

**Data Validation Summary Report, Revision 2
Baseline Ecological Risk Assessment and
Phase 3 Remedial Investigation Modification #7
May 2019 through June 2020
Nevada Environmental Response Trust
Henderson, Nevada**

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June 24, 2021

Baseline Ecological Risk Assessment and
Phase 3 Remedial Investigation Modification #7 DVSR and EDD
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Revision 2
Nevada Environmental Response Trust Site
Henderson, Nevada

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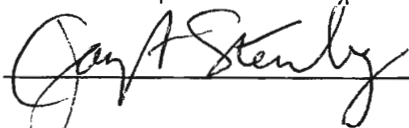
**Nevada Environmental Response Trust
Site (Former Tronox LLC Site)
Henderson, Nevada**

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Site (Former Tronox LLC Site)
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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.



6/25/21

John M. Pekala, PG
Principal

Date

Certified Environmental Manager
Ramboll US Corporation
CEM Certificate Number: 2347
CEM Expiration Date: September 20, 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

ASTM	American Society for Testing and Material
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
DL	Detection Limit
DNR	Do Not Report
DOC	Dissolved Organic Carbon
DQO	Data Quality Objectives
DUP	Laboratory Duplicate
DVR	Data Validation Report
DVSR	Data Validation Summary Report
EB	Equipment Blank
EPA	Environmental Protection Agency
FB	Field Blank
FD	Field Duplicate
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Samples
ICV	Initial Calibration Verification
LCS/LCSD	Laboratory Control Sample / Laboratory Control Sample Duplicate
LDC	Laboratory Data Consultants, Inc.
LODV	Limit of Detection Verification
MB	Method Blank
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
SIM	Selected Ion Monitoring
SOP	Standard Operating Procedure
SQL	Sample Quantitation Limit
TB	Trip Blank
TCP	1,2,3-Trichloropropane
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
%	Percent
%RSD	Percent Relative Standard Deviation
%D	Percent Difference
%R	Percent Recovery
ug/Kg	Micrograms per Kilogram
ug/L	Micrograms per Liter
ug/m ³	Micrograms per Cubic Meter
mg/Kg	Milligrams per Kilogram

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

mg/L	Milligrams per Liter
ppbv	Parts per Billion by volume

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 associated with the Baseline Ecological Risk Assessment and Phase 3 Remedial Investigation Modification #7 sampling efforts completed from May 2019 through June 2020, 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, Revisions 3 and 4, Nevada Environmental Response Trust Site, Henderson, Nevada* dated April 2019 and December 2019, respectively, and included the collection and analyses of 251 environmental and quality control (QC) samples. Hexavalent chromium results for samples C-S-SWF001-20191025 and C-S-SWU001-20191025 were received by the laboratory past the recommend holding time and were rejected. Both samples were re-collected and validated (C-S-SWF002-20191031 and C-S-SWU002-20191031).

The analyses were performed by the following methods:

Volatile Organic Compounds (VOC) by Environmental Protection Agency (EPA) SW-846 Method 8260B
1,2,3-Trichloropropane (TCP) by EPA SW-846 Method 8260B in Selected Ion Monitoring (SIM) mode
VOC by EPA Methods TO-15/TO-15 SIM mode
Helium by American Society for Testing and Material (ASTM) D1946
Perchlorate by EPA SW-846 Method 6850
Metals by EPA Methods 200.7 and EPA SW-846 Method 6020

Wet Chemistry:

Alkalinity by Standard Method 2320B
Bromide, Chloride, Nitrate as Nitrogen, Nitrite as Nitrogen, Orthophosphate as Phosphate, and Sulfate by EPA Method 300.0
Bromide and Chlorate by EPA Method 300.1B
Dissolved Organic Carbon (DOC) by EPA SW 846 Method 9060
Hardness as Calcium Carbonate and Dissolved Hardness as Calcium Carbonate by Standard Method 2340B/C
Hexavalent Chromium by EPA SW Method 218.6
Hexavalent Chromium and Dissolved Hexavalent Chromium by EPA SW 846 Method 7196A
Percent Lipids by Method Laboratory SOP
Perchlorate and Dissolved Perchlorate by EPA Method 314.0
Sulfide by EPA SW 846 Method 9034
Total Dissolved Solids (TDS) by Standard Method 2540C
Total Organic Carbon (TOC) by Lloyd Kahn Method and EPA SW 846 Method 9060

Laboratory analytical services were provided by Eurofins. The analyses for VOC by EPA Methods TO-15/TO-15 SIM mode and helium by ASTM D1946 were subcontracted to Eurofins Air Toxics, LLC. The samples were grouped into sample delivery groups (SDGs). The air, porewater, sediment, soil, tissue, and water samples are associated with quality assurance and quality control (QA/QC) samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Table I is a cross-reference table listing each sample, analysis, SDG, collection date, laboratory sample number, matrix, and validation level. An individual sample may be on multiple rows if it is reported in more than one SDG or if its analytes were validated at different validation levels. 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. An email from NDEP to the Trust dated December 7, 2018 (2018b) clarified the guidance for reporting multiple results as follows:

Multiple results can be reported for a single analyte for several reasons: dilutions to report analytes within the linear range of the calibration, results reported with QC sample outliers can be reanalyzed beyond the holding time and both results are reported, and analytes can be reported from two different methods (e.g., SW-846 8260 and 8270). In cases where more than one result is reported for an analyte in a sample, and only one result is valid, the most technically sound value is to be reported and the other result is to be rejected or otherwise qualified as unused (e.g. “R” or “DNR”). The professional judgment used to choose the most technically sound result should be documented in the validation report and the DVSR.

Consistent with the NDEP and QAPP requirements, one hundred percent of the water analytical data were validated according to Stage 2A and approximately ninety percent of the air, porewater, sediment, soil, and tissue analytical data were validated according to Stage 2B data validation procedures and approximately ten percent of the air, porewater, sediment, soil, and tissue samples were validated according to Stage 4 data validation procedures. The number of samples and percentage of samples validated to Stage 2A, Stage 2B, and Stage 4 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 3, Nevada Environmental Response Trust Site, Henderson, Nevada* dated April 2019 and *Quality Assurance Project Plan, Revision 4, Nevada Environmental Response Trust Site, Henderson, Nevada* dated December 30, 2019; a modified outline of the *USEPA National Functional Guidelines (NFGs) for Organic Superfund Methods Data Review* (January 2017) and *for Inorganic Superfund Data Review* (January 2017); *Standard Method for the Examination of Water and Wastewater 22nd edition* (2012); 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.

The 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 10.0 presents a summary of the PARCCS criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCCS criteria are also summarized in this section.

Precision and Accuracy of Environmental Data

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

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: trip blanks (TBs), equipment blanks (EBs), field blanks (FBs), field duplicates (FDs), calibration blanks, method blanks, canister blanks, laboratory control samples/laboratory control sample duplicates (LCS/LCSDs),

matrix spike/matrix spike duplicates (MS/MSDs), and laboratory duplicates (DUPS).

Before conducting the PARCCS evaluation, the analytical data were validated according to the NDEP Data Validation Guidance (July 2018), Quality Assurance Project Plans (QAPPs; April 2019 and December 2019), NFGs (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 compound or 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.
- 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. A 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 or solid matrix is used to prepare an LCS. The LCS measures laboratory efficiency in recovering target analytes from either 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, and LCS. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. Accuracy 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, canister blanks, initial calibration blanks (ICB), and continuing calibration blanks (CCB), EBs, and TBs.

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.

Canister blanks are used to certify that the summa canisters used for sample collection are free of contaminants prior to entering the field. Canister certification can either be done on each canister individually, or by batch.

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.

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

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

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 VOLATILE ORGANIC COMPOUNDS (METHOD SW8260B)

A total of 20 porewater, 35 sediment, 30 soil, 31 tissue, and 91 water samples were analyzed for VOC by EPA SW-846 Method 8260B. All VOC (Method SW8260B) data were assessed to be valid since none of the 574 total results were rejected due to holding time or 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 Instrument Calibration

Initial and continuing calibration results provide a means of evaluating accuracy within a particular SDG. Relative response factor (RRF), percent relative standard deviation (%RSD), and percent difference (%D) are the major parameters used to measure the effectiveness of instrument calibration. RRF is a measure of the relative spectral response of an analyte compared to its internal standard. %RSD is an expression of the linearity of instrument response. %D is a comparison of a continuing calibration instrumental response with its initial response. %RSD and %D exceedances suggest routine instrumental anomalies, which typically impact all sample results for the affected compounds.

The %RSDs met the acceptance criteria of 30 percent for chloroform in the initial calibration (ICAL).

The %Ds in the initial calibration verifications met the acceptance criteria of 20 percent.

In instances where continuing calibration verifications %Ds were above the acceptance criteria of 20 percent no data were qualified since the associated sample results were not detected.

2.1.2 Surrogates

All surrogate %Rs met the laboratory acceptance criteria for this analysis.

2.1.3 MS/MSD Samples

As a result of a low MS %R, the chloroform result in sample Z5-FT002-LMB-20191025 was qualified as non-detected estimated (UJ). The details regarding the qualification of results are provided in Attachment A.

All MS/MSD RPDs met the laboratory acceptance criteria for this analysis.

2.1.4 LCS/LCSD Samples

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

2.1.5 Internal Standards

All internal standard areas and retention times met the method acceptance criteria.

2.1.6 FD Samples

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.

2.1.7 Compound Quantitation and Target Identification

Raw data were evaluated for four (4) porewater, four (4) sediment, six (6) soil, and four (4) tissue samples. All target identifications were acceptable and all reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

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 14-day analysis holding time criteria for preserved porewater and water samples, sediment, and tissue samples.

Three (3) chloroform results were qualified as non-detected estimated (UJ) as a result of exceeding the analysis holding time criteria of 14 days for soil samples. The details regarding the qualification of results are provided in Attachment A.

2.2.2 Blanks

Method blanks, EBs, and TBs were collected and analyzed to evaluate representativeness. The concentration for an individual target compound 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 - Using professional judgment, if a sample result for the blank contaminant was less than the PQL and the sample result was less than or equal to 2 times the blank value, the sample result was qualified as detected estimated (J) at the reported concentration. Reason codes are applied to distinguish if the blank concentration was above or below the PQL.

Results Above the PQL - Using professional judgment, if a sample result for the blank contaminant was greater than the PQL and the sample result was less than or equal to 2 times the blank contaminant value, the sample result was qualified as detected estimated (J+) at the reported concentration. Reason codes are applied to distinguish if the blank concentration was above or below the PQL.

No Action - Using professional judgment, if a sample result for the blank contaminant was greater than 2 times the blank value, the result was not qualified.

2.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

2.2.2.2 EBs

No data were qualified due to the contaminants detected in the equipment blanks for this analysis.

2.2.2.3 TBs

No contaminants were detected in the trip blanks for this analysis.

2.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In most cases, the SQLs attained were at or below the PQLs. Due to high sample volumes, the calculation of some SQLs and PQLs resulted in values below the MDL. The SQLs and PQLs have been determined to be correct. Target compounds detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the VOC (Method SW8260B) data is regarded as acceptable.

2.4 Completeness

The completeness level attained for VOC (Method SW8260B) 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 1,2,3-TRICHLOROPROPANE

A total of four (4) water samples were analyzed for 1,2,3-trichloropropane by EPA SW-846 Method 8260B-SIM. All 1,2,3-trichloropropane data were assessed to be valid since none of the four (4) total results were rejected due to holding time or 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 Surrogates

All surrogate %Rs met the laboratory acceptance criteria for this analysis.

3.1.2 MS/MSD Samples

MS/MSD was not performed for this analysis.

3.1.3 LCS Samples

All LCS %Rs met the laboratory acceptance criteria for this analysis.

3.1.4 FD Samples

Field duplicate samples were not collected for this analysis.

3.2 Representativeness

3.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 14-day analysis holding time criteria for preserved water samples.

3.2.2 Blanks

Method blanks were analyzed to evaluate representativeness.

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

3.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

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. The comparability of the 1,2,3-trichloropropane data is regarded as acceptable.

3.4 Completeness

The completeness level attained for 1,2,3-trichloropropane 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 VOLATILE ORGANIC COMPOUNDS (EPA METHOD TO-15/TO-15 SIM)

A total of 34 air samples were analyzed for VOC by EPA Method TO-15 and 32 samples were analyzed for VOC by TO-15 SIM. All reported VOC (EPA Method TO-15/TO-15 SIM) data were assessed to be valid since none of the 2,006 total results reported in units of parts per billion by volume (ppbv) or 2,006 total results reported in units of microgram per cubic meter ($\mu\text{g}/\text{m}^3$) were rejected due to holding time or QC exceedances. VOC (EPA Method TO-15/TO-15 SIM) data were reported and qualified as initial results in ppbv and as molecular weight converted results in $\mu\text{g}/\text{m}^3$. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

4.1 Precision and Accuracy

4.1.1 Instrument Calibration

Twenty-two (22) results (44 total for both ppbv and $\mu\text{g}/\text{m}^3$ results) were qualified as detected estimated (J) or non-detected estimated (UJ). The %RSDs were outside the acceptance criteria of 30 percent in the initial calibration.

Twenty (20) results (40 total for both ppbv and $\mu\text{g}/\text{m}^3$ results) were qualified as detected estimated (J+). The %Ds in the initial and continuing calibration verifications were outside the acceptance criteria of 20 percent. Positive bias was removed for eight (8) results (sixteen [16] total for both ppbv and $\mu\text{g}/\text{m}^3$ results) since the results were also qualified as detected estimated (J) due to blank contamination.

The details regarding the qualification of results are provided in Attachment C.

In instances where initial calibration verifications %Ds were above the acceptance criteria of 30 percent no data were qualified since the associated sample results were not detected.

4.1.2 Surrogates

All surrogate %Rs met the laboratory acceptance criteria for this analysis.

4.1.3 DUP Samples

DUP samples were not performed for this analysis.

4.1.4 LCS/LCSD Samples

In instances where LCS/LCSD %Rs were above the laboratory acceptance criteria no data were qualified since the associated sample results were not detected.

All LCS/LCSD RPDs met the laboratory acceptance criteria for this analysis.

4.1.5 Internal Standards

All internal standard areas and retention times met the method acceptance criteria.

4.1.6 FD Samples

Twenty-eight (28) results (56 total for both ppbv and ug/m³ results) in three (3) field duplicate pairs were qualified as detected estimated (J) due to RPDs above the QAPP acceptance criteria. The details regarding the qualification of results are provided in Attachment C.

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.

4.1.7 Compound Quantitation and Target Identification

Raw data were evaluated for four (4) air samples. All target identifications were acceptable and all reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

4.2 Representativeness

4.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 30-day analysis holding time criteria for air samples.

4.2.2 Blanks

Method blanks and canister blanks were analyzed to evaluate representativeness.

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

4.2.2.1 Method Blanks

As a result of contamination found in the method blanks, 20 results (40 total for both ug/m³ and ppbv results) were qualified as detected estimated (J). The details regarding the qualification of results are provided in Attachment C.

4.2.2.2 Canister Blanks

Summa canisters were individually certified by the laboratory. No contaminants were detected in the canister blanks.

4.3 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 compounds detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the VOC (EPA Method TO-15/TO-15 SIM) data is regarded as acceptable.

4.4 Completeness

The completeness level attained for VOC (EPA Method TO-15/TO-15 SIM) 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.

4.5 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.

5.0 HELIUM

A total of 34 air samples were analyzed for helium by ASTM D1946. All helium data were assessed to be valid since none of the 34 total results were rejected due to holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

5.1 Precision and Accuracy

5.1.1 Instrument Calibration

The %RSDs in the initial calibration met the acceptance criteria of 20 percent.

The %Ds in the initial and continuing calibration verifications met the acceptance criteria of 15 percent.

5.1.2 LCS/LCSD Samples

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

5.1.3 FD Samples

No helium was detected in the field duplicate pairs.

5.1.4 Compound Quantitation and Target Identification

Raw data were evaluated for four (4) air samples. All target identifications were acceptable and all reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

5.2 Representativeness

5.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 30-day analysis holding time criteria for air samples.

5.2.2 Blanks

Method blanks were analyzed to evaluate representativeness.

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

5.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

5.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the SQLs attained were at or below the PQLs. The comparability of the helium data is regarded as acceptable.

5.4 Completeness

The completeness level attained for helium 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.

The helium leak percentage was evaluated for the samples. Helium was not detected in any of the samples, which indicates the samples were not compromised by ambient air leaks during sample collection.

5.5 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.

6.0 PERCHLORATE (EPA SW 846 METHOD 6850)

A total of 31 tissue samples were analyzed for perchlorate by EPA SW 846 Method 6850. All perchlorate data were assessed to be valid since none of the 31 total results were rejected due to holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

6.1 Precision and Accuracy

6.1.1 Instrument Calibration

The %RSDs in the initial calibration met the acceptance criteria of 15 percent.

The %Ds in the initial and continuing calibration verifications met the acceptance criteria of 15 percent.

The %Ds in the limit of detection verification (LODV) standards met the acceptance criteria of 50 percent.

The isotope ratios were within QC limits.

6.1.2 MS/MSD

All MS/MSD %Rs and RPDs met the laboratory acceptance criteria for this analysis.

6.1.3 LCS/LCSD and Interference Check Samples

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

All interference check samples (ICS) %Rs met the laboratory acceptance criteria for this analysis.

6.1.4 Internal Standards

All internal standard areas and retention times met the method acceptance criteria.

6.1.5 FD Samples

All RPDs met the QAPP acceptance criteria.

6.1.6 Compound Quantitation and Target Identification

Raw data were evaluated for four (4) tissue samples. All target identifications were acceptable and all reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

6.2 Representativeness

6.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 28-day analysis holding time criteria for tissue samples.

6.2.2 Blanks

Method blanks were analyzed to evaluate representativeness.

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

6.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

6.3 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 compounds detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the perchlorate data is regarded as acceptable.

6.4 Completeness

The completeness level attained for perchlorate 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.

6.5 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.

7.0 METALS

A total of three (3) water samples were analyzed for metals by EPA Method 200.7, 20 porewater and 31 water samples were analyzed for dissolved chromium by EPA SW-846 Method 6020, and a total of 30 sediment, 26 soil, 31 tissue, and 38 water samples were analyzed for total chromium by EPA SW-846 Method 6020. All metal data were assessed to be valid since none of the 188 total results were rejected based on holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

7.1 Precision and Accuracy

7.1.1 Instrument Calibration

Initial and continuing calibration verification results provide a means of evaluating accuracy within a particular SDG. Correlation coefficient (r) and percent recovery (%R) are the two major parameters used to measure the effectiveness of instrument calibration. The correlation coefficient indicates the linearity of the calibration curve. %R is used to verify the ongoing calibration acceptability of the analytical system. The most critical of the two calibration parameters, r, has the potential to affect data accuracy across an SDG when it is outside the acceptable QC limits. %R exceedances suggest more routine instrumental anomalies, which typically impact all sample results for the affected analytes.

The correlation coefficients in the initial calibrations were within the acceptance criteria of ≥ 0.995 . The continuing calibration verifications %Rs were within the acceptance criteria of 90-110%.

7.1.2 MS/MSD Samples

Twelve (12) results were qualified as detected estimated (J-) or non-detected estimated (UJ) due to MS/MSD %Rs below the laboratory acceptance criteria. The details regarding the qualification of results are provided in Attachment F.

All MS/MSD RPDs met the laboratory acceptance criteria for these analyses.

7.1.3 DUP Samples

All DUP RPDs met the laboratory acceptance criteria for these analyses.

7.1.4 LCS/LCSD Samples

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

7.1.5 Inductively Coupled Plasma (ICP) Interference Check Sample

All ICP interference check concentrations met the method acceptance criteria.

7.1.6 ICP Serial Dilution

All serial dilution %D met the laboratory acceptance criteria for these analyses.

7.1.7 Internal Standards

All internal standard %Rs met the method acceptance criteria.

7.1.8 FD Samples

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.

7.1.9 Sample Result Verification

Raw data were evaluated for four (4) porewater for dissolved chromium by EPA SW-846 Method 6020 and four (4) sediment, six (6) soil, and four (4) tissue samples for chromium by EPA SW-846 Method 6020. All reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

7.2 Representativeness

7.2.1 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 for metals.

7.2.2 Blanks

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

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

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

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

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

7.2.2.1 Method and Calibration Blanks

Nine (9) chromium results were qualified as detected estimated (J) due to a contaminant detected in the calibration blank. The details regarding the qualification of results are provided in Attachment F.

No contaminants were detected in the calibration blanks for these analyses.

7.2.2.2 EBs

No data were qualified due to the contaminants detected in the equipment blanks for these analyses.

7.3 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 compounds detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the metals data is regarded as acceptable.

7.4 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.

7.5 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.

8.0 WET CHEMISTRY

A total of three (3) water samples were analyzed for alkalinity by Standard Method 2320B and anions by EPA Method 300.0; 20 porewater and three (3) water samples were analyzed for bromide by EPA Method 300.1B; 20 porewater, 30 sediment, 26 soil, and 72 water samples were analyzed for chlorate by EPA Method 300.1B; 18 porewater and 31 water samples were analyzed for DOC by EPA 9060; 20 porewater and 31 water samples were analyzed for dissolved perchlorate by EPA Method 314.0; four (4) water samples were analyzed for dissolved hexavalent chromium by EPA Method 218.6; 18 porewater and 31 water samples were analyzed for dissolved hardness by Standard Method 2340B/C; 20 porewater and 32 water samples were analyzed for dissolved hexavalent chromium by EPA Method 7196A; 31 water samples were analyzed for hardness by Standard Method 2340B/C; 30 sediment, 26 soil, 30 tissue, and 39 water samples were analyzed for hexavalent chromium by EPA Method 7196A; 16 tissue samples were analyzed for lipids by method laboratory SOP; 30 sediment, 26 soil, and 41 water samples were analyzed for perchlorate by EPA Method 314.0; 30 sediment and one (1) soil samples were analyzed for sulfide by Standard Method 9034; three (3) porewater and 34 water samples were analyzed for TDS by Standard Method 2540C; 31 water samples were analyzed for TOC by EPA 9060; and 30 sediment and 26 soil samples were analyzed for TOC by Lloyd Kahn. All wet chemistry data were assessed to be valid with the exception of 6 of the 830 total results which were rejected based on holding time exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

8.1 Precision and Accuracy

8.1.1 Instrument Calibration

Instrument calibrations were evaluated for all wet chemistry methods. The correlation coefficients in the initial calibrations were within the acceptance criteria of ≥ 0.995 .

The TOC results by Lloyd Kahn in samples G-S-SO001-20200610, D-S-SED002-20200610, and 1-N-SED001-20200610 were qualified as detected estimated (J+) due to high CCV %Rs above the acceptance criteria of 90-110%. The details regarding the qualification of results are provided in Attachment G.

In instances where continuing calibration verifications %Rs were above the acceptance criteria of 90-110 percent no data were qualified since the associated sample results were not detected.

8.1.2 Surrogate

All surrogate %Rs associated to EPA method 300.1B met the laboratory acceptance criteria.

8.1.3 MS/MSD Samples

As a result of low MS/MSD %Rs, two (2) TOC by Lloyd Kahn, 10 sulfide, and 34 hexavalent chromium results were qualified as detected estimated (J-) or non-detected estimated (UJ) due to MS/MSD %Rs below the laboratory acceptance criteria. Negative bias was removed for two (2) TOC results by Lloyd Kahn since these results were also qualified as detected estimated (J) due to DUP RPD exceedance.

As a result of high MS/MSD %Rs, one (1) perchlorate and three (3) sulfide results were qualified as detected estimated (J+) due to MS/MSD %Rs above the laboratory acceptance criteria. Positive bias was removed for one (1) perchlorate and two (2) of the sulfide results since these results were also qualified as detected estimated (J) due to MS/MSD RPD or field duplicate RPD exceedance.

As a result of a high MS/MSD RPD, two (2) perchlorate results were qualified as detected estimated (J) due to MS/MSD RPD above the laboratory acceptance criteria.

The details regarding the qualification of results are provided in Attachment G.

In instances where MS/MSD %Rs were above the laboratory acceptance criteria no data were qualified since the associated sample results were not detected.

No data were qualified for %Rs outside the QC limits when the parent sample results were greater than 4X the spike concentration.

8.1.4 DUP Samples

As a result of a high DUP RPD, two (2) TOC results by Lloyd Kahn were qualified as detected estimated (J) due to DUP RPD above the laboratory acceptance criteria. The details regarding the qualification of results are provided in Attachment G.

In instances where the sample result and DUP result were less than 5X the RL no data were qualified since the difference between the two results were less than 2X the RL.

8.1.5 LCS/LCSD Samples

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

8.1.6 FD Samples

Sixteen (16) results in five (5) field duplicate pairs were qualified as detected estimated (J) due to RPDs above the QAPP acceptance criteria. The details regarding the qualification of results are provided in Attachment G.

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.

8.1.7 Sample Result Verification

Raw data were evaluated for four (4) porewater samples for dissolved hexavalent chromium; four (4)

sediment, six (6) soil, and four (4) tissue samples for hexavalent chromium; four (4) porewater samples for bromide (300.1B); four (4) porewater, four (4) sediment, and six (6) soil samples for chlorate; four (4) porewater samples for dissolved perchlorate; four (4) sediment, and six (6) soil samples for perchlorate; four (4) sediment and one (1) soil samples for sulfide; four (4) porewater samples for dissolved hardness and DOC; one (1) porewater for TDS; four (4) sediment and six (6) soil samples for TOC by Lloyd Kahn; and three (3) tissue samples for lipids. All reported sample results, detects and non-detects, were correctly calculated for these Stage 4 samples.

Hexavalent chromium results for samples C-S-SWF001-20191025 and C-S-SWU001-20191025 were received by the laboratory past the method holding time and were rejected. Both samples were re-collected (C-S-SWF002-20191031 and C-S-SWU002-20191031) and validated. The original results have been marked DNR and are not included in the sample result counts.

8.2 Representativeness

8.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with all wet chemistry methods was conducted. All samples met the 24-hour holding time for porewater and water samples analyzed for dissolved hexavalent chromium; the 48-hour analysis holding time for water samples analyzed for nitrate as nitrogen, nitrite as nitrogen, and orthophosphate as phosphate; the 7-day analysis holding time for porewater and water samples analyzed for TDS; the 7-day analysis holding time for sediment and soil samples analyzed for sulfide; the 14-day analysis holding time criteria for water samples analyzed for alkalinity; the 28-day analysis holding time criteria for porewater and water samples analyzed for bromide, chlorate, chloride, sulfate, perchlorate, dissolved perchlorate, DOC, and TOC; the 28-day analysis holding time criteria for sediment and soil samples analyzed for chlorate, perchlorate, and TOC; the 30-day analysis holding time criteria for sediment, soil, and tissue samples analyzed for hexavalent chromium; the 6-month analysis holding time criteria for porewater and water samples analyzed for hardness and dissolved hardness; and the 6-month analysis holding time criteria for tissue samples analyzed for lipids.

Six (6) hexavalent chromium results were qualified as rejected (R) and two (2) hexavalent chromium results were qualified as non-detected estimated (UJ) as a result of exceeding the analysis holding time criteria of 24 hours for water samples. The details regarding the qualification of results are presented in Attachment G. As stated in Section 8.1.7, two samples (C-S-SWF001-20191025 and C-S-SWU001-20191025) were received at the laboratory past the method holding time for hexavalent chromium analysis. These samples were re-collected and the original results are marked DNR.

8.2.2 Blanks

Method blanks, ICB/CCBs, and EBs 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 7.2.2.

8.2.2.1 Laboratory and Calibration Blanks

No contaminants were detected in the method and calibration blanks for these analyses.

8.2.2.2 EBs

No data were qualified due to the contaminants detected in the equipment blanks for these analyses.

8.3 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 compounds detected below the PQLs flagged (J) by the laboratory should be considered estimated. The comparability of the wet chemistry data is regarded as acceptable.

8.4 Completeness

The completeness level attained for wet chemistry field samples was 100 percent for alkalinity, anions, bromide, chlorate, dissolved hardness, dissolved hexavalent chromium, dissolved perchlorate, DOC, hardness, lipids, perchlorate, sulfide, TDS, and TOC; and 95.2 percent for hexavalent chromium (EPA Method 7196A). This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

8.5 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.

9.0 VARIANCES IN ANALYTICAL PERFORMANCE

The laboratory used standard analytical methods for all of the analyses throughout the project. No systematic variances in analytical performance were noted in the laboratory case narratives.

10.0 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.

10.1 Precision and Accuracy

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

All calibrations were performed as required and met the acceptance criteria with the exceptions noted in Sections 4.1.1 and 8.1.1.

All surrogate, LCS/LCSD and MS/MSD %Rs and RPDs, internal standard areas and %Rs, serial dilution %Ds, ICP interference check, field, and laboratory duplicate RPDs, and compound quantitation and target identifications met acceptance criteria with the exceptions noted in Sections 2.1.3, 4.1.6, 7.1.2, 8.1.3, 8.1.4, and 8.1.6.

10.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All holding times were met with the exception noted in Sections 2.2.1 and 8.2.1. All samples were associated with a method blank and in each individual SDG. The representativeness of the project data is considered acceptable after integration of result qualification due to blank contamination as noted in Sections 4.2.2.1 and 7.2.2.1.

10.3 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 Sections 2.2.1 and 8.2.1. The overall comparability is considered acceptable.

10.4 Completeness

Of the 3,667 total analytes reported, six (6) of the sample results were rejected. The completeness for the SDGs is as follows:

Parameter (Method)	Total Analytes	No. of Rejects	% Completeness
VOC (Method SW8260B)	574	0	100
1,2,3-Trichloropropane	4	0	100
VOC (EPA Method TO-15/TO-15 SIM)	2,006	0	100
Helium	34	0	100
Perchlorate (Method SW6850)	31	0	100
Metals	188	0	100
Wet Chemistry:			
Alkalinity	12	0	100
Anions	18	0	100
Bromide (300.1)	23	0	100
Chlorate	148	0	100
Dissolved Hardness	49	0	100
Dissolved Hexavalent Chromium (218.6)	4	0	100
Dissolved Hexavalent Chromium (7196A)	52	0	100
Dissolved Perchlorate	51	0	100
DOC	49	0	100
Hardness	31	0	100
Hexavalent Chromium (7196A)	125	6	95.2
Lipids	16	0	100
Perchlorate	97	0	100
Sulfide	31	0	100
TDS	37	0	100
TOC (9060)	31	0	100
TOC (Lloyd Kahn)	56	0	100
Total	3,667	6	99.8

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

10.5 Sensitivity

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

11.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical data quality assessment for the air, porewater, sediment, soil, tissue, and water sample laboratory analytical results generated during the Baseline Ecological Risk Assessment and Phase 3 Remedial Investigation Modification #7 sampling activities completed from May 2019 through June 2020, 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 rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Stage 2A, Stage 2B, and Stage 4 data validation all other results are considered valid and usable for all purposes.

12.0 REFERENCES

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

TABLES

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	VOC (8260B)	I,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
45635A	4402422401	SWF-SO001-20190521	440-242240-1	05/21/19	Stage 2B	Soil		X						X			X			X		X										X		
45635A	4402422401	SWF-SO002-20190521	440-242240-2	05/21/19	Stage 4	Soil		X						X			X				X		X										X	
45635A	4402422401	SWF-SO003-20190521	440-242240-3	05/21/19	Stage 2B	Soil		X						X			X				X		X										X	
47257A	4402531721	K-S-SWU001-20191024	440-253172-1	10/24/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257A	4402531721	K-S-SWF001-20191024	440-253172-2	10/24/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257A	4402531721	L-S-SWU001-20191024	440-253172-3	10/24/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257A	4402531721	L-S-SWF001-20191024	440-253172-4	10/24/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257A	4402531721	K-S-SED001-20191024	440-253172-5	10/24/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257A	4402531721	K-S-SO001-20191024	440-253172-6	10/24/19	Stage 4	Soil		X						X			X				X		X	X									X	
47257A	4402531721	L-S-SED001-20191024	440-253172-7	10/24/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257A	4402531721	L-S-SWU001-20191024-TB	440-253172-8	10/24/19	Stage 2A	Water	TB	X																										
47257B	4402532481	C-S-SWU001-20191025	440-253248-1	10/25/19	Stage 2A	Water		X						X							X		X				X				X			
47257B	4402532481	B-S-SWU001-20191025	440-253248-2	10/25/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257C	4402532501	C-S-SWF001-20191025	440-253250-1	10/25/19	Stage 2A	Water		X					X								X	X				X		X	X					
47257C	4402532501	B-S-SWF001-20191025	440-253250-2	10/25/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257D	4402532521	B-S-SO001-20191025	440-253252-1	10/25/19	Stage 2B	Soil		X						X			X				X		X										X	
47257E	4402532531	C-S-SED001-20191025	440-253253-1	10/25/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257E	4402532531	B-S-SED001-20191025	440-253253-2	10/25/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257F	4402533221	I-S-SWF001-20191028	440-253322-1	10/28/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257F	4402533221	H-S-SWF001-20191028	440-253322-2	10/28/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257F	4402533221	F-S-SWF001-20191028	440-253322-3	10/28/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257G	4402533231	I-S-SWU001-20191028	440-253323-1	10/28/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257G	4402533231	H-S-SWU001-20191028	440-253323-2	10/28/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257G	4402533231	F-S-SWU001-20191028	440-253323-3	10/28/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257H	4402533241	I-S-SO001-20191028	440-253324-1	10/28/19	Stage 4	Soil		X						X			X				X		X										X	
47257H	4402533241	F-S-SO001-20191028	440-253324-2	10/28/19	Stage 4	Soil		X						X			X				X		X										X	
47257I	4402533261	I-S-SED001-20191028	440-253326-1	10/28/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257I	4402533261	H-S-SED001-20191028	440-253326-2	10/28/19	Stage 2B	Sediment		X						X			X				X		X	X									X	
47257J	4402534241	2-N-SWU001-20191029	440-253424-1	10/29/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257K	4402534251	2-N-SWF001-20191029	440-253425-1	10/29/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257L	4402534291	2-N-SO001-20191029	440-253429-1	10/29/19	Stage 2B	Soil		X						X			X				X		X										X	
47257M	4402534301	2-N-SED001-20191029	440-253430-1	10/29/19	Stage 4	Sediment		X						X			X				X		X	X									X	
47257N	4402534801	A-S-SWU001-20191030	440-253480-1	10/30/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257N	4402534801	BP9-S-SWU001-20191030	440-253480-2	10/30/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257O	4402534811	A-S-SWF001-20191030	440-253481-1	10/30/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257O	4402534811	BP9-S-SWF001-20191030	440-253481-2	10/30/19	Stage 2A	Water		X					X				X				X	X				X		X	X					
47257P	4402535471	D-S-SWU001-20191031	440-253547-1	10/31/19	Stage 2A	Water	FD1	X						X			X				X		X				X				X			
47257P	4402535471	D-S-SWU001-20191031-FD	440-253547-2	10/31/19	Stage 2A	Water	FD1	X						X			X				X		X				X				X			
47257P	4402535471	E-S-SWU001-20191031	440-253547-3	10/31/19	Stage 2A	Water		X						X			X				X		X				X				X			
47257P	4402535471	C-S-SWU002-20191031	440-253547-4	10/31/19	Stage 2A	Water											X																	
47257P	4402535471	B-S-SWU002-20191031	440-253547-5	10/31/19	Stage 2A	Water											X																	
47257P	4402535471	D-S-SWU001-20191031-TB	440-253547-6	10/31/19	Stage 2A	Water	TB	X																										
47257Q	4402535491	D-S-SWF001-20191031	440-253549-1	10/31/19	Stage 2A	Water	FD2	X					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	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47257Q	4402535491	D-S-SWF001-20191031-FD	440-253549-2	10/31/19	Stage 2A	Water	FD2	X						X		X				X	X				X		X	X	X					
47257Q	4402535491	E-S-SWF001-20191031	440-253549-3	10/31/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257Q	4402535491	C-S-SWF002-20191031	440-253549-4	10/31/19	Stage 2A	Water											X																	
47257Q	4402535491	B-S-SWF002-20191031	440-253549-5	10/31/19	Stage 2A	Water											X																	
47257R	4402535511	D-S-SO001-20191031	440-253551-1	10/31/19	Stage 2B	Soil	FD3	X							X			X			X		X										X	
47257R	4402535511	D-S-SO001-20191031-FD	440-253551-2	10/31/19	Stage 2B	Soil	FD3	X							X			X			X		X										X	
47257R	4402535511	E-S-SO001-20191031	440-253551-3	10/31/19	Stage 2B	Soil		X							X			X			X		X										X	
47257R	4402535511	D-S-SO001-20191031-TB	440-253551-4	10/31/19	Stage 2B	Soil	TB	X																										
47257S	4402536311	EB-001-20191101	440-253631-1	11/01/19	Stage 2A	Water	EB	X							X			X			X		X											
47257S	4402536311	EB-002-20191101	440-253631-2	11/01/19	Stage 2A	Water	EB	X							X			X			X		X											
47257S	4402536311	EB-003-20191101	440-253631-3	11/01/19	Stage 2A	Water	EB	X							X			X			X		X											
47257S	4402536311	EB-004-20191101	440-253631-4	11/01/19	Stage 2A	Water	EB	X							X			X			X		X											
47257S	4402536311	EB-005-20191101	440-253631-5	11/01/19	Stage 2A	Water	EB	X							X			X			X		X											
47257S	4402536311	EB-006-20191101	440-253631-6	11/01/19	Stage 2A	Water	EB								X			X			X		X											
47257S	4402536311	TB-005-20191101	440-253631-7	11/01/19	Stage 2A	Water	TB	X																										
47257T	4402543361	D-N-SWU001-20191111	440-254336-1	11/11/19	Stage 2A	Water		X							X			X			X		X				X					X		
47257T	4402543361	E-N-SWU001-20191111	440-254336-2	11/11/19	Stage 2A	Water		X							X			X			X		X				X					X		
47257T	4402543361	D-N-SWU001-20191111-TB	440-254336-3	11/11/19	Stage 2A	Water	TB	X																										
47257U	4402543371	D-N-SWF001-20191111	440-254337-1	11/11/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257U	4402543371	E-N-SWF001-20191111	440-254337-2	11/11/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257V	4402543811	J-N-SWF001-20191112	440-254381-1	11/12/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257V	4402543811	I-N-SWF001-20191112	440-254381-2	11/12/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257V	4402543811	H-N-SWF001-20191112	440-254381-3	11/12/19	Stage 2A	Water		X						X			X				X	X				X		X	X					
47257W	4402543851	J-N-SWU001-20191112	440-254385-1	11/12/19	Stage 2A	Water		X							X			X			X		X				X				X			
47257W	4402543851	I-N-SWU001-20191112	440-254385-2	11/12/19	Stage 2A	Water		X							X			X			X		X				X				X			
47257W	4402543851	H-N-SWU001-20191112	440-254385-3	11/12/19	Stage 2A	Water		X							X			X			X		X				X				X			
47257W	4402543851	J-N-SWU001-20191112-TB	440-254385-4	11/12/19	Stage 2A	Water	TB	X																										
47257X	4402543881	J-N-SED001-20191112	440-254388-1	11/12/19	Stage 2B	Sediment		X							X			X			X		X	X									X	
47257X	4402543881	I-N-SED001-20191112	440-254388-2	11/12/19	Stage 2B	Sediment		X							X			X			X		X	X									X	
47257X	4402543881	H-N-SED001-20191112	440-254388-3	11/12/19	Stage 2B	Sediment		X							X			X			X		X	X									X	
47257X	4402543881	J-N-SED001-20191112-TB	440-254388-4	11/12/19	Stage 2B	Sediment	TB	X																										
47257Y	4402543921	D-N-SED001-20191111	440-254392-1	11/11/19	Stage 2B	Sediment		X							X			X			X		X	X									X	
47257Y	4402543921	E-N-SED001-20191111	440-254392-2	11/11/19	Stage 2B	Sediment		X							X			X			X		X	X									X	
47257Y	4402543921	D-N-SED001-20191111-TB	440-254392-3	11/11/19	Stage 2B	Sediment	TB	X																										
47257Z	4402544411	J-S-SO001-20191112-FD	440-254441-1	11/12/19	Stage 2B	Soil	FD4	X							X			X			X		X										X	
47257Z	4402544411	J-S-SO001-20191112	440-254441-2	11/12/19	Stage 2B	Soil	FD4	X							X			X			X		X										X	
47257Z	4402544411	J-S-SO001-20191112-TB	440-254441-3	11/12/19	Stage 2B	Soil	TB	X																										
47257Z	4402544411	L-S-SO001-20191112	440-254441-4	11/12/19	Stage 2B	Soil		X										X			X		X										X	
47257Z	4402544411	TRIP BLANK-20191112	440-254441-5	11/12/19	Stage 2A	Water	TB	X																										
47258A	4402546391	G-S-SWU001-20191114	440-254639-1	11/14/19	Stage 2A	Water		X							X			X			X		X				X					X		
47258A	4402546391	G-N-SWU001-20191114	440-254639-2	11/14/19	Stage 2A	Water		X							X			X			X		X				X					X		
47258A	4402546391	K-N-SWU001-20191114-FD	440-254639-3	11/14/19	Stage 2A	Water	FD5	X							X			X			X		X				X					X		
47258A	4402546391	K-N-SWU001-20191114	440-254639-4	11/14/19	Stage 2A	Water	FD5	X							X			X			X		X				X					X		

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LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47258A	4402546391	G-S-SWU001-20191114-TB	440-254639-5	11/14/19	Stage 2A	Water	TB	X																										
47258B	4402546401	G-S-SWF001-20191114	440-254640-1	11/14/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258B	4402546401	G-N-SWF001-20191114	440-254640-2	11/14/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258B	4402546401	K-N-SWF001-20191114-FD	440-254640-3	11/14/19	Stage 2A	Water	FD6	X						X			X					X	X			X		X	X					
47258B	4402546401	K-N-SWF001-20191114	440-254640-4	11/14/19	Stage 2A	Water	FD6	X						X			X					X	X			X		X	X					
47258C	4402546531	G-S-SED001-20191114-FD	440-254653-1	11/14/19	Stage 2B	Sediment	FD7	X						X			X					X		X	X							X		
47258C	4402546531	G-S-SED001-20191114	440-254653-2	11/14/19	Stage 2B	Sediment	FD7	X						X			X					X		X	X							X		
47258C	4402546531	K-N-SED001-20191114	440-254653-3	11/14/19	Stage 2B	Sediment		X							X			X				X	X									X		
47258C	4402546531	G-S-SED001-20191114-TB	440-254653-4	11/14/19	Stage 2B	Sediment	TB	X																										
47258D	4402547281	B-N-SED 001-20191115	440-254728-1	11/15/19	Stage 4	Sediment		X						X			X					X	X									X		
47258D	4402547281	A-N-SED 001-20191115	440-254728-2	11/15/19	Stage 4	Sediment		X						X			X					X	X									X		
47258D	4402547281	B-N-SED 001-20191115-TB	440-254728-3	11/15/19	Stage 2B	Sediment	TB	X																										
47258E	4402547291	C-N-SWF001-20191115	440-254729-1	11/15/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258E	4402547291	B-N-SWF001-20191115	440-254729-2	11/15/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258E	4402547291	A-N-SWF001-20191115-FD	440-254729-3	11/15/19	Stage 2A	Water	FD8	X						X			X					X	X			X		X	X					
47258E	4402547291	A-N-SWF001-20191115	440-254729-4	11/15/19	Stage 2A	Water	FD8	X						X			X					X	X			X		X	X					
47258F	4402547311	C-N-SWU001-20191115-TB	440-254731-1	11/15/19	Stage 2A	Water	TB	X																										
47258F	4402547311	C-N-SWU001-20191115	440-254731-2	11/15/19	Stage 2A	Water		X						X			X					X				X						X		
47258F	4402547311	B-N-SWU001-20191115	440-254731-3	11/15/19	Stage 2A	Water		X						X			X					X	X			X						X		
47258F	4402547311	A-N-SWU001-20191115	440-254731-4	11/15/19	Stage 2A	Water	FD9	X						X			X					X	X			X						X		
47258F	4402547311	A-N-SWU001-20191115-FD	440-254731-5	11/15/19	Stage 2A	Water	FD9	X						X			X					X	X			X						X		
47258G	4402547701	EB-T0-007-20191115	440-254770-1	11/15/19	Stage 2A	Water	EB	X																										
47258G	4402547701	EB-T0-008-20191115	440-254770-2	11/15/19	Stage 2A	Water	EB														X													
47258H	4402570101	L-N-SWU001-20191210	440-257010-1	12/10/19	Stage 2A	Water		X						X			X					X				X					X			
47258H	4402570101	L-N-SWU001-20191210-TB	440-257010-2	12/10/19	Stage 2A	Water	TB	X																										
47258I	4402570141	F-N-SWU001-20191210-TB	440-257014-1	12/10/19	Stage 2A	Water	TB	X																										
47258I	4402570141	F-N-SWU001-20191210	440-257014-2	12/10/19	Stage 2A	Water		X						X			X					X		X		X					X			
47258J	4402570151	F-N-SWF001-20191210	440-257015-1	12/10/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258K	4402570161	L-N-SWF001-20191210	440-257016-1	12/10/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258L	4402573201	3-N-SWF001-20191213	440-257320-1	12/13/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258L	4402573201	1-N-SWF001-20191213	440-257320-2	12/13/19	Stage 2A	Water		X						X			X					X	X			X		X	X					
47258M	4402573271	3-N-SOSS001-20191213	440-257327-1	12/13/19	Stage 2B	Soil		X						X			X					X	X									X		
47258M	4402573271	1-N-SOSS001-20191213	440-257327-2	12/13/19	Stage 2B	Soil		X						X			X					X	X									X		
47258M	4402573271	2-N-SOSS001-20191213	440-257327-3	12/13/19	Stage 2B	Soil		X						X			X					X	X									X		
47390A	320563822	D-S-BMIT001-20191111	320-56382-5	11/11/19	Stage 2B	Tissue						X																						
47390A	320563822	I-S-BMIT001-20191112	320-56382-6	11/12/19	Stage 2B	Tissue						X																						
47390A	320563822	A-S-BMIT001-20191112	320-56382-7	11/12/19	Stage 2B	Tissue						X																						
47390A	320563822	1-N-BMIT001-20191114	320-56382-8	11/14/19	Stage 2B	Tissue						X																						
47390A	320563822	3-N-BMIT001-20191114	320-56382-9	11/14/19	Stage 2B	Tissue						X																						
47390A	320563822	H-S-BMIT001-20191027	320-56382-17	11/14/19	Stage 2B	Tissue						X																						
47390A	320563822	G-S-BMIT001-20191027	320-56382-18	11/14/19	Stage 2B	Tissue						X																						
47390B	4402530641	J-S-SWU001-20191023	440-253064-1	10/23/19	Stage 2A	Water		X						X			X					X	X			X					X			
47390B	4402530641	J-S-SWF001-20191023	440-253064-2	10/23/19	Stage 2A	Water		X						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	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47390B	4402530641	J-S-SED001-20191023	440-253064-3	10/23/19	Stage 2B	Sediment		X						X			X			X		X	X								X			
47390B	4402530641	J-S-SWU001-20191023-TB	440-253064-4	10/23/19	Stage 2A	Water	TB	X																										
47390C	4402534791	A-S-SED001-20191030	440-253479-1	10/30/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390C	4402534791	BP9-S-SED001-20191030	440-253479-2	10/30/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390D	4402535501	D-S-SED001-20191031	440-253550-1	10/31/19	Stage 2B	Sediment	FD10	X						X			X				X		X	X								X		
47390D	4402535501	D-S-SED001-20191031-FD	440-253550-2	10/31/19	Stage 2B	Sediment	FD10	X						X			X				X		X	X								X		
47390D	4402535501	E-S-SED001-20191031	440-253550-3	10/31/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390E	4402570061	F-S-SOSS001-20191210	440-257006-1	12/10/19	Stage 4	Soil		X						X			X				X		X	X								X		
47390F	4402570071	F-N-SED001-20191210-FD	440-257007-1	12/10/19	Stage 2B	Sediment	FD11	X						X			X				X		X	X								X		
47390F	4402570071	F-N-SED001-20191210	440-257007-2	12/10/19	Stage 2B	Sediment	FD11	X						X			X				X		X	X								X		
47390F	4402570071	F-S-SED001-20191210	440-257007-3	12/10/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390G	4402570091	L-S-SOSS001-20191210	440-257009-1	12/10/19	Stage 2B	Soil		X						X			X				X		X	X								X		
47390G	4402570091	K-S-SOSS001-20191210	440-257009-2	12/10/19	Stage 2B	Soil		X						X			X				X		X	X								X		
47390G	4402570091	D-S-SOSS001-20191210	440-257009-3	12/10/19	Stage 2B	Soil		X						X			X				X		X	X								X		
47390H	4402570901	J-S-PW001-20191211	440-257090-1	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390H	4402570901	E-S-PW001-20191211	440-257090-2	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390H	4402570901	A-S-PW001-20191211	440-257090-3	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390H	4402570901	B-S-PW001-20191211	440-257090-4	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390H	4402570901	J-S-PW001-20191211-TB	440-257090-5	12/11/19	Stage 2A	Water	TB	X																										
47390I	4402570911	K-S-PW001-20191211	440-257091-1	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390I	4402570911	K-N-PW001-20191211	440-257091-2	12/11/19	Stage 2B	Porewater	FD12	X						X			X				X	X	X			X				X				
47390I	4402570911	K-N-PW001-20191211-FD	440-257091-3	12/11/19	Stage 2B	Porewater	FD12	X						X			X				X	X	X			X				X				
47390I	4402570911	L-S-PW001-20191211	440-257091-4	12/11/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390I	4402570911	K-S-PW001-20191211-TB	440-257091-5	12/11/19	Stage 2A	Water	TB	X																										
47390J	4402572371	H-S-PW001-20191212	440-257237-1	12/12/19	Stage 4	Porewater		X						X			X				X	X	X			X				X				
47390J	4402572371	I-S-PW001-20191212	440-257237-2	12/12/19	Stage 4	Porewater	FD13	X						X			X				X	X	X			X				X				
47390J	4402572371	I-S-PW001-20191212-FD	440-257237-3	12/12/19	Stage 4	Porewater	FD13	X						X			X				X	X	X			X				X				
47390J	4402572371	H-S-PW001-20191212-TB	440-257237-4	12/12/19	Stage 2A	Water	TB	X																										
47390K	4402572381	J-S-SOSS001-20191212	440-257238-1	12/12/19	Stage 2B	Soil	FD14	X						X			X				X		X									X		
47390K	4402572381	J-S-SOSS001-20191212-FD	440-257238-2	12/12/19	Stage 2B	Soil	FD14	X						X			X				X		X									X		
47390K	4402572381	20191212-TB	440-257238-3	12/12/19	Stage 2B	Soil	TB	X																										
47390L	4402572391	F-N-PW001-20191212	440-257239-1	12/12/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390L	4402572391	I-N-PW001-20191212	440-257239-2	12/12/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390L	4402572391	J-N-PW001-20191212	440-257239-3	12/12/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390L	4402572391	2-N-PW001-20191212	440-257239-4	12/12/19	Stage 2B	Porewater		X						X			X				X	X	X			X				X				
47390M	4402573121	1-N-SED001-20191213	440-257312-1	12/13/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390M	4402573121	3-N-SED001-20191213	440-257312-2	12/13/19	Stage 2B	Sediment		X						X			X				X		X	X								X		
47390N	4402573241	G-S-PW001-20191213	440-257324-1	12/13/19	Stage 2B	Porewater	FD15	X						X			X				X	X	X											
47390N	4402573241	G-S-PW001-20191213-FD	440-257324-2	12/13/19	Stage 2B	Porewater	FD15	X						X			X				X	X	X											
47390N	4402573241	3-N-PW001-20191213	440-257324-3	12/13/19	Stage 2B	Porewater		X						X			X				X	X	X			X			X	X	X			
47390N	4402573241	G-S-PW001-20191213-TB	440-257324-4	12/13/19	Stage 2A	Water	TB	X																										
47390O	4402578071	1-N-SO001-20191219	440-257807-1	12/19/19	Stage 2B	Soil		X						X			X				X		X										X	
47390O	4402578071	3-N-SO001-20191219	440-257807-2	12/19/19	Stage 2B	Soil		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	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47390O	4402578071	1-N-SO001-20191219-TB	440-257807-3	12/19/19	Stage 2B	Soil	TB	X																										
47509A	320558741	J-S-BMIT001-20191023	320-55874-1	10/23/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z5-FT002-LMB-20191025	320-55874-2	10/25/19	Stage 2B	Tissue		X							X																			
47509A	320558741	K-S-BMIT001-20191025	320-55874-3	10/25/19	Stage 2B	Tissue		X							X																			
47509A	320558741	L-S-BMIT001-20191026	320-55874-4	10/26/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z4-FT001-BG-20191026	320-55874-5	10/26/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z2-FT002-LMB-20191027	320-55874-7	10/27/19	Stage 2B	Tissue	FD16	X							X																			
47509A	320558741	B-S-BMIT001-20191028	320-55874-8	10/28/19	Stage 2B	Tissue		X							X																			
47509A	320558741	C-S-BMIT001-20191028	320-55874-9	10/28/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z1-FT001-GS-20191028	320-55874-10	10/28/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z3-FT001-BG-20191029	320-55874-11	10/29/19	Stage 2B	Tissue		X							X																			
47509A	320558741	Z3-FT002-GS-20191029	320-55874-12	10/29/19	Stage 2B	Tissue		X							X																			
47509A	320558741	J-S-BMIT001-20191023	320-55874-13	10/23/19	Stage 2B	Tissue												X																
47509A	320558741	Z5-FT002-LMB-20191025	320-55874-14	10/25/19	Stage 2B	Tissue												X																
47509A	320558741	K-S-BMIT001-20191025	320-55874-15	10/25/19	Stage 2B	Tissue												X																
47509A	320558741	L-S-BMIT001-20191026	320-55874-16	10/26/19	Stage 2B	Tissue												X																
47509A	320558741	Z4-FT001-BG-20191026	320-55874-17	10/26/19	Stage 2B	Tissue												X																
47509A	320558741	Z2-FT002-LMB-20191027	320-55874-19	10/27/19	Stage 2B	Tissue	FD16											X																
47509A	320558741	B-S-BMIT001-20191028	320-55874-20	10/28/19	Stage 2B	Tissue												X																
47509A	320558741	C-S-BMIT001-20191028	320-55874-21	10/28/19	Stage 2B	Tissue												X																
47509A	320558741	Z1-FT001-GS-20191028	320-55874-22	10/28/19	Stage 2B	Tissue												X																
47509A	320558741	Z3-FT001-BG-20191029	320-55874-23	10/29/19	Stage 2B	Tissue												X																
47509A	320558741	Z3-FT002-GS-20191029	320-55874-24	10/29/19	Stage 2B	Tissue												X																
47509A	320558741	Z2-FT002-LMB-20191027-DUP	320-55874-25	10/27/19	Stage 2B	Tissue	FD16	X							X																			
47509A	320558741	Z2-FT002-LMB-20191027-DUP	320-55874-26	10/27/19	Stage 2B	Tissue	FD16											X																
47509B	320558742	J-S-BMIT001-20191023	320-55874-1	10/23/19	Stage 2B	Tissue							X																					
47509B	320558742	Z5-FT002-LMB-20191025	320-55874-2	10/25/19	Stage 2B	Tissue							X																					X
47509B	320558742	K-S-BMIT001-20191025	320-55874-3	10/25/19	Stage 2B	Tissue							X																					
47509B	320558742	L-S-BMIT001-20191026	320-55874-4	10/26/19	Stage 2B	Tissue							X																					
47509B	320558742	Z4-FT001-BG-20191026	320-55874-5	10/26/19	Stage 2B	Tissue							X																					X
47509B	320558742	Z2-FT002-LMB-20191027	320-55874-7	10/27/19	Stage 2B	Tissue	FD16						X																					X
47509B	320558742	B-S-BMIT001-20191028	320-55874-8	10/28/19	Stage 2B	Tissue							X																					
47509B	320558742	C-S-BMIT001-20191028	320-55874-9	10/28/19	Stage 2B	Tissue							X																					
47509B	320558742	Z1-FT001-GS-20191028	320-55874-10	10/28/19	Stage 2B	Tissue							X																					X
47509B	320558742	Z3-FT001-BG-20191029	320-55874-11	10/29/19	Stage 2B	Tissue							X																					X
47509B	320558742	Z3-FT002-GS-20191029	320-55874-12	10/29/19	Stage 2B	Tissue							X																					X
47509B	320558742	Z2-FT002-LMB-20191027-DUP	320-55874-25	10/27/19	Stage 2B	Tissue	FD16						X																					
47509C	320559621	Z5-FT002-CP-20191031	320-55962-1	10/31/19	Stage 4	Tissue	FD17	X							X																			
47509C	320559621	Z5-FT001-GS-20191026	320-55962-2	10/26/19	Stage 2B	Tissue		X							X																			
47509C	320559621	Z4-FT002-LMB-20191027	320-55962-3	10/27/19	Stage 2B	Tissue		X							X																			
47509C	320559621	Z3-FT003-LMB-20191029	320-55962-4	10/29/19	Stage 4	Tissue		X							X																			
47509C	320559621	RF-FT001-LMB-20191030	320-55962-5	10/30/19	Stage 2B	Tissue		X							X																			
47509C	320559621	Z4-FT004-CP-20191031	320-55962-6	10/31/19	Stage 2B	Tissue		X							X																			

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47509C	320559621	RF-FT002-CP-20191030	320-55962-7	10/30/19	Stage 2B	Tissue		X							X																			
47509C	320559621	Z2-FT001-GS-20191028	320-55962-8	10/28/19	Stage 4	Tissue		X							X																			
47509C	320559621	Z1-FT002-LMB-20191028	320-55962-9	10/28/19	Stage 2B	Tissue		X							X																			
47509C	320559621	E-N-BMIT001-20191029	320-55962-10	10/29/19	Stage 4	Tissue		X							X																			
47509C	320559621	2-N-BMIT001-20191030	320-55962-11	10/30/19	Stage 2B	Tissue		X							X																			
47509C	320559621	Z5-FT002-CP-20191031-DUP	320-55962-12	10/31/19	Stage 2B	Tissue	FD17	X							X																			
47509C	320559621	Z5-FT002-CP-20191031	320-55962-13	10/31/19	Stage 4	Tissue	FD17											X																
47509C	320559621	Z5-FT001-GS-20191026	320-55962-14	10/26/19	Stage 2B	Tissue												X																
47509C	320559621	Z3-FT003-LMB-20191029	320-55962-16	10/29/19	Stage 4	Tissue												X																
47509C	320559621	RF-FT001-LMB-20191030	320-55962-17	10/30/19	Stage 2B	Tissue												X																
47509C	320559621	Z4-FT004-CP-20191031	320-55962-18	10/31/19	Stage 2B	Tissue												X																
47509C	320559621	RF-FT002-CP-20191030	320-55962-19	10/30/19	Stage 2B	Tissue												X																
47509C	320559621	Z2-FT001-GS-20191028	320-55962-20	10/28/19	Stage 4	Tissue												X																
47509C	320559621	Z1-FT002-LMB-20191028	320-55962-21	10/28/19	Stage 2B	Tissue												X																
47509C	320559621	E-N-BMIT001-20191029	320-55962-22	10/29/19	Stage 4	Tissue												X																
47509C	320559621	2-N-BMIT001-20191030	320-55962-23	10/30/19	Stage 2B	Tissue												X																
47509C	320559621	Z5-FT002-CP-20191031-DUP	320-55962-24	10/31/19	Stage 2B	Tissue	FD17											X																
47509D	320559622	Z5-FT002-CP-20191031	320-55962-1	10/31/19	Stage 4	Tissue	FD17					X																						X
47509D	320559622	Z5-FT001-GS-20191026	320-55962-2	10/26/19	Stage 2B	Tissue						X																						X
47509D	320559622	Z4-FT002-LMB-20191027	320-55962-3	10/27/19	Stage 2B	Tissue						X																						X
47509D	320559622	Z3-FT003-LMB-20191029	320-55962-4	10/29/19	Stage 4	Tissue						X																						X
47509D	320559622	RF-FT001-LMB-20191030	320-55962-5	10/30/19	Stage 2B	Tissue						X																						X
47509D	320559622	Z4-FT004-CP-20191031	320-55962-6	10/31/19	Stage 2B	Tissue						X																						X
47509D	320559622	RF-FT002-CP-20191030	320-55962-7	10/30/19	Stage 2B	Tissue						X																						X
47509D	320559622	Z2-FT001-GS-20191028	320-55962-8	10/28/19	Stage 4	Tissue						X																						X
47509D	320559622	Z1-FT002-LMB-20191028	320-55962-9	10/28/19	Stage 2B	Tissue						X																						X
47509D	320559622	E-N-BMIT001-20191029	320-55962-10	10/29/19	Stage 4	Tissue						X																						
47509D	320559622	2-N-BMIT001-20191030	320-55962-11	10/30/19	Stage 2B	Tissue						X																						
47509D	320559622	Z5-FT002-CP-20191031-DUP	320-55962-12	10/31/19	Stage 2B	Tissue	FD17					X																						X
47509E	320563821	H-S-BMIT001-20191114	320-56382-2	11/14/19	Stage 2B	Tissue		X																										
47509E	320563821	G-S-BMIT001-20191114	320-56382-4	11/14/19	Stage 2B	Tissue		X																										
47509E	320563821	D-S-BMIT001-20191111	320-56382-5	11/11/19	Stage 2B	Tissue		X							X																			
47509E	320563821	I-S-BMIT001-20191112	320-56382-6	11/12/19	Stage 2B	Tissue		X							X																			
47509E	320563821	A-S-BMIT001-20191112	320-56382-7	11/12/19	Stage 2B	Tissue		X							X																			
47509E	320563821	1-N-BMIT001-20191114	320-56382-8	11/14/19	Stage 2B	Tissue		X							X																			
47509E	320563821	3-N-BMIT001-20191114	320-56382-9	11/14/19	Stage 2B	Tissue		X							X																			
47509E	320563821	H-S-BMIT001-20191027	320-56382-10	11/14/19	Stage 2B	Tissue												X																
47509E	320563821	G-S-BMIT001-20191027	320-56382-11	11/14/19	Stage 2B	Tissue												X																
47509E	320563821	D-S-BMIT001-20191111	320-56382-12	11/11/19	Stage 2B	Tissue												X																
47509E	320563821	I-S-BMIT001-20191112	320-56382-13	11/12/19	Stage 2B	Tissue												X																
47509E	320563821	A-S-BMIT001-20191112	320-56382-14	11/12/19	Stage 2B	Tissue												X																
47509E	320563821	1-N-BMIT001-20191114	320-56382-15	11/14/19	Stage 2B	Tissue												X																
47509E	320563821	3-N-BMIT001-20191114	320-56382-16	11/14/19	Stage 2B	Tissue												X																

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids		
47509E	320563821	H-S-BMIT001-20191027	320-56382-17	11/14/19	Stage 2B	Tissue									X																			
47509E	320563821	G-S-BMIT001-20191027	320-56382-18	11/14/19	Stage 2B	Tissue									X																			
47509F	4402573131	3-N-SWU001-20191213	440-257313-1	12/13/19	Stage 2A	Water		X							X		X				X						X				X			
47509F	4402573131	1-N-SWU001-20191213	440-257313-2	12/13/19	Stage 2A	Water		X							X		X				X						X				X			
47509F	4402573131	1-N-SWU001-20191213-TB	440-257313-3	12/13/19	Stage 2A	Water	TB	X													X													
47837A	4402572351	J-S-SWU001-20191212-EB	440-257235-1	12/12/19	Stage 2A	Water	EB	X							X		X				X													
48500A	4402621871	PZ-2S-20200305-TB	440-262187-1	03/05/20	Stage 2A	Water	TB	X																										
48500A	4402621871	PZ-2S-20200305	440-262187-2	03/05/20	Stage 2A	Water		X	X				X		X				X		X		X		X			X						
48500A	4402621871	PC-200-20200305	440-262187-3	03/05/20	Stage 2A	Water		X	X						X																			
48500A	4402621871	PC-201-20200305	440-262187-4	03/05/20	Stage 2A	Water		X	X				X		X				X		X		X		X		X							
48500A	4402621871	PC-202-20200305	440-262187-5	03/05/20	Stage 2A	Water		X	X				X		X				X		X		X		X		X							
48502A	4402620901/2003191	RISG-41-15.0-20200302	2003191A-01A	03/02/20	Stage 4	Air	FD18			X	X																							
48502A	4402620901/2003191	RISG-41-15.0-20200302-FD	2003191A-02A	03/02/20	Stage 2B	Air	FD18			X	X																							
48502A	4402620901/2003191	RISG-41-5.0-20200302	2003191A-03A	03/02/20	Stage 2B	Air				X	X																							
48502A	4402620901/2003191	RISG-37-13.0-20200302	2003191A-04A	03/02/20	Stage 2B	Air				X	X																							
48502A	4402620901/2003191	RISG-37-5.0-20200303	2003191A-05A	03/03/20	Stage 2B	Air				X	X																							
48502A	4402620901/2003191	RISG-46-5.0-20200303	2003191A-06A	03/03/20	Stage 2B	Air				X	X																							
48502A	4402620901/2003191	RISG-46-15.0-20200303	2003191A-07A	03/03/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-42-5.0-20200224	2003013A-01A	02/24/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-42-12.5-20200224	2003013A-02A	02/24/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-45-15.0-20200224	2003013A-03A	02/24/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-45-5.0-20200224	2003013A-04A	02/24/20	Stage 4	Air				X	X																							
48502B	4402620921/2003013	RISG-47-15.0-20200224	2003013A-05A	02/24/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-47-5.0-20200225	2003013A-06A	02/25/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-39-5.0-20200226	2003013A-07A	02/26/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-39-13.5-20200226	2003013A-08A	02/26/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-35-5.0-20200226	2003013A-09A	02/26/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-48-10.0-20200226	2003013A-10A	02/26/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-36-15.0-20200226	2003013B-11A	02/26/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-36-5.0-20200227	2003013B-12A	02/27/20	Stage 2B	Air	FD19			X	X																							
48502B	4402620921/2003013	RISG-36-5.0-20200227-FD	2003013B-13A	02/27/20	Stage 2B	Air	FD19			X	X																							
48502B	4402620921/2003013	RISG-48-5.0-20200227	2003013B-14A	02/27/20	Stage 4	Air				X	X																							
48502B	4402620921/2003013	RISG-44-15.0-20200227	2003013B-15A	02/27/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-44-5.0-20200228	2003013B-16A	02/28/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-43-5.0-20200228	2003013B-17A	02/28/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-49-5.0-20200228	2003013B-18A	02/28/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-49-10.0-20200228	2003013B-19A	02/28/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-43-15.0-20200228	2003013B-20A	02/28/20	Stage 2B	Air				X	X																							
48502B	4402620921/2003013	RISG-40-5.0-20200228	2003013B-21A	02/28/20	Stage 2B	Air				X	X																							
48502C	4402669001/2005655	RISG-51-5.0-20200520	2005655B-01A	05/20/20	Stage 4	Air				X	X																							
48502C	4402669001/2005655	RISG-50-5.0-20200520	2005655B-02A	05/20/20	Stage 2B	Air				X	X																							
48502C	4402669001/2005655	RISG-50-10.0-20200520	2005655B-03A	05/20/20	Stage 2B	Air	FD20			X	X																							
48502C	4402669001/2005655	RISG-50-10.0-20200520-FD	2005655B-04A	05/20/20	Stage 2B	Air	FD20			X	X																							

Table I. Sample Cross-Reference

LDC	SDG	Client Sample ID	Lab ID	Sample Date	Validation Level	Matrix	QC Type	VOC (8260B)	1,2,3-TCP (8260B SIM)	VOC (TO-15/TO-15 SIM)	Helium (D1946)	Perchlorate (6850)	Metals (200.7)	Dissolved Chromium (6020)	Chromium (6020)	Chromium VI (218.6)	Dissolved Chromium VI (7196)	Chromium VI (7196)	Anions (300.0)	Bromide (300.1B)	Chlorate (300.1B)	Dissolved Perchlorate (314.0)	Perchlorate (314.0)	Sulfide (9034)	Alkalinity (2320B)	Dissolved Hardness as CaCO3 (2340)	Hardness as CaCO3 (2340)	TDS (2540C)	DOC (9060)	TOC (9060)	TOC (Lloyd Kahn)	Lipids			
48502C	4402669001/2005655	RISG-38-5.0-20200526	2005655B-05A	05/26/20	Stage 2B	Air				X	X																								
48502C	4402669001/2005655	RISG-38-15.0-20200526	2005655B-06A	05/26/20	Stage 2B	Air				X	X																								
48665A	4402660631	EB-T0-001-20200513	440-266063-1	05/13/20	Stage 2A	Water	EB													X															
48665A	4402660631	EB-T0-001-20200514	440-266063-2	05/14/20	Stage 2A	Water	EB													X															
48665B	4402672271	1-N-PW001-20200610	440-267227-1	06/10/20	Stage 2B	Porewater		X						X						X	X					X		X	X						
48665B	4402672271	D-S-PW001-20200610	440-267227-2	06/10/20	Stage 4	Porewater		X						X						X	X					X		X	X						
48665B	4402672271	D-S-PW001-20200610-TB	440-267227-3	06/10/20	Stage 2A	Water	TB	X																											
48665C	4402672272	1-N-PW001-20200610	440-267227-1	06/10/20	Stage 2B	Porewater																X													
48665C	4402672272	D-S-PW001-20200610	440-267227-2	06/10/20	Stage 4	Porewater																X													
48665D	4402672291	G-S-SO001-20200610	440-267229-1	06/10/20	Stage 4	Soil		X						X						X		X											X		
48665E	4402672301	D-S-SED002-20200610	440-267230-1	06/10/20	Stage 2B	Sediment		X						X						X		X	X										X		
48665E	4402672301	D-S-SED002-20200610-TB	440-267230-2	06/10/20	Stage 2B	Sediment	TB	X																										X	
48665E	4402672301	1-N-SED001-20200610	440-267230-3	06/10/20	Stage 4	Sediment		X							X					X		X	X										X		

Table II. Stage 2A, Stage 2B, and Stage 4 Validation Elements

Quality Control Elements	Stage 2A		
	GC/MS ¹	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)	N/A	-	-
Field Blanks	√	√	√
Inductively Coupled Plasma (ICP) Interference Check Sample	N/A	-	N/A
Surrogate Spikes/ Carrier Recovery	√	N/A	√
Matrix Spike (MS)/ Matrix Spike Duplicate (MSD)	√	√	√
Laboratory Duplicate (DUP)	N/A	√	√
Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD)	√	√	√
Serial Dilution	N/A	√	N/A
Internal Standards	-	-	N/A
Field Duplicate	√	√	√
RPD Between Two Columns	N/A	N/A	N/A
Project Quantitation Limits (PQL) ²	√	√	√
Multiple Results for One Sample	√	√	√
Target Compound Identification	-	-	-
Compound Quantitation/ Sample Result Verification	-	-	-
System Performance ³	-	-	-
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

¹GC/MS = VOCs

²PQLs verified for GC/MS, Metals, and Wet Chemistry methods.

³System performance is a thorough review of the data acquisition that can yield indicators of degrading instrument performance affecting quality of data.

Table II. Stage 2A, Stage 2B, and Stage 4 Validation Elements

Quality Control Elements	Stage 2B				
	GC/MS ¹	GC ²	LC/MS ³	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)	N/A	N/A	√	√	√
Field Blanks	√	N/A	N/A	√	√
Inductively Coupled Plasma (ICP) Interference Check Sample	N/A	N/A	N/A	√	N/A
Surrogate Spikes/ Carrier Recovery	√	N/A	N/A	N/A	√
Matrix Spike (MS)/ Matrix Spike Duplicate (MSD)	√	N/A	√	√	√
Laboratory Duplicate (DUP)	N/A	N/A	N/A	√	√
Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD)	√	√	√	√	√
Serial Dilution	N/A	N/A	N/A	√	N/A
Internal Standards	√	N/A	√	√	N/A
Field Duplicate	√	√	√	√	√
RPD Between Two Columns	N/A	N/A	N/A	N/A	N/A
Project Quantitation Limits (PQL) ⁴	√	√	√	√	√
Multiple Results for One Sample	√	√	√	√	√
Target Compound Identification	-	-	-	-	-
Compound Quantitation/ Sample Result Verification	-	-	-	-	-
System Performance ⁵	-	-	-	-	-
Overall Data Usability Assessment	√	√	√	√	√

√ = Reviewed for Stage 2B review

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

- = Not applicable for Stage 2B review

¹GC/MS = VOCs

²GC = Helium

³LC/MS = Perchlorate

⁴PQLs verified for GC/MS, GC, LC/MS, Metals, and Wet Chemistry methods.

⁵System performance is a thorough review of the data acquisition that can yield indicators of degrading instrument performance affecting quality of data.

Table II. Stage 2A, Stage 2B, and Stage 4 Validation Elements

Quality Control Elements	Stage 4				
	GC/MS ¹	GC ²	LC/MS ³	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)	N/A	N/A	√	√	√
Field Blanks	√	N/A	N/A	√	√
Inductively Coupled Plasma (ICP) Interference Check Sample	N/A	N/A	N/A	√	N/A
Surrogate Spikes/ Carrier Recovery	√	N/A	N/A	N/A	√
Matrix Spike (MS)/ Matrix Spike Duplicate (MSD)	√	N/A	√	√	√
Laboratory Duplicate (DUP)	N/A	N/A	N/A	√	√
Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD)	√	√	√	√	√
Serial Dilution	N/A	N/A	N/A	√	N/A
Internal Standards	√	N/A	√	√	N/A
Field Duplicate	√	√	√	√	√
RPD Between Two Columns	N/A	N/A	N/A	N/A	N/A
Project Quantitation Limits (PQL) ⁴	√	√	√	√	√
Multiple Results for One Sample	√	√	√	√	√
Target Compound Identification	√	√	√	N/A	N/A
Compound Quantitation/ Sample Result Verification	√	√	√	√	√
System Performance ⁵	√	√	√	N/A	N/A
Overall Data Usability Assessment	√	√	√	√	√

√ = Reviewed for Stage 4 review

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

- = Not applicable for Stage 4 review

¹GC/MS = VOCs

²GC = Helium

³LC/MS = Perchlorate

⁴PQLs verified for GC/MS, GC, LC/MS, Metals, and Wet Chemistry methods.

⁵System performance is a thorough review of the data acquisition that can yield indicators of degrading instrument performance affecting quality of data.

Table III. Stage 2A, Stage 2B & Stage 4 Validation Percentages

Parameter	Number of Samples										
	(Water ¹) Stage 2A	(Air ²) Stage 2B	(Air ²) Stage 4	(Porewater) Stage 2B	(Porewater) Stage 4	(Sediment) Stage 2B	(Sediment) Stage 4	(Soil) Stage 2B	(Soil) Stage 4	(Tissue) Stage 2B	(Tissue) Stage 4
VOC (8260B)	91	-	-	16	4	31	4	24	6	27	4
1,2,3-Trichloropropane (8260B-SIM)	4	-	-	-	-	-	-	-	-	-	-
VOC (TO-15/TO-15 SIM)	-	30	4	-	-	-	-	-	-	-	-
Helium (D1946)	-	30	4	-	-	-	-	-	-	-	-
Perchlorate (6850)	-	-	-	-	-	-	-	-	-	27	4
Metals (200.7)	3	-	-	-	-	-	-	-	-	-	-
Dissolved Chromium (6020)	31	-	-	16	4	-	-	-	-	-	-
Chromium (6020)	38	-	-	-	-	26	4	20	6	27	4
Chromium VI (218.6)	4	-	-	-	-	-	-	-	-	-	-
Dissolved Chromium VI (7196)	32	-	-	16	4	-	-	-	-	-	-
Chromium VI (7196)	39	-	-	-	-	26	4	20	6	26	4
Anions (300.0)	3	-	-	-	-	-	-	-	-	-	-
Bromide (300.1B)	3	-	-	16	4	-	-	-	-	-	-
Chlorate (300.1B)	72	-	-	16	4	26	4	20	6	-	-
Dissolved Perchlorate (314.0)	31	-	-	16	4	-	-	-	-	-	-
Perchlorate (314.0)	41	-	-	-	-	26	4	20	6	-	-
Sulfide (9034)	-	-	-	-	-	26	4	-	1	-	-
Alkalinity (2320B)	3	-	-	-	-	-	-	-	-	-	-
Dissolved Hardness as CaCO ₃ (2340)	31	-	-	14	4	-	-	-	-	-	-
Hardness as CaCO ₃ (2340)	31	-	-	-	-	-	-	-	-	-	-
TDS (2540C)	34	-	-	2	1	-	-	-	-	-	-
DOC (9060)	31	-	-	14	4	-	-	-	-	-	-
TOC (9060)	31	-	-	-	-	-	-	-	-	-	-
TOC (Lloyd Kahn)	-	-	-	-	-	26	4	20	6	-	-
Lipids	-	-	-	-	-	-	-	-	-	13	3

Notes:

1. Consistent with NDEP guidance emailed on March 7, 2017, all water results have been validated to Stage 2A.
2. Air samples were collected and analyzed for VOC by EPA Method TO-15/TO-15 SIM and Helium by ASTM D1946.

Table III. Stage 2A, Stage 2B & Stage 4 Validation Percentages

Parameter	Validation Percentage										
	(Water ¹) Stage 2A	(Air ²) Stage 2B	(Air ²) Stage 4	(Porewater) Stage 2B	(Porewater) Stage 4	(Sediment) Stage 2B	(Sediment) Stage 4	(Soil) Stage 2B	(Soil) Stage 4	(Tissue) Stage 2B	(Tissue) Stage 4
VOC (8260B)	100	-	-	80	20	89	11	80	20	87	13
1,2,3-Trichloropropane (8260B-SIM)	100	-	-	-	-	-	-	-	-	-	-
VOC (TO-15/TO-15 SIM)	-	88	12	-	-	-	-	-	-	-	-
Helium (D1946)	-	88	12	-	-	-	-	-	-	-	-
Perchlorate (6850)	-	-	-	-	-	-	-	-	-	87	13
Metals (200.7)	100	-	-	-	-	-	-	-	-	-	-
Dissolved Chromium (6020)	100	-	-	80	20	-	-	-	-	-	-
Chromium (6020)	100	-	-	-	-	87	13	77	23	87	13
Chromium VI (218.6)	100	-	-	-	-	-	-	-	-	-	-
Dissolved Chromium VI (7196)	100	-	-	80	20	-	-	-	-	-	-
Chromium VI (7196)	100	-	-	-	-	87	13	77	23	87	13
Anions (300.0)	100	-	-	-	-	-	-	-	-	-	-
Bromide (300.1B)	100	-	-	80	20	-	-	-	-	-	-
Chlorate (300.1B)	100	-	-	80	20	87	13	77	23	-	-
Dissolved Perchlorate (314.0)	100	-	-	80	20	-	-	-	-	-	-
Perchlorate (314.0)	100	-	-	-	-	87	13	77	23	-	-
Sulfide (9034)	-	-	-	-	-	87	13	-	100	-	-
Alkalinity (2320B)	100	-	-	-	-	-	-	-	-	-	-
Dissolved Hardness as CaCO ₃ (2340)	100	-	-	78	22	-	-	-	-	-	-
Hardness as CaCO ₃ (2340)	100	-	-	-	-	-	-	-	-	-	-
TDS (2540C)	100	-	-	67	33	-	-	-	-	-	-
DOC (9060)	100	-	-	78	22	-	-	-	-	-	-
TOC (9060)	100	-	-	-	-	-	-	-	-	-	-
TOC (Lloyd Kahn)	-	-	-	-	-	87	13	77	23	-	-
Lipids	-	-	-	-	-	-	-	-	-	81	19

Table IV. Reason Codes and Definitions

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

Table V. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	SQL	PQL	Units	Validator Qualifier	Reason Code	Data Quality Indicator	Qualification Finding	Acceptance Criteria
320558741	B-S-BMIT001-20191028	10/28/19	SW7196	18540-29-9	Chromium VI		U	0.52	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	C-S-BMIT001-20191028	10/28/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	J-S-BMIT001-20191023	10/23/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	J-S-BMIT001-20191023	10/23/19	SW8260	67-66-3	Chloroform	0.68	J	0.67	17	ug/kg	J	sp	< PQL		
320558741	K-S-BMIT001-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	L-S-BMIT001-20191026	10/26/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z1-FT001-GS-20191028	10/28/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z2-FT002-LMB-20191027	10/27/19	SW6020	7440-47-3	Chromium (total)	0.10	J	0.10	0.21	mg/kg	J	sp	< PQL		
320558741	Z2-FT002-LMB-20191027	10/27/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z2-FT002-LMB-20191027	10/27/19	SW8260	67-66-3	Chloroform	0.92	J	0.63	16	ug/kg	J	sp	< PQL		
320558741	Z2-FT002-LMB-20191027-DUP	10/27/19	SW6020	7440-47-3	Chromium (total)	0.10	J	0.098	0.20	mg/kg	J	sp	< PQL		
320558741	Z2-FT002-LMB-20191027-DUP	10/27/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z2-FT002-LMB-20191027-DUP	10/27/19	SW8260	67-66-3	Chloroform	1.1	J	0.44	11	ug/kg	J	sp	< PQL		
320558741	Z3-FT001-BG-20191029	10/29/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z3-FT002-GS-20191029	10/29/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z3-FT002-GS-20191029	10/29/19	SW8260	67-66-3	Chloroform	1.2	J	0.73	18	ug/kg	J	sp	< PQL		
320558741	Z4-FT001-BG-20191026	10/26/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z5-FT002-LMB-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		UF1	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	58	75-125 %
320558741	Z5-FT002-LMB-20191025	10/25/19	SW8260	67-66-3	Chloroform		UF1	0.58	15	ug/kg	UJ	m	MS/MSD %R	74,-	78-135 %
320558742	B-S-BMIT001-20191028	10/28/19	SW6850	14797-73-0	Perchlorate	7.3	J	0.38	14	ug/kg	J	sp	< PQL		
320558742	K-S-BMIT001-20191025	10/25/19	SW6850	14797-73-0	Perchlorate	6.2	J	2.0	73	ug/kg	J	sp	< PQL		
320558742	L-S-BMIT001-20191026	10/26/19	SW6850	14797-73-0	Perchlorate	15	J	1.8	68	ug/kg	J	sp	< PQL		
320558742	Z1-FT001-GS-20191028	10/28/19	SW6850	14797-73-0	Perchlorate	19	J	1.9	72	ug/kg	J	sp	< PQL		
320558742	Z3-FT001-BG-20191029	10/29/19	SW6850	14797-73-0	Perchlorate	17	J	1.9	69	ug/kg	J	sp	< PQL		
320558742	Z3-FT002-GS-20191029	10/29/19	SW6850	14797-73-0	Perchlorate	13	J	1.9	71	ug/kg	J	sp	< PQL		
320558742	Z4-FT001-BG-20191026	10/26/19	SW6850	14797-73-0	Perchlorate	15	J	1.9	69	ug/kg	J	sp	< PQL		
320558742	Z5-FT002-LMB-20191025	10/25/19	SW6850	14797-73-0	Perchlorate	11	J	2.0	74	ug/kg	J	sp	< PQL		
320559621	2-N-BMIT001-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	0.25		0.098	0.20	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	2-N-BMIT001-20191030	10/30/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	E-N-BMIT001-20191029	10/29/19	SW6020	7440-47-3	Chromium (total)	9.1	F1	0.10	0.21	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	E-N-BMIT001-20191029	10/29/19	SW7196	18540-29-9	Chromium VI		UF1	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	RF-FT001-LMB-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	0.25		0.099	0.20	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	RF-FT001-LMB-20191030	10/30/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	RF-FT001-LMB-20191030	10/30/19	SW8260	67-66-3	Chloroform	5.2	J	0.70	18	ug/kg	J	sp	< PQL		
320559621	RF-FT002-CP-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	0.21		0.096	0.19	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	RF-FT002-CP-20191030	10/30/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	RF-FT002-CP-20191030	10/30/19	SW8260	67-66-3	Chloroform	4.0	J	0.71	18	ug/kg	J	sp	< PQL		
320559621	Z1-FT002-LMB-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	0.24		0.095	0.19	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	Z1-FT002-LMB-20191028	10/28/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z2-FT001-GS-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	0.35		0.10	0.21	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	Z2-FT001-GS-20191028	10/28/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z3-FT003-LMB-20191029	10/29/19	SW6020	7440-47-3	Chromium (total)	0.26		0.098	0.20	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	Z3-FT003-LMB-20191029	10/29/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z3-FT003-LMB-20191029	10/29/19	SW8260	67-66-3	Chloroform	1.0	J	0.53	13	ug/kg	J	sp	< PQL		
320559621	Z4-FT002-LMB-20191027	10/27/19	SW6020	7440-47-3	Chromium (total)	0.31		0.10	0.20	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	Z4-FT004-CP-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)	0.32		0.10	0.20	mg/kg	J-	m	MS/MSD %R	63, 61	80-120 %
320559621	Z4-FT004-CP-20191031	10/31/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z4-FT004-CP-20191031	10/31/19	SW8260	67-66-3	Chloroform	1.5	J	0.61	15	ug/kg	J	sp	< PQL		
320559621	Z5-FT001-GS-20191026	10/26/19	SW6020	7440-47-3	Chromium (total)	0.18	J	0.097	0.19	mg/kg	J-	m,sp	MS/MSD %R; < PQL	63, 61	80-120 %
320559621	Z5-FT001-GS-20191026	10/26/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z5-FT002-CP-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)		U	0.096	0.19	mg/kg	UJ	m	MS/MSD %R	63, 61	80-120 %
320559621	Z5-FT002-CP-20191031	10/31/19	SW7196	18540-29-9	Chromium VI		U	0.50	0.99	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z5-FT002-CP-20191031	10/31/19	SW8260	67-66-3	Chloroform	0.77	J	0.70	17	ug/kg	J	sp	< PQL		
320559621	Z5-FT002-CP-20191031-DUP	10/31/19	SW6020	7440-47-3	Chromium (total)		U	0.10	0.20	mg/kg	UJ	m	MS/MSD %R	63, 61	80-120 %
320559621	Z5-FT002-CP-20191031-DUP	10/31/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	62	75-125 %
320559621	Z5-FT002-CP-20191031-DUP	10/31/19	SW8260	67-66-3	Chloroform	0.97	J	0.51	13	ug/kg	J	sp	< PQL		
320559622	Z1-FT002-LMB-20191028	10/28/19	SW6850	14797-73-0	Perchlorate	23	J	2.0	73	ug/kg	J	sp	< PQL		
320559622	Z2-FT001-GS-20191028	10/28/19	SW6850	14797-73-0	Perchlorate	14	J	2.0	74	ug/kg	J	sp	< PQL		
320559622	Z4-FT002-LMB-20191027	10/27/19	SW6850	14797-73-0	Perchlorate	18	J	4.1	150	ug/kg	J	sp	< PQL		
320559622	Z4-FT004-CP-20191031	10/31/19	SW6850	14797-73-0	Perchlorate	4.8	J	2.0	74	ug/kg	J	sp	< PQL		
320559622	Z5-FT002-CP-20191031	10/31/19	SW6850	14797-73-0	Perchlorate	8.5	J	0.36	13	ug/kg	J	sp	< PQL		
320559622	Z5-FT002-CP-20191031-DUP	10/31/19	SW6850	14797-73-0	Perchlorate	8.8	J	1.9	72	ug/kg	J	sp	< PQL		

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
320563821	1-N-BMIT001-20191114	11/14/19	SW6020	7440-47-3	Chromium (total)	0.51	J	0.49	0.97	mg/kg	J	sp	< PQL		
320563821	1-N-BMIT001-20191114	11/14/19	SW8260	67-66-3	Chloroform	3.1	J	1.2	29	ug/kg	J	sp	< PQL		
320563821	G-S-BMIT001-20191027	11/14/19	SW6020	7440-47-3	Chromium (total)	0.56	J	0.51	1.0	mg/kg	J	sp	< PQL		
320563822	3-N-BMIT001-20191114	11/14/19	SW6850	14797-73-0	Perchlorate	6.4	J	0.40	15	ug/kg	J	sp	< PQL		
320563822	D-S-BMIT001-20191111	11/11/19	SW6850	14797-73-0	Perchlorate	6.1	J	0.39	14	ug/kg	J	sp	< PQL		
320563822	G-S-BMIT001-20191027	11/14/19	SW6850	14797-73-0	Perchlorate	8.4	J	0.39	14	ug/kg	J	sp	< PQL		
320563822	H-S-BMIT001-20191027	11/14/19	SW6850	14797-73-0	Perchlorate	13	J	0.42	15	ug/kg	J	sp	< PQL		
320563822	I-S-BMIT001-20191112	11/12/19	SW6850	14797-73-0	Perchlorate	2.0	J	0.41	15	ug/kg	J	sp	< PQL		
4402422401	SWF-SO001-20190521	05/21/19	SW8260	67-66-3	Chloroform		UH	0.85	1.7	ug/kg	UJ	h	holding times	18	14 days
4402422401	SWF-SO002-20190521	05/21/19	SW8260	67-66-3	Chloroform		UH	0.70	1.4	ug/kg	UJ	h	holding times	18	14 days
4402422401	SWF-SO003-20190521	05/21/19	SW8260	67-66-3	Chloroform		UH	0.82	1.6	ug/kg	UJ	h	holding times	18	14 days
4402530641	J-S-SWF001-20191023	10/23/19	SW6020	7440-47-3	Chromium, Dissolved	0.79	J	0.50	2.0	ug/l	J	sp	< PQL		
4402530641	J-S-SWF001-20191023	10/23/19	SW8260	67-66-3	Chloroform	0.25	J	0.25	2.0	ug/l	J	sp	< PQL		
4402530641	J-S-SWU001-20191023	10/23/19	SW6020	7440-47-3	Chromium (total)	0.85	J	0.50	2.0	ug/l	J	sp	< PQL		
4402530641	J-S-SWU001-20191023	10/23/19	SW8260	67-66-3	Chloroform	0.89	J	0.25	2.0	ug/l	J	sp	< PQL		
4402531721	K-S-SWF001-20191024	10/24/19	SW6020	7440-47-3	Chromium (total)	1.0	J	0.50	2.0	ug/l	J	sp	< PQL		
4402531721	K-S-SWF001-20191024	10/24/19	SW8260	67-66-3	Chloroform	0.57	J	0.25	2.0	ug/l	J	sp	< PQL		
4402531721	K-S-SWU001-20191024	10/24/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402531721	K-S-SWU001-20191024	10/24/19	SW8260	67-66-3	Chloroform	0.70	J	0.25	2.0	ug/l	J	sp	< PQL		
4402531721	L-S-SWF001-20191024	10/24/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402531721	L-S-SWF001-20191024	10/24/19	SW8260	67-66-3	Chloroform	0.67	J	0.25	2.0	ug/l	J	sp	< PQL		
4402531721	L-S-SWU001-20191024	10/24/19	SW6020	7440-47-3	Chromium (total)	0.94	J	0.50	2.0	ug/l	J	sp	< PQL		
4402531721	L-S-SWU001-20191024	10/24/19	SW8260	67-66-3	Chloroform	0.73	J	0.25	2.0	ug/l	J	sp	< PQL		
4402532481	B-S-SWU001-20191025	10/25/19	E314.0	14797-73-0	Perchlorate	1.4	J	0.95	4.0	ug/l	J	sp	< PQL		
4402532481	B-S-SWU001-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	UJ	h	holding times	47.08	24 hours
4402532481	B-S-SWU001-20191025	10/25/19	SW8260	67-66-3	Chloroform	1.4	J	0.25	2.0	ug/l	J	sp	< PQL		
4402532481	C-S-SWU001-20191025	10/25/19	SW6020	7440-47-3	Chromium (total)	0.78	J	0.50	2.0	ug/l	J	sp	< PQL		
4402532481	C-S-SWU001-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		UHH3	0.0080	0.025	mg/l	DNR	orr			
4402532481	C-S-SWU001-20191025	10/25/19	SW8260	67-66-3	Chloroform	1.3	J	0.25	2.0	ug/l	J	sp	< PQL		
4402532501	B-S-SWF001-20191025	10/25/19	E314.0	14797-73-0	Perchlorate	1.2	J	0.95	4.0	ug/l	J	sp	< PQL		
4402532501	B-S-SWF001-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	UJ	h	holding times	46.83	24 hours
4402532501	B-S-SWF001-20191025	10/25/19	SW8260	67-66-3	Chloroform	0.81	J	0.25	2.0	ug/l	J	sp	< PQL		
4402532501	C-S-SWF001-20191025	10/25/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	DNR	orr			
4402532501	C-S-SWF001-20191025	10/25/19	SW8260	67-66-3	Chloroform	0.78	J	0.25	2.0	ug/l	J	sp	< PQL		
4402532531	B-S-SED001-20191025	10/25/19	E300.1	14866-68-3	Chlorate	54	J	20	200	ug/kg	J	sp	< PQL		
4402532531	B-S-SED001-20191025	10/25/19	SW9034	18496-25-8	Sulfide (total)	440		20	40	mg/kg	J-	m	MS/MSD %R	-.64	70-130 %
4402532531	C-S-SED001-20191025	10/25/19	SW9034	18496-25-8	Sulfide (total)		UF1	20	40	mg/kg	UJ	m	MS/MSD %R	-.64	70-130 %
4402533221	F-S-SWF001-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	0.51	J	0.50	2.0	ug/l	J	sp	< PQL		
4402533221	H-S-SWF001-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	0.73	J	0.50	2.0	ug/l	J	sp	< PQL		
4402533221	H-S-SWF001-20191028	10/28/19	SW8260	67-66-3	Chloroform	0.29	J	0.25	2.0	ug/l	J	sp	< PQL		
4402533221	I-S-SWF001-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	0.79	J	0.50	2.0	ug/l	J	sp	< PQL		
4402533221	I-S-SWF001-20191028	10/28/19	SW8260	67-66-3	Chloroform	0.28	J	0.25	2.0	ug/l	J	sp	< PQL		
4402533231	F-S-SWU001-20191028	10/28/19	SW8260	67-66-3	Chloroform	0.46	J	0.25	2.0	ug/l	J	sp	< PQL		
4402533231	H-S-SWU001-20191028	10/28/19	SW8260	67-66-3	Chloroform	0.68	J	0.25	2.0	ug/l	J	sp	< PQL		
4402533231	I-S-SWU001-20191028	10/28/19	SW6020	7440-47-3	Chromium (total)	1.5	J	0.50	2.0	ug/l	J	sp	< PQL		
4402533231	I-S-SWU001-20191028	10/28/19	SW8260	67-66-3	Chloroform	0.55	J	0.25	2.0	ug/l	J	sp	< PQL		
4402533241	F-S-SO001-20191028	10/28/19	E314.0	14797-73-0	Perchlorate	0.56	F1F2	0.019	0.080	mg/kg	J	ld,m	MS/MSD %R; RPD	-.166; 28	80-120; 15 %
4402533241	I-S-SO001-20191028	10/28/19	E314.0	14797-73-0	Perchlorate		U	0.0095	0.040	mg/kg	UJ	ld	MS/MSD RPD	28	15 %
4402534241	2-N-SWU001-20191029	10/29/19	SW6020	7440-47-3	Chromium (total)	0.98	J	0.50	2.0	ug/l	J	sp	< PQL		
4402534241	2-N-SWU001-20191029	10/29/19	SW7196	18540-29-9	Chromium VI	0.011	J	0.0080	0.025	mg/l	J	sp	< PQL		
4402534791	A-S-SED001-20191030	10/30/19	SW7196	18540-29-9	Chromium VI		UF1	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	72,-	75-125 %
4402534791	A-S-SED001-20191030	10/30/19	SW9034	18496-25-8	Sulfide (total)	300	F1	20	40	mg/kg	J-	m	MS/MSD %R	64,-	70-130 %
4402534791	BP9-S-SED001-20191030	10/30/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	72,-	75-125 %
4402534791	BP9-S-SED001-20191030	10/30/19	SW9034	18496-25-8	Sulfide (total)	470		20	40	mg/kg	J-	m	MS/MSD %R	64,-	70-130 %
4402534801	A-S-SWU001-20191030	10/30/19	E314.0	14797-73-0	Perchlorate	1.8	J	0.95	4.0	ug/l	J	sp	< PQL		
4402534801	A-S-SWU001-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	1.3	J	0.50	2.0	ug/l	J	sp	< PQL		
4402534801	A-S-SWU001-20191030	10/30/19	SW8260	67-66-3	Chloroform	0.45	J	0.25	2.0	ug/l	J	sp	< PQL		
4402534801	BP9-S-SWU001-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	0.56	J	0.50	2.0	ug/l	J	sp	< PQL		
4402534811	A-S-SWF001-20191030	10/30/19	SW6020	7440-47-3	Chromium (total)	1.9	J	0.50	2.0	ug/l	J	sp	< PQL		
4402534811	BP9-S-SWF001-20191030	10/30/19	SW7196	18540-29-9	Chromium VI	0.0096	J	0.0080	0.025	mg/l	J	sp	< PQL		
4402535471	D-S-SWU001-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)	1.2	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402535471	D-S-SWU001-20191031	10/31/19	SW8260	67-66-3	Chloroform	1.4	J	0.25	2.0	ug/l	J	sp	< PQL		

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
4402535471	D-S-SWU001-20191031-FD	10/31/19	SW6020	7440-47-3	Chromium (total)	1.1	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402535471	D-S-SWU001-20191031-FD	10/31/19	SW8260	67-66-3	Chloroform	1.4	J	0.25	2.0	ug/l	J	sp	< PQL		
4402535471	E-S-SWU001-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)	0.68	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402535471	E-S-SWU001-20191031	10/31/19	SW8260	67-66-3	Chloroform	1.3	J	0.25	2.0	ug/l	J	sp	< PQL		
4402535491	D-S-SWF001-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)	0.53	J	0.50	2.0	ug/l	J	sp	< PQL		
4402535491	D-S-SWF001-20191031	10/31/19	SW8260	67-66-3	Chloroform	0.76	J	0.25	2.0	ug/l	J	sp	< PQL		
4402535491	D-S-SWF001-20191031-FD	10/31/19	SW8260	67-66-3	Chloroform	0.59	J	0.25	2.0	ug/l	J	sp	< PQL		
4402535491	E-S-SWF001-20191031	10/31/19	SW6020	7440-47-3	Chromium (total)	0.55	J	0.50	2.0	ug/l	J	sp	< PQL		
4402535491	E-S-SWF001-20191031	10/31/19	SW8260	67-66-3	Chloroform	0.58	J	0.25	2.0	ug/l	J	sp	< PQL		
4402535501	D-S-SED001-20191031	10/31/19	LLOYD_KAHN	7440-44-0	CARBON	1800		750	1000	mg/kg	J	fd	FD RPD	71	50 %
4402535501	D-S-SED001-20191031-FD	10/31/19	LLOYD_KAHN	7440-44-0	CARBON	3800		750	1000	mg/kg	J	fd	FD RPD	71	50 %
4402535501	E-S-SED001-20191031	10/31/19	SW9034	18496-25-8	Sulfide (total)	24	J	20	39	mg/kg	J	sp	< PQL		
4402535511	D-S-SO001-20191031-FD	10/31/19	LLOYD_KAHN	7440-44-0	CARBON	890	J	750	1000	mg/kg	J	sp	< PQL		
4402536311	EB-001-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	83.62	24 hours
4402536311	EB-001-20191101	11/01/19	SW8260	67-66-3	Chloroform	0.38	J	0.25	2.0	ug/l	J	sp	< PQL		
4402536311	EB-002-20191101	11/01/19	SW6020	7440-47-3	Chromium (total)	0.52	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402536311	EB-002-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	82.95	24 hours
4402536311	EB-002-20191101	11/01/19	SW8260	67-66-3	Chloroform	0.35	J	0.25	2.0	ug/l	J	sp	< PQL		
4402536311	EB-003-20191101	11/01/19	SW6020	7440-47-3	Chromium (total)	0.64	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402536311	EB-003-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	82.45	24 hours
4402536311	EB-003-20191101	11/01/19	SW8260	67-66-3	Chloroform	0.35	J	0.25	2.0	ug/l	J	sp	< PQL		
4402536311	EB-004-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	81.95	24 hours
4402536311	EB-004-20191101	11/01/19	SW8260	67-66-3	Chloroform	0.29	J	0.25	2.0	ug/l	J	sp	< PQL		
4402536311	EB-005-20191101	11/01/19	SW6020	7440-47-3	Chromium (total)	0.91	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.546	5.46 ug/l
4402536311	EB-005-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	81.37	24 hours
4402536311	EB-005-20191101	11/01/19	SW8260	67-66-3	Chloroform	0.36	J	0.25	2.0	ug/l	J	sp	< PQL		
4402536311	EB-006-20191101	11/01/19	SW7196	18540-29-9	Chromium VI		UH	0.0080	0.025	mg/l	R	h	holding times	81.28	24 hours
4402543361	D-N-SWU001-20191111	11/11/19	SW6020	7440-47-3	Chromium (total)	0.71	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543361	D-N-SWU001-20191111	11/11/19	SW8260	67-66-3	Chloroform	1.1	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543361	E-N-SWU001-20191111	11/11/19	E300.1	14866-68-3	Chlorate	71	J	20	200	ug/l	J	sp	< PQL		
4402543361	E-N-SWU001-20191111	11/11/19	SW6020	7440-47-3	Chromium (total)	0.54	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543361	E-N-SWU001-20191111	11/11/19	SW8260	67-66-3	Chloroform	1.2	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543371	D-N-SWF001-20191111	11/11/19	SW8260	67-66-3	Chloroform	0.65	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543371	E-N-SWF001-20191111	11/11/19	SW8260	67-66-3	Chloroform	0.80	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543811	I-N-SWF001-20191112	11/12/19	SW8260	67-66-3	Chloroform	0.48	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543811	J-N-SWF001-20191112	11/12/19	SW6020	7440-47-3	Chromium (total)	1.0	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543811	J-N-SWF001-20191112	11/12/19	SW8260	67-66-3	Chloroform	0.45	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543851	H-N-SWU001-20191112	11/12/19	SW6020	7440-47-3	Chromium (total)	0.67	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543851	H-N-SWU001-20191112	11/12/19	SW8260	67-66-3	Chloroform	0.97	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543851	I-N-SWU001-20191112	11/12/19	SW6020	7440-47-3	Chromium (total)	0.84	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543851	I-N-SWU001-20191112	11/12/19	SW8260	67-66-3	Chloroform	0.87	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543851	J-N-SWU001-20191112	11/12/19	SW6020	7440-47-3	Chromium (total)	1.3	J	0.50	2.0	ug/l	J	sp	< PQL		
4402543851	J-N-SWU001-20191112	11/12/19	SW8260	67-66-3	Chloroform	1.5	J	0.25	2.0	ug/l	J	sp	< PQL		
4402543921	D-N-SED001-20191111	11/11/19	SW9034	18496-25-8	Sulfide (total)	120	F1	20	40	mg/kg	J-	m	MS/MSD %R	54,54	70-130 %
4402543921	E-N-SED001-20191111	11/11/19	SW9034	18496-25-8	Sulfide (total)		U	20	40	mg/kg	UJ	m	MS/MSD %R	54,54	70-130 %
4402546391	G-N-SWU001-20191114	11/14/19	SW6020	7440-47-3	Chromium (total)	0.63	J	0.50	2.0	ug/l	J	sp	< PQL		
4402546391	G-N-SWU001-20191114	11/14/19	SW8260	67-66-3	Chloroform	0.97	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546391	G-S-SWU001-20191114	11/14/19	SW8260	67-66-3	Chloroform	1.0	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546391	K-N-SWU001-20191114	11/14/19	SW6020	7440-47-3	Chromium (total)	0.56	J	0.50	2.0	ug/l	J	sp	< PQL		
4402546391	K-N-SWU001-20191114	11/14/19	SW8260	67-66-3	Chloroform	0.75	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546391	K-N-SWU001-20191114-FD	11/14/19	SW8260	67-66-3	Chloroform	0.78	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546401	G-N-SWF001-20191114	11/14/19	SW8260	67-66-3	Chloroform	0.35	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546401	G-S-SWF001-20191114	11/14/19	SW8260	67-66-3	Chloroform	0.58	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546401	K-N-SWF001-20191114	11/14/19	SW8260	67-66-3	Chloroform	0.48	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546401	K-N-SWF001-20191114-FD	11/14/19	SW8260	67-66-3	Chloroform	0.39	J	0.25	2.0	ug/l	J	sp	< PQL		
4402546531	G-S-SED001-20191114	11/14/19	SW9034	18496-25-8	Sulfide (total)	32	J	20	40	mg/kg	J	sp	< PQL		
4402547281	A-N-SED 001-20191115	11/15/19	SW7196	18540-29-9	Chromium VI		U	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	68	75-125 %
4402547281	A-N-SED 001-20191115	11/15/19	SW8260	67-66-3	Chloroform	1.3	J	0.86	1.7	ug/kg	J	sp	< PQL		
4402547281	A-N-SED 001-20191115	11/15/19	SW9034	18496-25-8	Sulfide (total)	24	J	20	39	mg/kg	J-	m,sp	MS/MSD %R; < PQL	16, 24	70-130 %
4402547281	B-N-SED 001-20191115	11/15/19	SW7196	18540-29-9	Chromium VI		UF1	0.50	1.0	mg/kg	UJ	m	MS/MSD %R	68	75-125 %
4402547281	B-N-SED 001-20191115	11/15/19	SW9034	18496-25-8	Sulfide (total)	71	F1	20	40	mg/kg	J-	m	MS/MSD %R	16, 24	70-130 %
4402547291	A-N-SWF001-20191115	11/15/19	SW8260	67-66-3	Chloroform	0.94	J	0.25	2.0	ug/l	J	sp	< PQL		

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
4402547291	A-N-SWF001-20191115-FD	11/15/19	SW8260	67-66-3	Chloroform	1.3	J	0.25	2.0	ug/l	J	sp	< PQL		
4402547291	B-N-SWF001-20191115	11/15/19	SW8260	67-66-3	Chloroform	1.1	J	0.25	2.0	ug/l	J	sp	< PQL		
4402547291	C-N-SWF001-20191115	11/15/19	E314.0	14797-73-0	Perchlorate	1.1	J	0.95	4.0	ug/l	J	sp	< PQL		
4402547291	C-N-SWF001-20191115	11/15/19	SW8260	67-66-3	Chloroform	0.92	J	0.25	2.0	ug/l	J	sp	< PQL		
4402547311	A-N-SWU001-20191115-FD	11/15/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402547311	A-N-SWU001-20191115-FD	11/15/19	SW8260	67-66-3	Chloroform	1.7	J	0.25	2.0	ug/l	J	sp	< PQL		
4402547311	B-N-SWU001-20191115	11/15/19	SW8260	67-66-3	Chloroform	1.7	J	0.25	2.0	ug/l	J	sp	< PQL		
4402547311	C-N-SWU001-20191115	11/15/19	SW8260	67-66-3	Chloroform	1.7	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570071	F-N-SED001-20191210	12/10/19	SW9034	18496-25-8	Sulfide (total)	220		20	40	mg/kg	J	fd,m	FD RPD; MS/MSD %R	75; 153,181	50; 70-130 %
4402570071	F-N-SED001-20191210-FD	12/10/19	SW9034	18496-25-8	Sulfide (total)	100	F1	20	40	mg/kg	J	fd,m	FD RPD; MS/MSD %R	75; 153,181	50; 70-130 %
4402570071	F-S-SED001-20191210	12/10/19	SW9034	18496-25-8	Sulfide (total)	110		20	40	mg/kg	J+	m	MS/MSD %R	153, 181	70-130 %
4402570101	L-N-SWU001-20191210	12/10/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570101	L-N-SWU001-20191210	12/10/19	SW8260	67-66-3	Chloroform	0.97	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570141	F-N-SWU001-20191210	12/10/19	SW6020	7440-47-3	Chromium (total)	1.0	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570141	F-N-SWU001-20191210	12/10/19	SW8260	67-66-3	Chloroform	1.4	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570151	F-N-SWF001-20191210	12/10/19	SW6020	7440-47-3	Chromium (total)	0.85	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570151	F-N-SWF001-20191210	12/10/19	SW8260	67-66-3	Chloroform	0.82	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570161	L-N-SWF001-20191210	12/10/19	SW6020	7440-47-3	Chromium (total)	0.90	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570161	L-N-SWF001-20191210	12/10/19	SW8260	67-66-3	Chloroform	0.59	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570901	A-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	0.74	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570901	A-S-PW001-20191211	12/11/19	SW8260	67-66-3	Chloroform	1.5	J	0.25	2.0	ug/l	J	sp	< PQL		
4402570901	B-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	0.96	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570901	E-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	0.89	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570901	J-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	0.99	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570911	K-N-PW001-20191211	12/11/19	E300.1	24959-67-9	Bromide	27		0.40	2.5	mg/l	J	fd	FD RPD	62	30 %
4402570911	K-N-PW001-20191211	12/11/19	SM2340	HARDCACO3	Hardness (as CaCO3)	340		20	20	mg/l	J	fd	FD RPD	31	30 %
4402570911	K-N-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	1.0	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570911	K-N-PW001-20191211-FD	12/11/19	E300.1	24959-67-9	Bromide	51		0.80	5.0	mg/l	J	fd	FD RPD	62	30 %
4402570911	K-N-PW001-20191211-FD	12/11/19	SM2340	HARDCACO3	Hardness (as CaCO3)	250		20	20	mg/l	J	fd	FD RPD	31	30 %
4402570911	K-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	0.81	J	0.50	2.0	ug/l	J	sp	< PQL		
4402570911	L-S-PW001-20191211	12/11/19	SW6020	7440-47-3	Chromium (total)	1.0	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572351	J-S-SWU001-20191212-EB	12/12/19	SW6020	7440-47-3	Chromium (total)	1.2	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.683	6.83 ug/l
4402572371	H-S-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.4	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572371	H-S-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572371	I-S-PW001-20191212	12/12/19	E300.1	24959-67-9	Bromide	15		0.40	2.5	mg/l	J	fd	FD RPD	78	30 %
4402572371	I-S-PW001-20191212	12/12/19	SM2340	HARDCACO3	Hardness (as CaCO3)	800		20	20	mg/l	J	fd	FD RPD	42	30 %
4402572371	I-S-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.4	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572371	I-S-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572371	I-S-PW001-20191212	12/12/19	SW9060	7440-44-0	CARBON	4.9		0.65	1.0	mg/l	J	fd	FD RPD	42	30 %
4402572371	I-S-PW001-20191212-FD	12/12/19	E300.1	24959-67-9	Bromide	34		0.40	2.5	mg/l	J	fd	FD RPD	78	30 %
4402572371	I-S-PW001-20191212-FD	12/12/19	SM2340	HARDCACO3	Hardness (as CaCO3)	520		20	20	mg/l	J	fd	FD RPD	42	30 %
4402572371	I-S-PW001-20191212-FD	12/12/19	SW6020	7440-47-3	Chromium (total)	1.4	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572371	I-S-PW001-20191212-FD	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572371	I-S-PW001-20191212-FD	12/12/19	SW9060	7440-44-0	CARBON	7.5		0.65	1.0	mg/l	J	fd	FD RPD	42	30 %
4402572381	J-S-SOSS001-20191212	12/12/19	LLOYD_KAHN	7440-44-0	CARBON	4700		750	1000	mg/kg	J	fd	FD RPD	65	50 %
4402572381	J-S-SOSS001-20191212-FD	12/12/19	LLOYD_KAHN	7440-44-0	CARBON	2400		750	1000	mg/kg	J	fd	FD RPD	65	50 %
4402572391	2-N-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.2	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572391	2-N-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		UF1	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572391	F-N-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572391	F-N-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572391	I-N-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.2	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572391	I-N-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402572391	I-N-PW001-20191212	12/12/19	SW8260	67-66-3	Chloroform	0.33	J	0.25	2.0	ug/l	J	sp	< PQL		
4402572391	J-N-PW001-20191212	12/12/19	SW6020	7440-47-3	Chromium (total)	1.4	J	0.50	2.0	ug/l	J	sp	< PQL		
4402572391	J-N-PW001-20191212	12/12/19	SW7196	18540-29-9	Chromium VI		U	0.0080	0.025	mg/l	UJ	m	MS/MSD %R	70,68	85-115 %
4402573121	1-N-SED001-20191213	12/13/19	E300.1	14866-68-3	Chlorate	78	J	20	200	ug/kg	J	sp	< PQL		
4402573121	3-N-SED001-20191213	12/13/19	E300.1	14866-68-3	Chlorate	55	J	20	200	ug/kg	J	sp	< PQL		
4402573131	1-N-SWU001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	1.8	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.860	8.6 ug/l
4402573131	3-N-SWU001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	1.7	JB	0.50	2.0	ug/l	J	bl,bb,sp	blank contamination below PQL; < PQL	0.860	8.6 ug/l
4402573201	1-N-SWF001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	1.1	J	0.50	2.0	ug/l	J	sp	< PQL		
4402573201	3-N-SWF001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	0.97	J	0.50	2.0	ug/l	J	sp	< PQL		
4402573241	3-N-PW001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	0.53	J	0.50	2.0	ug/l	J	sp	< PQL		

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
4402573241	G-S-PW001-20191213	12/13/19	SW6020	7440-47-3	Chromium (total)	1.2	J	0.50	2.0	ug/l	J	sp	< PQL		
4402573241	G-S-PW001-20191213-FD	12/13/19	SW6020	7440-47-3	Chromium (total)	1.4	J	0.50	2.0	ug/l	J	sp	< PQL		
4402573271	3-N-SOSS001-20191213	12/13/19	E300.1	14866-68-3	Chlorate	34	J	200	200	ug/kg	J	sp	< PQL		
4402578071	1-N-SO001-20191219	12/19/19	E300.1	14866-68-3	Chlorate	20	J	200	200	ug/kg	J	sp	< PQL		
4402578071	1-N-SO001-20191219	12/19/19	LLOYD_KAHN	7440-44-0	CARBON	11000	F1	750	1000	mg/kg	J	ld,m	MS/MSD %R; DUP RPD	-.65; 65	75-125; 20 %
4402578071	3-N-SO001-20191219	12/19/19	LLOYD_KAHN	7440-44-0	CARBON	3300		750	1000	mg/kg	J	ld,m	MS/MSD %R; DUP RPD	-.65; 65	75-125; 20 %
4402620901	RISG-37-13.0-20200302	03/02/20	TO15	79-01-6	Trichloroethene	23	J	2.6	31	ug/m3	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15	64-17-5	Ethanol	29	J	2.4	43	ug/m3	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15	75-34-3	1,1-Dichloroethane	7.2	J	0.90	23	ug/m3	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15	78-93-3	2-Butanone	10	J	5.9	68	ug/m3	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15	67-64-1	Acetone	9.1	J	9.1	140	ug/m3	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15VOL	78-93-3	2-Butanone	3.5	J	2.0	23	ppbv	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15VOL	64-17-5	Ethanol	15	J	1.3	23	ppbv	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15VOL	79-01-6	Trichloroethene	4.3	J	0.48	5.8	ppbv	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15VOL	67-64-1	Acetone	3.8	J	3.8	58	ppbv	J	sp	< PQL		
4402620901	RISG-37-13.0-20200302	03/02/20	TO15VOL	75-34-3	1,1-Dichloroethane	1.8	J	0.22	5.8	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	75-35-4	1,1-Dichloroethane	13	J	3.4	13	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	67-64-1	Acetone	19	J	5.3	80	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	64-17-5	Ethanol	16	J	1.4	26	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	75-34-3	1,1-Dichloroethane	3.7	J	0.53	14	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	79-01-6	Trichloroethene	11	J	1.5	18	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	95-63-6	1,2,4-Trimethylbenzene	2.5	J	1.9	17	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15	75-15-0	Carbon Disulfide	7.5	J	5.0	42	ug/m3	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	75-35-4	1,1-Dichloroethane	3.2	J	0.86	3.4	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	75-15-0	Carbon Disulfide	2.4	J	1.6	14	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.51	J	0.39	3.4	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	67-64-1	Acetone	8.2	J	2.2	34	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	79-01-6	Trichloroethene	2.0	J	0.28	3.4	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	75-34-3	1,1-Dichloroethane	0.91	J	0.13	3.4	ppbv	J	sp	< PQL		
4402620901	RISG-37-5.0-20200303	03/03/20	TO15VOL	64-17-5	Ethanol	8.3	J	0.75	14	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	95-63-6	1,2,4-Trimethylbenzene	1.2	J	0.48	1.7	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.33	1.9	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	75-15-0	Carbon Disulfide	1.3	J	1.2	5.3	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	541-73-1	1,3-Dichlorobenzene	1.2	J	1.2	2.0	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	109-99-9	Tetrahydrofuran	1.5	J	0.65	5.0	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	591-78-6	2-Hexanone	U		0.59	6.9	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-41-15.0-20200302	03/02/20	TO15	78-93-3	2-Butanone	8.0	J	0.56	5.0	ug/m3	J	fd	FD RPD	58	50 %
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	74-87-3	Chloromethane	0.13	J	0.073	3.5	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.085	J	0.054	0.27	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	71-43-2	Benzene	0.31	J	0.087	0.54	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	108-88-3	Toluene	0.37	J	0.082	0.64	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	100-41-4	Ethyl Benzene	0.19	J	0.039	0.29	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	95-47-6	ortho-xylene	0.23	J	0.030	0.29	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	91-20-3	Naphthalene	0.27	J	0.11	0.88	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.050	0.1 ug/m3
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIM	75-00-3	Chloroethane	0.034	J	0.034	0.44	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	108-88-3	Toluene	0.097	J	0.022	0.17	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	71-43-2	Benzene	0.096	J	0.027	0.17	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	95-47-6	ortho-xylene	0.052	J	0.0070	0.068	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	74-87-3	Chloromethane	0.062	J	0.035	1.7	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.021	J	0.013	0.068	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	75-00-3	Chloroethane	0.013	J	0.013	0.17	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	91-20-3	Naphthalene	0.051	J	0.021	0.17	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.0096	0.0192 ppbv
4402620901	RISG-41-15.0-20200302	03/02/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.044	J	0.0090	0.068	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	78-93-3	2-Butanone	2.7	J	0.19	1.7	ppbv	J	fd	FD RPD	58	50 %
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	109-99-9	Tetrahydrofuran	0.52	J	0.22	1.7	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	541-73-1	1,3-Dichlorobenzene	0.20	J	0.19	0.34	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	591-78-6	2-Hexanone	U		0.14	1.7	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.059	0.34	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	75-15-0	Carbon Disulfide	0.43	J	0.39	1.7	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302	03/02/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.25	J	0.098	0.34	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	109-99-9	Tetrahydrofuran	1.1	J	0.56	4.3	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	591-78-6	2-Hexanone	U		0.51	6.0	ug/m3	UJ	c	ICAL %RSD	30.793	30 %

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
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	67-64-1	Acetone	4.8	J	1.9	7.0	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.29	1.6	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	75-15-0	Carbon Disulfide	1.1	J	1.0	4.6	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.80	J	0.42	1.4	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	75-09-2	Methylene Chloride	1.0	J	0.95	2.0	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15	78-93-3	2-Butanone	4.4		0.49	4.3	ug/m3	J	fd	FD RPD	58	50 %
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	95-47-6	ortho-xylene	0.17	J	0.026	0.25	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	100-41-4	Ethyl Benzene	0.16	J	0.034	0.25	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	71-43-2	Benzene	0.25	J	0.075	0.47	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	108-88-3	Toluene	0.48	J	0.071	0.55	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.090	J	0.047	0.24	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIM	74-87-3	Chloromethane	0.17	J	0.063	3.0	ug/m3	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	71-43-2	Benzene	0.078	J	0.024	0.15	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	108-88-3	Toluene	0.13	J	0.019	0.15	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	95-47-6	ortho-xylene	0.040	J	0.0060	0.059	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	74-87-3	Chloromethane	0.083	J	0.031	1.5	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.022	J	0.012	0.059	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.037	J	0.0078	0.059	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	75-15-0	Carbon Disulfide	0.36	J	0.34	1.5	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	75-09-2	Methylene Chloride	0.30	J	0.27	0.59	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.16	J	0.085	0.29	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.051	0.29	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	591-78-6	2-Hexanone	0.12	U	0.12	1.5	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	109-99-9	Tetrahydrofuran	0.38	J	0.19	1.5	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	67-64-1	Acetone	2.0	J	0.81	2.9	ppbv	J	sp	< PQL		
4402620901	RISG-41-15.0-20200302-FD	03/02/20	TO15VOL	78-93-3	2-Butanone	1.5		0.16	1.5	ppbv	J	fd	FD RPD	58	50 %
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	75-09-2	Methylene Chloride	0.67	J	0.60	1.3	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.34	J	0.26	0.91	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	591-78-6	2-Hexanone		U	0.32	3.8	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	75-15-0	Carbon Disulfide	2.3	J	0.67	2.9	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	109-99-9	Tetrahydrofuran	1.7	J	0.36	2.7	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	123-91-1	1,4-Dioxane	0.13	J	0.11	0.67	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	75-25-2	Bromoform	0.96	J	0.82	1.9	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15	78-93-3	2-Butanone	1.7	J	0.31	2.7	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	136777-61-2	m,p-xylene	0.23	J	0.016	0.32	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	75-00-3	Chloroethane	0.028	J	0.018	0.24	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	71-43-2	Benzene	0.16	J	0.048	0.30	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.070	J	0.025	0.15	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.041	J	0.030	0.15	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	74-87-3	Chloromethane	0.13	J	0.040	1.9	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	91-20-3	Naphthalene	0.37	J	0.059	0.49	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.050	0.1 ug/m3
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIM	100-41-4	Ethyl Benzene	0.12	J	0.021	0.16	ug/m3	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.029	J	0.0049	0.037	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	91-20-3	Naphthalene	0.070	J	0.011	0.093	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.0096	0.0192 ppbv
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.054	J	0.0038	0.074	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	75-00-3	Chloroethane	0.011	J	0.0070	0.093	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	71-43-2	Benzene	0.050	J	0.015	0.093	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.010	J	0.0073	0.037	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	74-87-3	Chloromethane	0.061	J	0.019	0.93	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.017	J	0.0062	0.037	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	78-93-3	2-Butanone	0.57	J	0.10	0.93	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	75-25-2	Bromoform	0.093	J	0.079	0.19	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	109-99-9	Tetrahydrofuran	0.58	J	0.12	0.93	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	123-91-1	1,4-Dioxane	0.036	J	0.031	0.19	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	591-78-6	2-Hexanone		U	0.079	0.93	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	75-09-2	Methylene Chloride	0.19	J	0.17	0.37	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.069	J	0.054	0.19	ppbv	J	sp	< PQL		
4402620901	RISG-41-5.0-20200302	03/02/20	TO15VOL	75-15-0	Carbon Disulfide	0.74	J	0.22	0.93	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15	109-99-9	Tetrahydrofuran	2.4	J	1.7	13	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15	591-78-6	2-Hexanone		U	1.6	18	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-46-15.0-20200303	03/03/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.89	5.1	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIM	71-43-2	Benzene	0.59	J	0.23	1.4	ug/m3	J	sp	< PQL		

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
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIM	108-88-3	Toluene	0.57	J	0.22	1.7	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIM	95-47-6	ortho-xylene	0.16	J	0.081	0.78	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIM	100-41-4	Ethyl Benzene	0.15	J	0.10	0.78	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIM	136777-61-2	m,p-xylene	0.40	J	0.080	1.6	ug/m3	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.034	J	0.024	0.18	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIMVOL	71-43-2	Benzene	0.18	J	0.073	0.45	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIMVOL	108-88-3	Toluene	0.15	J	0.058	0.45	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.091	J	0.018	0.36	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15SIMVOL	95-47-6	ortho-xylene	0.037	J	0.019	0.18	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.16	0.90	ppbv	J	sp	< PQL		
4402620901	RISG-46-15.0-20200303	03/03/20	TO15VOL	591-78-6	2-Hexanone		U	0.38	4.5	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-46-15.0-20200303	03/03/20	TO15VOL	109-99-9	Tetrahydrofuran	0.83	J	0.59	4.5	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.44	2.5	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15	591-78-6	2-Hexanone		U	0.79	9.2	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-46-5.0-20200303	03/03/20	TO15	67-64-1	Acetone	5.5	J	3.0	11	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15	78-93-3	2-Butanone	1.3	J	0.75	6.7	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIM	108-88-3	Toluene	0.15	J	0.11	0.85	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIM	100-41-4	Ethyl Benzene	0.19	J	0.052	0.39	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIM	91-20-3	Naphthalene	0.34	J	0.14	1.2	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.050	0.1 ug/m3
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIM	95-47-6	ortho-xylene	0.21	J	0.040	0.39	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIM	136777-61-2	m,p-xylene	0.25	J	0.040	0.78	ug/m3	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.043	J	0.012	0.090	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIMVOL	91-20-3	Naphthalene	0.065	J	0.028	0.23	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.0096	0.0192 ppbv
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.058	J	0.0092	0.18	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIMVOL	95-47-6	ortho-xylene	0.049	J	0.0093	0.090	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15SIMVOL	108-88-3	Toluene	0.039	J	0.029	0.23	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15VOL	78-93-3	2-Butanone	0.43	J	0.25	2.3	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15VOL	67-64-1	Acetone	2.3	J	1.2	4.5	ppbv	J	sp	< PQL		
4402620901	RISG-46-5.0-20200303	03/03/20	TO15VOL	591-78-6	2-Hexanone		U	0.19	2.3	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620901	RISG-46-5.0-20200303	03/03/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.079	0.45	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	75-15-0	Carbon Disulfide	0.84	J	0.51	3.0	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.54	J	0.29	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	75-27-4	Bromodichloromethane	0.77	J	0.46	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	75-09-2	Methylene Chloride	1.1	J	0.19	1.3	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	110-82-7	Cyclohexane	0.40	J	0.18	3.3	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15	108-90-7	Chlorobenzene	0.26	J	0.23	0.88	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIM	74-87-3	Chloromethane	0.23	J	0.047	2.0	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIM	91-20-3	Naphthalene	1.7		0.085	0.50	ug/m3	J+	c	ICV %D	36.85	30 %
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.48		0.11	0.24	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIM	71-43-2	Benzene	0.30	J	0.18	0.30	ug/m3	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.11	J	0.023	0.96	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIMVOL	91-20-3	Naphthalene	0.33		0.016	0.096	ppbv	J+	c	ICAL %D	36.85	30 %
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.077		0.018	0.038	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-35-5.0-20200226	02/26/20	TO15SIMVOL	71-43-2	Benzene	0.094	J	0.056	0.096	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.070	J	0.038	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	75-09-2	Methylene Chloride	0.30	J	0.055	0.38	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	108-90-7	Chlorobenzene	0.058	J	0.050	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	75-27-4	Bromodichloromethane	0.12	J	0.069	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	110-82-7	Cyclohexane	0.11	J	0.051	0.96	ppbv	J	sp	< PQL		
4402620921	RISG-35-5.0-20200226	02/26/20	TO15VOL	75-15-0	Carbon Disulfide	0.27	J	0.16	0.96	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	108-90-7	Chlorobenzene	0.23	J	0.22	0.82	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	110-82-7	Cyclohexane	0.24	J	0.22	3.1	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.36	J	0.22	0.88	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	591-78-6	2-Hexanone		U	0.31	3.7	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	124-48-1	Dibromochloromethane	0.48	J	0.45	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	75-15-0	Carbon Disulfide	0.85	J	0.64	2.8	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	108-10-1	4-Methyl-2-pentanone	0.34	J	0.22	0.73	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	123-91-1	1,4-Dioxane	0.62	J	0.11	0.64	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	75-09-2	Methylene Chloride	1.2	J	0.58	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15	100-42-5	Styrene	0.22	J	0.11	0.76	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.20	J	0.14	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.082	J	0.028	0.14	ug/m3	J	sp	< PQL		

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
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIM	74-87-3	Chloromethane	0.17	J	0.039	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.084	J	0.019	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.034	J	0.024	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.020	J	0.0070	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	591-78-6	2-Hexanone		U	0.076	0.90	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	100-42-5	Styrene	0.051	J	0.025	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	123-91-1	1,4-Dioxane	0.17	J	0.030	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	75-15-0	Carbon Disulfide	0.27	J	0.21	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	124-48-1	Dibromochloromethane	0.056	J	0.052	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	108-90-7	Chlorobenzene	0.050	J	0.048	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.084	J	0.055	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	75-09-2	Methylene Chloride	0.35	J	0.17	0.36	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	110-82-7	Cyclohexane	0.071	J	0.065	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-36-15.0-20200226	02/26/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.074	J	0.045	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	75-09-2	Methylene Chloride	1.2	J	0.60	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.62	J	0.23	0.92	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	108-10-1	4-Methyl-2-pentanone	0.24	J	0.24	0.77	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	110-82-7	Cyclohexane	0.36	J	0.24	3.2	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	95-63-6	1,2,4-Trimethylbenzene	3.8		0.27	0.92	ug/m3	J	fd	FD RPD	81	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	622-96-8	4-Ethyltoluene	2.0		0.25	0.92	ug/m3	J	fd	FD RPD	68	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	591-78-6	2-Hexanone	0.94	J	0.32	3.8	ug/m3	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	108-90-7	Chlorobenzene	0.36	J	0.23	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15	100-42-5	Styrene	0.30	J	0.11	0.80	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	95-47-6	ortho-xylene	2.4		0.017	0.16	ug/m3	J	fd	FD RPD	74	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	75-01-4	Vinyl Chloride	0.037	J	0.012	0.048	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	127-18-4	Tetrachloroethene	3.9		0.069	0.25	ug/m3	J	fd	FD RPD	69	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	100-41-4	Ethyl Benzene	0.80		0.022	0.16	ug/m3	J	fd	FD RPD	56	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	91-20-3	Naphthalene	2.1		0.060	0.49	ug/m3	J	fd	FD RPD	71	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	136777-61-2	m,p-xylene	2.0		0.016	0.32	ug/m3	J	fd	FD RPD	67	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	74-87-3	Chloromethane	0.19	J	0.040	1.9	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	79-01-6	Trichloroethene	0.16	J	0.054	0.20	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.042	J	0.030	0.15	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIM	71-43-2	Benzene	0.26	J	0.048	0.30	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	91-20-3	Naphthalene	0.40		0.011	0.094	ppbv	J	fd	FD RPD	71	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.010	J	0.0073	0.037	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	79-01-6	Trichloroethene	0.029	J	0.010	0.037	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	71-43-2	Benzene	0.083	J	0.015	0.094	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.18		0.0050	0.037	ppbv	J	fd	FD RPD	56	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	75-01-4	Vinyl Chloride	0.014	J	0.0048	0.019	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	95-47-6	ortho-xylene	0.55		0.0038	0.037	ppbv	J	fd	FD RPD	74	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.45		0.0038	0.075	ppbv	J	fd	FD RPD	67	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	127-18-4	Tetrachloroethene	0.57		0.010	0.037	ppbv	J	fd	FD RPD	69	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15SIMVOL	74-87-3	Chloromethane	0.094	J	0.020	0.94	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	108-90-7	Chlorobenzene	0.078	J	0.050	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	75-09-2	Methylene Chloride	0.33	J	0.17	0.37	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.13	J	0.047	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	100-42-5	Styrene	0.072	J	0.026	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	591-78-6	2-Hexanone	0.23	J	0.080	0.94	ppbv	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	622-96-8	4-Ethyltoluene	0.41		0.050	0.19	ppbv	J	fd	FD RPD	68	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.77		0.054	0.19	ppbv	J	fd	FD RPD	81	50 %
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	110-82-7	Cyclohexane	0.10	J	0.068	0.94	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227	02/27/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.058	J	0.057	0.19	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	100-42-5	Styrene	0.13	J	0.10	0.74	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	591-78-6	2-Hexanone	0.79	J	0.30	3.6	ug/m3	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	622-96-8	4-Ethyltoluene	0.98		0.23	0.86	ug/m3	J	fd	FD RPD	68	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	75-09-2	Methylene Chloride	1.0	J	0.57	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.29	J	0.22	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	109-99-9	Tetrahydrofuran	1.5	J	0.34	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15	95-63-6	1,2,4-Trimethylbenzene	1.6		0.25	0.86	ug/m3	J	fd	FD RPD	81	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.037	J	0.028	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	74-87-3	Chloromethane	0.24	J	0.038	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.18	J	0.14	0.21	ug/m3	J	sp	< PQL		

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
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	71-43-2	Benzene	0.21	J	0.045	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	79-01-6	Trichloroethene	0.14	J	0.051	0.19	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	136777-61-2	m,p-xylene	1.0		0.015	0.30	ug/m3	J	fd	FD RPD	67	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	95-47-6	ortho-xylene	1.1		0.016	0.15	ug/m3	J	fd	FD RPD	74	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	91-20-3	Naphthalene	1.0		0.056	0.46	ug/m3	J	fd	FD RPD	71	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	100-41-4	Ethyl Benzene	0.45		0.020	0.15	ug/m3	J	fd	FD RPD	56	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	127-18-4	Tetrachloroethene	1.9		0.065	0.24	ug/m3	J	fd	FD RPD	69	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIM	75-01-4	Vinyl Chloride	0.031	J	0.012	0.045	ug/m3	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	74-87-3	Chloromethane	0.12	J	0.018	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.030	J	0.024	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	71-43-2	Benzene	0.066	J	0.014	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.0090	J	0.0069	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	79-01-6	Trichloroethene	0.025	J	0.0094	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	127-18-4	Tetrachloroethene	0.28		0.0096	0.035	ppbv	J	fd	FD RPD	69	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.23		0.0036	0.070	ppbv	J	fd	FD RPD	67	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	95-47-6	ortho-xylene	0.25		0.0036	0.035	ppbv	J	fd	FD RPD	74	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	91-01-4	Vinyl Chloride	0.012	J	0.0045	0.018	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.10		0.0046	0.035	ppbv	J	fd	FD RPD	56	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15SIMVOL	91-20-3	Naphthalene	0.20		0.011	0.088	ppbv	J	fd	FD RPD	71	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	109-99-9	Tetrahydrofuran	0.50	J	0.11	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	591-78-6	2-Hexanone	0.19	J	0.074	0.88	ppbv	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	622-96-8	4-Ethyltoluene	0.20		0.047	0.18	ppbv	J	fd	FD RPD	68	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.33		0.051	0.18	ppbv	J	fd	FD RPD	81	50 %
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	100-42-5	Styrene	0.030	J	0.025	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.058	J	0.044	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-36-5.0-20200227-FD	02/27/20	TO15VOL	75-09-2	Methylene Chloride	0.30	J	0.16	0.35	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15	124-48-1	Dibromochloromethane	1.0	J	0.47	1.6	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15	622-96-8	4-Ethyltoluene	0.60	J	0.21	0.90	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15	75-09-2	Methylene Chloride	0.67	J	0.18	1.3	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-39-13.5-20200226	02/26/20	TO15	75-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.46	J	0.28	1.4	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.073	J	0.027	0.15	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.44		0.11	0.23	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	74-87-3	Chloromethane	0.070	J	0.045	1.9	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	71-43-2	Benzene	0.29	J	0.17	0.29	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.14	J	0.12	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIM	91-20-3	Naphthalene	0.29	J	0.081	0.48	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.034	J	0.022	0.92	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.023	J	0.021	0.037	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	71-43-2	Benzene	0.090	J	0.054	0.092	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.018	J	0.0067	0.037	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.070		0.017	0.037	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-39-13.5-20200226	02/26/20	TO15SIMVOL	91-20-3	Naphthalene	0.056	J	0.016	0.092	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-39-13.5-20200226	02/26/20	TO15VOL	75-09-2	Methylene Chloride	0.19	J	0.053	0.37	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-39-13.5-20200226	02/26/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.060	J	0.036	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15VOL	124-48-1	Dibromochloromethane	0.12	J	0.056	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-39-13.5-20200226	02/26/20	TO15VOL	622-96-8	4-Ethyltoluene	0.12	J	0.042	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	78-93-3	2-Butanone	0.94	J	0.49	2.4	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	622-96-8	4-Ethyltoluene	0.24	J	0.19	0.81	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.36	J	0.18	0.81	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	75-15-0	Carbon Disulfide	1.4	J	0.44	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	109-99-9	Tetrahydrofuran	1.8	J	0.96	2.4	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.54	J	0.25	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	124-48-1	Dibromochloromethane	0.45	J	0.42	1.4	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15	75-09-2	Methylene Chloride	0.84	J	0.16	1.1	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	95-47-6	ortho-xylene	0.13	J	0.032	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.45		0.096	0.21	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	91-20-3	Naphthalene	0.23	J	0.073	0.43	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	75-00-3	Chloroethane	0.043	J	0.032	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	136777-61-2	m,p-xylene	0.26	J	0.17	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	74-87-3	Chloromethane	0.11	J	0.040	1.7	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.055	J	0.024	0.13	ug/m3	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.014	J	0.0060	0.033	ppbv	J	sp	< PQL		

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
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.060	J	0.038	0.066	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	75-00-3	Chloroethane	0.016	J	0.012	0.082	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	91-20-3	Naphthalene	0.043	J	0.014	0.082	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	95-47-6	ortho-xylene	0.030	J	0.0073	0.033	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.054	J	0.020	0.82	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.071		0.015	0.033	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	78-93-3	2-Butanone	0.32	J	0.17	0.82	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	622-96-8	4-Ethyltoluene	0.048	J	0.038	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.074	J	0.036	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	75-15-0	Carbon Disulfide	0.45	J	0.14	0.82	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	109-99-9	Tetrahydrofuran	0.60	J	0.32	0.82	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	124-48-1	Dibromochloromethane	0.053	J	0.050	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.071	J	0.032	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-39-5.0-20200226	02/26/20	TO15VOL	75-09-2	Methylene Chloride	0.24	J	0.048	0.33	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-40-5.0-20200228	02/28/20	TO15	123-91-1	1,4-Dioxane	0.16	J	0.11	0.64	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone	2.2	J	0.31	3.7	ug/m3	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-40-5.0-20200228	02/28/20	TO15	100-42-5	Styrene	0.32	J	0.11	0.76	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15	108-10-1	4-Methyl-2-pentanone	0.63	J	0.22	0.73	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIM	74-87-3	Chloromethane	0.042	J	0.039	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIM	71-43-2	Benzene	0.090	J	0.046	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.18	J	0.14	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIMVOL	71-43-2	Benzene	0.028	J	0.014	0.090	ppbv	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.030	J	0.024	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15SIMVOL	74-87-3	Chloromethane	0.021	J	0.019	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.16	J	0.055	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15VOL	123-91-1	1,4-Dioxane	0.044	J	0.030	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-40-5.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone	0.52	J	0.076	0.90	ppbv	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-40-5.0-20200228	02/28/20	TO15VOL	100-42-5	Styrene	0.074	J	0.025	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	J	0.26	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	110-82-7	Cyclohexane	1.4	J	0.16	2.9	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	78-93-3	2-Butanone	1.2	J	0.52	2.5	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	109-99-9	Tetrahydrofuran	2.0	J	1.0	2.5	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	75-15-0	Carbon Disulfide	1.5	J	0.46	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.46	J	0.18	0.84	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	108-88-3	Toluene	0.29	J	0.098	0.32	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	91-20-3	Naphthalene	0.43	J	0.076	0.45	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	75-00-3	Chloroethane	0.11	J	0.033	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	136777-61-2	m,p-xylene	0.27	J	0.17	0.30	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.053	J	0.025	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	74-87-3	Chloromethane	0.11	J	0.042	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.20	J	0.12	0.20	ug/m3	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIM	56-23-5	Carbon Tetrachloride	15		0.10	0.22	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	2.4		0.016	0.034	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.033	J	0.019	0.034	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	75-00-3	Chloroethane	0.041	J	0.013	0.086	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	91-20-3	Naphthalene	0.083	J	0.014	0.086	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	74-87-3	Chloromethane	0.053	J	0.020	0.86	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.013	J	0.0062	0.034	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	108-88-3	Toluene	0.076	J	0.026	0.086	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.062	J	0.040	0.068	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	109-99-9	Tetrahydrofuran	0.67	J	0.34	0.86	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	78-93-3	2-Butanone	0.42	J	0.17	0.86	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.094	J	0.037	0.17	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	75-15-0	Carbon Disulfide	0.48	J	0.15	0.86	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	110-82-7	Cyclohexane	0.40	J	0.046	0.86	ppbv	J	sp	< PQL		
4402620921	RISG-42-12.5-20200224	02/24/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.064	J	0.034	0.17	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15	109-99-9	Tetrahydrofuran	3.3	J	2.8	7.0	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.55	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.78	J	0.51	2.3	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15	67-64-1	Acetone	9.2	J	1.9	11	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.46	0.92 ug/m3
4402620921	RISG-42-5.0-20200224	02/24/20	TO15	541-73-1	1,3-Dichlorobenzene	2.2	J	0.99	2.9	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	91-20-3	Naphthalene	0.68	J	0.21	1.2	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3

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
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	75-00-3	Chloroethane	0.19	J	0.093	0.63	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	108-88-3	Toluene	0.58	J	0.27	0.90	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.34	J	0.33	0.57	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	74-87-3	Chloromethane	0.33	J	0.12	4.9	ug/m3	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIM	56-23-5	Carbon Tetrachloride	34		0.28	0.60	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	5.4		0.044	0.095	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	108-88-3	Toluene	0.15	J	0.072	0.24	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.056	J	0.054	0.095	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	74-87-3	Chloromethane	0.16	J	0.057	2.4	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	75-00-3	Chloroethane	0.072	J	0.035	0.24	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15SIMVOL	91-20-3	Naphthalene	0.13	J	0.040	0.24	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-42-5.0-20200224	02/24/20	TO15VOL	67-64-1	Acetone	3.9	J	0.80	4.8	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.20	0.4 ppbv
4402620921	RISG-42-5.0-20200224	02/24/20	TO15VOL	541-73-1	1,3-Dichlorobenzene	0.37	J	0.16	0.48	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.16	J	0.10	0.48	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.098	0.48	ppbv	J	sp	< PQL		
4402620921	RISG-42-5.0-20200224	02/24/20	TO15VOL	109-99-9	Tetrahydrofuran	1.1	J	0.95	2.4	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	75-15-0	Carbon Disulfide	1.0	J	0.94	4.1	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	109-99-9	Tetrahydrofuran	3.2	J	0.50	3.8	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	75-69-4	Trichlorofluoromethane	1.2	J	0.26	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	75-09-2	Methylene Chloride	1.0	J	0.84	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone	0.55	J	0.45	5.3	ug/m3	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	622-96-8	4-Ethyltoluene	0.80	J	0.34	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15	78-93-3	2-Butanone	1.4	J	0.43	3.8	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.050	J	0.035	0.21	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIM	100-41-4	Ethyl Benzene	0.20	J	0.030	0.23	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIM	75-00-3	Chloroethane	0.060	J	0.026	0.34	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIM	71-43-2	Benzene	0.17	J	0.067	0.42	ug/m3	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.046	J	0.0069	0.052	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIMVOL	75-00-3	Chloroethane	0.023	J	0.0099	0.13	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIMVOL	71-43-2	Benzene	0.054	J	0.021	0.13	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.012	J	0.0087	0.052	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	622-96-8	4-Ethyltoluene	0.16	J	0.070	0.26	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	78-93-3	2-Butanone	0.49	J	0.15	1.3	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	75-09-2	Methylene Chloride	0.29	J	0.24	0.52	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone	0.14	J	0.11	1.3	ppbv	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.21	J	0.046	0.26	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	75-15-0	Carbon Disulfide	0.33	J	0.30	1.3	ppbv	J	sp	< PQL		
4402620921	RISG-43-15.0-20200228	02/28/20	TO15VOL	109-99-9	Tetrahydrofuran	1.1	J	0.17	1.3	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15	109-99-9	Tetrahydrofuran	1.2	J	0.34	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone	1.2	J	0.31	3.7	ug/m3	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-43-5.0-20200228	02/28/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.33	J	0.22	0.88	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15	108-10-1	4-Methyl-2-pentanone	0.27	J	0.22	0.73	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15	622-96-8	4-Ethyltoluene	0.58	J	0.24	0.88	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	75-00-3	Chloroethane	0.13	J	0.018	0.24	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	100-41-4	Ethyl Benzene	0.14	J	0.020	0.16	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.17	J	0.14	0.22	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.031	J	0.024	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	71-43-2	Benzene	0.13	J	0.046	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIM	74-87-3	Chloromethane	0.26	J	0.039	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.032	J	0.0047	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	74-87-3	Chloromethane	0.13	J	0.019	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	75-00-3	Chloroethane	0.050	J	0.0068	0.090	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	71-43-2	Benzene	0.040	J	0.014	0.090	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.0077	J	0.0060	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.028	J	0.024	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone	0.28	J	0.076	0.90	ppbv	J	c,sp	ICAL %RSD; < PQL	30.793	30 %
4402620921	RISG-43-5.0-20200228	02/28/20	TO15VOL	622-96-8	4-Ethyltoluene	0.12	J	0.048	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15VOL	109-99-9	Tetrahydrofuran	0.42	J	0.12	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.067	J	0.055	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-43-5.0-20200228	02/28/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.067	J	0.045	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15	78-93-3	2-Butanone	6.2	J	2.8	25	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15	591-78-6	2-Hexanone		U	2.9	34	ug/m3	UJ	c	ICAL %RSD	30.793	30 %

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
4402620921	RISG-44-15.0-20200227	02/27/20	TO15	75-27-4	Bromodichloromethane	7.9	J	4.2	11	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15	75-09-2	Methylene Chloride	6.3	J	5.4	12	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	95-47-6	ortho-xylene	0.65	J	0.15	1.4	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	100-41-4	Ethyl Benzene	0.65	J	0.19	1.4	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	136777-61-2	m,p-xylene	0.59	J	0.15	2.9	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	71-43-2	Benzene	0.52	J	0.43	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.92	J	0.23	1.4	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIM	108-88-3	Toluene	0.75	J	0.41	3.2	ug/m3	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.15	J	0.044	0.34	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.14	J	0.034	0.67	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	108-88-3	Toluene	0.20	J	0.11	0.84	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	71-43-2	Benzene	0.16	J	0.14	0.84	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	95-47-6	ortho-xylene	0.15	J	0.035	0.34	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.23	J	0.056	0.34	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15VOL	75-27-4	Bromodichloromethane	1.2	J	0.62	1.7	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15VOL	75-09-2	Methylene Chloride	1.8	J	1.6	3.4	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15VOL	78-93-3	2-Butanone	2.1	J	0.95	8.4	ppbv	J	sp	< PQL		
4402620921	RISG-44-15.0-20200227	02/27/20	TO15VOL	591-78-6	2-Hexanone		U	0.71	8.4	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-44-5.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone		U	2.0	23	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-44-5.0-20200228	02/28/20	TO15	75-27-4	Bromodichloromethane	3.4	J	2.8	7.5	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15	75-69-4	Trichlorofluoromethane	1.4	J	1.1	6.3	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15	75-15-0	Carbon Disulfide	9.4	J	4.0	17	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15	64-17-5	Ethanol	10	J	2.2	10	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	100-41-4	Ethyl Benzene	0.42	J	0.13	0.97	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	108-88-3	Toluene	0.68	J	0.27	2.1	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.55	J	0.15	0.91	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	95-47-6	ortho-xylene	0.33	J	0.10	0.97	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	136777-61-2	m,p-xylene	0.34	J	0.099	1.9	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIM	75-00-3	Chloroethane	0.12	J	0.11	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.097	J	0.030	0.22	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	75-00-3	Chloroethane	0.045	J	0.042	0.56	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	108-88-3	Toluene	0.18	J	0.072	0.56	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.13	J	0.037	0.22	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	95-47-6	ortho-xylene	0.075	J	0.023	0.22	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.078	J	0.023	0.45	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15VOL	75-27-4	Bromodichloromethane	0.51	J	0.41	1.1	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15VOL	64-17-5	Ethanol	5.4	J	1.2	5.6	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15VOL	75-15-0	Carbon Disulfide	3.0	J	1.3	5.6	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.26	J	0.20	1.1	ppbv	J	sp	< PQL		
4402620921	RISG-44-5.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone		U	0.48	5.6	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	108-10-1	4-Methyl-2-pentanone	0.76	J	0.20	0.80	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	J	0.30	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	100-42-5	Styrene	0.29	J	0.090	0.83	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	75-09-2	Methylene Chloride	0.70	J	0.20	1.4	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.56	J	0.19	0.96	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15	75-15-0	Carbon Disulfide	0.80	J	0.53	3.0	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	91-20-3	Naphthalene	0.090	J	0.087	0.51	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.31		0.11	0.25	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.032	J	0.029	0.16	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.14	J	0.053	0.16	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	74-87-3	Chloromethane	0.19	J	0.048	2.0	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIM	75-00-3	Chloroethane	0.21	J	0.038	0.26	ug/m3	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	75-00-3	Chloroethane	0.081	J	0.014	0.098	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.0080	J	0.0072	0.039	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.035	J	0.013	0.039	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	91-20-3	Naphthalene	0.017	J	0.017	0.098	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	74-87-3	Chloromethane	0.092	J	0.023	0.98	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.050		0.018	0.039	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	75-15-0	Carbon Disulfide	0.26	J	0.17	0.98	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.11	J	0.039	0.20	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.18	J	0.048	0.20	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	100-42-5	Styrene	0.068	J	0.021	0.20	ppbv	J	sp	< PQL		

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
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.065	J	0.039	0.20	ppbv	J	sp	< PQL		
4402620921	RISG-45-15.0-20200224	02/24/20	TO15VOL	75-09-2	Methylene Chloride	0.20	J	0.057	0.39	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	75-09-2	Methylene Chloride	0.79	J	0.18	1.2	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.61	J	0.17	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.47	J	0.26	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	100-42-5	Styrene	0.28	J	0.080	0.74	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	75-15-0	Carbon Disulfide	1.7	J	0.47	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	142-82-5	n-Heptane	0.64	J	0.24	3.6	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	591-78-6	2-Hexanone	1.3	J	0.91	3.6	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	110-54-3	n-Hexane	2.2	J	0.35	3.1	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15	110-82-7	Cyclohexane	0.24	J	0.16	3.0	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	75-00-3	Chloroethane	0.13	J	0.034	0.23	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	91-20-3	Naphthalene	0.56		0.078	0.46	ug/m3	J+	c	ICV %D	36.85	30 %
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.43		0.10	0.22	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.060	J	0.026	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	71-43-2	Benzene	0.20	J	0.16	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIM	74-87-3	Chloromethane	0.074	J	0.043	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.015	J	0.0064	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.068		0.016	0.035	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	91-20-3	Naphthalene	0.11		0.015	0.088	ppbv	J+	c	ICV %D	36.85	30 %
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	75-00-3	Chloroethane	0.049	J	0.013	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	71-43-2	Benzene	0.061	J	0.052	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15SIMVOL	74-87-3	Chloromethane	0.036	J	0.021	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	75-09-2	Methylene Chloride	0.23	J	0.051	0.35	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.12	J	0.035	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.061	J	0.034	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	110-82-7	Cyclohexane	0.069	J	0.047	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	110-54-3	n-Hexane	0.62	J	0.099	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	75-15-0	Carbon Disulfide	0.54	J	0.15	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	100-42-5	Styrene	0.065	J	0.019	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	142-82-5	n-Heptane	0.16	J	0.059	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-45-5.0-20200224	02/24/20	TO15VOL	591-78-6	2-Hexanone	0.32	J	0.22	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15	75-27-4	Bromodichloromethane	6.0	J	4.4	12	ug/m3	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15	67-64-1	Acetone	16	J	7.3	43	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.46	0.92 ug/m3
4402620921	RISG-47-15.0-20200224	02/24/20	TO15	78-93-3	2-Butanone	16	J	5.5	27	ug/m3	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.40	J	0.27	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIM	56-23-5	Carbon Tetrachloride	1.10		1.1	2.3	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIM	95-47-6	ortho-xylene	0.36	J	0.36	1.6	ug/m3	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIM	91-20-3	Naphthalene	0.82	J	0.81	4.8	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	17		0.17	0.37	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIMVOL	91-20-3	Naphthalene	0.16	J	0.16	0.92	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.10	J	0.067	0.37	ppbv	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15SIMVOL	95-47-6	ortho-xylene	0.084	J	0.082	0.37	ppbv	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15VOL	75-27-4	Bromodichloromethane	0.90	J	0.66	1.8	ppbv	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15VOL	78-93-3	2-Butanone	5.3	J	1.9	9.2	ppbv	J	sp	< PQL		
4402620921	RISG-47-15.0-20200224	02/24/20	TO15VOL	67-64-1	Acetone	6.9	J	3.1	18	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.20	0.4 ppbv
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	95-63-6	1,2,4-Trimethylbenzene	1.2	J	0.94	4.3	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	75-27-4	Bromodichloromethane	2.2	J	2.1	5.9	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	622-96-8	4-Ethyltoluene	1.1	J	1.0	4.3	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	75-69-4	Trichlorofluoromethane	1.1	J	1.0	4.9	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	78-93-3	2-Butanone	7.3	J	2.6	13	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	67-64-1	Acetone	6.8	J	3.5	21	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.46	0.92 ug/m3
4402620921	RISG-47-5.0-20200225	02/25/20	TO15	100-42-5	Styrene	1.4	J	0.40	3.7	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	79-34-5	1,1,2,2-Tetrachloroethane	0.51	J	0.40	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	136777-61-2	m,p-xylene	0.91	J	0.89	1.5	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	91-20-3	Naphthalene	0.44	J	0.39	2.3	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	56-23-5	Carbon Tetrachloride	28		0.51	1.1	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	108-88-3	Toluene	0.76	J	0.50	1.6	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	95-47-6	ortho-xylene	0.54	J	0.17	0.76	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.20	J	0.13	0.71	ug/m3	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	4.4		0.081	0.18	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.21	J	0.20	0.35	ppbv	J	sp	< PQL		

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
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	95-47-6	ortho-xylene	0.12	J	0.039	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	91-20-3	Naphthalene	0.084	J	0.074	0.44	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.050	J	0.032	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	108-88-3	Toluene	0.20	J	0.13	0.44	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15SIMVOL	79-34-5	1,1,2,2-Tetrachloroethane	0.074	J	0.058	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.20	J	0.18	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.26	J	0.19	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	622-96-8	4-Ethyltoluene	0.22	J	0.20	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	78-93-3	2-Butanone	2.5	J	0.89	4.4	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	67-64-1	Acetone	2.9	J	1.5	8.8	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.20	0.4 ppbv
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	100-42-5	Styrene	0.32	J	0.094	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-47-5.0-20200225	02/25/20	TO15VOL	75-27-4	Bromodichloromethane	0.33	J	0.32	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.71	J	0.19	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15	75-09-2	Methylene Chloride	1.0	J	0.18	1.2	ug/m3	J	bl,bb,sp	blank contamination below PQL; < PQL	0.11	0.22 ug/m3
4402620921	RISG-48-10.0-20200226	02/26/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.45	J	0.26	1.3	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15	75-15-0	Carbon Disulfide	0.56	J	0.47	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15	622-96-8	4-Ethyltoluene	0.39	J	0.20	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.067	J	0.026	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	136777-61-2	m,p-xylene	0.26	J	0.18	0.30	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	74-87-3	Chloromethane	0.42	J	0.043	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	108-88-3	Toluene	0.15	J	0.10	0.33	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	95-47-6	ortho-xylene	0.13	J	0.034	0.15	ug/m3	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.63	J	0.10	0.22	ug/m3	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIM	91-20-3	Naphthalene	0.42	J	0.078	0.46	ug/m3	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.062	30; 0.124 %; ug/m3
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	108-88-3	Toluene	0.041	J	0.026	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.016	J	0.0064	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.20	J	0.021	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.060	J	0.041	0.070	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	91-20-3	Naphthalene	0.080	J	0.015	0.088	ppbv	J	bl,bb,c,sp	blank contamination below PQL; ICV %D; < PQL	36.85; 0.012	30; 0.024 %; ppbv
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.10	J	0.016	0.035	ppbv	J+	c	CCV %D	34.02992	30 %
4402620921	RISG-48-10.0-20200226	02/26/20	TO15SIMVOL	95-47-6	ortho-xylene	0.030	J	0.0078	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15VOL	75-09-2	Methylene Chloride	0.29	J	0.051	0.35	ppbv	J	bl,bb,sp	blank contamination below PQL; < PQL	0.033	0.066 ppbv
4402620921	RISG-48-10.0-20200226	02/26/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.059	J	0.034	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.14	J	0.038	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15VOL	75-15-0	Carbon Disulfide	0.18	J	0.15	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-10.0-20200226	02/26/20	TO15VOL	622-96-8	4-Ethyltoluene	0.079	J	0.041	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	622-96-8	4-Ethyltoluene	0.56	J	0.23	0.86	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	591-78-6	2-Hexanone		U	0.30	3.6	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	78-93-3	2-Butanone	2.0	J	0.29	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	75-15-0	Carbon Disulfide	0.65	J	0.63	2.7	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	109-99-9	Tetrahydrofuran	1.5	J	0.34	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	75-25-2	Bromoform	1.1	J	0.77	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	75-27-4	Bromodichloromethane	0.49	J	0.43	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15	75-09-2	Methylene Chloride	0.77	J	0.57	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	75-01-4	Vinyl Chloride	0.022	J	0.012	0.045	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	75-00-3	Chloroethane	0.024	J	0.017	0.23	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	74-87-3	Chloromethane	0.23	J	0.038	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	79-01-6	Trichloroethene	0.13	J	0.051	0.19	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	108-88-3	Toluene	0.31	J	0.042	0.33	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIM	71-43-2	Benzene	0.088	J	0.045	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	74-87-3	Chloromethane	0.11	J	0.018	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	79-01-6	Trichloroethene	0.024	J	0.0094	0.035	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	108-88-3	Toluene	0.083	J	0.011	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	75-01-4	Vinyl Chloride	0.0086	J	0.0045	0.018	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	71-43-2	Benzene	0.027	J	0.014	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15SIMVOL	75-00-3	Chloroethane	0.0092	J	0.0066	0.088	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	75-25-2	Bromoform	0.11	J	0.074	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	75-27-4	Bromodichloromethane	0.073	J	0.065	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	78-93-3	2-Butanone	0.70	J	0.098	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	75-15-0	Carbon Disulfide	0.21	J	0.20	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	622-96-8	4-Ethyltoluene	0.11	J	0.047	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	75-09-2	Methylene Chloride	0.22	J	0.16	0.35	ppbv	J	sp	< PQL		

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
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	591-78-6	2-Hexanone		U	0.074	0.88	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-48-5.0-20200227	02/27/20	TO15VOL	109-99-9	Tetrahydrofuran	0.51	J	0.11	0.88	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	109-99-9	Tetrahydrofuran	0.54	J	0.31	2.4	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone		U	0.28	3.3	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	100-42-5	Styrene	0.13	J	0.096	0.68	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	622-96-8	4-Ethyltoluene	0.33	J	0.21	0.79	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	78-87-5	1,2-Dichloropropane	0.29	J	0.17	0.74	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	541-73-1	1,3-Dichlorobenzene	0.73	J	0.56	0.97	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	123-91-1	1,4-Dioxane	0.11	J	0.096	0.58	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.43	J	0.23	0.79	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	75-15-0	Carbon Disulfide	1.3	J	0.58	2.5	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	110-82-7	Cyclohexane	0.20	J	0.20	2.8	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	108-90-7	Chlorobenzene	0.25	J	0.20	0.74	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15	75-25-2	Bromoform	1.2	J	0.71	1.7	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIM	74-87-3	Chloromethane	0.056	J	0.035	1.7	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.089	J	0.026	0.13	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIM	156-59-2	cis-1,2-Dichloroethene	0.089	J	0.022	0.13	ug/m3	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIMVOL	156-59-2	cis-1,2-Dichloroethene	0.022	J	0.0054	0.032	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIMVOL	74-87-3	Chloromethane	0.027	J	0.017	0.80	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.022	J	0.0063	0.032	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	100-42-5	Styrene	0.030	J	0.023	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	108-90-7	Chlorobenzene	0.054	J	0.043	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	75-25-2	Bromoform	0.11	J	0.068	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	110-82-7	Cyclohexane	0.059	J	0.059	0.80	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone		U	0.068	0.80	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	123-91-1	1,4-Dioxane	0.031	J	0.027	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	541-73-1	1,3-Dichlorobenzene	0.12	J	0.092	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.088	J	0.047	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	78-87-5	1,2-Dichloropropane	0.063	J	0.036	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	75-15-0	Carbon Disulfide	0.41	J	0.19	0.80	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	109-99-9	Tetrahydrofuran	0.18	J	0.10	0.80	ppbv	J	sp	< PQL		
4402620921	RISG-49-10.0-20200228	02/28/20	TO15VOL	622-96-8	4-Ethyltoluene	0.068	J	0.043	0.16	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	75-09-2	Methylene Chloride	1.1	J	0.58	1.2	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	75-15-0	Carbon Disulfide	1.4	J	0.64	2.8	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	75-25-2	Bromoform	1.4	J	0.79	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	78-93-3	2-Butanone	2.0	J	0.30	2.6	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	591-78-6	2-Hexanone		U	0.31	3.7	ug/m3	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-49-5.0-20200228	02/28/20	TO15	123-91-1	1,4-Dioxane	0.15	J	0.11	0.64	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.058	J	0.028	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	74-87-3	Chloromethane	0.064	J	0.039	1.8	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	71-43-2	Benzene	0.24	J	0.046	0.28	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	95-47-6	ortho-xylene	0.15	J	0.016	0.16	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	136777-61-2	m,p-xylene	0.25	J	0.016	0.31	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	91-20-3	Naphthalene	0.27	J	0.057	0.47	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	100-41-4	Ethyl Benzene	0.14	J	0.020	0.16	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIM	156-59-2	cis-1,2-Dichloroethene	0.038	J	0.024	0.14	ug/m3	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	71-43-2	Benzene	0.074	J	0.014	0.090	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	156-59-2	cis-1,2-Dichloroethene	0.0097	J	0.0060	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.031	J	0.0047	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.058	J	0.0036	0.072	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	91-20-3	Naphthalene	0.051	J	0.011	0.090	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	74-87-3	Chloromethane	0.031	J	0.019	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.014	J	0.0070	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15SIMVOL	95-47-6	ortho-xylene	0.034	J	0.0037	0.036	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	75-15-0	Carbon Disulfide	0.47	J	0.21	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	75-25-2	Bromoform	0.13	J	0.076	0.18	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	75-09-2	Methylene Chloride	0.31	J	0.17	0.36	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	78-93-3	2-Butanone	0.68	J	0.10	0.90	ppbv	J	sp	< PQL		
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	591-78-6	2-Hexanone		U	0.076	0.90	ppbv	UJ	c	ICAL %RSD	30.793	30 %
4402620921	RISG-49-5.0-20200228	02/28/20	TO15VOL	123-91-1	1,4-Dioxane	0.041	J	0.030	0.18	ppbv	J	sp	< PQL		
4402621871	PC-200-20200305	03/05/20	E218.6	18540-29-9	Chromium VI	0.26	J	0.25	1.0	ug/l	J	sp	< PQL		
4402621871	PC-201-20200305	03/05/20	E218.6	18540-29-9	Chromium VI	0.33	J	0.25	1.0	ug/l	J	sp	< PQL		

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
4402621871	PC-202-20200305	03/05/20	SW8260	56-23-5	Carbon Tetrachloride	0.72	J	0.50	1.0	ug/l	J	sp	< PQL		
4402621871	PC-202-20200305	03/05/20	SW8260	127-18-4	Tetrachloroethene	0.86	J	0.50	1.0	ug/l	J	sp	< PQL		
4402621871	PZ-2S-20200305	03/05/20	SW8260	56-23-5	Carbon Tetrachloride	1.4	J	1.3	2.5	ug/l	J	sp	< PQL		
4402621871	PZ-2S-20200305	03/05/20	SW8260	127-18-4	Tetrachloroethene	1.5	J	1.3	2.5	ug/l	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	108-10-1	4-Methyl-2-pentanone	0.76	J	0.16	1.7	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	142-82-5	n-Heptane	0.47	J	0.28	8.4	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.59	J	0.14	2.0	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	108-90-7	Chlorobenzene	0.36	J	0.058	1.9	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	124-48-1	Dibromochloromethane	0.25	J	0.23	3.5	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	75-69-4	Trichlorofluoromethane	2.1	J	0.096	2.3	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	622-96-8	4-Ethyltoluene	1.2	J	0.10	2.0	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	75-09-2	Methylene Chloride	1.6	J	1.4	2.9	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	75-27-4	Bromodichloromethane	2.4	J	0.084	2.8	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	J	0.33	3.2	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	78-93-3	2-Butanone	2.2	J	0.42	6.1	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	100-42-5	Styrene	0.27	J	0.069	1.8	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15	123-91-1	1,4-Dioxane	0.20	J	0.10	1.5	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	100-41-4	Ethyl Benzene	0.27	J	0.054	0.36	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	74-87-3	Chloromethane	0.20	J	0.056	4.2	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	91-20-3	Naphthalene	12	J	0.44	1.1	ug/m3	J	c	ICAL %RSD	33.645	30 %
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	75-00-3	Chloroethane	0.10	J	0.034	0.54	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	75-35-4	1,1-Dichloroethene	0.11	J	0.054	0.16	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	71-43-2	Benzene	0.60	J	0.064	0.66	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.24	J	0.096	0.33	ug/m3	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	75-35-4	1,1-Dichloroethene	0.028	J	0.014	0.041	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	91-20-3	Naphthalene	2.4	J	0.084	0.21	ppbv	J	c	ICAL %RSD	33.645	30 %
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	75-00-3	Chloroethane	0.038	J	0.013	0.21	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	71-43-2	Benzene	0.19	J	0.020	0.21	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.062	J	0.012	0.082	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.095	J	0.027	2.1	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.059	J	0.024	0.082	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.37	J	0.017	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.18	J	0.039	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	108-90-7	Chlorobenzene	0.079	J	0.012	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.12	J	0.028	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	123-91-1	1,4-Dioxane	0.055	J	0.028	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.072	J	0.044	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	75-09-2	Methylene Chloride	0.46	J	0.41	0.82	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	75-27-4	Bromodichloromethane	0.36	J	0.012	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	78-93-3	2-Butanone	0.74	J	0.14	2.1	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	100-42-5	Styrene	0.064	J	0.016	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	142-82-5	n-Heptane	0.12	J	0.070	2.1	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	622-96-8	4-Ethyltoluene	0.24	J	0.021	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-15.0-20200526	05/26/20	TO15VOL	124-48-1	Dibromochloromethane	0.029	J	0.026	0.41	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	75-69-4	Trichlorofluoromethane	1.7	J	0.14	3.4	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	75-15-0	Carbon Disulfide	3.1	J	1.7	9.5	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	123-91-1	1,4-Dioxane	0.94	J	0.15	2.2	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	591-78-6	2-Hexanone	2.7	J	0.87	12	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	75-09-2	Methylene Chloride	3.0	J	2.1	4.2	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	75-27-4	Bromodichloromethane	0.97	J	0.12	4.1	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	108-10-1	4-Methyl-2-pentanone	1.9	J	0.23	2.5	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	108-90-7	Chlorobenzene	1.1	J	0.086	2.8	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	108-67-8	1,3,5-Trimethylbenzene	1.6	J	0.20	3.0	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	142-82-5	n-Heptane	0.85	J	0.42	12	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	110-54-3	n-Hexane	1.6	J	0.82	11	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	110-82-7	Cyclohexane	2.3	J	1.1	10	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15	100-42-5	Styrene	1.0	J	0.10	2.6	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIM	71-43-2	Benzene	0.41	J	0.095	0.97	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIM	75-00-3	Chloroethane	0.17	J	0.050	0.80	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIM	74-87-3	Chloromethane	0.59	J	0.082	6.3	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIM	79-01-6	Trichloroethene	0.19	J	0.066	0.66	ug/m3	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIM	91-20-3	Naphthalene	1.4	J	0.65	1.6	ug/m3	J	c,sp	ICAL %RSD; < PQL	33.645	30 %

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
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIMVOL	79-01-6	Trichloroethene	0.036	J	0.012	0.12	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIMVOL	71-43-2	Benzene	0.13	J	0.030	0.30	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIMVOL	74-87-3	Chloromethane	0.29	J	0.040	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIMVOL	75-00-3	Chloroethane	0.066	J	0.019	0.30	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15SIMVOL	91-20-3	Naphthalene	0.26	J	0.12	0.30	ppbv	J	c,sp	ICAL %RSD; < PQL	33,645	30 %
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.46	J	0.057	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	108-90-7	Chlorobenzene	0.24	J	0.019	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	75-27-4	Bromodichloromethane	0.14	J	0.018	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	591-78-6	2-Hexanone	0.67	J	0.21	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	75-09-2	Methylene Chloride	0.87	J	0.61	1.2	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	123-91-1	1,4-Dioxane	0.26	J	0.042	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	75-69-4	Trichlorofluoromethane	0.30	J	0.025	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	75-15-0	Carbon Disulfide	1.0	J	0.54	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.33	J	0.041	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	110-82-7	Cyclohexane	0.68	J	0.32	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	110-54-3	n-Hexane	0.45	J	0.23	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	142-82-5	n-Heptane	0.21	J	0.10	3.0	ppbv	J	sp	< PQL		
4402669001	RISG-38-5.0-20200526	05/26/20	TO15VOL	100-42-5	Styrene	0.24	J	0.024	0.61	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	108-10-1	4-Methyl-2-pentanone	0.29	J	0.075	0.80	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	142-82-5	n-Heptane	0.18	J	0.14	4.0	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	64-17-5	Ethanol	30		0.13	1.8	ug/m3	J	fd	FD RPD	67	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	100-42-5	Styrene	0.45	J	0.033	0.83	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	95-50-1	1,2-Dichlorobenzene	0.22	J	0.14	1.2	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	108-90-7	Chlorobenzene	0.38	J	0.028	0.90	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	541-73-1	1,3-Dichlorobenzene	6.9		0.082	1.2	ug/m3	J	fd	FD RPD	51	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	110-82-7	Cyclohexane	0.96	J	0.35	3.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	110-54-3	n-Hexane	0.33	J	0.26	3.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.086	J	0.065	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	109-99-9	Tetrahydrofuran	0.69	J	0.31	2.9	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	622-96-8	4-Ethyltoluene	0.51	J	0.048	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	78-87-5	1,2-Dichloropropane	0.092	J	0.050	0.90	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.33	J	0.068	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	123-91-1	1,4-Dioxane	0.065	J	0.048	0.71	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	591-78-6	2-Hexanone	0.44	J	0.28	4.0	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	75-27-4	Bromodichloromethane	0.11	J	0.040	1.3	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	75-09-2	Methylene Chloride	0.81	J	0.68	1.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.73	J	0.16	1.5	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	56-23-5	Carbon Tetrachloride	1.1		0.092	0.25	ug/m3	J	fd	FD RPD	72	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	75-00-3	Chloroethane	0.13	J	0.016	0.26	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	91-20-3	Naphthalene	0.38	J	0.21	0.51	ug/m3	J	c,sp	ICAL %RSD; < PQL	33,645	30 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	95-47-6	ortho-xylene	0.73		0.036	0.17	ug/m3	J	fd	FD RPD	101	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.15	J	0.046	0.16	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	79-01-6	Trichloroethene	0.031	J	0.021	0.21	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	74-87-3	Chloromethane	0.20	J	0.026	2.0	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	100-41-4	Ethyl Benzene	0.61		0.026	0.17	ug/m3	J	fd	FD RPD	113	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	71-43-2	Benzene	1.1		0.031	0.31	ug/m3	J	fd	FD RPD	82	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.050	J	0.024	0.16	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	74-87-3	Chloromethane	0.096	J	0.013	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	79-01-6	Trichloroethene	0.0058	J	0.0039	0.039	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	95-47-6	ortho-xylene	0.17		0.0082	0.039	ppbv	J	fd	FD RPD	101	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	91-20-3	Naphthalene	0.073	J	0.040	0.098	ppbv	J	c,sp	ICAL %RSD; < PQL	33,645	30 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.012	J	0.0059	0.039	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.038	J	0.011	0.039	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	71-43-2	Benzene	0.35		0.0096	0.098	ppbv	J	fd	FD RPD	82	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.14		0.0059	0.039	ppbv	J	fd	FD RPD	113	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.17		0.015	0.039	ppbv	J	fd	FD RPD	72	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15SIMVOL	75-00-3	Chloroethane	0.049	J	0.0062	0.098	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	75-27-4	Bromodichloromethane	0.016	J	0.0059	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	142-82-5	n-Heptane	0.043	J	0.033	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	100-42-5	Styrene	0.11	J	0.0078	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	75-09-2	Methylene Chloride	0.23	J	0.20	0.39	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.096	J	0.021	0.20	ppbv	J	sp	< PQL		

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
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	541-73-1	1,3-Dichlorobenzene	1.1		0.014	0.20	ppbv	J	fd	FD RPD	51	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.070	J	0.018	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	591-78-6	2-Hexanone	0.11	J	0.068	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	95-50-1	1,2-Dichlorobenzene	0.036	J	0.022	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.017	J	0.013	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	64-17-5	Ethanol	16		0.070	0.98	ppbv	J	fd	FD RPD	67	50 %
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	110-82-7	Cyclohexane	0.28	J	0.10	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	110-54-3	n-Hexane	0.092	J	0.075	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	108-90-7	Chlorobenzene	0.083	J	0.0060	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	123-91-1	1,4-Dioxane	0.018	J	0.013	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.066	J	0.014	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	78-87-5	1,2-Dichloropropane	0.020	J	0.011	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	109-99-9	Tetrahydrofuran	0.23	J	0.10	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520	05/20/20	TO15VOL	622-96-8	4-Ethyltoluene	0.10	J	0.0099	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	142-82-5	n-Heptane	0.20	J	0.13	3.8	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	100-42-5	Styrene	0.12	J	0.032	0.80	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	78-93-3	2-Butanone	2.0	J	0.19	2.8	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	75-09-2	Methylene Chloride	1.2	J	0.65	1.3	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	109-99-9	Tetrahydrofuran	0.34	J	0.30	2.8	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	75-15-0	Carbon Disulfide	2.0	J	0.52	2.9	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.11	J	0.064	0.92	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	622-96-8	4-Ethyltoluene	0.16	J	0.046	0.92	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	591-78-6	2-Hexanone	0.27	J	0.27	3.8	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	541-73-1	1,3-Dichlorobenzene	4.1		0.078	1.1	ug/m3	J	fd	FD RPD	51	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	75-27-4	Bromodichloromethane	0.045	J	0.038	1.2	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	J	0.15	1.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	110-82-7	Cyclohexane	0.44	J	0.34	3.2	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	108-10-1	4-Methyl-2-pentanone	0.21	J	0.072	0.77	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	95-50-1	1,2-Dichlorobenzene	0.13	J	0.13	1.1	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	108-90-7	Chlorobenzene	0.15	J	0.026	0.86	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15	64-17-5	Ethanol	15		0.13	1.8	ug/m3	J	fd	FD RPD	67	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	136777-61-2	m,p-xylene	0.13	J	0.033	0.32	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	91-20-3	Naphthalene	0.25	J	0.20	0.49	ug/m3	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	75-01-4	Vinyl Chloride	0.040	J	0.011	0.048	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	95-47-6	ortho-xylene	0.24		0.034	0.16	ug/m3	J	fd	FD RPD	101	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	75-00-3	Chloroethane	0.082	J	0.015	0.25	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	108-88-3	Toluene	0.29	J	0.022	0.35	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	56-23-5	Carbon Tetrachloride	0.52		0.088	0.24	ug/m3	J	fd	FD RPD	72	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	100-41-4	Ethyl Benzene	0.17		0.024	0.16	ug/m3	J	fd	FD RPD	113	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	74-87-3	Chloromethane	0.17	J	0.025	1.9	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.10	J	0.044	0.15	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	71-43-2	Benzene	0.46		0.029	0.30	ug/m3	J	fd	FD RPD	82	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.026	J	0.023	0.15	ug/m3	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	108-88-3	Toluene	0.076	J	0.0060	0.094	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.025	J	0.011	0.037	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	74-87-3	Chloromethane	0.081	J	0.012	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.0064	J	0.0056	0.037	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	75-00-3	Chloroethane	0.031	J	0.0059	0.094	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	71-43-2	Benzene	0.14		0.0092	0.094	ppbv	J	fd	FD RPD	82	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	75-01-4	Vinyl Chloride	0.016	J	0.0043	0.019	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	91-20-3	Naphthalene	0.048	J	0.038	0.094	ppbv	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	95-47-6	ortho-xylene	0.055		0.0078	0.037	ppbv	J	fd	FD RPD	101	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.030	J	0.0076	0.075	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	56-23-5	Carbon Tetrachloride	0.082	J	0.014	0.037	ppbv	J	fd	FD RPD	72	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.040		0.0056	0.037	ppbv	J	fd	FD RPD	113	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	108-90-7	Chlorobenzene	0.034	J	0.0057	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	95-50-1	1,2-Dichlorobenzene	0.022	J	0.021	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	64-17-5	Ethanol	8.2		0.067	0.94	ppbv	J	fd	FD RPD	67	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	108-10-1	4-Methyl-2-pentanone	0.052	J	0.018	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	622-96-8	4-Ethyltoluene	0.033	J	0.0094	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	109-99-9	Tetrahydrofuran	0.12	J	0.10	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	75-15-0	Carbon Disulfide	0.64	J	0.17	0.94	ppbv	J	sp	< PQL		

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
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.023	J	0.013	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	591-78-6	2-Hexanone	0.073	J	0.065	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	75-27-4	Bromodichloromethane	0.0067	J	0.0057	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	75-09-2	Methylene Chloride	0.35	J	0.19	0.37	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.085	J	0.020	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	110-82-7	Cyclohexane	0.13	J	0.098	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	541-73-1	1,3-Dichlorobenzene	0.68	J	0.013	0.19	ppbv	J	fd	FD RPD	51	50 %
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	142-82-5	n-Heptane	0.049	J	0.032	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	100-42-5	Styrene	0.027	J	0.0074	0.19	ppbv	J	sp	< PQL		
4402669001	RISG-50-10.0-20200520-FD	05/20/20	TO15VOL	78-93-3	2-Butanone	0.69	J	0.065	0.94	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	622-96-8	4-Ethyltoluene	0.18	J	0.050	0.99	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	142-82-5	n-Heptane	0.21	J	0.14	4.1	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	110-54-3	n-Hexane	0.46	J	0.27	3.5	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	110-82-7	Cyclohexane	0.79	J	0.36	3.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	100-42-5	Styrene	0.20	J	0.034	0.86	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.078	J	0.067	0.99	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	108-90-7	Chlorobenzene	0.39	J	0.028	0.92	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	95-50-1	1,2-Dichlorobenzene	0.15	J	0.14	1.2	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	75-27-4	Bromodichloromethane	0.057	J	0.041	1.3	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	109-99-9	Tetrahydrofuran	0.80	J	0.32	3.0	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	75-15-0	Carbon Disulfide	2.0	J	0.56	3.1	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.36	J	0.069	0.99	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	591-78-6	2-Hexanone	0.91	J	0.29	4.1	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	J	0.16	1.5	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	75-09-2	Methylene Chloride	1.1	J	0.70	1.4	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15	123-91-1	1,4-Dioxane	0.14	J	0.049	0.72	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	91-20-3	Naphthalene	0.45	J	0.21	0.53	ug/m3	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	136777-61-2	m,p-xylene	0.23	J	0.036	0.35	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	75-00-3	Chloroethane	0.13	J	0.017	0.26	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	71-43-2	Benzene	0.22	J	0.031	0.32	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	106-46-7	1,4-Dichlorobenzene	0.20	J	0.12	0.24	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	74-87-3	Chloromethane	0.37	J	0.027	2.1	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	79-01-6	Trichloroethene	0.033	J	0.022	0.22	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIM	100-41-4	Ethyl Benzene	0.082	J	0.026	0.17	ug/m3	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	71-43-2	Benzene	0.070	J	0.0098	0.10	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	106-46-7	1,4-Dichlorobenzene	0.033	J	0.020	0.040	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	74-87-3	Chloromethane	0.18	J	0.013	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	79-01-6	Trichloroethene	0.0061	J	0.0040	0.040	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	100-41-4	Ethyl Benzene	0.019	J	0.0061	0.040	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	75-00-3	Chloroethane	0.048	J	0.0063	0.10	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	136777-61-2	m,p-xylene	0.053	J	0.0082	0.080	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15SIMVOL	91-20-3	Naphthalene	0.086	J	0.041	0.10	ppbv	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	110-54-3	n-Hexane	0.13	J	0.077	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	110-82-7	Cyclohexane	0.23	J	0.10	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	100-42-5	Styrene	0.046	J	0.0080	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.016	J	0.014	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	108-90-7	Chlorobenzene	0.085	J	0.0061	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	95-50-1	1,2-Dichlorobenzene	0.025	J	0.023	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	142-82-5	n-Heptane	0.051	J	0.034	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	123-91-1	1,4-Dioxane	0.039	J	0.014	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	109-99-9	Tetrahydrofuran	0.27	J	0.11	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.074	J	0.014	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	75-15-0	Carbon Disulfide	0.64	J	0.18	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	591-78-6	2-Hexanone	0.22	J	0.070	1.0	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	622-96-8	4-Ethyltoluene	0.036	J	0.010	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	75-27-4	Bromodichloromethane	0.0085	J	0.0061	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	75-09-2	Methylene Chloride	0.32	J	0.20	0.40	ppbv	J	sp	< PQL		
4402669001	RISG-50-5.0-20200520	05/20/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.074	J	0.021	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	142-82-5	n-Heptane	0.53	J	0.14	4.0	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	75-27-4	Bromodichloromethane	0.18	J	0.040	1.3	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.68	J	0.16	1.5	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	110-54-3	n-Hexane	0.48	J	0.26	3.4	ug/m3	J	sp	< PQL		

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
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	110-82-7	Cyclohexane	0.42	J	0.35	3.4	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	100-42-5	Styrene	0.23	J	0.033	0.83	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	622-96-8	4-Ethyltoluene	0.048	J	0.048	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	109-99-9	Tetrahydrofuran	1.1	J	0.31	2.9	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	75-15-0	Carbon Disulfide	2.8	J	0.54	3.0	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	123-91-1	1,4-Dioxane	0.20	J	0.048	0.71	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	591-78-6	2-Hexanone	0.74	J	0.28	4.0	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	75-25-2	Bromoform	0.24	J	0.13	2.0	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	108-90-7	Chlorobenzene	0.41	J	0.028	0.90	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	108-67-8	1,3,5-Trimethylbenzene	0.11	J	0.065	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15	95-63-6	1,2,4-Trimethylbenzene	0.52	J	0.068	0.96	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	91-20-3	Naphthalene	0.34	J	0.21	0.51	ug/m3	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	75-00-3	Chloroethane	0.14	J	0.016	0.26	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	74-87-3	Chloromethane	0.50	J	0.026	2.0	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	75-01-4	Vinyl Chloride	0.025	J	0.012	0.050	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	75-34-3	1,1-Dichloroethane	0.060	J	0.046	0.16	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIM	107-06-2	1,2-Dichloroethane	0.038	J	0.024	0.16	ug/m3	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	75-00-3	Chloroethane	0.054	J	0.0062	0.098	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	91-20-3	Naphthalene	0.066	J	0.040	0.098	ppbv	J	c,sp	ICAL %RSD; < PQL	33.645	30 %
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	75-01-4	Vinyl Chloride	0.0098	J	0.0045	0.020	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	74-87-3	Chloromethane	0.24	J	0.013	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	107-06-2	1,2-Dichloroethane	0.0093	J	0.0059	0.039	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15SIMVOL	75-34-3	1,1-Dichloroethane	0.015	J	0.011	0.039	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	109-99-9	Tetrahydrofuran	0.38	J	0.10	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	75-15-0	Carbon Disulfide	0.89	J	0.17	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	108-67-8	1,3,5-Trimethylbenzene	0.023	J	0.013	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	110-54-3	n-Hexane	0.14	J	0.075	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	110-82-7	Cyclohexane	0.12	J	0.10	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	108-90-7	Chlorobenzene	0.089	J	0.0060	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	75-25-2	Bromoform	0.023	J	0.012	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	95-63-6	1,2,4-Trimethylbenzene	0.11	J	0.014	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	123-91-1	1,4-Dioxane	0.055	J	0.013	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	622-96-8	4-Ethyltoluene	0.076	J	0.0099	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	591-78-6	2-Hexanone	0.18	J	0.068	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	75-27-4	Bromodichloromethane	0.026	J	0.0059	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.088	J	0.021	0.20	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	142-82-5	n-Heptane	0.13	J	0.033	0.98	ppbv	J	sp	< PQL		
4402669001	RISG-51-5.0-20200520	05/20/20	TO15VOL	100-42-5	Styrene	0.055	J	0.0078	0.20	ppbv	J	sp	< PQL		
4402672271	1-N-PW001-20200610	06/10/20	SW6020	7440-47-3	Chromium, Dissolved	0.70	J	0.50	2.0	ug/l	J	sp	< PQL		
4402672271	D-S-PW001-20200610	06/10/20	SW6020	7440-47-3	Chromium, Dissolved	0.55	J	0.50	2.0	ug/l	J	sp	< PQL		
4402672271	D-S-PW001-20200610	06/10/20	SW8260	67-66-3	Chloroform	1.6	J	0.25	2.0	ug/l	J	sp	< PQL		
4402672291	G-S-SO001-20200610	06/10/20	E300.1	14866-68-3	Chlorate	73	J	20	200	ug/kg	J	sp	< PQL		
4402672291	G-S-SO001-20200610	06/10/20	LLOYD_KAHN	7440-44-0	CARBON	24000		750	1000	mg/kg	J+	c	CCV %R	111	90-110 %
4402672301	1-N-SEDO01-20200610	06/10/20	LLOYD_KAHN	7440-44-0	CARBON	9900		750	1000	mg/kg	J+	c	CCV %R	111	90-110 %
4402672301	1-N-SEDO01-20200610	06/10/20	SW9034	18496-25-8	Sulfide (total)	120		20	40	mg/kg	J-	m	MS/MSD %R	63,-	70-130 %
4402672301	D-S-SEDO02-20200610	06/10/20	LLOYD_KAHN	7440-44-0	CARBON	6500		750	1000	mg/kg	J+	c	CCV %R	111	90-110 %
4402672301	D-S-SEDO02-20200610	06/10/20	SW9034	18496-25-8	Sulfide (total)	95	F1	20	40	mg/kg	J-	m	MS/MSD %R	63,-	70-130 %

ATTACHMENT A
VOC (METHOD SW8260B) Data Validation Report (DVR)

Volatile Organic Compounds (VOC) by Environmental Protection Agency (EPA) SW 846 Method 8260B

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

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

SDG	Sample	Compound	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
440-242240-1	SWF-SO001-190521 SWF-SO002-190521** SWF-SO003-190521	Chloroform	18	14	UJ (all non-detects)	P

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

Instrument performance check data were not reviewed for Stage 2A validation.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 30%.

Average relative response factors (RRF) were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0%.

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

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
440-267229-1	06/16/20	Chloroform	22.5	G-S-SO001-20200610**	NA	-
440-267230-1	06/16/20	Chloroform	22.5	D-S-SED002-20200610 D-S-SED002-20200610-TB	NA	-

All of the continuing calibration relative response factors (RRF) were within validation criteria.

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

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Samples J-S-SWU001-20191023-TB* (from SDG 440-253064-1), L-S-SWU001-20191024-TB* (from SDG 440-253172-1), D-S-SWU001-20191031-TB* (from SDG 440-253547-1), D-S-SO001-20191031-TB (from SDG 440-253551-1), TB-005-20191101* (from SDG 440-253631-1), D-N-SWU001-20191111-TB* (from SDG 440-254336-1), J-N-SWU001-20191112-TB* (from SDG 440-254385-1), J-N-SED001-20191112-TB (from SDG 440-254388-1), D-N-SED001-20191111-TB* (from SDG 440-254392-1), J-S-SO001-20191112-TB, TRIP BLANK-20191112* (both from SDG 440-254441-1), G-S-SWU001-20191114-TB* (from SDG 440-254639-1), G-S-SED001-20191114-TB (from SDG 440-254653-1), B-N-SED001-20191115-TB (from SDG 440-254728-1), C-N-SWU001-20191115-TB* (from SDG 440-254731-1), L-N-SWU001-20191210-TB* (from SDG 440-257010-1), F-N-SWU001-20191210-TB* (from SDG 440-257014-1), J-S-PW001-20191211-TB* (from SDG 440-257090-1), K-S-PW001-20191211-TB* (from SDG 440-257091-1), H-S-PW001-20191212-TB* (from SDG 440-257237-1), 20191212-TB (from SDG 440-257238-1), 1-N-SWU001-20191213-TB* (from SDG 440-257313-1), G-S-PW001-20191213-TB* (from SDG 440-257324-1), 1-N-SO001-20191219-TB (from SDG 440-257807-1), PZ-2S-20200305-TB (from SDG 440-262187-1), D-S-PW001-20200610-TB (from SDG 440-267227-1), and D-S-SED002-20200610-TB (from SDG 440-267230-1) were identified as trip blanks. No contaminants were found.

Samples EB-001-20191101*, EB-002-20191101*, EB-003-20191101*, EB-004-20191101*, EB-005-20191101* (all five from SDG 440-253631-1), EB-T0-007-20191115* (from SDG 440-254770-1), and J-S-SWU001-20191212-EB (from SDG 440-257235-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Compound	Concentration	Associated Samples
440-253631-1	EB-001-20191101*	11/01/19	Chloroform	0.38 ug/L	No associated samples in this SDG
440-253631-1	EB-002-20191101*	11/01/19	Chloroform	0.35 ug/L	No associated samples in this SDG
440-253631-1	EB-003-20191101*	11/01/19	Chloroform	0.35 ug/L	No associated samples in this SDG
440-253631-1	EB-004-20191101*	11/01/19	Chloroform	0.29 ug/L	No associated samples in this SDG
440-253631-1	EB-005-20191101*	11/01/19	Chloroform	0.36 ug/L	No associated samples in this SDG

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. 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)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
320-55874-1	Z5-FT002-LMB-20191025MS/MSD (Z5-FT002-LMB-20191025)	Chloroform	74 (78-135)	-	UJ (the non-detect)	P

Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

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

X. Field Duplicates

Samples Z2-FT002-LMB-20191027 and Z2-FT002-LMB-20191027-DUP (both from SDG 320-55874-1), samples Z5-FT002-CP-20191031** and Z5-FT002-CP-20191031-DUP (both from SDG 320-55962-1), samples D-S-SWU001-20191031* and D-S-SWU001-20191031-FD* (both from SDG 440-253547-1), samples D-S-SWF001-20191031* and D-S-SWF001-20191031-FD* (both from SDG 440-253549-1), samples D-S-SED001-20191031 and D-S-SED001-20191031-FD (both from SDG 440-253550-1), samples D-S-SO001-20191031 and D-S-SO001-20191031-FD (both from SDG 440-253551-1), samples J-S-SO001-20191112-FD and J-S-SO001-20191112 (both from SDG 440-254441-1), samples K-N-SWU001-20191114-FD* and K-N-SWU001-20191114* (both from SDG 440-254639-1), samples K-N-SWF001-20191114-FD* and K-N-SWF001-20191114* (both from SDG 440-254640-1), samples G-S-SED001-20191114-FD and G-S-SED001-20191114 (both from SDG 440-254653-1), samples A-N-SWF001-20191115-FD* and A-N-SWF001-20191115* (both from SDG 440-254729-1), samples A-N-SWU001-20191115* and A-N-SWU001-20191115-FD* (both from SDG 440-254731-1), samples F-N-SED001-20191210-FD and F-N-SED001-20191210 (both from SDG 440-257007-1), samples K-N-PW001-20191211 and K-N-PW001-20191211-FD (both from SDG 440-257091-1), samples I-S-PW001-20191212** and I-S-PW001-20191212-FD** (both from SDG 440-257237-1), samples J-S-SOSS001-20191212 and J-S-SOSS001-20191212-FD (both from SDG 440-257238-1), and samples G-S-PW001-20191213 and G-S-PW001-20191213-FD (both from SDG 440-257324-1) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
		Z2-FT002-LMB-20191027	Z2-FT002-LMB-20191027-DUP			
320-55874-1	Chloroform	0.92	1.1	18 (≤50)	-	-

SDG	Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
		Z5-FT002-CP-20191031	Z5-FT002-CP-20191031-DUP			
320-55962-1	Chloroform	0.77	0.97	23 (≤50)	-	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		D-S-SWU001-20191031*	D-S-SWU001-20191031-FD*			
440-253547-1	Chloroform	1.4	1.4	0 (≤30)	-	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		D-S-SWF001-20191031*	D-S-SWF001-20191031-FD*			
440-253549-1	Chloroform	0.76	0.59	25 (≤30)	-	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		K-N-SWU001-20191114-FD*	K-N-SWU001-20191114*			
440-254639-1	Chloroform	0.78	0.75	4 (≤30)	-	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		K-N-SWF001-20191114-FD*	K-N-SWF001-20191114*			
440-254640-1	Chloroform	0.39	0.48	21 (≤30)	-	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		A-N-SWF001-20191115-FD*	A-N-SWF001-20191115*			
440-254729-1	Chloroform	1.3	0.94	32 (≤30)	NQ	-

SDG	Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		A-N-SWU001-20191115*	A-N-SWU001-20191115-FD*			
440-254731-1	Chloroform	2.1	1.7	21 (≤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. Internal Standards

All internal standard areas and retention times were within QC limits.

Internal standards data were not reviewed for Stage 2A and Stage 2B validation.

XII. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation.

Soil and sediment samples in SDGs 440-242240-1, 440-253064-1, 440-253172-1, 440-253252-1, 440-253253-1, 440-253324-1, 440-253326-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253550-1, 440-253551-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254653-1, 440-254728-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257238-1, 440-257312-1, 440-257327-1, 440-257807-1, 440-267229-1, and 440-267230-1 were reported on a wet weight basis.

Raw data were not reviewed for Stage 2A and Stage 2B validation.

XIII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2A and Stage 2B validation.

XIV. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2A and Stage 2B validation.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method.

Due to technical holding time and MS/MSD %R, data were qualified as estimated in four samples.

No results were rejected in these SDGs.

NERT BERA and RI3 Mod 7

Chloroform - Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

SDG	Sample	Compound	Flag	A or P	Reason (Code)
440-242240-1	SWF-SO001-190521 SWF-SO002-190521** SWF-SO003-190521	Chloroform	UJ (all non-detects)	P	Technical holding times (h)
320-55874-1	Z5-FT002-LMB-20191025	Chloroform	UJ (all non-detects)	P	Matrix spike/Matrix spike duplicate (%R) (m)

NERT BERA and RI3 Mod 7

Chloroform - Laboratory Blank Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

No Sample Data Qualified in these SDGs

NERT BERA and RI3 Mod 7

Chloroform - Field Blank Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

No Sample Data Qualified in these SDGs

ATTACHMENT B
1,2,3-Trichloropropane DVR

1,2,3-Trichloropropane by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selected Ion Monitoring (SIM) mode

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

III. Initial Calibration and Initial Calibration Verification

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

IV. Continuing Calibration

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

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

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

No field duplicates were identified in this SDG.

XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

XII. Compound Quantitation

Raw data were not reviewed for Stage 2A validation.

XIII. Target Compound Identifications

Raw data were not reviewed for Stage 2A validation.

XIV. System Performance

Raw data were not reviewed for Stage 2A validation.

XV. Overall Assessment of Data

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

NERT BERA and RI3 Mod 7

1,2,3-Trichloropropane - Data Qualification Summary - SDG 440-262187-1

No Sample Data Qualified in this SDG

NERT BERA and RI3 Mod 7

1,2,3-Trichloropropane - Laboratory Blank Data Qualification Summary - SDG 440-262187-1

No Sample Data Qualified in this SDG

NERT BERA and RI3 Mod 7

1,2,3-Trichloropropane - Field Blank Data Qualification Summary - SDG 440-262187-1

No Sample Data Qualified in this SDG

ATTACHMENT C
VOC (EPA METHOD TO-15/TO-15 SIM) DVR

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Methods TO-15 and TO-15 in Selected Ion Monitoring (SIM) mode

I. Sample Receipt and Technical Holding Times

The canisters were properly pressurized and handled.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 24 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the methods.

The percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

SDG	Date	Compound	%RSD	Associated Samples	Flag	A or P
440-262090-1/ 2003191	03/04/20	2-Hexanone	30.793	RISG-41-15.0-20200302** RISG-41-15.0-20200302-FD RISG-41-5.0-20200302 RISG-46-5.0-20200303 RISG-46-15.0-20200303	UJ (all non-detects)	P
440-262092-1/ 2003013	03/04/20	2-Hexanone	30.793	RISG-36-15.0-20200226 RISG-36-5.0-20200227 RISG-36-5.0-20200227-FD RISG-48-5.0-20200227** RISG-44-15.0-20200227 RISG-44-5.0-20200228 RISG-43-5.0-20200228 RISG-49-5.0-20200228 RISG-49-10.0-20200228 RISG-43-15.0-20200228 RISG-40-5.0-20200228	J (all detects) UJ (all non-detects)	P
440-266900-1/ 2005655	06/05/20	Naphthalene	33.645	All samples in SDG 440-266900-1/2005655	J (all detects)	P

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
440-262092-1/ 2003013	01/08/20	Naphthalene	36.85	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226	J+ (all detects)	A
440-266900-1/ 2005655	06/05/20	alpha-Chlorotoluene	65	All samples in SDG 440-266900-1/2005655	NA	-

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
440-262092-1/ 2003013	03/13/20	Carbon tetrachloride	34.02992	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226	J+ (all detects)	P

V. 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	Analysis Date	Compound	Concentration		Associated Samples
440-262090-1/ 2003191	Lab Blank-08B	03/18/20	Naphthalene	0.050 ug/m ³	0.0096 ppbv	RISG-41-15.0-20200302** RISG-41-15.0-20200302-FD RISG-41-5.0-20200302 RISG-46-5.0-20200303 RISG-46-15.0-20200303
440-262090-1/ 2003191	Lab Blank-08C	03/17/20	1,2,4-Trichlorobenzene 1,4-Dichlorobenzene Methylene chloride	0.56 ug/m ³ 0.21 ug/m ³ 1.1 ug/m ³	0.075 ppbv 0.035 ppbv 0.32 ppbv	RISG-37-13.0-20200302 RISG-37-5.0-20200303

SDG	Blank ID	Analysis Date	Compound	Concentration		Associated Samples
440-262092-1/ 2003013	Lab Blank-11A	03/13/20	Acetone Methylene chloride	0.46 ug/m ³ 0.11 ug/m ³	0.20 ppbv 0.033 ppbv	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226
440-262092-1/ 2003013	Lab Blank-11B	03/13/20	Naphthalene	0.062 ug/m ³	0.012 ppbv	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226

Canister blank analyses were performed for every sample canister. No contaminants were found in the canister blanks.

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 with the following exceptions:

SDG	Sample	Compound	Reported Concentration		Modified Final Concentration	
440-262090-1/ 2003191	RISG-41-15.0-20200302** (3.38X)	Naphthalene	0.27 ug/m ³	0.051 ppbv	0.27J ug/m ³	0.051J ppbv
440-262090-1/ 2003191	RISG-41-5.0-20200302 (1.86X)	Naphthalene	0.37 ug/m ³	0.070 ppbv	0.37J ug/m ³	0.070J ppbv
440-262090-1/ 2003191	RISG-46-5.0-20200303 (4.52X)	Naphthalene	0.34 ug/m ³	0.065 ppbv	0.34J ug/m ³	0.065J ppbv
440-262092-1/ 2003013	RISG-42-5.0-20200224 (4.77X)	Acetone Naphthalene	9.2 ug/m ³ 0.68 ug/m ³	3.9 ppbv 0.13 ppbv	9.2J ug/m ³ 0.68J ug/m ³	3.9J ppbv 0.13J ppbv
440-262092-1/ 2003013	RISG-45-15.0-20200224 (1.96X)	Methylene chloride Naphthalene	0.70 ug/m ³ 0.090 ug/m ³	0.20 ppbv 0.017 ppbv	0.70J ug/m ³ 0.090J ug/m ³	0.20J ppbv 0.017J ppbv
440-262092-1/ 2003013	RISG-45-5.0-20200224** (1.75X)	Methylene chloride	0.79 ug/m ³	0.23 ppbv	0.79J ug/m ³	0.23J ppbv
440-262092-1/ 2003013	RISG-47-15.0-20200224 (18.3X)	Acetone Naphthalene	16 ug/m ³ 0.82 ug/m ³	6.9 ppbv 0.16 ppbv	16J ug/m ³ 0.82J ug/m ³	6.9J ppbv 0.16J ppbv

SDG	Sample	Compound	Reported Concentration		Modified Final Concentration	
440-262092-1/ 2003013	RISG-47-5.0-20200225 (8.75X)	Acetone Naphthalene	6.8 ug/m ³ 0.44 ug/m ³	2.9 ppbv 0.084 ppbv	6.8J ug/m ³ 0.44J ug/m ³	2.9J ppbv 0.084J ppbv
440-262092-1/ 2003013	RISG-39-5.0-20200226 (1.64X)	Methylene chloride Naphthalene	0.84 ug/m ³ 0.23 ug/m ³	0.24 ppbv 0.043 ppbv	0.84J ug/m ³ 0.23J ug/m ³	0.24J ppbv 0.043J ppbv
440-262092-1/ 2003013	RISG-39-13.5-20200226 (1.83X)	Methylene chloride Naphthalene	0.67 ug/m ³ 0.29 ug/m ³	0.19 ppbv 0.056 ppbv	0.67J ug/m ³ 0.29J ug/m ³	0.19J ppbv 0.056J ppbv
440-262092-1/ 2003013	RISG-35-5.0-20200226 (1.91X)	Methylene chloride	1.1 ug/m ³	0.30 ppbv	1.1J ug/m ³	0.30J ppbv
440-262092-1/ 2003013	RISG-48-10.0-20200226 (1.75X)	Methylene chloride Naphthalene	1.0 ug/m ³ 0.42 ug/m ³	0.29 ppbv 0.080 ppbv	1.0J ug/m ³ 0.42J ug/m ³	0.29J ppbv 0.080J ppbv
440-262092-1/ 2003013	RISG-42-12.5-20200224 (1.71X)	Naphthalene	0.43 ug/m ³	0.083 ppbv	0.43J ug/m ³	0.083J ppbv

VI. Field Blanks

No field blanks were identified in these SDGs.

VII. Surrogates

Although surrogates were not required by the methods, surrogate analysis was performed by the laboratory. Surrogate recoveries (%R) were within QC limits.

VIII. 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.

IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the methods. Percent recoveries (%R) were within QC limits with the following exceptions:

SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	Flag	A or P
440-266900-1/ 2005655	2005655A-LCS/LCSD (All samples in SDG 440-266900-1/ 2005655)	alpha-Chlorotoluene	166 (70-130)	176 (70-130)	NA	-

Relative percent differences (RPD) were within QC limits.

X. Field Duplicates

Samples RISG-41-15.0-20200302** and RISG-41-15.0-20200302-FD (both from SDG 440-262090-1/2003191), samples RISG-36-5.0-20200227 and RISG-36-5.0-20200227-FD (both from SDG 440-262092-1/2003013), and samples RISG-50-10.0-20200520 and RISG-50-10.0-20200520-FD (both from SDG 440-266900-1/2005655) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-41-15.0-20200302**	RISG-41-15.0-20200302-FD			
440-262090-1/ 2003191	1,2,4-Trimethylbenzene	1.2	0.80	40 (≤50)	-	-
	1,3-Dichlorobenzene	1.2	1.6U	200 (≤50)	NQ	-
	2-Butanone	8.0	4.4	58 (≤50)	J (all detects)	A
	Acetone	12	4.8	86 (≤50)	NQ	-
	Carbon disulfide	1.3	1.1	17 (≤50)	-	-
	Ethanol	4.8	5.4	12 (≤50)	-	-
	Freon 11	1.2	1.2	0 (≤50)	-	-
	Methylene chloride	1.2U	1.0	200 (≤50)	NQ	-
	Tetrahydrofuran	1.5	1.1	31 (≤50)	-	-
	1,1-Dichloroethane	0.28	0.29	4 (≤50)	-	-
	1,1-Dichloroethene	0.55	0.54	2 (≤50)	-	-
	1,2-Dichloroethane	0.085	0.090	6 (≤50)	-	-
	Benzene	0.31	0.25	21 (≤50)	-	-
	Carbon tetrachloride	6.8	6.8	0 (≤50)	-	-
	Chloroethane	0.034	0.12U	200 (≤50)	NQ	-
	Chloroform	240	240	0 (≤50)	-	-
Chloromethane	0.13	0.17	27 (≤50)	-	-	

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-41-15.0-20200302**	RISG-41-15.0-20200302-FD			
440-262090-1/ 2003191	Ethylbenzene	0.19	0.16	17 (≤50)	-	-
	Freon 12	1.9	1.9	0 (≤50)	-	-
	m,p-Xylene	0.69	0.52	28 (≤50)	-	-
	Naphthalene	0.27	0.23U	200 (≤50)	NQ	-
	o-Xylene	0.23	0.17	30 (≤50)	-	-
	Tetrachloroethene	68	70	3 (≤50)	-	-
	Toluene	0.37	0.48	26 (≤50)	-	-
	Trichloroethene	0.86	0.87	1 (≤50)	-	-

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-36-5.0-20200227	RISG-36-5.0-20200227-FD			
440-262092-1/ 2003013	1,2,4-Trimethylbenzene	3.8	1.6	81 (≤50)	J (all detects)	A
	1,3,5-Trimethylbenzene	0.62	0.29	73 (≤50)	NQ	-
	1,3-Dichlorobenzene	3.6	2.4	40 (≤50)	-	-
	2-Butanone	5.8	4.2	32 (≤50)	-	-
	2-Hexanone	0.94	0.79	17 (≤50)	-	-
	4-Ethyltoluene	2.0	0.98	68 (≤50)	J (all detects)	A
	4-Methyl-2-pentanone	0.24	0.67U	200 (≤50)	NQ	-
	Acetone	8.3	9.3	11 (≤50)	-	-
	Carbon disulfide	6.9	6.6	4 (≤50)	-	-
	Chlorobenzene	0.36	0.75U	200 (≤50)	NQ	-
	Cyclohexane	0.36	0.56U	200 (≤50)	NQ	-
	Ethanol	2.3	1.9	19 (≤50)	-	-

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-36-5.0-20200227	RISG-36-5.0-20200227-FD			
440-262092-1/ 2003013	Freon 11	1.2	1.2	0 (≤50)	-	-
	Methylene chloride	1.2	1.0	18 (≤50)	-	-
	Styrene	0.30	0.13	79 (≤50)	NQ	-
	Tetrahydrofuran	3.0	1.5	67 (≤50)	NQ	-
	1,1-Dichloroethane	0.93	0.96	3 (≤50)	-	-
	1,2-Dichloroethane	0.042	0.037	13 (≤50)	-	-
	1,4-Dichlorobenzene	0.35	0.18	64 (≤50)	NQ	-
	Benzene	0.26	0.21	21 (≤50)	-	-
	Carbon tetrachloride	0.43	0.41	5 (≤50)	-	-
	Chloroethane	0.35	0.36	3 (≤50)	-	-
	Chloroform	27	26	4 (≤50)	-	-
	Chloromethane	0.19	0.24	23 (≤50)	-	-
	Ethylbenzene	0.80	0.45	56 (≤50)	J (all detects)	A
	Freon 12	2.0	2.0	0 (≤50)	-	-
	m,p-Xylene	2.0	1.0	67 (≤50)	J (all detects)	A
	Naphthalene	2.1	1.0	71 (≤50)	J (all detects)	A
	o-Xylene	2.4	1.1	74 (≤50)	J (all detects)	A
	Tetrachloroethene	3.9	1.9	69 (≤50)	J (all detects)	A
	Toluene	1.4	0.86	48 (≤50)	-	-
	Trichloroethene	0.16	0.14	13 (≤50)	-	-
Vinyl chloride	0.037	0.031	18 (≤50)	-	-	

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-50-10.0-20200520	RISG-50-10.0-20200520-FD			
440-266900-1/ 2005655	1,2,4-Trimethylbenzene	0.33	0.11	100 (≤50)	NQ	-
	1,2-Dichlorobenzene	0.22	0.13	51 (≤50)	NQ	-
	1,2-Dichloropropane	0.092	0.22U	200 (≤50)	NQ	-
	1,3,5-Trimethylbenzene	0.086	0.23U	200 (≤50)	NQ	-
	1,3-Dichlorobenzene	6.9	4.1	51 (≤50)	J (all detects)	A
	1,4-Dioxane	0.065	0.17U	200 (≤50)	NQ	-
	2-Butanone	3.2	2.0	46 (≤50)	-	-
	2-Hexanone	0.44	0.30	38 (≤50)	-	-
	4-Ethyltoluene	0.51	0.16	104 (≤50)	NQ	-
	4-Methyl-2-pentanone	0.29	0.21	32 (≤50)	-	-
	Acetone	52	33	45 (≤50)	-	-
	Bromodichloromethane	0.11	0.045	84 (≤50)	NQ	-
	Carbon disulfide	3.5	2.0	55 (≤50)	NQ	-
	Chlorobenzene	0.38	0.15	87 (≤50)	NQ	-
	Cyclohexane	0.96	0.44	74 (≤50)	NQ	-
	Ethanol	30	15	67 (≤50)	J (all detects)	A
	Freon 11	1.3	1.3	0 (≤50)	-	-
	Freon 113	0.73	0.65	12 (≤50)	-	-
	Heptane	0.18	0.20	11 (≤50)	-	-
	Hexane	0.33	0.99U	200 (≤50)	NQ	-
Methylene chloride	0.81	1.2	39 (≤50)	-	-	
Styrene	0.45	0.12	116 (≤50)	NQ	-	

SDG	Compound	Concentration (ug/m ³)		RPD (Limits)	Flag	A or P
		RISG-50-10.0-20200520	RISG-50-10.0-20200520-FD			
440-266900-1/ 2005655	Tetrahydrofuran	0.69	0.34	68 (≤50)	NQ	-
	1,1-Dichloroethane	0.15	0.10	40 (≤50)	-	-
	1,2-Dichloroethane	0.050	0.026	63 (≤50)	NQ	-
	1,4-Dichlorobenzene	0.36	0.26	32 (≤50)	-	-
	Benzene	1.1	0.46	82 (≤50)	J (all detects)	A
	Carbon tetrachloride	1.1	0.52	72 (≤50)	J (all detects)	A
	Chloroethane	0.13	0.082	45 (≤50)	-	-
	Chloroform	2.0	1.8	11 (≤50)	-	-
	Chloromethane	0.20	0.17	16 (≤50)	-	-
	Ethylbenzene	0.61	0.17	113 (≤50)	J (all detects)	A
	Freon 12	1.5	1.5	0 (≤50)	-	-
	m,p-Xylene	0.35	0.13	92 (≤50)	NQ	-
	Naphthalene	0.38	0.25	41 (≤50)	-	-
	o-Xylene	0.73	0.24	101 (≤50)	J (all detects)	A
	Tetrachloroethene	0.66	0.48	32 (≤50)	-	-
	Toluene	0.96	0.29	107 (≤50)	NQ	-
	Trichloroethene	0.031	0.080U	200 (≤50)	NQ	-
Vinyl chloride	0.078	0.040	64 (≤50)	NQ	-	

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

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the methods.

Due to initial calibration %RSD, ICV %D, continuing calibration %D, and field duplicate RPD, data were qualified as estimated in thirty-two samples.

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

No results were rejected in these SDGs.

**NERT BERA and RI3 Mod 7
Volatiles - Data Qualification Summary - SDGs 440-262090-1/2003191, 440-262092-1/2003013, 440-266900-1/2005655**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
440-262090-1/2003191	RISG-41-15.0-20200302** RISG-41-15.0-20200302-FD RISG-41-5.0-20200302 RISG-46-5.0-20200303 RISG-46-15.0-20200303	2-Hexanone	UJ (all non-detects)	P	Initial calibration (%RSD) (c)
440-262092-1/2003013	RISG-36-15.0-20200226 RISG-36-5.0-20200227 RISG-36-5.0-20200227-FD RISG-48-5.0-20200227** RISG-44-15.0-20200227 RISG-44-5.0-20200228 RISG-43-5.0-20200228 RISG-49-5.0-20200228 RISG-49-10.0-20200228 RISG-43-15.0-20200228 RISG-40-5.0-20200228	2-Hexanone	J (all detects) UJ (all non-detects)	P	Initial calibration (%RSD) (c)
440-266900-1/2005655	RISG-51-5.0-20200520** RISG-50-5.0-20200520 RISG-50-10.0-20200520 RISG-50-10.0-20200520-FD RISG-38-5.0-20200526 RISG-38-15.0-20200526	Naphthalene	J (all detects)	P	Initial calibration (%RSD) (c)
440-262092-1/2003013	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226	Naphthalene	J+ (all detects)	A	Initial calibration verification (%D) (c)
440-262092-1/2003013	RISG-42-5.0-20200224 RISG-42-12.5-20200224 RISG-45-15.0-20200224 RISG-45-5.0-20200224** RISG-47-15.0-20200224 RISG-47-5.0-20200225 RISG-39-5.0-20200226 RISG-39-13.5-20200226 RISG-35-5.0-20200226 RISG-48-10.0-20200226	Carbon tetrachloride	J+ (all detects)	P	Continuing calibration (%D) (c)
440-262090-1/2003191	RISG-41-15.0-20200302** RISG-41-15.0-20200302-FD	2-Butanone	J (all detects)	A	Field duplicates (RPD) (fd)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
440-262092-1/ 2003013	RISG-36-5.0-20200227 RISG-36-5.0-20200227-FD	1,2,4-Trimethylbenzene 4-Ethyltoluene Ethylbenzene m,p-Xylene Naphthalene o-Xylene Tetrachloroethene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (fd)
440-266900-1/ 2005655	RISG-50-10.0-20200520 RISG-50-10.0-20200520-FD	1,3-Dichlorobenzene Ethanol Benzene Carbon tetrachloride Ethylbenzene o-Xylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (fd)

**NERT BERA and RI3 Mod 7
Volatiles - Laboratory Blank Data Qualification Summary - SDGs 440-262090-1/2003191, 440-262092-1/2003013, 440-266900-1/2005655**

SDG	Sample	Compound	Modified Final Concentration		A or P	Code
440-262090-1/ 2003191	RISG-41-15.0-20200302** (3.38X)	Naphthalene	0.27J ug/m ³	0.051J ppbv	A	bl,bb
440-262090-1/ 2003191	RISG-41-5.0-20200302 (1.86X)	Naphthalene	0.37J ug/m ³	0.070J ppbv	A	bl,bb
440-262090-1/ 2003191	RISG-46-5.0-20200303 (4.52X)	Naphthalene	0.34J ug/m ³	0.065J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-42-5.0-20200224 (4.77X)	Acetone Naphthalene	9.2J ug/m ³ 0.68J ug/m ³	3.9J ppbv 0.13J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-45-15.0-20200224 (1.96X)	Methylene chloride Naphthalene	0.70J ug/m ³ 0.090J ug/m ³	0.20J ppbv 0.017J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-45-5.0-20200224** (1.75X)	Methylene chloride	0.79J ug/m ³	0.23J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-47-15.0-20200224 (18.3X)	Acetone Naphthalene	16J ug/m ³ 0.82J ug/m ³	6.9J ppbv 0.16J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-47-5.0-20200225 (8.75X)	Acetone Naphthalene	6.8J ug/m ³ 0.44J ug/m ³	2.9J ppbv 0.084J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-39-5.0-20200226 (1.64X)	Methylene chloride Naphthalene	0.84J ug/m ³ 0.23J ug/m ³	0.24J ppbv 0.043J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-39-13.5-20200226 (1.83X)	Methylene chloride Naphthalene	0.67J ug/m ³ 0.29J ug/m ³	0.19J ppbv 0.056J ppbv	A	bl,bb

SDG	Sample	Compound	Modified Final Concentration		A or P	Code
440-262092-1/ 2003013	RISG-35-5.0-20200226 (1.91X)	Methylene chloride	1.1J ug/m ³	0.30J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-48-10.0-20200226 (1.75X)	Methylene chloride Naphthalene	1.0J ug/m ³ 0.42J ug/m ³	0.29J ppbv 0.080J ppbv	A	bl,bb
440-262092-1/ 2003013	RISG-42-12.5-20200224 (1.71X)	Naphthalene	0.43J ug/m ³	0.083J ppbv	A	bl,bb

**NERT BERA and RI3 Mod 7
Volatiles - Field Blank Data Qualification Summary - SDGs 440-262090-1/2003191,
440-262092-1/2003013, 440-266900-1/2005655**

No Sample Data Qualified in these SDGs

ATTACHMENT D
Helium DVR

Helium by American Society for Testing and Material (ASTM) D1946

I. Sample Receipt and Technical Holding Times

The canisters were properly pressurized and handled.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0%.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 15.0%.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 15.0%.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in these SDGs.

VI. 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.

VII. Laboratory Control Samples

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

VIII. Field Duplicates

Samples RISG-41-15.0-20200302** and RISG-41-15.0-20200302-FD (both from SDG 440-262090-1/2003191), samples RISG-36-5.0-20200227 and RISG-36-5.0-20200227-FD (both from SDG 440-262092-1/2003013), and samples RISG-50-10.0-20200520 and RISG-50-10.0-20200520-FD (both from SDG 440-266900-1/2005655) were identified as field duplicates. No results were detected in any of the samples.

IX. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

X. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XI. Overall Assessment of Data

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

Helium leak percentage was evaluated for all samples. Helium was not detected in any of the samples, which indicates the samples were not compromised by ambient air leaks during sample collection.

NERT BERA and RI3 Mod 7

Helium - Data Qualification Summary - SDGs 440-262090-1/2003191, 440-262092-1/2003013, 440-266900-1/2005655

No Sample Data Qualified in these SDGs

NERT BERA and RI3 Mod 7

Helium - Laboratory Blank Data Qualification Summary - SDGs 440-262090-1/2003191, 440-262092-1/2003013, 440-266900-1/2005655

No Sample Data Qualified in these SDGs

NERT BERA and RI3 Mod 7

Helium - Field Blank Data Qualification Summary - SDGs 440-262090-1/2003191, 440-262092-1/2003013, 440-266900-1/2005655

No Sample Data Qualified in these SDGs

ATTACHMENT E
Perchlorate (Method SW6850) DVR

Perchlorate by Environmental Protection Agency (EPA) SW 846 Method 6850

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. LC/MS Instrument Performance Check

Instrument performance check was performed at the required frequency.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 15.0%.

The isotope ratios were within QC limits.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 15.0%.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 15.0%.

The percent differences (%D) of the limit of detection verification (LODV) standard were less than or equal to 50.0%.

The isotope ratios were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

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. Relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples/Interference Check Samples

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

Interference check samples (ICS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

Samples Z2-FT002-LMB-20191027 and Z2-FT002-LMB-20191027-DUP (both from SDG 320-55874-2) and samples Z5-FT002-CP-20191031** and Z5-FT002-CP-20191031-DUP (both from SDG 320-55962-2) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
		Z2-FT002-LMB-20191027	Z2-FT002-LMB-20191027-DUP			
320-55874-2	Perchlorate	31	30	3 (≤50)	-	-

SDG	Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
		Z5-FT002-CP-20191031**	Z5-FT002-CP-20191031-DUP			
320-55962-2	Perchlorate	8.5	8.8	3 (≤50)	-	-

X. Internal Standards

All internal standard recoveries (%R) were within QC limits.

XI. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIII. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. Overall Assessment of Data

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

**NERT BERA and RI3 Mod 7
Perchlorate - Data Qualification Summary – SDGs 320-55874-2, 320-55962-2, 320-56382-2**

No Sample Data Qualified in this SDG

**NERT BERA and RI3 Mod 7
Perchlorate - Laboratory Blank Data Qualification Summary - SDGs 320-55874-2, 320-55962-2, 320-56382-2**

No Sample Data Qualified in this SDG

**NERT BERA and RI3 Mod 7
Perchlorate - Field Blank Data Qualification Summary - SDGs 320-55874-2, 320-55962-2, 320-56382-2**

No Sample Data Qualified in this SDG

ATTACHMENT F
Metals DVR

**Chromium and Dissolved Chromium by Environmental Protection Agency (EPA)
SW 846 Method 6020
Calcium, Magnesium, Potassium, and Sodium by 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. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

ICP-MS tune data were not reviewed for Stage 2A validation.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

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

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

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

V. 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
440-253547-1	PB (prep blank)	Chromium	0.546 ug/L	D-S-SWU001-20191031* D-S-SWU001-20191031-FD* E-S-SWU001-20191031*

SDG	Blank ID	Analyte	Maximum Concentration	Associated Samples
440-253631-1	PB (prep blank)	Chromium	0.546 ug/L	EB-001-20191101* EB-002-20191101* EB-003-20191101* EB-004-20191101* EB-005-20191101* EB-006-20191101*
440-257235-1	PB (prep blank)	Chromium	0.683 ug/L	J-S-SWU001-20191212-EB
440-257313-1	PB (prep blank)	Chromium	0.860 ug/L	All samples in SDG 440-257313-1
440-262187-1	PB (prep blank)	Sodium	0.327 mg/L	PC-201-20200305 PC-202-20200305 PZ-2S-20200305

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 with the following exceptions:

SDG	Sample	Analyte	Reported Concentration	Modified Final Concentration
440-253547-1	D-S-SWU001-20191031*	Chromium	1.2 ug/L	1.2J ug/L
440-253547-1	D-S-SWU001-20191031-FD*	Chromium	1.1 ug/L	1.1J ug/L
440-253547-1	E-S-SWU001-20191031*	Chromium	0.68 ug/L	0.68J ug/L
440-253631-1	EB-002-20191101*	Chromium	0.52 ug/L	0.52J ug/L
440-253631-1	EB-003-20191101*	Chromium	0.64 ug/L	0.64J ug/L
440-253631-1	EB-005-20191101*	Chromium	0.91 ug/L	0.91J ug/L
440-257235-1	J-S-SWU001-20191212-EB	Chromium	1.2 ug/L	1.2J ug/L
440-257313-1	3-N-SWU001-20191213*	Chromium	1.7 ug/L	1.7J ug/L
440-257313-1	1-N-SWU001-20191213*	Chromium	1.8 ug/L	1.8J ug/L

VI. Field Blanks

Samples EB-001-20191101*, EB-002-20191101*, EB-003-20191101*, EB-004-20191101*, EB-005-20191101*, and EB-006-20191101* (all six from SDG 440-253631-1), and J-S-SWU001-20191212-EB (from SDG 440-257235-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
440-253631-1	EB-002-20191101*	11/01/19	Chromium	0.52 ug/L	No associated samples in this SDG
440-253631-1	EB-003-20191101*	11/01/19	Chromium	0.64 ug/L	No associated samples in this SDG
440-253631-1	EB-004-20191101*	11/01/19	Chromium	2.5 ug/L	No associated samples in this SDG
440-253631-1	EB-005-20191101*	11/01/19	Chromium	0.91 ug/L	No associated samples in this SDG
440-257235-1	J-S-SWU001-20191212-EB	12/12/19	Chromium	1.2 ug/L	No associated samples in this SDG

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
320-55962-1	E-N-BMIT001-20191029MS/MSD (All samples in SDG 320-55962-1)	Chromium	63 (80-120)	61 (80-120)	J- (all detects) UJ (all non-detects)	A

Relative percent differences (RPD) were within QC limits.

VIII. Duplicate Sample Analysis

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

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. Percent differences (%D) were within QC limits.

X. Laboratory Control Samples

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

XI. Field Duplicates

Samples Z2-FT002-LMB-20191027 and Z2-FT002-LMB-20191027-DUP (both from SDG 320-55874-1), samples Z5-FT002-CP-20191031** and Z5-FT002-CP-20191031-DUP (both from SDG 320-55962-1), samples D-S-SWU001-20191031* and D-S-SWU001-20191031-FD* (both from SDG 440-253547-1), samples D-S-SWF001-20191031F* and D-S-SWF001-20191031-FDF* (both from SDG 440-253549-1), samples D-S-SED001-20191031 and D-S-SED001-20191031-FD (both from SDG 440-253550-1), samples D-S-SO001-20191031 and D-S-SO001-20191031-FD (both from SDG 440-253551-1), samples J-S-SO001-20191112-FD and J-S-SO001-20191112 (both from SDG 440-254441-1), samples K-N-SWU001-20191114-FD* and K-N-SWU001-20191114* (both from SDG 440-254639-1), samples K-N-SWF001-20191114-FDF* and K-N-SWF001-20191114F* (both from SDG 440-254640-1), samples G-S-SED001-20191114-FD and G-S-SED001-20191114 (both from SDG 440-254653-1), samples A-N-SWF001-20191115-FDF* and A-N-SWF001-20191115F* (both from SDG 440-254729-1), samples A-N-SWU001-20191115* and A-N-SWU001-20191115-FD* (both from SDG 440-254731-1), samples F-N-SED001-20191210-FD and F-N-SED001-20191210 (both from SDG 440-257007-1), samples K-N-PW001-20191211F and K-N-PW001-20191211-FDF (both from SDG 440-257091-1), samples I-S-PW001-20191212F** and I-S-PW001-20191212-FDF** (both from SDG 440-257237-1), samples J-S-SOSS001-20191212 and J-S-SOSS001-20191212-FD (both from SDG 440-257238-1), and samples G-S-PW001-20191213F and G-S-PW001-20191213-FDF (both from SDG 440-257324-1) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		Z2-FT002-LMB-20191027	Z2-FT002-LMB-20191027-DUP			
320-55874-1	Chromium	0.10	0.10	0 (≤50)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		D-S-SWU001-20191031*	D-S-SWU001-20191031-FD*			
440-253547-1	Chromium	1.2	1.1	9 (≤30)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		D-S-SWF001-20191031F*	D-S-SWF001-20191031-FDF*			
440-253549-1	Chromium	0.53	2.0U	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		D-S-SED001-20191031	D-S-SED001-20191031-FD			
440-253550-1	Chromium	15	16	6 (≤50)	-	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		D-S-SO001-20191031	D-S-SO001-20191031-FD			
440-253551-1	Chromium	13	14	7 (≤50)	-	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		J-S-SO001-20191112-FD	J-S-SO001-20191112			
440-254441-1	Chromium	14	12	15 (≤50)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		K-N-SWU001-20191114-FD*	K-N-SWU001-20191114*			
440-254639-1	Chromium	2.0U	0.56	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		G-S-SED001-20191114-FD	G-S-SED001-20191114			
440-254653-1	Chromium	8.6	11	24 (≤50)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		A-N-SWU001-20191115*	A-N-SWU001-20191115-FD*			
440-254731-1	Chromium	2.0U	1.1	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		F-N-SED001-20191210-FD	F-N-SED001-20191210			
440-257007-1	Chromium	10	10	0 (≤50)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		K-N-PW001-20191211F	K-N-PW001-20191211-FDF			
440-257091-1	Chromium	1.0	2.8	95 (≤30)	NQ	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		I-S-PW001-20191212F**	I-S-PW001-20191212-FDF**			
440-257237-1	Chromium	1.4	1.4	200 (≤30)	NQ	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		J-S-SOSS001-20191212	J-S-SOSS001-20191212-FD			
440-257238-1	Chromium	12	13	8 (≤50)	-	-

SDG	Analyte	Concentration (ug/L)		RPD (Limits)	Flag	A or P
		G-S-PW001-20191213F	G-S-PW001-20191213-FDF			
440-257324-1	Chromium	1.2	1.4	15 (≤30)	-	-

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

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits for samples.

Internal standards data were not reviewed for Stage 2A validation.

XIII. Sample Result Verification

All sample result verifications were acceptable for samples which underwent Stage 4 validation.

Soil and sediment samples in SDGs 440-242240-1, 440-253064-1, 440-253172-1, 440-253252-1, 440-253253-1, 440-253324-1, 440-253326-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253550-1, 440-253551-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254653-1, 440-254728-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257238-1, 440-257312-1, 440-257327-1, 440-257807-1, 440-267229-1, and 440-267230-1 were reported on a wet weight basis.

Raw data were not reviewed for Stage 2A and Stage 2B validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method.

Due to MS/MSD %R, data were qualified as estimated in twelve samples.

Due to laboratory blank contamination, data were qualified as estimated or not detected in nine samples.

No results were rejected in these SDGs.

NERT BERA and RI3 Mod 7

Chromium - Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
320-55962-1	Z5-FT002-CP-20191031** Z5-FT001-GS-20191026 Z4-FT002-LMB-20191027 Z3-FT003-LMB-20191029** RF-FT001-LMB-20191030 Z4-FT004-CP-20191031 RF-FT002-CP-20191030 Z2-FT001-GS-20191028** Z1-FT002-LMB-20191028 E-N-BMIT001-20191029** 2-N-BMIT001-20191030 Z5-FT002-CP-20191031-DUP	Chromium	J- (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

NERT BERA and RI3 Mod 7

Chromium - Laboratory Blank Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
440-253547-1	D-S-SWU001-20191031*	Chromium	1.2J ug/L	A	bl,bb

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
440-253547-1	D-S-SWU001-20191031-FD*	Chromium	1.1J ug/L	A	bl,bb
440-253547-1	E-S-SWU001-20191031*	Chromium	0.68J ug/L	A	bl,bb
440-253631-1	EB-002-20191101*	Chromium	0.52J ug/L	A	bl,bb
440-253631-1	EB-003-20191101*	Chromium	0.64J ug/L	A	bl,bb
440-253631-1	EB-005-20191101*	Chromium	0.91J ug/L	A	bl,bb
440-257235-1	J-S-SWU001-20191212-EB	Chromium	1.2J ug/L	A	bl,bb
440-257313-1	3-N-SWU001-20191213*	Chromium	1.7J ug/L	A	bl,bb
440-257313-1	1-N-SWU001-20191213*	Chromium	1.8J ug/L	A	bl,bb

NERT BERA and RI3 Mod 7

Chromium - Field Blank Data Qualification Summary - SDGs 320-55874-1, 320-55962-1, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253547-1, 440-253549-1, 440-253550-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257235-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257320-1, 440-257324-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-267227-1, 440-267229-1, 440-267230-1

No Sample Data Qualified in these SDGs

ATTACHMENT G
Wet Chemistry DVR

Alkalinity by Standard Method 2320B
Bromide, Chloride, Nitrate as Nitrogen, Nitrite as Nitrogen, Orthophosphate as Phosphate, and Sulfate by EPA Method 300.0
Bromide and Chlorate by EPA Method 300.1B
Dissolved Organic Carbon by EPA SW 846 Method 9060
Dissolved Hexavalent Chromium by EPA SW Method 218.6
Hardness as Calcium Carbonate and Dissolved Hardness as Calcium Carbonate by Standard Method 2340B/C
Hexavalent Chromium and Dissolved Hexavalent Chromium by EPA SW 846 Method 7196A
Percent Lipids by Method Laboratory SOP
Perchlorate and Dissolved Perchlorate by EPA Method 314.0
Sulfide by EPA SW 846 Method 9034
Total Dissolved Solids by Standard Method 2540C
Total Organic Carbon by Lloyd Kahn Method and EPA SW 846 Method 9060

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
440-253248-1	C-S-SWU001-20191025*	Hexavalent chromium	48.83 hours	24 hours	R (all non-detects)	P
440-253248-1	B-S-SWU001-20191025*	Hexavalent chromium	47.08 hours	24 hours	UJ (all non-detects)	P
440-253250-1	C-S-SWF001-20191025*	Hexavalent chromium (dissolved)	48.58 hours	24 hours	R (all non-detects)	P
440-253250-1	B-S-SWF001-20191025*	Hexavalent chromium (dissolved)	46.83 hours	24 hours	UJ (all non-detects)	P
440-253631-1	EB-001-20191101*	Hexavalent chromium	83.62 hours	24 hours	R (all non-detects)	P
440-253631-1	EB-002-20191101*	Hexavalent chromium	82.95 hours	24 hours	R (all non-detects)	P
440-253631-1	EB-003-20191101*	Hexavalent chromium	82.45 hours	24 hours	R (all non-detects)	P
440-253631-1	EB-004-20191101*	Hexavalent chromium	81.95 hours	24 hours	R (all non-detects)	P
440-253631-1	EB-005-20191101*	Hexavalent chromium	81.37 hours	24 hours	R (all non-detects)	P

440-253631-1	EB-006-20191101*	Hexavalent chromium	81.28 hours	24 hours	R (all non-detects)	P
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II. Initial Calibration

All criteria for the initial calibration of each method were met.

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

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable with the following exceptions:

SDG	Date	Lab. Reference/ID	Analyte	%R (Limits)	Associated Samples	Flag	A or P
440-257239-1	12/20/19	CCV (17:14)	Perchlorate (dissolved)	113 (90-110)	F-N-PW001-20191212 I-N-PW001-20191212 J-N-PW001-20191212	NA	-
440-267229-1	06/15/20	CCV (22:30)	Total organic carbon	111 (90-110)	All samples in SDG 440-267229-1	J+ (all detects)	P
440-267230-1	06/15/20	CCV (22:30)	Total organic carbon	111 (90-110)	All samples in SDG 440-267230-1	J+ (all detects)	P

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.

V. Field Blanks

Samples EB-001-20191101*, EB-002-20191101*, EB-003-20191101*, EB-004-20191101*, EB-005-20191101*, EB-006-20191101* (all six from SDG 440-253631-1), EB-T0-008-20191115* (from SDG 440-254770-1), J-S-SWU001-20191212-EB* (from SDG 440-257235-1), EB-T0-001-20200513*, and EB-T0-001-20200514* (both from SDG 440-266063-1) were identified as equipment blanks. No contaminants were found with the following exceptions:

SDG	Blank ID	Collection Date	Analyte	Concentration	Associated Samples
440-254770-1	EB-T0-008-20191115*	11/15/19	Bromide	95 mg/L	No associated samples in this SDG
440-266063-1	EB-T0-001-20200513*	05/13/20	Bromide	490000 ug/L	No associated samples in this SDG
440-266063-1	EB-T0-001-20200514*	05/14/20	Bromide	480000 ug/L	No associated samples in this SDG

VI. Surrogates

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

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	%R (Limits)	Flag	A or P
320-55874-1	Z5-FT002-LMB-20191025MS (All samples in SDG 320-55874-1)	Hexavalent chromium	58 (75-125)	UJ (all non-detects)	A
320-55962-1	E-N-BMIT0041-20191029MS (All samples in SDG 320-55962-1)	Hexavalent chromium	62 (75-125)	UJ (all non-detects)	A
440-254728-1	B-N-SED001-20191115MS** (All samples in SDG 440-254728-1)	Hexavalent chromium (insoluble)	68 (75-125)	UJ (all non-detects)	A

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-253253-1	C-S-SED001-20191025MS/MSD (C-S-SED001-20191025 B-S-SED001-20191025)	Sulfide	-	64 (70-130)	J- (all detects) UJ (all non-detects)	A
440-253324-1	F-S-SO001-20191028MS/MSD** (F-S-SO001-20191028**)	Perchlorate	-	166 (80-120)	J+ (all detects)	A
440-253324-1	F-S-SO001-20191028MS/MSD** (I-S-SO001-20191028**)	Perchlorate	-	166 (80-120)	NA	-

SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
440-253479-1	A-S-SED001-20191030MS/MSD (All samples in SDG 440-253479-1)	Hexavalent chromium (insoluble) Sulfide	72 (75-125) 64 (70-130)	- -	J- (all detects) UJ (all non-detects) J- (all detects) UJ (all non-detects)	A
440-254392-1	D-N-SED001-20191111MS/MSD (D-N-SED001-20191111 E-N-SED001-20191111)	Sulfide	54 (70-130)	54 (70-130)	J- (all detects) UJ (all non-detects)	A
440-254728-1	B-N-SED001-20191115MS/MSD** (All samples in SDG 440-254728-1)	Sulfide	16 (70-130)	24 (70-130)	J- (all detects)	A
440-257006-1	LS-SOSS001-20191210MS/MSD (All samples in SDG 440-257006-1)	Hexavalent chromium (insoluble)	148 (75-125)	-	NA	-
440-257007-1	LS-SOSS001-20191210MS/MSD (All samples in SDG 440-257007-1)	Hexavalent chromium (insoluble)	148 (75-125)	-	NA	-
440-257007-1	F-N-SED001-20191210-FDMS/MSD (All samples in SDG 440-257007-1)	Sulfide	153 (70-130)	181 (70-130)	J+ (all detects)	A
440-257009-1	LS-SOSS001-20191210MS/MSD (All samples in SDG 440-257009-1)	Hexavalent chromium (insoluble)	148 (75-125)	-	NA	-
440-257237-1	2-N-PW001-20191212MS/MSD (All samples in SDG 440-257237-1)	Hexavalent chromium (dissolved)	70 (85-115)	68 (85-115)	UJ (all non-detects)	A
440-257238-1	LS-SOSS001-20191210MS/MSD (All samples in SDG 440-257238-1)	Hexavalent chromium (insoluble)	148 (75-125)	-	NA	-
440-257239-1	2-N-PW001-20191212MS/MSD (2-N-PW001-20191212)	Chlorate	251 (75-125)	238 (75-125)	NA	-
440-257239-1	2-N-PW001-20191212MS/MSD (All samples in SDG 440-257239-1)	Hexavalent chromium (dissolved)	70 (85-115)	68 (85-115)	UJ (all non-detects)	A
440-257807-1	1N-SO001-20191219MS/MSD (All samples in SDG 440-257807-1)	Total organic carbon	-	65 (75-125)	J- (all detects)	A
440-267230-1	D-S-SED002-20200610MS/MSD (All samples in SDG 440-267230-1)	Sulfide	63 (70-130)	-	J- (all detects)	A
440-262187-1	PZ-2S-20200305MS/MSD (PZ-2S-20200305 PC-201-20200305 PC-202-20200305)	Orthophosphate as PO ₄	183 (80-120)	183 (80-120)	NA	-

For I-S-PW001-20191212-FDMS/MSD** (from SDG 440-257237-1) and 2-N-PW001-20191212MS/MSD (from SDG 440-257239-1), no data were qualified for bromide percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration.

For PZ-2S-20200305MS/MSD (from SDG 440-262187-1), no data were qualified for chloride and sulfate 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
440-253324-1	F-S-SO001-20191028MS/MSD** (I-S-SO001-20191028** F-S-SO001-20191028**)	Perchlorate	28 (≤15)	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 with the following exceptions:

SDG	DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
440-257009-1	LS-SOSS001-20191210DUP (All samples in SDG 440-257009-1)	Total organic carbon	-	900 (≤2000 mg/kg)	-	-
440-257807-1	1N-SO001-20191219DUP (All samples in SDG 440-257807-1)	Total organic carbon	65 (≤20)	-	J (all detects)	P

IX. Laboratory Control Samples

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

X. Field Duplicates

Samples Z2-FT002-LMB-20191027 and Z2-FT002-LMB-20191027-DUP (both from SDG 320-55874-1), samples Z5-FT002-CP-20191031** and Z5-FT002-CP-20191031-Dup (both from SDG 320-55962-1), samples Z5-FT002-CP-20191031** and Z5-FT002-CP-20191031-DUP (both from SDG 320-55962-2), samples D-S-SWU001-20191031* and D-S-SWU001-20191031-FD* (both from SDG 440-253547-1), samples D-S-SWF001-20191031* and D-S-SWF001-20191031-FD* (both from SDG 440-253549-1),

samples D-S-SED001-20191031 and D-S-SED001-20191031-FD (both from SDG 440-253550-1), samples D-S-SO001-20191031 and D-S-SO001-20191031-FD (both from SDG 440-253551-1), samples J-S-SO001-20191112-FD and J-S-SO001-20191112 (both from SDG 440-254441-1), samples K-N-SWU001-20191114-FD* and K-N-SWU001-20191114* (both from SDG 440-254639-1), samples K-N-SWF001-20191114-FD* and K-N-SWF001-20191114* (both from SDG 440-254640-1), samples G-S-SED001-20191114-FD and G-S-SED001-20191114 (both from SDG 440-254653-1), samples A-N-SWF001-20191115-FD* and A-N-SWF001-20191115* (both from SDG 440-254729-1), samples A-N-SWU001-20191115* and A-N-SWU001-20191115-FD* (both from SDG 440-254731-1), samples F-N-SED001-20191210-FD and F-N-SED001-20191210 (both from SDG 440-257007-1), samples K-N-PW001-20191211 and K-N-PW001-20191211-FD (both from SDG 440-257091-1), samples I-S-PW001-20191212** and I-S-PW001-20191212-FD** (both from SDG 440-257237-1), samples J-S-SOSS001-20191212 and J-S-SOSS001-20191212-FD (both from SDG 440-257238-1), and samples G-S-PW001-20191213 and G-S-PW001-20191213-FD (both from SDG 440-257324-1) 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
		Z5-FT002-CP-20191031**	Z5-FT002-CP-20191031-DUP			
320-55962-2	Percent lipids	3.1	2.9	7 (≤50)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		D-S-SWU001-20191031*	D-S-SWU001-20191031-FD*			
440-253547-1	Chlorate	120 ug/L	110 ug/L	9 (≤30)	-	-
	Perchlorate	18 ug/L	19 ug/L	5 (≤30)	-	-
	Total organic carbon	5.2 mg/L	5.2 mg/L	0 (≤30)	-	-
	Hardness as calcium carbonate	540 mg/L	560 mg/L	4 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		D-S-SWF001-20191031*	D-S-SWF001-20191031-FD*			
440-253549-1	Chlorate	130 ug/L	130 ug/L	0 (≤30)	-	-
	Perchlorate (dissolved)	19 ug/L	17 ug/L	11 (≤30)	-	-
	Total dissolved solids	1300 mg/L	1300 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		D-S-SWF001-20191031*	D-S-SWF001-20191031-FD*			
	Dissolved organic carbon	5.2 mg/L	5.9 mg/L	13 (≤30)	-	-
	Hardness as calcium carbonate (dissolved)	530 mg/L	520 mg/L	2 (≤30)	-	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		D-S-SED001-20191031	D-S-SED001-20191031-FD			
440-253550-1	Total organic carbon	1800	3800	71 (≤50)	J (all detects)	A

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		D-S-SO001-20191031	D-S-SO001-20191031-FD			
440-253551-1	Total organic carbon	3100	890	111 (≤50)	NQ	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		J-S-SO001-20191112-FD	J-S-SO001-20191112			
440-254441-1	Total organic carbon	19000	15000	24 (≤50)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		K-N-SWU001-20191114-FD*	K-N-SWU001-20191114*			
440-254639-1	Chlorate	120 ug/L	120 ug/L	0 (≤30)	-	-
	Perchlorate	44 ug/L	43 ug/L	2 (≤30)	-	-
	Total organic carbon	5.1 mg/L	5.3 mg/L	4 (≤30)	-	-
	Hardness as calcium carbonate	560 mg/L	560 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		K-N-SWF001-20191114-FD*	K-N-SWF001-20191114*			
440-254640-1	Chlorate	110 ug/L	120 ug/L	9 (≤30)	-	-
	Perchlorate (dissolved)	35 ug/L	39 ug/L	11 (≤30)	-	-
	Total dissolved solids	1400 mg/L	1400 mg/L	0 (≤30)	-	-
	Dissolved organic carbon	6.8 mg/L	5.5 mg/L	21 (≤30)	-	-
	Hardness as calcium carbonate (dissolved)	560 mg/L	560 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		G-S-SED001-20191114-FD	G-S-SED001-20191114			
440-254653-1	Sulfide	56	32	55 (≤50)	NQ	-
	Total organic carbon	4200	3500	18 (≤50)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		A-N-SWF001-20191115-FD*	A-N-SWF001-20191115*			
440-254729-1	Chlorate	78 ug/L	61 ug/L	24 (≤30)	-	-
	Total dissolved solids	1100 mg/L	1100 mg/L	0 (≤30)	-	-
	Dissolved organic carbon	6.6 mg/L	6.1 mg/L	8 (≤30)	-	-
	Hardness as calcium carbonate (dissolved)	440 mg/L	440 mg/L	0 (≤30)	-	-

SDG	Analyte	Concentration		RPD (Limits)	Flag	A or P
		A-N-SWU001-20191115*	A-N-SWU001-20191115-FD*			
440-254731-1	Chlorate	77 ug/L	78 ug/L	1 (≤30)	-	-
	Total organic carbon	5.6 mg/L	5.6 mg/L	0 (≤30)	-	-
	Hardness as calcium carbonate	420 mg/L	440 mg/L	5 (≤30)	-	-

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		F-N-SED001-20191210-FD	F-N-SED001-20191210			
440-257007-1	Sulfide	100	220	75 (≤50)	J (all detects)	A
	Total organic carbon	9000	9100	1 (≤50)	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		K-N-PW001-20191211	K-N-PW001-20191211-FD			
440-257091-1	Bromide	27	51	62 (≤30)	J (all detects)	A
	Dissolved organic carbon	4.6	4.1	11 (≤30)	-	-
	Hardness as calcium carbonate (dissolved)	340	250	31 (≤30)	J (all detects)	A

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
		I-S-PW001-20191212**	I-S-PW001-20191212-FD**			
440-257237-1	Bromide	15	34	78 (≤30)	J (all detects)	A
	Dissolved organic carbon	4.9	7.5	42 (≤30)	J (all detects)	A
	Hardness as calcium carbonate (dissolved)	800	520	42 (≤30)	J (all detects)	A

SDG	Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
		J-S-SOSS001-20191212	J-S-SOSS001-20191212-FD			
440-257238-1	Total organic carbon	4700	2400	65 (≤50)	J (all detects)	A

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

All sample result verifications were acceptable for samples which underwent Stage 4 validation.

Soil and sediment samples in SDGs 440-242240-1, 440-253064-1, 440-253172-1, 440-253252-1, 440-253253-1, 440-253324-1, 440-253326-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253550-1, 440-253551-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254653-1, 440-254728-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257238-1, 440-257312-1, 440-257327-1, 440-257807-1, 440-267229-1, and 440-267230-1 were reported on a wet weight basis.

Raw data were not reviewed for Stage 2A and Stage 2B validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the methods.

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

SDG	Sample	Analyte	Reason	Flag	A or P
440-253248-1	C-S-SWU001-20191025*	Hexavalent chromium	Result from reanalysis was more usable.	DNR	-
440-253250-1	C-S-SWF001-20191025*	Hexavalent chromium (dissolved)	Result from reanalysis was more usable.	DNR	-

Due to technical holding time, data were rejected in six samples.

Due to technical holding time, continuing calibration %R, MS/MSD %R and RPD, DUP RPD, and field duplicate RPD, data were qualified as estimated in fifty-six samples.

No results were rejected in these SDGs.

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Wet Chemistry - Data Qualification Summary - SDGs 320-55874-1, 320-55874-2, 320-55962-1, 320-55962-2, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253550-1, 440-253547-1, 440-253549-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257324-1, 440-257320-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-266063-1, 440-267227-1, 440-267227-2, 440-267229-1, 440-267230-1

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-253248-1	B-S-SWU001-20191025*	Hexavalent chromium	UJ (all non-detects)	P	Technical holding times (h)
440-253250-1	B-S-SWF001-20191025*	Hexavalent chromium (dissolved)	UJ (all non-detects)	P	Technical holding times (h)
440-253631-1	EB-001-20191101* EB-002-20191101* EB-003-20191101* EB-004-20191101* EB-005-20191101* EB-006-20191101*	Hexavalent chromium	R (all non-detects)	P	Technical holding times (h)
440-267229-1	G-S-SO001-20200610**	Total organic carbon	J+ (all detects)	P	Continuing calibration (%R) (c)
440-267230-1	D-S-SED002-20200610 1-N-SED001-20200610**	Total organic carbon	J+ (all detects)	P	Continuing calibration (%R) (c)
320-55874-1	J-S-BMIT001-20191023 Z5-FT002-LMB-20191025 K-S-BMIT001-20191025 L-S-BMIT001-20191026 Z4-FT001-BG-20191026 Z2-FT002-LMB-20191027 B-S-BMIT001-20191028 C-S-BMIT001-20191028 Z1-FT001-GS-20191028 Z3-FT001-BG-20191029 Z3-FT002-GS-20191029 Z2-FT002-LMB-20191027-DUP	Hexavalent chromium	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
320-55962-1	Z5-FT002-CP-20191031** Z5-FT001-GS-20191026 Z3-FT003-LMB-20191029** RF-FT001-LMB-20191030 Z4-FT004-CP-20191031 RF-FT002-CP-20191030 Z2-FT001-GS-20191028** Z1-FT002-LMB-20191028 E-N-BMIT001-20191029** 2-N-BMIT001-20191030 Z5-FT002-CP-20191031-Dup	Hexavalent chromium	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-253253-1	C-S-SED001-20191025 B-S-SED001-20191025	Sulfide	J- (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-253324-1	F-S-SO001-20191028**	Perchlorate	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-253479-1	A-S-SED001-20191030 BP9-S-SED001-20191030	Hexavalent chromium (insoluble) Sulfide	J- (all detects) UJ (all non-detects) J- (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-254392-1	D-N-SED001-20191111 E-N-SED001-20191111	Sulfide	J- (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-254728-1	B-N-SED001-20191115** A-N-SED001-20191115**	Hexavalent chromium (insoluble)	UJ (all non-detects)	A	Matrix spike (%R) (m)
440-254728-1	B-N-SED001-20191115** A-N-SED001-20191115**	Sulfide	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-257007-1	F-N-SED001-20191210-FD F-N-SED001-20191210 F-S-SED001-20191210	Sulfide	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-257237-1	H-S-PW001-20191212** I-S-PW001-20191212** I-S-PW001-20191212-FD**	Hexavalent chromium (dissolved)	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-257239-1	F-N-PW001-20191212 I-N-PW001-20191212 J-N-PW001-20191212 2-N-PW001-20191212	Hexavalent chromium (dissolved)	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-257807-1	1N-SO001-20191219 3-N-SO001-20191219	Total organic carbon	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)
440-267230-1	D-S-SED002-20200610 1-N-SED001-20200610**	Sulfide	J- (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (m)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
440-253324-1	I-S-SO001-20191028** F-S-SO001-20191028**	Perchlorate	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (ld)
440-257807-1	1N-SO001-20191219 3-N-SO001-20191219	Total organic carbon	J (all detects)	P	Duplicate sample analysis (RPD) (ld)
440-253550-1	D-S-SED001-20191031 D-S-SED001-20191031-FD	Total organic carbon	J (all detects)	A	Field duplicates (RPD) (fd)
440-257007-1	F-N-SED001-20191210-FD F-N-SED001-20191210	Sulfide	J (all detects)	A	Field duplicates (RPD) (fd)
440-257091-1	K-N-PW001-20191211 K-N-PW001-20191211-FD	Bromide Hardness as Calcium Carbonate (dissolved)	J (all detects) J (all detects)	A	Field duplicates (RPD) (fd)
440-257237-1	I-S-PW001-20191212** I-S-PW001-20191212-FD**	Bromide Dissolved organic carbon Hardness as Calcium Carbonate (dissolved)	J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (fd)
440-257238-1	J-S-SOSS001-20191212 J-S-SOSS001-20191212-FD	Total organic carbon	J (all detects)	A	Field duplicates (RPD) (fd)
440-253248-1	C-S-SWU001-20191025*	Hexavalent chromium	DNR	-	Overall assessment of data (orr)
440-253250-1	C-S-SWF001-20191025*	Hexavalent chromium (dissolved)	DNR	-	Overall assessment of data (orr)

NERT BERA and RI3 Mod 7

Wet Chemistry - Laboratory Blank Data Qualification Summary - SDGs 320-55874-1, 320-55874-2, 320-55962-1, 320-55962-2, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253550-1, 440-253547-1, 440-253549-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257324-1, 440-257320-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-266063-1, 440-267227-1, 440-267227-2, 440-267229-1, 440-267230-1

No Sample Data Qualified in these SDGs

NERT BERA and RI3 Mod 7

Wet Chemistry - Field Blank Data Qualification Summary - SDGs 320-55874-1, 320-55874-2, 320-55962-1, 320-55962-2, 320-56382-1, 440-242240-1, 440-253064-1, 440-253172-1, 440-253248-1, 440-253250-1, 440-253252-1, 440-253253-1, 440-253322-1, 440-253323-1, 440-253324-1, 440-253326-1, 440-253424-1, 440-253425-1, 440-253429-1, 440-253430-1, 440-253479-1, 440-253480-1, 440-253481-1, 440-253550-1, 440-253547-1, 440-253549-1, 440-253551-1, 440-253631-1, 440-254336-1, 440-254337-1, 440-254381-1, 440-254385-1, 440-254388-1, 440-254392-1, 440-254441-1, 440-254639-1, 440-254640-1, 440-254653-1, 440-254728-1, 440-254729-1, 440-254731-1, 440-254770-1, 440-257006-1, 440-257007-1, 440-257009-1, 440-257010-1, 440-257014-1, 440-257015-1, 440-257016-1, 440-257090-1, 440-257091-1, 440-257237-1, 440-257238-1, 440-257239-1, 440-257312-1, 440-257313-1, 440-257324-1, 440-257320-1, 440-257327-1, 440-257807-1, 440-262187-1, 440-266063-1, 440-267227-1, 440-267227-2, 440-267229-1, 440-267230-1

No Sample Data Qualified in these SDGs