-20181023-FD (both from SDG 440-222875-1), samples PC-90-20181105 and PC-90-20181105-FD6 (both from SDG 440-223747-1), samples PC-155A-20181105 and PC-155A-20181105-FD5 (both from SDG 440-223750-1), samples PC-135A-20181106 and PC-135A-20181106-FD7 (both from SDG 440-223852-1), samples PC-118 20181107 and PC-118 20181107-FD (both from SDG 440-223932-1), samples M-19-20181107 and M-19-20181107-FD9 (both from SDG 440-223935-1), samples PC-54-20181107 and PC-54-20181107-FD8 (both from SDG 440-223935-1), samples M-11-20181108 and M-11-20181108-FD4 (both from SDG 440-224035-1), samples E1-2 20181113 and E1-2 20181113-FD (both from SDG 440-224307-1), samples ART-1A 20181113 and ART-1A 20181113-FD (both from SDG 440-224307-2), samples I-T 20181120 and I-T 20181120-FD (both from SDG 440-224841-1), samples PC-120 20181210 and PC-120 20181210-FD (both from SDG 440-227180-1), samples E2-1-20181211 and E2-1-20181211-FD (both from SDG 440-227392-1), samples I-V 20181218 and I-V 20181218-FD (both from SDG 440-228215-1), and samples ART-3A 20181219 and ART-3A 20181219 FD (both from SDG 440-228329-1) 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
		I-L 20180710	I-L 20180710-FD			
440-215464-1	Chromium	1.2	1.3	8 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-2 20180717	ART-2 20180717-FD			
440-216049-1	Chromium	0.0075	0.0076	1 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E1-3 20180719	E1-3 20180719-FD			
440-216272-1	Chromium	0.31	0.32	3 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-44-20180807	M-44-20180807-FD4			
440-217588-1	Chromium	0.75	0.75	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-4-20180814	ART-4-20180814-FD			
440-218122-1	Chromium	0.16	0.16	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-2-20180816	E2-2-20180816-FD			
440-218304-1	Chromium	0.030	0.031	3 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-N-20180821	I-N-20180821-FD			
440-218596-1	Chromium	6.5	6.6	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-99R2/R3 20180906	PC-99R2/R3 20180906-FD			
440-219540-1	Chromium	0.0028	0.0025U	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-7B 20180911	ART-7B 20180911-FD			
440-219898-1	Chromium	0.56	0.55	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-P 20180913	I-P 20180913-FD			
440-220115-1	Chromium	17	17	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-3 20180919	E2-3 20180919-FD			
440-220450-1	Chromium	0.027	0.028	4 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-116R 20181009	PC-116R 20181009-FD			
440-221832-1	Chromium	0.0040	0.0037	8 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-9 20181010	ART-9 20181010-FD			
440-221907-1	Chromium	0.70	0.70	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-R 20181016	I-R 20181016-FD			
440-222403-1	Chromium	0.70	0.74	6 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-5-20181023	E2-5-20181023-FD			
440-222875-1	Chromium	0.11	0.11	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-90-20181105	PC-90-20181105-FD6			
440-223747-1	Chromium	0.0050U	0.0026	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-135A-20181106	PC-135A-20181106-FD7			
440-223852-1	Chromium	0.027	0.028	4 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-19-20181107	M-19-20181107-FD9			
440-223935-1	Chromium	0.41	0.40	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		PC-54-20181107	PC-54-20181107-FD8			
440-223935-1	Chromium	1.9	2.0	5 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		M-11-20181108	M-11-20181108-FD4			
440-224035-1	Chromium	1.3	1.3	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E1-2 20181113	E1-2 20181113-FD			
440-224307-1	Chromium	0.18	0.17	6 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-1A 20181113	ART-1A 20181113-FD			
440-224307-2	Chromium	0.0033	0.0050U	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-T 20181120	I-T 20181120-FD			
440-224841-1	Chromium	19	18	5 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-1-20181211	E2-1-20181211-FD			
440-227392-1	Chromium	0.031	0.029	7 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-V 20181218	I-V 20181218-FD			
440-228215-1	Chromium	12	12	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-3A 20181219	ART-3A 20181219 FD			
440-228329-1	Chromium	0.36	0.36	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).

XI. Sample Result Verification

Raw data were not reviewed for Stage 2A validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

NERT GWM Performance Sampling, July-December 2018

Metals - Data Qualification Summary - SDGs 440-215464-1, 440-215507-1, 440-216049-1, 440-216142-1, 440-216272-1, 440-217588-1, 440-217589-1, 440-217590-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218596-1, 440-218636-1, 440-219540-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220408-1, 440-220450-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224841-1, 440-225026-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

No Sample Data Qualified in these SDGs

NERT GWM Performance Sampling, July-December 2018

Metals - Laboratory Blank Data Qualification Summary – SDGs 440-215464-1, 440-215507-1, 440-216049-1, 440-216142-1, 440-216272-1, 440-217588-1, 440-217589-1, 440-217590-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218596-1, 440-218636-1, 440-219540-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220408-1, 440-220450-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224841-1, 440-225026-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

No Sample Data Qualified in these SDGs

NERT GWM Performance Sampling, July-December 2018

Metals - Field Blank Data Qualification Summary – SDGs 440-215464-1, 440-215507-1, 440-216049-1, 440-216142-1, 440-216272-1, 440-217588-1, 440-217589-1, 440-217590-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218596-1, 440-218636-1, 440-219540-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220408-1, 440-220450-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224841-1, 440-225026-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

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, and Sulfate by EPA Method 300.0**

Chlorate by EPA Method 300.1B

Conductivity by Standard Method 2540B

Hexavalent Chromium by EPA Method 218.6

Nitrate/Nitrite as Nitrogen by Calculation

Perchlorate by EPA Method 314.0

Total Dissolved Solids by Standard Method 2540C

Total Recoverable Phenolics by EPA Method 420.4

Total Organic Carbon by Standard Method 5310C

Total Inorganic Nitrogen by Calculation

Total Organic Halides by Standard Method 9020B

Field pH

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
440-216272-1	E1-1 20180719 E1-2 20180719 E1-3 20180719 E2-1 20180719 E2-2 20180719 E2-3 20180719 E2-4 20180719 E2-5 20180719 E1-3 20180719-FD E2-1 20180719-EB	Total dissolved solids	13 days	7 days	J- (all detects) UJ (all non-detects)	P
440-227392-1	E2-3-20181211	Nitrate as N	182 hours	48 hours	J- (all detects)	A

II. Initial Calibration

Initial calibration data were not reviewed for Stage 2A validation.

III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

IV. 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
440-218361-1/N031723	PB (prep blank)	Hexavalent chromium	0.0000472 mg/L	All samples in SDG 440-218361-1/N031723
440-220024-1	PB (prep blank)	Chlorate	4.14 mg/L	I-C 20180912 I-AB 20180912 I-L 20180912
440-220115-1	PB (prep blank)	Chlorate	4.14 mg/L	All samples in SDG 440-220115-1
440-221500-1/N032058	PB (prep blank)	Hexavalent chromium	0.0000627 mg/L	All samples in SDG 440-221500-1/N032058

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

V. Field Blanks

Samples I-M 20180711-EB (from SDG 440-215507-1), I-M 20180711-EB (from SDG 440-215713-1/N031175), ART-3A 20180717-EB (from SDG 440-216049-1), ART-3A 20180717-EB (from SDG 440-216115-1/N031262), PC-120 20180718-EB (from SDG 440-216142-1), E2-1 20180719-EB (from SDG 440-216272-1), E2-1 20180719-EB (from SDG 440-216344-1/N031298), PC-120 20180718-EB (from SDG 440-216972-1/N031278), M-44-20180807-EB4 (from SDG 440-217588-1), ART-6-20180814-EB, PC-133-20180814-EB (both from SDG 440-218122-1), E2-3-20180816-EB (from SDG 440-218304-1), E2-3-20180816-EB (from SDG 440-218361-1/N031723), ART-6-20180814-EB, PC-133-20180814-EB (from SDG 440-218427-1/N031678), I-O-20180821-EB (from SDG 440-218596-1), I-O-20180821-EB (from SDG 440-218659-1/N031767), PC-115R 20180906-EB (from SDG 440-219540-1), ART-8A 20180911-EB (from SDG 440-219898-1), I-Q 20180913-EB (from SDG 440-220115-1), I-Q 20180913-EB (from SDG 440-220156-1/N032071), E2-4 20180919-EB (from SDG 440-220450-1), E2-4 20180919-EB (from SDG 440-220499-1/N032144), ART-8A 20180911-EB (from SDG 440-221491-1/N032036), PC-115R 20180906-EB (from SDG 440-221497-1/N031967), PC-117 20181009-EB (from SDG 440-221832-1), PC-150 20181010-EB (from SDG 440-221907-1), I-S 20181016-EB (from SDG 440-222403-1), E1-1-20181023-EB (from SDG 440-222875-1), PC-86-20181105-EB5 (from SDG 440-223745-1), PC-59-20181106-EB6, ARP-3A-20181106-EB7 (both from SDG 440-223852-1), PC-119 20181107-EB (from SDG 440-223932-1), PC-123-20181107-EB8 (from SDG 440-223935-1), M-38-20181108-EB4, M-25-20181108-EB9 (both from SDG 440-224035-1), E1-3 20181113-EB (from SDG 440-224307-1), ART-2 20181113-EB (from SDG 440-224307-2), I-U 20181120-EB (from SDG 440-224841-1), PC-121 20181210-EB (from SDG 440-227180-1), E2-2-20181211-EB (from SDG 440-227392-1), I-W 20181217-EB (from SDG 440-228089-1), and ART-4 20181219 EB (from SDG 440-228329-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
440-216142-1	PC-120 20180718-EB	07/18/18	Perchlorate	0.00079 mg/L	PC-120 20180718
440-220115-1	I-Q 20180913-EB	09/13/18	Perchlorate	0.0018 mg/L	I-Q 20180913
440-220450-1	E2-4 20180919-EB	09/19/18	Perchlorate	0.00055 mg/L	E2-4 20180919
440-223852-1	PC-59-20181106-EB6	11/06/18	Perchlorate	2.6 ug/L	PC-59-20181106
440-224035-1	M-38-20181108-EB4	11/08/18	Chlorate Perchlorate	19 ug/L 1.6 ug/L	M-38-20181108
440-228089-1	I-W 20181217-EB	12/17/18	Hexavalent chromium	0.0041 mg/L	I-W 20181217
440-228329-1	ART-4 20181219 EB	12/19/18	Hexavalent chromium Nitrate as N Perchlorate	0.0018 mg/L 0.069 mg/L 0.00086 mg/L	ART-4 20181219

Samples LVW6.05-0.5-20180724-FB (from SDG 440-216598-1), LVW8.85-1.0-20180725-FB (from SDG 440-216701-1), M-38-20180807-FB4 (from SDG 440-217588-1), LVW6.05-0.75-20180809-FB (from SDG 440-217949-1), LVW6.05-0.5-20180907-FB, LVW8.85-1.0-20180907-FB (both from SDG 440-219684-1), LVW3.5-6-2.0-20181004-FB (from SDG 440-221636-1), LVW6.05-0.5-20181005-FB (from SDG 440-221636-1), LVW6.05-0.8-20181101-FB, LVW7.2-0.8-20181102-FB (both from SDG 440-223647-1), PC-156A-20181105-FB5 (from SDG 440-223745-1), PC-72-20181107-FB6, PC-125-20181107-FB7 (both from SDG 440-223935-1), M-12A-20181108-FB4, M-192-20181108-FB8 (both from SDG 440-224035-1), M-70-20181109-FB9 (from SDG 440-224101-1), LVW6.05-0.7-20181205-FB, and LVW7.2-0.7-20181205-FB (both from SDG 440-226661-1) were identified as field blanks. No contaminants were found.

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.

VI. Surrogates

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

SDG	Sample	Surrogate	%R (Limits)	Affected Analyte	Flag	A or P
440-227180-1	PC-121 20181210	Dichloroacetic acid	120 (90-115)	Chlorate	NA	-

VII. 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
440-216142-1	PC-121 20180718MS/MSD (PC-117 20180718 PC-119 20180718-FD PC-133 20180718)	Nitrate as N	124 (80-120)	125 (80-120)	J+ (all detects)	A
440-216142-1	PC-121 20180718MS/MSD (PC-121 20180718)	Nitrate as N	124 (80-120)	125 (80-120)	NA	-
440-217589-1	M-7B-20180807MS/MSD (M-7B-20180807)	Total organic halides	52 (78-114)	49 (78-114)	UJ (all non-detects)	A
440-218596-1	I-M-20180821MS/MSD (I-S-20180821 I-F-20180821 I-X-20180821 I-N-20180821 I-E-20180821 I-M-20180821)	Nitrate as N	172 (80-120)	174 (80-120)	J+ (all detects)	A
440-219540-1	PC-120 20180906MS/MSD (PC-99R2/R3 20180906 PC-115R 20180906 PC-116R 20180906 PC-118 20180906 PC-119 20180906)	Nitrate as N	129 (80-120)	-	J+ (all detects)	A
440-219540-1	PC-120 20180906MS/MSD (PC-120 20180906)	Nitrate as N	129 (80-120)	-	NA	-
440-219684-1	LWW3.5-1-1.0-20180906MS/MSD (LWW0.55-0.5-20180906 LWW0.55-0.5-20180906-FD LWW3.5-1-1.0-20180906 LWW3.5-2-1.0-20180906 LWW3.5-3-1.0-20180906 LWW3.5-4-2.0-20180906 LWW3.5-5-2.0-20180906 LWW3.5-6-2.0-20180906 LWW4.2-1-2.0-20180906 LWW4.2-2-2.0-20180906 LWW4.2-3-2.5-20180906 LWW4.2-4-3.0-20180906 LWW4.2-4-3.0-20180906-FD LWW4.75-1-1.25-20180906 LWW4.75-2-1.25-20180906 LWW4.75-3-1.5-20180906 LWW4.75-4-1.5-20180906 LWW4.75-5-0.75-20180906 LWW6.05-0.5-20180907 LWW8.85-1.0-20180907)	Chlorate	129 (75-125)	-	J+ (all detects)	A

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-219684-1	LVW55-0.5-20180906MS/MSD (LVW0.55-0.5-20180906 LVW0.55-0.5-20180906-FD LVW3.5-1-1.0-20180906 LVW3.5-2-1.0-20180906 LVW3.5-3-1.0-20180906 LVW3.5-4-2.0-20180906 LVW3.5-5-2.0-20180906 LVW3.5-6-2.0-20180906 LVW4.2-1-2.0-20180906 LVW4.2-2-2.0-20180906 LVW4.2-3-2.5-20180906 LVW4.2-4-3.0-20180906 LVW4.2-4-3.0-20180906-FD LVW4.75-1-1.25-20180906 LVW4.75-2-1.25-20180906 LVW4.75-3-1.5-20180906 LVW4.75-4-1.5-20180906 LVW4.75-5-0.75-20180906 LVW6.05-0.5-20180907)	Perchlorate	-	122 (80-120)	J+ (all detects)	A
440-220408-1	I-V 20180918MS/MSD (I-K 20180918 I-J 20180918 I-Z 20180918 I-I 20180918 I-V 20180918)	Nitrate as N	124 (80-120)	138 (80-120)	J+ (all detects)	A
440-221636-1	LVW0.55-0.5-20181004MS/MSD (LVW0.55-0.5-20181004)	Perchlorate	132 (80-120)	135 (80-120)	J+ (all detects)	A
440-221636-1	LVW0.55-0.5-20181004-FDMS/MSD (LVW0.55-0.5-20181004-FD)	Perchlorate	128 (80-120)	133 (80-120)	J+ (all detects)	A
440-221832-1	PC-12 20181009MS/MSD (PC-117 20181009 PC-116R 20181009-FD)	Nitrate as N	121 (80-120)	-	J+ (all detects)	A
440-221832-1	PC-12 20181009MS/MSD (PC-120 20181009 PC-121 20181009 PC-133 20181009)	Nitrate as N	121 (80-120)	-	NA	-
440-222060-1	I-O 20181011MS/MSD (I-O 20181011 I-W 20181011 I-P 20181011 I-H 20181011 I-U 20181011 I-T 20181011)	Nitrate as N	-	129 (80-120)	J+ (all detects)	A
440-222060-1	I-E 20181011MS/MSD (I-P 20181011 I-H 20181011 I-U 20181011 I-F 20181011 I-X 20181011 I-N 20181011 I-E 20181011)	Hexavalent chromium	85 (90-110)	83 (90-110)	J- (all detects)	A

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-222875-1	E2-4-20181023MS/MSD (E2-3-20181023 E2-4-20181023 E2-5-20181023 E2-5-20181023-FD)	Nitrate as N	131 (80-120)	155 (80-120)	J+ (all detects)	A
440-223647-1	LVW0.55-0.5-20181101MS/MSD (LVW0.55-0.5-20181101 LVW0.55-0.5-20181101-FD LVW3.5-1-0.9-20181101 LVW3.5-2-1.0-20181101 LVW3.5-3-1.9-20181101 LVW3.5-4-2.0-20181101 LVW3.5-5-2.0-20181101 LVW3.5-6-1.7-20181101 LVW4.2-1-2.1-20181101 LVW4.2-2-1.8-20181101 LVW4.2-3-2.0-20181101 LVW4.2-4-1.9-20181101 LVW4.75-1-1.3-20181101 LVW4.75-2-1.2-20181101 LVW4.75-3-0.7-20181101 LVW4.75-4-0.8-20181101 LVW4.75-5-0.9-20181101 LVW5.3-1-3.3-20181101)	Perchlorate	139 (80-120)	143 (80-120)	J+ (all detects)	A
440-223852-1	PC-56-20181106MS/MSD (PC-56-20181106 PC-122-20181106 PC-136-20181106 PC-158-20181106 M-69-20181106 PC-53-20181106)	Nitrate as N	132 (80-120)	131 (80-120)	J+ (all detects)	A
440-223935-1	PC-159-20181107MS/MSD (PC-159-20181107 PC-55-20181107 PC-124-20181107 M-193-20181107 M-48A-20181107 PC-125-20181107)	Nitrate as N	121 (80-120)	121 (80-120)	J+ (all detects)	A
440-223935-1	PC-132-20181107MS/MSD (PC-132-20181107)	Perchlorate	124 (80-120)	-	NA	-
440-224307-2	ART-1A 20181113MS/MSD (ART-2 20181113 ART-3A 20181113 ART-4 20181113 ART-7B 20181113 ART-8A 20181113 ART-6 20181113)	Hexavalent chromium	112 (90-110)	111 (90-110)	J+ (all detects)	A
440-224307-2	ART-1A 20181113MS/MSD (ART-1A 20181113 ART-1A 20181113-FD)	Hexavalent chromium	112 (90-110)	111 (90-110)	NA	-

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-227392-1	E1-1-20181211MS/MSD (E1-1-20181211 E1-2-20181211 E1-3-20181211 E2-1-20181211 E2-2-20181211)	Nitrate as N	-	121 (80-120)	J+ (all detects)	A
440-228089-1	I-Y 20181217MS/MSD (I-F 20181217 I-D 20181217 I-C 20181217 I-Y 20181217 I-L 20181217 I-S 20181217)	Hexavalent chromium	123 (90-110)	121 (90-110)	J+ (all detects)	A

For ART-1A 20180717MS/MSD (from SDG 440-216049-1), ART-1A-20180814MS/MSD, ART-4-20180814MS/MSD, PC-150-20180814MS/MSD (all three from SDG 440-218122-1), I-AB-20180821MS/MSD (from SDG 440-218596-1), I-AR-20180822MS/MSD (from SDG 440-218636-1), ART-1A 20180911MS/MSD (from SDG 440-219898-1), I-F 20181011MS/MSD (from SDG 440-222060-1), PC-151-20181107MS/MSD, PC-55-20181107MS/MSD, PC-149-20181107MS/MSD (all three from SDG 440-223935-1), M-31A-20181108MS/MSD, M-186D-20181108MS/MSD (both from SDG 440-224035-1), M-10-20181108MS/MSD (from SDG 440-224036-1), ART-2 20181113MS/MSD (from SDG 440-224307-2), I-T 20181120MS/MSD, I-T 20181120-FDMS/MSD (both from SDG 440-224841-1), E1-1-20181211MS/MSD (from SDG 440-227392-1), I-P 20181217MS/MSD, I-N 20181217MS/MSD (both from SDG 440-228089-1), and I-Z 20181218MS/MSD (from SDG 440-228215-1), 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 E1-1-20180816MS/MSD (from SDG 440-218304-1), I-L 20180912MS/MSD (from SDG 440-220024-1), I-L 20181016MS/MSD (from SDG 440-222403-1), M-37-20181108MS/MSD (from SDG 440-224035-1), and E2-3-20181211MS/MSD (from SDG 440-227392-1), 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.

For I-L-20180821MS/MSD (from SDG 440-218596-1), no data were qualified for Chlorate and 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 with the following exceptions:

SDG	Spike ID (Associated Samples)	Analyte	RPD (Limits)	Flag	A or P
440-219540-1	PC-120 20180906MS/MSD (PC-99R2/R3 20180906 PC-115R 20180906 PC-116R 20180906 PC-118 20180906 PC-119 20180906 PC-120 20180906)	Nitrate as N	32 (≤20)	J (all detects) UJ (all non-detects)	A

VIII. Duplicate Sample Analysis

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

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the methods. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples I-L 20180710 and I-L 20180710-FD (both from SDG 440-215464-1), samples I-L 20180710 and I-L 20180710-FD (both from SDG 440-215489-1/N031152), samples ART-2 20180717 and ART-2 20180717-FD (both from SDG 440-216049-1), samples ART-2 20180717 and ART-2 20180717-FD (both from SDG 440-216115-1/N031262), samples PC-119 20180718 and PC-119 20180718-FD (both from SDG 440-216142-1), samples E1-3 20180719 and E1-3 20180719-FD (both from SDG 440-216272-1), samples E1-3 20180719 and E1-3 20180719-FD (both from SDG 440-216344-1/N031298), samples LVW6.05-0.5-20180724 and LVW6.05-0.5-20180724-FD (both from SDG 440-216598-1), samples LVW8.85-1.0-20180725 and LVW8.85-1.0-20180725-FD (both from SDG 440-216701-1), samples PC-119 20180718 and PC-119 20180718-FD (both from SDG 440-216972-1/N031278), samples M-44-20180807 and M-44-20180807-FD4 (both from SDG 440-217588-1), samples M-44-20180809 and M-44-20180809-FD4 (both from SDG 440-217805-1), samples LVW0.55-0.5-20180809 and LVW0.55-0.5-20180809-FD (both from SDG 440-217949-1), samples LVW6.05-0.75-20180809 and LVW6.05-0.75-20180809-FD (both from SDG 440-217949-1), samples ART-4-20180814 and ART-4-20180814-FD (both from SDG 440-218122-1), samples PC-121-20180814 and PC-121-20180814-FD (both from SDG 440-218122-1), samples E2-2-20180816 and E2-2-20180816-FD (both from SDG 440-218304-1), samples E2-2-20180816 and E2-2-20180816-FD (both from SDG 440-218361-1/N031723), samples ART-4-20180814 and ART-4-20180814-FD (both from SDG 440-218427-1/N031678), samples PC-121-20180814 and PC-121-20180814-FD (both from SDG 440-218427-1/N031678), samples I-N-20180821 and I-N-20180821-FD (both from SDG 440-218596-1), samples I-N-20180821 and I-N-20180821-FD (both from SDG 440-218659-1/N031767), samples PC-99R2/R3 20180906 and PC-99R2/R3 20180906-FD (both from SDG 440-219540-1), samples LVW0.55-0.5-20180906 and LVW0.55-

0.5-20180906-FD (both from SDG 440-219684-1), samples LVW4.2-4-3.0-20180906 and LVW4.2-4-3.0-20180906-FD (both from SDG 440-219684-1), samples LVW8.85-1.0-20180907 and LVW8.85-1.0-20180907-FD (both from SDG 440-219684-1), samples ART-7B 20180911 and ART-7B 20180911-FD (both from SDG 440-219898-1), samples I-P 20180913 and I-P 20180913-FD (both from SDG 440-220115-1), samples I-P 20180913 and I-P 20180913-FD (both from SDG 440-220156-1/N032071), samples E2-3 20180919 and E2-3 20180919-FD (both from SDG 440-220450-1), samples E2-3 20180919 and E2-3 20180919-FD (both from SDG 440-220499-1/N032144), samples ART-7B 20180911 and ART-7B 20180911-FD (both from SDG 440-221491-1/N032036), samples PC-99R2/R3 20180906 and PC-99R2/R3 20180906-FD (both from SDG 440-221497-1/N031967), samples LVW0.55-0.5-20181004 and LVW0.55-0.5-20181004-FD (both from SDG 440-221636-1), samples LVW3.5-6-2.0-20181004 and LVW3.5-6-2.0-20181004-FD (both from SDG 440-221636-1), samples LVW6.05-0.5-20181005 and LVW6.05-0.5-20181005-FD (both from SDG 440-221636-1), samples PC-116R 20181009 and PC-116R 20181009-FD (both from SDG 440-221832-1), samples ART-9 20181010 and ART-9 20181010-FD (both from SDG 440-221907-1), samples I-R 20181016 and I-R 20181016-FD (both from SDG 440-222403-1), samples E2-5-20181023 and E2-5-20181023-FD (both from SDG 440-222875-1), samples LVW0.55-0.5-20181101 and LVW0.55-0.5-20181101-FD (both from SDG 440-223647-1), samples LVW8.85-0.6-20181102 and LVW8.85-0.6-20181102-FD (both from SDG 440-223647-1), samples LVW7.2-0.8-20181102 and LVW7.2-0.8-20181102-FD (both from SDG 440-223647-1), samples PC-90-20181105 and PC-90-20181105-FD6 (both from SDG 440-223747-1), samples PC-155A-20181105 and PC-155A-20181105-FD5 (both from SDG 440-223750-1), samples PC-135A-20181106 and PC-135A-20181106-FD7 (both from SDG 440-223852-1), samples PC-118 20181107 and PC-118 20181107-FD (both from SDG 440-223932-1), samples M-19-20181107 and M-19-20181107-FD9 (both from SDG 440-223935-1), samples PC-54-20181107 and PC-54-20181107-FD8 (both from SDG 440-223935-1), samples M-11-20181108 and M-11-20181108-FD4 (both from SDG 440-224035-1), samples E1-2 20181113 and E1-2 20181113-FD (both from SDG 440-224307-1), samples ART-1A 20181113 and ART-1A 20181113-FD (both from SDG 440-224307-2), samples LVW0.55-05-20181204 and LVW0.55-05-20181204-FD (both from SDG 440-226661-1), samples LVW6.05-0.7-20181205 and LVW6.05-0.7-20181205-FD (both from SDG 440-226661-1), samples LVW7.2-0.7-20181205 and LVW7.2-0.7-20181205-FD (both from SDG 440-226661-1), samples PC-120 20181210 and PC-120 20181210-FD (both from SDG 440-227180-1), samples E2-1-20181211 and E2-1-20181211-FD (both from SDG 440-227392-1), samples I-V 20181218 and I-V 20181218-FD (both from SDG 440-228215-1), and samples ART-3A 20181219 and ART-3A 20181219 FD (both from SDG 440-228329-1) samples I-T 20181120 and I-T 20181120-FD (both from SDG 440-224841-1) 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
		I-L 20180710	I-L 20180710-FD			
440-215464-1	Nitrate as N	74 mg/L	75 mg/L	1 (≤30)	-	-
	Chlorate	370000 ug/L	380000 ug/L	3 (≤30)	-	-
	Perchlorate	430 mg/L	430 mg/L	0 (≤30)	-	-
	Total dissolved solids	5000 mg/L	4900 mg/L	2 (≤30)	-	-
	Field pH	7.43 SU	7.46 SU	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-L 20180710	I-L 20180710-FD			
440-215489-1/ N031152	Hexavalent chromium	1.3	1.3	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-2 20180717	ART-2 20180717-FD			
440-216049-1	Nitrate as N	5.5U mg/L	2.9 mg/L	200 (≤30)	NQ	-
	Chlorate	13000 ug/L	13000 ug/L	0 (≤30)	-	-
	Perchlorate	14 mg/L	14 mg/L	0 (≤30)	-	-
	Total dissolved solids	8900 mg/L	8800 mg/L	1 (≤30)	-	-
	Field pH	7.24 SU	7.26 SU	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-2 20180717	ART-2 20180717-FD			
440-216115-1/ N031262	Hexavalent chromium	0.0071	0.0068	4 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-119 20180718	PC-119 20180718-FD			
440-216142-1	Nitrate as N	0.27 mg/L	0.33 mg/L	20 (≤30)	-	-
	Chlorate	250 ug/L	270 ug/L	8 (≤30)	-	-
	Perchlorate	0.73 mg/L	0.79 mg/L	8 (≤30)	-	-
	Total dissolved solids	1800 mg/L	1800 mg/L	0 (≤30)	-	-
	Field pH	7.36 SU	7.31 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E1-3 20180719	E1-3 20180719-FD			
440-216272-1	Nitrate as N	91 mg/L	84 mg/L	8 (≤30)	-	-
	Chlorate	90000 ug/L	92000 ug/L	2 (≤30)	-	-
	Perchlorate	870 mg/L	860 mg/L	1 (≤30)	-	-
	Total dissolved solids	5100 mg/L	5100 mg/L	0 (≤30)	-	-
	Field pH	6.87 SU	6.90 SU	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E1-3 20180719	E1-3 20180719-FD			
440-216344-1/ N031298	Hexavalent chromium	0.31	0.31	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.5-20180724	LVW6.05-0.5-20180724-FD			
440-216598-1	Chlorate	430 ug/L	450 ug/L	5 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW8.85-1.0-20180725	LVW8.85-1.0-20180725-FD			
440-216701-1	Chlorate	120 ug/L	120 ug/L	0 (≤30)	-	-
	Total dissolved solids	1100 mg/L	1100 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-44-20180807	M-44-20180807-FD4			
440-217588-1	Perchlorate	610000 ug/L	600000 ug/L	2 (≤30)	-	-
	Total dissolved solids	8500 mg/L	8400 mg/L	1 (≤30)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		M-44-20180809	M-44-20180809-FD4			
440-217805-1	Hexavalent chromium	700	690	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.5-20180809	LVW0.55-0.5-20180809-FD			
440-217949-1	Chlorate	220 ug/L	230 ug/L	4 (≤30)	-	-
	Perchlorate	37 ug/L	35 ug/L	6 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.75-20180809	LVW6.05-0.75-20180809-FD			
440-217949-1	Chlorate	230 ug/L	230 ug/L	0 (≤30)	-	-
	Perchlorate	5.2 ug/L	5.1 ug/L	2 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-4-20180814	ART-4-20180814-FD			
440-218122-1	Chlorate	160000 ug/L	170000 ug/L	6 (≤30)	-	-
	Nitrate as N	12 mg/L	12 mg/L	0 (≤30)	-	-
	Perchlorate	120 mg/L	130 mg/L	8 (≤30)	-	-
	Field pH	7.42 SU	7.38 SU	1 (≤30)	-	-
	Total dissolved solids	5700 mg/L	5700 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-121-20180814	PC-121-20180814-FD			
440-218122-1	Perchlorate	0.098 mg/L	0.098 mg/L	0 (≤30)	-	-
	Field pH	7.41 SU	7.36 SU	1 (≤30)	-	-
	Total dissolved solids	1700 mg/L	1700 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-2-20180816	E2-2-20180816-FD			
440-218304-1	Chlorate	10000 ug/L	10000 ug/L	0 (≤30)	-	-
	Nitrate as N	21 mg/L	21 mg/L	0 (≤30)	-	-
	Perchlorate	560 mg/L	500 mg/L	11 (≤30)	-	-
	Field pH	7.28 SU	7.28 SU	0 (≤30)	-	-
	Total dissolved solids	3700 mg/L	3800 mg/L	3 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-2-20180816	E2-2-20180816-FD			
440-218361-1/ N031723	Hexavalent chromium	0.028	0.029	4 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-4-20180814	ART-4-20180814-FD			
440-218427-1/ N031678	Hexavalent chromium	0.17	0.17	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-N-20180821	I-N-20180821-FD			
440-218596-1	Chlorate	1800000 ug/L	1900000 ug/L	5 (≤30)	-	-
	Nitrate as N	84 mg/L	83 mg/L	1 (≤30)	-	-
	Perchlorate	490 mg/L	480 mg/L	2 (≤30)	-	-
	Field pH	7.20 SU	7.13 SU	1 (≤30)	-	-
	Total dissolved solids	7600 mg/L	7600 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-N-20180821	I-N-20180821-FD			
440-218659-1/ N031677	Hexavalent chromium	7.0	6.8	3 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-99R2/R3 20180906	PC-99R2/R3 20180906-FD			
440-219540-1	Chlorate	20000 ug/L	20000 ug/L	0 (≤30)	-	-
	Nitrate as N	8.5 mg/L	8.7 mg/L	2 (≤30)	-	-
	Perchlorate	17 mg/L	17 mg/L	0 (≤30)	-	-
	Field pH	7.46 SU	7.38 SU	1 (≤30)	-	-
	Total dissolved solids	3600 mg/L	3600 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.5-20180906	LVW0.55-0.5-20180906-FD			
440-219684-1	Chlorate	230 ug/L	260 ug/L	12 (≤30)	-	-
	Perchlorate	37 ug/L	36 ug/L	3 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW4.2-4-3.0-20180906	LVW4.2-4-3.0-20180906-FD			
440-219684-1	Chlorate	160 ug/L	150 ug/L	6 (≤30)	-	-
	Perchlorate	24 ug/L	22 ug/L	9 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW8.85-1.0-20180907	LVW8.85-1.0-20180907-FD			
440-219684-1	Chlorate	110 ug/L	110 ug/L	0 (≤30)	-	-
	Perchlorate	0.95U ug/L	0.96 ug/L	200 (≤30)	NQ	-
	Total dissolved solids	1100 mg/L	1100 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-7B 20180911	ART-7B 20180911-FD			
440-219898-1	Chlorate	360000 ug/L	340000 ug/L	6 (≤30)	-	-
	Nitrate as N	25 mg/L	27 mg/L	8 (≤30)	-	-
	Perchlorate	100 mg/L	92 mg/L	8 (≤30)	-	-
	Field pH	7.40 SU	7.48 SU	1 (≤30)	-	-
	Total dissolved solids	7200 mg/L	7100 mg/L	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-P 20180913	I-P 20180913-FD			
440-220115-1	Chlorate	3400000 ug/L	3600000 ug/L	6 (≤30)	-	-
	Nitrate as N	70 mg/L	69 mg/L	1 (≤30)	-	-
	Perchlorate	850 mg/L	850 mg/L	0 (≤30)	-	-
	Field pH	7.29 SU	7.23 SU	1 (≤30)	-	-
	Total dissolved solids	10000 mg/L	11000 mg/L	10 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-P 20180913	I-P 20180913-FD			
440-220156-1/ N032071	Hexavalent chromium	15	15	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-3 20180919	E2-3 20180919-FD			
440-220450-1	Chlorate	11000 ug/L	11000 ug/L	0 (≤30)	-	-
	Nitrate as N	41 mg/L	41 mg/L	0 (≤30)	-	-
	Perchlorate	910 mg/L	900 mg/L	1 (≤30)	-	-
	Field pH	7.24 SU	7.18 SU	1 (≤30)	-	-
	Total dissolved solids	4400 mg/L	4300 mg/L	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		E2-3 20180919	E2-3 20180919-FD			
440-220499-1/ N032144	Hexavalent chromium	0.026	0.026	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		ART-7B 20180911	ART-7B 20180911-FD			
440-221491-1/ N032036	Hexavalent chromium	0.58	0.58	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.5-20181004	LVW0.55-0.5-20181004-FD			
440-221636-1	Chlorate	200 ug/L	200 ug/L	0 (≤30)	-	-
	Perchlorate	36 ug/L	36 ug/L	0 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW3.5-6-2.0-20181004	LVW3.5-6-2.0-20181004-FD			
440-221636-1	Chlorate	180 ug/L	180 ug/L	0 (≤30)	-	-
	Perchlorate	33 ug/L	40 ug/L	19 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.5-20181005	LVW6.05-0.5-20181005-FD			
440-221636-1	Chlorate	160 ug/L	170 ug/L	6 (≤30)	-	-
	Perchlorate	15 ug/L	15 ug/L	0 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-116R 20181009	PC-116R 20181009-FD			
440-221832-1	Hexavalent chromium	0.0035 mg/L	0.0038 mg/L	8 (≤30)	-	-
	Nitrate as N	7.9 mg/L	7.7 mg/L	3 (≤30)	-	-
	Chlorate	24000 ug/L	24000 ug/L	0 (≤30)	-	-
	Perchlorate	15 mg/L	17 mg/L	13 (≤30)	-	-
	Total dissolved solids	3500 mg/L	3600 mg/L	3 (≤30)	-	-
	Field pH	7.39 SU	7.33 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-9 20181010	ART-9 20181010-FD			
440-221907-1	Hexavalent chromium	0.70 mg/L	0.70 mg/L	0 (≤30)	-	-
	Nitrate as N	21 mg/L	23 mg/L	9 (≤30)	-	-
	Chlorate	380000 ug/L	380000 ug/L	0 (≤30)	-	-
	Perchlorate	170 mg/L	190 mg/L	11 (≤30)	-	-
	Total dissolved solids	6500 mg/L	6600 mg/L	2 (≤30)	-	-
	Field pH	7.45 SU	7.43 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-R 20181016	I-R 20181016-FD			
440-222403-1	Hexavalent chromium	0.68 mg/L	0.66 mg/L	3 (≤30)	-	-
	Nitrate as N	75 mg/L	75 mg/L	0 (≤30)	-	-
	Chlorate	200000 ug/L	20000 ug/L	0 (≤30)	-	-
	Perchlorate	810 mg/L	970 mg/L	18 (≤30)	-	-
	Total dissolved solids	4800 mg/L	4900 mg/L	2 (≤30)	-	-
	Field pH	7.54 SU	7.56 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-5-20181023	E2-5-20181023-FD			
440-222875-1	Hexavalent chromium	0.11 mg/L	0.11 mg/L	0 (≤30)	-	-
	Nitrate as N	79 mg/L	80 mg/L	1 (≤30)	-	-
	Chlorate	17000 ug/L	17000 ug/L	0 (≤30)	-	-
	Perchlorate	2200 mg/L	2000 mg/L	10 (≤30)	-	-
	Total dissolved solids	5300 mg/L	5400 mg/L	2 (≤30)	-	-
	Field pH	7.11 SU	7.12 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-0.5-20181101	LVW0.55-0.5-20181101-FD			
440-223647-1	Chlorate	220 ug/L	210 ug/L	5 (≤30)	-	-
	Perchlorate	42 ug/L	40 ug/L	5 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW8.85-0.6-20181102	LVW8.85-0.6-20181102-FD			
440-223647-1	Chlorate	280 ug/L	280 ug/L	0 (≤30)	-	-
	Total dissolved solids	1100 mg/L	1100 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-0.8-20181102	LVW7.2-0.8-20181102-FD			
440-223647-1	Chlorate	350 ug/L	350 ug/L	0 (≤30)	-	-
	Perchlorate	1.7 ug/L	2.6 ug/L	42 (≤30)	NQ	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-90-20181105	PC-90-20181105-FD6			
440-223747-1	Nitrate as N	7.4 mg/L	7.5 mg/L	1 (≤30)	-	-
	Chlorate	9000 ug/L	8800 ug/L	2 (≤30)	-	-
	Perchlorate	9700 ug/L	9800 ug/L	1 (≤30)	-	-
	Total dissolved solids	2800 mg/L	2800 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-155A-20181105	PC-155A-20181105-FD5			
440-223750-1	Nitrate as N	3.4 mg/L	3.5 mg/L	3 (≤30)	-	-
	Chlorate	470 ug/L	460 ug/L	2 (≤30)	-	-
	Perchlorate	3300 ug/L	3300 ug/L	0 (≤30)	-	-
	Total dissolved solids	3200 mg/L	3200 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-135A-20181106	PC-135A-20181106-FD7			
440-223852-1	Nitrate as N	6.9 mg/L	6.9 mg/L	0 (≤30)	-	-
	Chlorate	7900 ug/L	7900 ug/L	0 (≤30)	-	-
	Perchlorate	45000 ug/L	44000 ug/L	2 (≤30)	-	-
	Total dissolved solids	4800 mg/L	4900 mg/L	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-118 20181107	PC-118 20181107-FD			
440-223932-1	Nitrate as N	2.8 mg/L	2.9 mg/L	4 (≤30)	-	-
	Chlorate	3400 ug/L	3500 ug/L	3 (≤30)	-	-
	Perchlorate	5.4 mg/L	5.5 mg/L	2 (≤30)	-	-
	Total dissolved solids	2200 mg/L	2200 mg/L	0 (≤30)	-	-
	Field pH	7.80 SU	7.68 SU	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-19-20181107	M-19-20181107-FD9			
440-223935-1	Nitrate as N	11 mg/L	11 mg/L	0 (≤30)	-	-
	Chlorate	110000 ug/L	100000 ug/L	10 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-19-20181107	M-19-20181107-FD9			
	Perchlorate	20000 ug/L	20000 ug/L	0 (≤30)	-	-
440-223935-1	Total dissolved solids	4500 mg/L	4400 mg/L	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-54-20181107	PC-54-20181107-FD8			
440-223935-1	Nitrate as N	35 mg/L	32 mg/L	9 (≤30)	-	-
	Chlorate	660000 ug/L	660000 ug/L	0 (≤30)	-	-
	Perchlorate	250000 ug/L	240000 ug/L	4 (≤30)	-	-
	Total dissolved solids	5100 mg/L	5100 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		M-11-20181108	M-11-20181108-FD4			
440-224035-1	Hexavalent chromium	420 ug/L	470 ug/L	11 (≤30)	-	-
	Nitrate as N	2.0 mg/L	2.1 mg/L	5 (≤30)	-	-
	Chlorate	200000 ug/L	200000 ug/L	0 (≤30)	-	-
	Perchlorate	16000 ug/L	14000 ug/L	13 (≤30)	-	-
	Total dissolved solids	3500 mg/L	3400 mg/L	3 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E1-2 20181113	E1-2 20181113-FD			
440-224307-1	Hexavalent chromium	0.17 mg/L	0.16 mg/L	6 (≤30)	-	-
	Nitrate as N	94 mg/L	88 mg/L	7 (≤30)	-	-
	Chlorate	70000 ug/L	71000 ug/L	1 (≤30)	-	-
	Perchlorate	1800 mg/L	1700 mg/L	6 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E1-2 20181113	E1-2 20181113-FD			
	Total dissolved solids	5600 mg/L	5500 mg/L	2 (≤30)	-	-
	Field pH	7.14 SU	6.81 SU	5 (≤30)	-	-
SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-1A 20181113	ART-1A 20181113-FD			
440-224307-2	Nitrate as N	2.6 mg/L	3.3 mg/L	24 (≤30)	-	-
	Chlorate	1500 ug/L	1500 ug/L	0 (≤30)	-	-
	Perchlorate	25 mg/L	24 mg/L	4 (≤30)	-	-
	Total dissolved solids	4500 mg/L	4500 mg/L	0 (≤30)	-	-
	Field pH	7.97 SU	7.85 SU	2 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-T 20181120	I-T 20181120-FD			
440-224841-1	Hexavalent chromium	20 mg/L	18 mg/L	11 (≤30)	-	-
	Nitrate as N	64 mg/L	64 mg/L	0 (≤30)	-	-
	Chlorate	4100000 ug/L	4100000 ug/L	0 (≤30)	-	-
	Perchlorate	1400 mg/L	1300 mg/L	7 (≤30)	-	-
	Total dissolved solids	12000 mg/L	12000 mg/L	0 (≤30)	-	-
	Field pH	6.93 SU	6.93 SU	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW0.55-05-20181204	LVW0.55-05-20181204-FD			
440-226661-1	Chlorate	190 ug/L	190 ug/L	0 (≤30)	-	-
	Perchlorate	48 ug/L	49 ug/L	2 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW6.05-0.7-20181205	LVW6.05-0.7-20181205-FD			
440-226661-1	Chlorate	420 ug/L	420 ug/L	0 (≤30)	-	-
	Perchlorate	21 ug/L	21 ug/L	0 (≤30)	-	-
	Total dissolved solids	1500 mg/L	1500 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		LVW7.2-0.7-20181205	LVW7.2-0.7-20181205-FD			
440-226661-1	Chlorate	77 ug/L	79 ug/L	3 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		PC-120 20181210	PC-120 20181210-FD			
440-227180-1	Chlorate	4.3 ug/L	5.4 ug/L	23 (≤30)	-	-
	Perchlorate	0.034 mg/L	0.034 mg/L	0 (≤30)	-	-
	Total dissolved solids	1600 mg/L	1600 mg/L	0 (≤30)	-	-
	pH	7.76 SU	7.72 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-1-20181211	E2-1-20181211-FD			
440-227392-1	Hexavalent chromium	0.029 mg/L	0.028 mg/L	4 (≤30)	-	-
	Nitrate as N	16 mg/L	15 mg/L	6 (≤30)	-	-
	Chlorate	12000 ug/L	11000 ug/L	9 (≤30)	-	-
	Perchlorate	170 mg/L	160 mg/L	6 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		E2-1-20181211	E2-1-20181211-FD			
	Total dissolved solids	2900 mg/L	3000 mg/L	3 (≤30)	-	-
	pH	7.40 SU	7.46 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		I-V 20181218	I-V 20181218-FD			
440-228215-1	Hexavalent chromium	13 mg/L	13 mg/L	0 (≤30)	-	-
	Nitrate as N	27 mg/L	29 mg/L	7 (≤30)	-	-
	Chlorate	2900000 ug/L	2900000 ug/L	0 (≤30)	-	-
	Perchlorate	900 mg/L	930 mg/L	3 (≤30)	-	-
	Total dissolved solids	9300 mg/L	9400 mg/L	1 (≤30)	-	-
	pH	7.05 SU	7.13 SU	1 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		ART-3A 20181219	ART-3A 20181219 FD			
440-228329-1	Hexavalent chromium	0.41 mg/L	0.40 mg/L	2 (≤30)	-	-
	Nitrate as N	18 mg/L	17 mg/L	6 (≤30)	-	-
	Chlorate	250000 ug/L	250000 ug/L	0 (≤30)	-	-
	Perchlorate	210 mg/L	200 mg/L	5 (≤30)	-	-
	Total dissolved solids	7100 mg/L	7000 mg/L	1 (≤30)	-	-
	pH	7.78 SU	7.72 SU	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).

XI. Sample Result Verification

Raw data were not reviewed for Stage 2A validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to technical holding time and MS/MSD %R and RPD, data were qualified as estimated in one hundred twenty-five samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

NERT GWM Performance Sampling, July-December 2018

Wet Chemistry - Data Qualification Summary - SDGs 440-215464-1, 440-215489-1/N031152, 440-215507-1, 440-215713-1/N031175, 440-216049-1, 440-216115-1/N031262, 440-216142-1, 440-216272-1, 440-216344-1/N031298, 440-216509-1, 440-216598-1, 440-216701-1, 440-216972-1/N031278, 440-217588-1, 440-217589-1, 440-217590-1, 440-217805-1, 440-217949-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218361-1/N031723, 440-218427-1/N031678, 440-218596-1, 440-218636-1, 440-218659-1/N031767, 440-219554-1/N031782, 440-219540-1, 440-219684-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220156-1/N032071, 440-220408-1, 440-220417-1/N032126, 440-220450-1, 440-220499-1/N032144, 440-221491-1/N032036, 440-221497-1/N031967, 440-221500-1/N032058, 440-221636-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223647-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224742-1, 440-224841-1, 440-225026-1, 440-226661-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-216272-1	E1-1 20180719 E1-2 20180719 E1-3 20180719 E2-1 20180719 E2-2 20180719 E2-3 20180719 E2-4 20180719 E2-5 20180719 E1-3 20180719-FD E2-1 20180719-EB	Total dissolved solids	J- (all detects) UJ (all non-detects)	P	Technical holding times (h)
440-227392-1	E2-3-20181211	Nitrate as N	J- (all detects)	A	Technical holding times (h)
440-216142-1	PC-117 20180718 PC-119 20180718-FD PC-133 20180718	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-217589-1	M-7B-20180807	Total organic halides	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-218596-1	I-S-20180821 I-F-20180821 I-X-20180821 I-N-20180821 I-E-20180821 I-M-20180821	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-219540-1	PC-99R2/R3 20180906 PC-115R 20180906 PC-116R 20180906 PC-118 20180906 PC-119 20180906	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-219684-1	LWW0.55-0.5-20180906 LWW0.55-0.5-20180906-FD LWW3.5-1-1.0-20180906 LWW3.5-2-1.0-20180906 LWW3.5-3-1.0-20180906 LWW3.5-4-2.0-20180906 LWW3.5-5-2.0-20180906 LWW3.5-6-2.0-20180906 LWW4.2-1-2.0-20180906 LWW4.2-2-2.0-20180906 LWW4.2-3-2.5-20180906 LWW4.2-4-3.0-20180906 LWW4.2-4-3.0-20180906-FD LWW4.75-1-1.25-20180906 LWW4.75-2-1.25-20180906 LWW4.75-3-1.5-20180906 LWW4.75-4-1.5-20180906 LWW4.75-5-0.75-20180906 LWW6.05-0.5-20180907 LWW8.85-1.0-20180907	Chlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-219684-1	LWW0.55-0.5-20180906 LWW0.55-0.5-20180906-FD LWW3.5-1-1.0-20180906 LWW3.5-2-1.0-20180906 LWW3.5-3-1.0-20180906 LWW3.5-4-2.0-20180906 LWW3.5-5-2.0-20180906 LWW3.5-6-2.0-20180906 LWW4.2-1-2.0-20180906 LWW4.2-2-2.0-20180906 LWW4.2-3-2.5-20180906 LWW4.2-4-3.0-20180906 LWW4.2-4-3.0-20180906-FD LWW4.75-1-1.25-20180906 LWW4.75-2-1.25-20180906 LWW4.75-3-1.5-20180906 LWW4.75-4-1.5-20180906 LWW4.75-5-0.75-20180906 LWW6.05-0.5-20180907	Perchlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-220408-1	I-K 20180918 I-J 20180918 I-Z 20180918 I-I 20180918 I-V 20180918	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-221636-1	LWW0.55-0.5-20181004 LWW0.55-0.5-20181004-FD	Perchlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-221832-1	PC-117 20181009 PC-116R 20181009-FD	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-222060-1	I-O 20181011 I-W 20181011 I-P 20181011 I-H 20181011 I-U 20181011 I-T 20181011	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-222060-1	I-P 20181011 I-H 20181011 I-U 20181011 I-F 20181011 I-X 20181011 I-N 20181011 I-E 20181011	Hexavalent chromium	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-222875-1	E2-3-20181023 E2-4-20181023 E2-5-20181023 E2-5-20181023-FD	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-223647-1	LWW0.55-0.5-20181101 LWW0.55-0.5-20181101-FD LWW3.5-1-0.9-20181101 LWW3.5-2-1.0-20181101 LWW3.5-3-1.9-20181101 LWW3.5-4-2.0-20181101 LWW3.5-5-2.0-20181101 LWW3.5-6-1.7-20181101 LWW4.2-1-2.1-20181101 LWW4.2-2-1.8-20181101 LWW4.2-3-2.0-20181101 LWW4.2-4-1.9-20181101 LWW4.75-1-1.3-20181101 LWW4.75-2-1.2-20181101 LWW4.75-3-0.7-20181101 LWW4.75-4-0.8-20181101 LWW4.75-5-0.9-20181101 LWW5.3-1-3.3-20181101	Perchlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-223852-1	PC-56-20181106 PC-122-20181106 PC-136-20181106 PC-158-20181106 M-69-20181106 PC-53-20181106	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-223935-1	PC-159-20181107 PC-55-20181107 PC-124-20181107 M-193-20181107 M-48A-20181107 PC-125-20181107	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-224307-2	ART-2 20181113 ART-3A 20181113 ART-4 20181113 ART-7B 20181113 ART-8A 20181113 ART-6 20181113	Hexavalent chromium	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-227392-1	E1-1-20181211 E1-2-20181211 E1-3-20181211 E2-1-20181211 E2-2-20181211	Nitrate as N	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-228089-1	I-F 20181217 I-D 20181217 I-C 20181217 I-Y 20181217 I-L 20181217 I-S 20181217	Hexavalent chromium	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-219540-1	PC-99R2/R3 20180906 PC-115R 20180906 PC-116R 20180906 PC-118 20180906 PC-119 20180906 PC-120 20180906	Nitrate as N	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (ld)

NERT GWM Performance Sampling, July-December 2018

Wet Chemistry - Laboratory Blank Data Qualification Summary - SDGs 440-215464-1, 440-215489-1/N031152, 440-215507-1, 440-215713-1/N031175, 440-216049-1, 440-216115-1/N031262, 440-216142-1, 440-216272-1, 440-216344-1/N031298, 440-216509-1, 440-216598-1, 440-216701-1, 440-216972-1/N031278, 440-217588-1, 440-217589-1, 440-217590-1, 440-217805-1, 440-217949-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218361-1/N031723, 440-218427-1/N031678, 440-218596-1, 440-218636-1, 440-218659-1/N031767, 440-219554-1/N031782, 440-219540-1, 440-219684-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220156-1/N032071, 440-220408-1, 440-220417-1/N032126, 440-220450-1, 440-220499-1/N032144, 440-221491-1/N032036, 440-221497-1/N031967, 440-221500-1/N032058, 440-221636-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223647-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224742-1, 440-224841-1, 440-225026-1, 440-226661-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

No Sample Data Qualified in these SDGs

NERT GWM Performance Sampling, July-December 2018

Wet Chemistry - Field Blank Data Qualification Summary - SDGs 440-215464-1, 440-215489-1/N031152, 440-215507-1, 440-215713-1/N031175, 440-216049-1, 440-216115-1/N031262, 440-216142-1, 440-216272-1, 440-216344-1/N031298, 440-216509-1, 440-216598-1, 440-216701-1, 440-216972-1/N031278, 440-217588-1, 440-217589-1, 440-217590-1, 440-217805-1, 440-217949-1, 440-218122-1, 440-218304-1, 440-218335-1, 440-218361-1/N031723, 440-218427-1/N031678, 440-218596-1, 440-218636-1, 440-218659-1/N031767, 440-219554-1/N031782, 440-219540-1, 440-219684-1, 440-219898-1, 440-220024-1, 440-220115-1, 440-220156-1/N032071, 440-220408-1, 440-220417-1/N032126, 440-220450-1, 440-220499-1/N032144, 440-221491-1/N032036, 440-221497-1/N031967, 440-221500-1/N032058, 440-221636-1, 440-221832-1, 440-221907-1, 440-222060-1, 440-222403-1, 440-222514-1, 440-222875-1, 440-223647-1, 440-223745-1, 440-223747-1, 440-223750-1, 440-223852-1, 440-223932-1, 440-223935-1, 440-224035-1, 440-224036-1, 440-224101-1, 440-224307-1, 440-224307-2, 440-224427-1, 440-224541-1, 440-224742-1, 440-224841-1, 440-225026-1, 440-226661-1, 440-227180-1, 440-227392-1, 440-228089-1, 440-228215-1, 440-228329-1

No Sample Data Qualified in these SDGs