# Data Validation Summary Report
# Remedial Investigation Phase 3 Soil Gas Sampling
# November 2022
# Nevada Environmental Response Trust
# Henderson, Nevada

Prepared for

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April 26, 2023

# Remedial Investigation Sampling Phase 3 Modification #15 DVSR and EDD November 2022

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

## Nevada Environmental Response Trust (NERT) Representative Certification

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

Office of the Nevada Environmental Response Trust

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

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

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

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**Date:** 4/26/23

# Remedial Investigation Sampling Phase 3 Modification #15 DVSR and EDD November 2023

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

## Responsible Certified Environmental Manager (CEM) for this project

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

Kimberly Kuwabara

April 26, 2023

**Kimberly Kuwabara, MS**
**Senior Managing Consultant**

**Date**

Certified Environmental Manager
Ramboll US Corporation, Inc.
CEM Certificate Number: 2353
CEM Expiration Date: March 20, 2025

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## ATTACHMENTS

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ASTM | American Society for Testing and Material |
| CCV | Continuing Calibration Verification |
| DL | Detection Limit |
| DNR | Do Not Report |
| DQO | Data Quality Objectives |
| DUP | Laboratory Duplicate |
| DVR | Data Validation Report |
| DVSR | Data Validation Summary Report |
| EPA | Environmental Protection Agency |
| FD | Field Duplicate |
| ICAL | Initial Calibration |
| ICV | Initial Calibration Verification |
| LCS/LCSD | Laboratory Control Sample / Laboratory Control Sample Duplicate |
| LDC | Laboratory Data Consultants, Inc. |
| 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 |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compounds |
| %RSD | Percent Relative Standard Deviation |
| %D | Percent Difference |
| %R | Percent Recovery |
| ppbv | Parts per Billion by Volume |
| $ug/m^3$ | Microgram per Cubic Meter |

## 1.0 INTRODUCTION

This data validation summary report (DVSR) has been prepared by Laboratory Data Consultants, Inc. (LDC) to assess the validity and usability of laboratory analytical data from the Remedial Investigation Phase 3 Soil Gas Sampling, November 2022, conducted at the Nevada Environmental Response Trust (NERT) site in Henderson, Nevada. The assessment was performed by Ramboll as a part of the *Quality Assurance Project Plan, Revision 6, Nevada Environmental Response Trust Site, Henderson, Nevada* dated February 2021 and included the collection and analyses of 23 environmental and quality control (QC) samples.

The analyses were performed by the following methods:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Method TO-15 and Method TO-15 in Selected Ion Monitoring (SIM) mode
Helium by American Society for Testing and Material (ASTM) D-1946

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

The laboratory analytical data were validated in accordance with procedures described in the Nevada Division of Environmental Protection (NDEP) *Data Validation Guidance* established for the BMI Plant Sites and Common Areas Projects, Henderson, Nevada, July 13, 2018. Consistent with the NDEP and Quality Assurance Project Plan (QAPP) requirements for air samples, approximately ninety percent of the analytical data were validated according to Stage 2B data validation procedures and ten percent of the analytical data were validated according to Stage 4 data validation procedures. The number of samples for each method is presented in Table III.

The analytical data were evaluated for QA/QC based on the following documents: QAPP (November 2021), *USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020), and the *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, EPA/625/R-96/010b, Center for Environmental Research Information*, January 1999.

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

PARCCS summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCCS criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 5 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: field duplicates (FDs), method blanks, canister blanks, laboratory control samples/laboratory control sample duplicates (LCS/LCSDs), and laboratory duplicates (DUPs).

Before conducting the PARCCS evaluation, the analytical data were validated according to the NDEP Data Validation Guidance (July 2018), NFG (USEPA 2020), and EPA 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 NDEP Data Validation Guidance (July 2018), NFG, and EPA Test Methods, the data set is then evaluated using PARCCS criteria. PARCCS criteria provide an evaluation of overall data usability. The following is a discussion of PARCCS criteria as related to the project DQOs.

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

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

$RPD = (D1-D2)/\{1/2(D1+D2)\} \times 100$
where:
D1 = reported concentration for the sample
D2 = reported concentration for the duplicate

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

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. An LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. The LCS measures laboratory efficiency in recovering target analytes from an aqueous matrix in the absence of matrix interferences.

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

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

An RPD outside the numerical QC limit in the LCS/LCSD, MS/MSD, DUPs, or field duplicates indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular

reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

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

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

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, 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.

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, volatization, and chemical degradation.

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

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

Percent completeness is calculated using the following equation:

$\%C = (T - R)/T \times 100$
where:
%C = percent completeness
T = total number of sample results
R = total number of rejected sample results

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

**Sensitivity** is the ability of an analytical method or instrument to discriminate between measurement responses representing different concentrations. This capability is established during the planning phase to meet the DQOs. It is important that detection limits (DLs), and PQLs presented in the QAPP Addendum (November 2021) 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 (EPA METHOD TO-15/TO-15 SIM)

All VOC by Method TO-15/TO-15 SIM data were assessed to be valid since none of the 1,357 total results in parts per billion by volume (ppbv) or 1,357 total results in microgram per cubic meter ($ug/m^3$) 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 $ug/m^3$. 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 %Ds in the continuing calibration verifications met the acceptance criteria of 30 percent.

Seventeen (17) 1,4-dichlorobenzene results (34 total for both ppbv and ug/$m^3$ results) were qualified as detected estimated (J) or non-detected estimated (UJ) due to the initial calibration %RSDs outside the acceptance criteria of 30 percent.

Seventeen (17) carbon tetrachloride results (34 total for both ppbv and ug/$m^3$ results) were qualified as detected estimated (J-) due to the initial calibration verification %Ds outside the acceptance criteria of 30 percent.

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

### 2.1.2 Surrogates

Due to surrogate %Rs above the laboratory acceptance criteria, 92 results (184 total for both ppbv and ug/$m^3$ results) were qualified as detected estimated (J+). The details regarding the qualification of results are provided in Attachment A.

### 2.1.3 DUP Samples

DUP samples were not performed for this analysis.

### 2.1.4 LCS/LCSD Samples

Due to LCS/LCSD %Rs above the laboratory acceptance criteria, four 1,2,4-trimethylbenzene results (8 total for both ppbv and ug/$m^3$ results) were qualified as detected estimated (J+). The details regarding the qualification of results are provided in Attachment A.

All LCS/LCSD 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

All RPDs field duplicate pair RISG-45-15.0-20221028 and RISG-45-15-Dup-20221028 were within the acceptance criteria of $\leq 50$ for results that were reported above the PQL.

Given the additional uncertainty in results reported below the PQL, no data were qualified when the RPDs were outside the acceptance criteria and the associated results in either the primary or duplicate

samples were below the PQL or not detected.

### 2.1.7 Target Analyte Quantitation and Identification

Raw data were evaluated for three air samples. All target analyte identifications were acceptable.

## 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 30-day analysis holding time criteria for air samples.

### 2.2.2 Blanks

Method blanks and canister blanks were 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.

For this data set, two times the blank value was used to assess all contaminants for organic methods. This allows the data not to be censored and provides an understanding of the level of contamination relative to that found in the samples. This approach is employed for all data sets collected for annual and semi-annual groundwater remedial performance sampling for the NERT site to ensure comparability.

#### 2.2.2.1 Method Blanks

As a result of method blank contamination, three carbon disulfide results (6 total for both ppbv and ug/$m^3$ results) were qualified as detected estimated (J). The details regarding the qualification of results are provided in Attachment A.

#### 2.2.2.2 Canister Blanks

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

### 2.3 Comparability

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

### 2.4 Completeness

The completeness level attained for VOC 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 HELIUM

All helium data were assessed to be valid since none of the 23 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCCS criteria and evaluated based on the DQOs.

### 3.1 Precision and Accuracy

#### 3.1.1 Instrument Calibration

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

#### 3.1.2 DUP Samples

DUP samples were not performed for this analysis.

#### 3.1.3 LCS/LCSD Samples

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

#### 3.1.4 FD Samples

The RPDs for field duplicate samples RISG-45-15.0-20221028 and RISG-45-15-Dup-20221028 were within the acceptance criteria.

#### 3.1.4 Target Analyte Quantitation and Identification

Raw data were evaluated for three air samples. All target analyte identifications were acceptable.

### 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 30-day analysis holding time criteria for air samples.

### 3.2.2 Blanks

Method blanks were analyzed to evaluate representativeness.

#### 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 helium data is regarded as acceptable.

### 3.4 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.

### 3.5 Sensitivity

The calibration was evaluated for instrument sensitivity and was determined to be technically acceptable. All laboratory PQLs met the specified requirements described in the QAPP.

## 4.0 VARIANCES IN ANALYTICAL PERFORMANCE

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

## 5.0 SUMMARY OF PARCCS CRITERIA

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

### 5.1 Precision and Accuracy

Precision and accuracy were evaluated using data quality indicators such as 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 Section 2.1.1. All surrogate, LCS/LCSD %Rs and RPDs, internal standard areas, field duplicate RPDs, and target analyte quantitation met acceptance criteria with the exceptions noted in Sections 2.1.2 and 2.1.4.

### 5.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All holding times were met. All samples were associated with a method blank and in each individual SDG. The representativeness of the project data is considered acceptable.

### 5.3 Comparability

Sampling frequency requirements were met in obtaining necessary 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. The overall comparability is considered acceptable.

### 5.4 Completeness

Of the 1,380 total analytes reported, none of the sample results were rejected. The completeness for the SDGs is as follows:

| Parameter (Method) | Total Analytes | No. of Rejects | % Completeness |
|---|---|---|---|
| VOC (EPA Method TO-15/TO-15 SIM) | 1,357 | 0 | 100 |
| Helium | 23 | 0 | 100 |
| **Total** | **1,380** | **100** | **100** |

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

### 5.5 Sensitivity

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

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical data quality assessment for the air sample laboratory analytical results generated during the Remedial Investigation Phase 3 Soil Gas sampling activities completed in November 2022, at the NERT site in Henderson, Nevada established that the overall project requirements and completeness levels were met. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Stage 2B and Stage 4 data validation all other results are considered valid and usable for all purposes.

## 7.0 REFERENCES

NDEP 2018. NDEP Data Validation Guidance. July.

Ramboll 2021. Quality Assurance Project Plan, Nevada Environmental Response Trust Site, Henderson, Nevada. February 24. NDEP approved March 11, 2021.

USEPA 1999. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, EPA/625/R-96/010b, Center for Environmental Research Information. January.

USEPA 2020. USEPA National Functional Guidelines for Superfund Organic Methods Data Review. November.

# TABLES

## Table I. Sample Cross-Reference

| LDC | SDG | Client Sample ID | Laboratory Sample ID | Sample Date | Validation Level | Matrix | QC Type | VOA (TO-15) | VOA (TO-15 SIM) | Helium (D1946) |
|---|---|---|---|---|---|---|---|---|---|---|
| 55575 | 2211031A | RISG-91-15.0-20221025 | 2211031-01 | 10/25/22 | Stage 4 | Air | | X | X | |
| 55575 | 2211031A | RISG-91-5.0-20221025 | 2211031-02 | 10/25/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031A | RISG-92-10.0-20221026 | 2211031-03 | 10/26/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031A | RISG-92-5.0-20221026 | 2211031-04 | 10/26/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031A | RISG-39-13.5-20221026 | 2211031-05 | 10/26/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031A | RISG-39-5.0-20221026 | 2211031-06 | 10/26/22 | Stage 4 | Air | | X | X | |
| 55575 | 2211031A | RISG-35-5.0-20221026 | 2211031-07 | 10/26/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031A | RISG-37-5.0-20221026 | 2211031-08 | 10/26/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031A | RISG-37-13.0-20221027 | 2211031-09 | 10/27/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031A | RISG-36-5.0-20221027 | 2211031-10 | 10/27/22 | Stage 4 | Air | | X | X | |
| 55575 | 2211031A | RISG-36-15.0-20221027 | 2211031-11 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031A | RISG-38-15.0-20221027 | 2211031-12 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031A | RISG-38-5.0-20221027 | 2211031-13 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-40-5.0-20221027 | 2211031-14 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-43-13.0-20221027 | 2211031-15 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-43-5.0-20221027 | 2211031-16 | 10/27/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-44-15.0-20221028 | 2211031-17 | 10/28/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031B | RISG-44-5.0-20221028 | 2211031-18 | 10/28/22 | Stage 2B | Air | | X | | |
| 55575 | 2211031B | RISG-42-5.0-20221028 | 2211031-19 | 10/28/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-42-12.5-20221028 | 2211031-20 | 10/28/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031B | RISG-45-15.0-20221028 | 2211031-21 | 10/28/22 | Stage 2B | Air | FD | X | X | |
| 55575 | 2211031B | RISG-45-15-DUP-20221028 | 2211031-22 | 10/28/22 | Stage 2B | Air | FD | X | X | |
| 55575 | 2211031B | RISG-45-5.0-20221028 | 2211031-23 | 10/28/22 | Stage 2B | Air | | X | X | |
| 55575 | 2211031C | RISG-91-15.0-20221025 | 2211031-01 | 10/25/22 | Stage 4 | Air | | | | X |
| 55575 | 2211031C | RISG-91-5.0-20221025 | 2211031-02 | 10/25/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-92-10.0-20221026 | 2211031-03 | 10/26/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-92-5.0-20221026 | 2211031-04 | 10/26/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-39-13.5-20221026 | 2211031-05 | 10/26/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-39-5.0-20221026 | 2211031-06 | 10/26/22 | Stage 4 | Air | | | | X |
| 55575 | 2211031C | RISG-35-5.0-20221026 | 2211031-07 | 10/26/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-37-5.0-20221026 | 2211031-08 | 10/26/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-37-13.0-20221027 | 2211031-09 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-36-5.0-20221027 | 2211031-10 | 10/27/22 | Stage 4 | Air | | | | X |
| 55575 | 2211031C | RISG-36-15.0-20221027 | 2211031-11 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-38-15.0-20221027 | 2211031-12 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-38-5.0-20221027 | 2211031-13 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-40-5.0-20221027 | 2211031-14 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-43-13.0-20221027 | 2211031-15 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-43-5.0-20221027 | 2211031-16 | 10/27/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-44-15.0-20221028 | 2211031-17 | 10/28/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-44-5.0-20221028 | 2211031-18 | 10/28/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-42-5.0-20221028 | 2211031-19 | 10/28/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-42-12.5-20221028 | 2211031-20 | 10/28/22 | Stage 2B | Air | | | | X |
| 55575 | 2211031C | RISG-45-15.0-20221028 | 2211031-21 | 10/28/22 | Stage 2B | Air | FD | | | X |
| 55575 | 2211031C | RISG-45-15-DUP-20221028 | 2211031-22 | 10/28/22 | Stage 2B | Air | FD | | | X |
| 55575 | 2211031C | RISG-45-5.0-20221028 | 2211031-23 | 10/28/22 | Stage 2B | Air | | | | X |

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

| Quality Control Elements | Stage 2B | |
|---|---|---|
| | **GC/MS[1]** | **GC[2]** |
| Sample Receipt & Technical Holding Time | √ | √ |
| Instrument Performance Check | √ | **N/A** |
| Initial Calibration (ICAL) | √ | √ |
| Initial Calibration Verification (ICV) | √ | √ |
| Continuing Calibration Verification (CCV) | √ | √ |
| Laboratory Blanks | √ | √ |
| Field Blanks | √ | √ |
| Surrogate Spikes | √ | **N/A** |
| Matrix Spike (MS)/ Matrix Spike Duplicate (MSD) | **N/A** | **N/A** |
| Laboratory Duplicate (DUP) | √ | √ |
| Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD) | √ | √ |
| Internal Standards | √ | **N/A** |
| Field Duplicate | √ | √ |
| Project Quantitation Limits (PQL)[3] | √ | √ |
| Multiple Results for One Sample | √ | √ |
| Target Analyte Quantitation | - | - |
| Target Analyte Identification | - | - |
| 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
[1]GC/MS = Method TO-15/TO-15SIM
[2]GC = Helium
[3]PQLs verified for GC/MS and GC methods.

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

| Quality Control Elements | Stage 4 | |
|---|---|---|
| | **GC/MS** | **GC[3]** |
| Sample Receipt & Technical Holding Time | √ | √ |
| Instrument Performance Check | √ | **N/A** |
| Initial Calibration (ICAL) | √ | √ |
| Initial Calibration Verification (ICV) | √ | √ |
| Continuing Calibration Verification (CCV) | √ | √ |
| Laboratory Blanks | √ | √ |
| Field Blanks | √ | √ |
| Surrogate Spikes | √ | **N/A** |
| Matrix Spike (MS)/ Matrix Spike Duplicate (MSD) | **N/A** | **N/A** |
| Laboratory Duplicate (DUP) | √ | √ |
| Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD) | √ | √ |
| Internal Standards | √ | **N/A** |
| Field Duplicate | √ | √ |
| Project Quantitation Limits (PQL)[4] | √ | √ |
| Multiple Results for One Sample | √ | √ |
| Target Analyte Quantitation | √ | √ |
| Target Analyte Identification | √ | √ |
| 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
[1]GC/MS = Method TO-15/TO-15SIM
[2]GC = Helium
[3]PQLs verified for GC/MS and GC methods.

## Table III. Stage 2B & Stage 4 Validation Percentage

| Parameter (Method) | Number of Results | | | Validation Percentage | |
|---|---|---|---|---|---|
| | Stage 2B Results | Stage 4 Results | Total Results | Stage 2B (%) | Stage 4 (%) |
| VOC (TO-15) | 858 | 108 | 966 | 89 | 11 |
| VOC (TO-15 SIM) | 322 | 69 | 391 | 82 | 18 |
| Helium (D1946) | 20 | 3 | 23 | 87 | 13 |

## 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 108-90-7 | Chlorobenzene | 0.82 | | 0.049 | 0.63 | ug/m3 | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 1.9 | | 0.10 | 0.93 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 78-93-3 | 2-Butanone | 3.3 | | 0.35 | 2.3 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.47 | J | 0.19 | 1.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.49 | J | 0.22 | 1.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.46 | J | 0.20 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 75-09-2 | Methylene Chloride | 2.0 | | 0.54 | 0.94 | ug/m3 | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.48 | J | 0.38 | 2.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 67-64-1 | Acetone | 19 | | 0.84 | 7.4 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 75-69-4 | Trichlorofluoromethane | 2.6 | | 0.060 | 0.76 | ug/m3 | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15 | 75-34-3 | 1,1-Dichloroethane | 16 | J | 7.0 | 33 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-37-5.0-20221026 | 2022-10-26 | TO15 | 75-35-4 | 1,1-Dichloroethene | 2.5 | J | 2.1 | 7.7 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-37-13.0-20221027 | 2022-10-27 | TO15 | 75-35-4 | 1,1-Dichloroethene | 10 | J | 5.0 | 18 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.29 | J | 0.21 | 0.71 | ug/m3 | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.29 | J | 0.24 | 0.82 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 108-67-8 | 1,3,5-Trimethylbenzene | 0.14 | J | 0.14 | 0.71 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.46 | J | 0.18 | 1.0 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.35 | J | 0.20 | 1.7 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 95-50-1 | 1,2-Dichlorobenzene | 0.17 | J | 0.097 | 0.82 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 75-27-4 | Bromodichloromethane | 6.2 | | 0.16 | 1.0 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 124-48-1 | Dibromochloromethane | 2.2 | | 0.23 | 1.3 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.64 | J | 0.10 | 0.91 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 75-09-2 | Methylene Chloride | 1.4 | | 0.61 | 1.1 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.60 | J | 0.49 | 4.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 1.2 | J | 1.0 | 8.9 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.34 | J | 0.099 | 0.87 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 109-99-9 | Tetrahydrofuran | 4.3 | | 0.37 | 2.3 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 67-64-1 | Acetone | 25 | | 0.79 | 6.9 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.4 | | 0.069 | 0.87 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.44 | J | 0.20 | 1.2 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.40 | J | 0.23 | 0.76 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.74 | J | 0.092 | 0.82 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 75-15-0 | Carbon Disulfide | 0.74 | J | 0.69 | 2.4 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 78-93-3 | 2-Butanone | 0.59 | J | 0.31 | 2.0 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 123-91-1 | 1,4-Dioxane | 0.090 | J | 0.083 | 0.52 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 78-93-3 | 2-Butanone | 1.2 | J | 0.33 | 2.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 78-93-3 | 2-Butanone | 0.80 | J | 0.66 | 4.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 108-90-7 | Chlorobenzene | 0.10 | J | 0.056 | 0.71 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 64-17-5 | Ethanol | 3.5 | J | 0.71 | 5.8 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 78-93-3 | 2-Butanone | 1.8 | J | 0.34 | 2.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 78-93-3 | 2-Butanone | 1.8 | J | 0.38 | 2.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 75-27-4 | Bromodichloromethane | 0.44 | J | 0.14 | 0.91 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15 | 67-64-1 | Acetone | 9.4 | | 0.74 | 6.5 | ug/m3 | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.17 | J | 0.15 | 0.76 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.19 | J | 0.16 | 0.82 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.20 | J | 0.14 | 0.71 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.16 | J | 0.14 | 0.74 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 108-10-1 | 4-Methyl-2-pentanone | 0.24 | J | 0.21 | 0.59 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 108-10-1 | 4-Methyl-2-pentanone | 0.44 | J | 0.43 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 67-64-1 | Acetone | 7.6 | J | 4.0 | 34 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15 | 67-64-1 | Acetone | 22 | J | 8.1 | 70 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 100-42-5 | Styrene | 0.65 | | 0.091 | 0.63 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15 | 75-27-4 | Bromodichloromethane | 2.8 | J | 1.5 | 9.9 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 75-27-4 | Bromodichloromethane | 0.19 | J | 0.16 | 1.0 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15 | 75-27-4 | Bromodichloromethane | 26 | J | 16 | 54 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 75-27-4 | Bromodichloromethane | 1.5 | J | 0.75 | 4.8 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 75-27-4 | Bromodichloromethane | 0.23 | J | 0.15 | 0.97 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 75-15-0 | Carbon Disulfide | 3.5 | J | 3.2 | 11 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 75-15-0 | Carbon Disulfide | 2.3 | J | 1.3 | 4.5 | ug/m3 | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 2.3 | ug/m3 |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 75-15-0 | Carbon Disulfide | 1.0 | J | 0.65 | 2.2 | ug/m3 | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 1.0 | ug/m3 |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 75-15-0 | Carbon Disulfide | 0.72 | J | 0.67 | 2.4 | ug/m3 | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 0.72 | ug/m3 |
| 2211031A | RISG-92-10.0-20221026 | 2022-10-26 | TO15 | 56-23-5 | Carbon Tetrachloride | 49 | J | 19 | 100 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15 | 56-23-5 | Carbon Tetrachloride | 50 | J | 13 | 51 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.7 | | 0.064 | 0.81 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 108-90-7 | Chlorobenzene | 0.16 | J | 0.060 | 0.76 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.6 | | 0.066 | 0.83 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 108-90-7 | Chlorobenzene | 0.12 | J | 0.052 | 0.67 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 108-90-7 | Chlorobenzene | 0.15 | J | 0.054 | 0.70 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 110-82-7 | Cyclohexane | 0.28 | J | 0.28 | 2.8 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 124-48-1 | Dibromochloromethane | 1.1 | J | 0.25 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15 | 64-17-5 | Ethanol | 27 | J | 6.8 | 56 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15 | 64-17-5 | Ethanol | 3.3 | J | 0.69 | 5.7 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 64-17-5 | Ethanol | 3.3 | J | 1.3 | 11 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 64-17-5 | Ethanol | 2.6 | J | 0.76 | 6.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.55 | J | 0.099 | 0.87 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 64-17-5 | Ethanol | 3.5 | J | 3.3 | 27 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 123-91-1 | 1,4-Dioxane | 0.20 | J | 0.085 | 0.53 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 78-93-3 | 2-Butanone | 1.2 | J | 0.33 | 2.2 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 591-78-6 | 2-Hexanone | 0.52 | J | 0.46 | 3.0 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 108-10-1 | 4-Methyl-2-pentanone | 0.34 | J | 0.22 | 0.61 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 108-10-1 | 4-Methyl-2-pentanone | 0.50 | J | 0.21 | 0.59 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 108-90-7 | Chlorobenzene | 0.24 | J | 0.052 | 0.67 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 108-90-7 | Chlorobenzene | 0.072 | J | 0.053 | 0.68 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15 | 100-42-5 | Styrene | 0.53 | J | 0.10 | 0.71 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 100-42-5 | Styrene | 0.17 | J | 0.090 | 0.62 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 64-17-5 | Ethanol | 1.8 | J | 0.68 | 5.6 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15 | 127-18-4 | Tetrachloroethene | 29 | J | 16 | 55 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15 | 109-99-9 | Tetrahydrofuran | 0.40 | J | 0.35 | 2.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15 | 109-99-9 | Tetrahydrofuran | 1.0 | J | 0.69 | 4.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 75-09-2 | Methylene Chloride | 0.81 | J | 0.59 | 1.0 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 75-09-2 | Methylene Chloride | 0.80 | J | 0.57 | 1.0 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-37-5.0-20221026 | 2022-10-26 | TO15 | 79-01-6 | Trichloroethene | 4.7 | J | 2.2 | 10 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-37-13.0-20221027 | 2022-10-27 | TO15 | 79-01-6 | Trichloroethene | 14 | J | 5.1 | 25 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.9 | J | 0.32 | 4.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 109-99-9 | Tetrahydrofuran | 0.38 | J | 0.35 | 2.2 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15 | 75-69-4 | Trichlorofluoromethane | 2.0 | J | 0.66 | 8.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 78-93-3 | 2-Butanone | 5.1 | | 0.33 | 2.1 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 75-27-4 | Bromodichloromethane | 1.6 | | 0.15 | 0.97 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.47 | J | 0.19 | 1.1 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.14 | J | 0.14 | 0.71 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15 | 64-17-5 | Ethanol | 2.1 | J | 0.66 | 5.5 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 67-64-1 | Acetone | 15 | | 0.81 | 7.0 | ug/m3 | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.38 | J | 0.20 | 1.1 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.64 | J | 0.10 | 0.89 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | J | 0.24 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.47 | J | 0.27 | 0.91 | ug/m3 | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.55 | J | 0.12 | 1.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.28 | J | 0.18 | 0.91 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 67-64-1 | Acetone | 6.7 | J | 1.0 | 8.8 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 108-90-7 | Chlorobenzene | 0.11 | J | 0.066 | 0.85 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 64-17-5 | Ethanol | 3.9 | J | 0.84 | 7.0 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 75-09-2 | Methylene Chloride | 1.1 | J | 0.73 | 1.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15 | 100-42-5 | Styrene | 0.22 | J | 0.11 | 0.79 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.77 | J | 0.73 | 2.4 | ug/m3 | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.88 | J | 0.34 | 3.0 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15 | 67-64-1 | Acetone | 8.2 | J | 2.7 | 23 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15 | 100-42-5 | Styrene | 0.54 | J | 0.30 | 2.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.3 | J | 0.22 | 2.8 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15 | 67-64-1 | Acetone | 7.1 | J | 2.6 | 23 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.2 | J | 0.21 | 2.7 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.42 | J | 0.18 | 1.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15 | 67-64-1 | Acetone | 5.9 | J | 0.76 | 6.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15 | 64-17-5 | Ethanol | 0.97 | J | 0.63 | 5.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-15.0-20221028 | 2022-10-28 | TO15 | 56-23-5 | Carbon Tetrachloride | 11 | J | 4.0 | 21 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-15.0-20221028 | 2022-10-28 | TO15 | 127-18-4 | Tetrachloroethene | 4.6 | J | 4.2 | 23 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 67-64-1 | Acetone | 11 | J | 10 | 28 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 75-27-4 | Bromodichloromethane | 2.7 | J | 1.3 | 7.9 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 56-23-5 | Carbon Tetrachloride | 5.4 | J | 1.4 | 7.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 75-71-8 | Dichlorodifluoromethane | 2.8 | J | 0.98 | 5.9 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 127-18-4 | Tetrachloroethene | 3.6 | J | 1.5 | 8.0 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15 | 75-69-4 | Trichlorofluoromethane | 2.0 | J | 1.3 | 6.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.49 | J | 0.28 | 1.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 95-63-6 | 1,2,4-Trimethylbenzene | 0.32 | J | 0.32 | 1.1 | ug/m3 | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.92 | J | 0.15 | 1.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 123-91-1 | 1,4-Dioxane | 0.17 | J | 0.12 | 0.78 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 78-93-3 | 2-Butanone | 1.0 | J | 0.49 | 3.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.27 | J | 0.20 | 1.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 67-64-1 | Acetone | 9.1 | J | 1.2 | 10 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 75-27-4 | Bromodichloromethane | 0.90 | J | 0.22 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 64-17-5 | Ethanol | 1.5 | J | 0.99 | 8.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 75-09-2 | Methylene Chloride | 1.0 | J | 0.86 | 1.5 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 100-42-5 | Styrene | 0.24 | J | 0.13 | 0.92 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 109-99-9 | Tetrahydrofuran | 2.4 | J | 0.52 | 3.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15 | 75-69-4 | Trichlorofluoromethane | 0.98 | J | 0.096 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.43 | J | 0.28 | 1.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 78-93-3 | 2-Butanone | 0.80 | J | 0.48 | 3.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 75-27-4 | Bromodichloromethane | 0.94 | J | 0.22 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 64-17-5 | Ethanol | 1.6 | J | 0.96 | 8.0 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 75-09-2 | Methylene Chloride | 0.99 | J | 0.84 | 1.5 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 100-42-5 | Styrene | 0.14 | J | 0.13 | 0.90 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 109-99-9 | Tetrahydrofuran | 1.1 | J | 0.50 | 3.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15 | 75-69-4 | Trichlorofluoromethane | 1.1 | J | 0.094 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.43 | J | 0.19 | 1.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 541-73-1 | 1,3-Dichlorobenzene | 0.71 | J | 0.099 | 0.87 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 78-93-3 | 2-Butanone | 0.51 | J | 0.33 | 2.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 622-96-8 | 4-Ethyltoluene | 0.14 | J | 0.14 | 0.71 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 108-10-1 | 4-Methyl-2-pentanone | 0.31 | J | 0.21 | 0.59 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 67-64-1 | Acetone | 6.0 | J | 0.79 | 6.9 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 75-27-4 | Bromodichloromethane | 0.25 | J | 0.15 | 0.97 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 108-90-7 | Chlorobenzene | 0.056 | J | 0.052 | 0.67 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 64-17-5 | Ethanol | 0.96 | J | 0.66 | 5.5 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15 | 109-99-9 | Tetrahydrofuran | 1.2 | J | 0.35 | 2.1 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.062 | J | 0.025 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.064 | J | 0.028 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.060 | J | 0.026 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.063 | J | 0.050 | 0.29 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15VOL | 75-34-3 | 1,1-Dichloroethane | 3.9 | J | 1.7 | 8.1 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-37-5.0-20221026 | 2022-10-26 | TO15VOL | 75-35-4 | 1,1-Dichloroethene | 0.62 | J | 0.53 | 2.0 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-37-13.0-20221027 | 2022-10-27 | TO15VOL | 75-35-4 | 1,1-Dichloroethene | 2.6 | J | 1.2 | 4.6 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.060 | J | 0.043 | 0.14 | ppbv | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.058 | J | 0.050 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 108-67-8 | 1,3,5-Trimethylbenzene | 0.029 | J | 0.029 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.099 | J | 0.082 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.059 | J | 0.033 | 0.29 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.057 | J | 0.016 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.20 | J | 0.17 | 1.5 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.11 | J | 0.017 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 67-64-1 | Acetone | 11 | | 0.33 | 2.9 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 123-91-1 | 1,4-Dioxane | 0.025 | J | 0.023 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 78-93-3 | 2-Butanone | 0.42 | J | 0.11 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 78-93-3 | 2-Butanone | 0.60 | J | 0.13 | 0.83 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 78-93-3 | 2-Butanone | 0.60 | J | 0.12 | 0.76 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 78-93-3 | 2-Butanone | 0.27 | J | 0.22 | 1.4 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.038 | J | 0.032 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.040 | J | 0.028 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.032 | J | 0.029 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 108-10-1 | 4-Methyl-2-pentanone | 0.059 | J | 0.052 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 108-10-1 | 4-Methyl-2-pentanone | 0.11 | J | 0.10 | 0.29 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 67-64-1 | Acetone | 3.2 | J | 1.7 | 14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15VOL | 67-64-1 | Acetone | 9.2 | J | 3.4 | 30 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 100-42-5 | Styrene | 0.15 | | 0.021 | 0.15 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.029 | J | 0.023 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.41 | J | 0.23 | 1.5 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.23 | J | 0.11 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15VOL | 75-27-4 | Bromodichloromethane | 3.9 | J | 2.3 | 8.1 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.034 | J | 0.022 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 75-15-0 | Carbon Disulfide | 0.75 | J | 0.42 | 1.4 | ppbv | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 0.75 | ppbv |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 75-15-0 | Carbon Disulfide | 1.1 | J | 1.0 | 3.6 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 75-15-0 | Carbon Disulfide | 0.33 | J | 0.21 | 0.72 | ppbv | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 0.33 | ppbv |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 75-15-0 | Carbon Disulfide | 0.23 | J | 0.22 | 0.76 | ppbv | J | bl,bb,sp | Blank Contamination < PQL, <PQL | | 0.23 | ppbv |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15VOL | 56-23-5 | Carbon Tetrachloride | 7.9 | J | 2.0 | 8.1 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-92-10.0-20221026 | 2022-10-26 | TO15VOL | 56-23-5 | Carbon Tetrachloride | 7.8 | J | 3.0 | 16 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.30 | | 0.011 | 0.14 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 108-90-7 | Chlorobenzene | 0.035 | J | 0.013 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.29 | | 0.012 | 0.15 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 108-90-7 | Chlorobenzene | 0.032 | J | 0.012 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 108-90-7 | Chlorobenzene | 0.027 | J | 0.011 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.062 | J | 0.025 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.050 | J | 0.025 | 0.15 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 110-82-7 | Cyclohexane | 0.082 | J | 0.080 | 0.83 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 124-48-1 | Dibromochloromethane | 0.13 | J | 0.029 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15VOL | 64-17-5 | Ethanol | 14 | J | 3.6 | 30 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15VOL | 64-17-5 | Ethanol | 1.8 | J | 0.36 | 3.0 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 64-17-5 | Ethanol | 1.7 | J | 0.70 | 5.8 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.11 | J | 0.017 | 0.15 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 64-17-5 | Ethanol | 1.4 | J | 0.40 | 3.3 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 64-17-5 | Ethanol | 1.9 | J | 1.8 | 14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.091 | J | 0.016 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 123-91-1 | 1,4-Dioxane | 0.055 | J | 0.024 | 0.15 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 78-93-3 | 2-Butanone | 0.42 | J | 0.11 | 0.74 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 591-78-6 | 2-Hexanone | 0.13 | J | 0.11 | 0.72 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.029 | J | 0.028 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 108-10-1 | 4-Methyl-2-pentanone | 0.12 | J | 0.052 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 108-10-1 | 4-Methyl-2-pentanone | 0.083 | J | 0.053 | 0.15 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 108-90-7 | Chlorobenzene | 0.052 | J | 0.011 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 108-90-7 | Chlorobenzene | 0.016 | J | 0.012 | 0.15 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 100-42-5 | Styrene | 0.039 | J | 0.021 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15VOL | 100-42-5 | Styrene | 0.12 | J | 0.024 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 64-17-5 | Ethanol | 0.96 | J | 0.36 | 3.0 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-92-5.0-20221026 | 2022-10-26 | TO15VOL | 127-18-4 | Tetrachloroethene | 4.2 | J | 2.3 | 8.1 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.13 | J | 0.12 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.36 | J | 0.24 | 1.4 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 75-09-2 | Methylene Chloride | 0.23 | J | 0.17 | 0.30 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 75-09-2 | Methylene Chloride | 0.23 | J | 0.16 | 0.29 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.31 | | 0.018 | 0.16 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 78-93-3 | 2-Butanone | 1.1 | | 0.12 | 0.78 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 67-64-1 | Acetone | 8.1 | | 0.36 | 3.1 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-37-13.0-20221027 | 2022-10-27 | TO15VOL | 79-01-6 | Trichloroethene | 2.6 | J | 0.95 | 4.6 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-37-5.0-20221026 | 2022-10-26 | TO15VOL | 79-01-6 | Trichloroethene | 0.88 | J | 0.40 | 2.0 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.92 | | 0.024 | 0.16 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.34 | J | 0.057 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.13 | J | 0.12 | 0.74 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.36 | J | 0.12 | 1.5 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 124-48-1 | Dibromochloromethane | 0.26 | | 0.027 | 0.16 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 75-09-2 | Methylene Chloride | 0.41 | | 0.18 | 0.31 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 109-99-9 | Tetrahydrofuran | 1.5 | | 0.12 | 0.78 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.24 | | 0.012 | 0.16 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 108-90-7 | Chlorobenzene | 0.18 | | 0.011 | 0.14 | ppbv | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 75-09-2 | Methylene Chloride | 0.58 | | 0.16 | 0.27 | ppbv | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.059 | J | 0.023 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 95-50-1 | 1,2-Dichlorobenzene | 0.028 | J | 0.016 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 78-93-3 | 2-Butanone | 0.20 | J | 0.10 | 0.68 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.065 | J | 0.021 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 67-64-1 | Acetone | 3.9 | | 0.31 | 2.7 | ppbv | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.47 | | 0.011 | 0.14 | ppbv | J+ | s | Surrogate %R | 139 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.12 | J | 0.015 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 139 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 78-93-3 | 2-Butanone | 1.7 | | 0.11 | 0.72 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.25 | | 0.022 | 0.14 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15VOL | 64-17-5 | Ethanol | 1.1 | J | 0.35 | 2.9 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.057 | J | 0.027 | 0.16 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.080 | J | 0.046 | 0.16 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.034 | J | 0.030 | 0.16 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 75-15-0 | Carbon Disulfide | 0.24 | J | 0.22 | 0.78 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 108-90-7 | Chlorobenzene | 0.022 | J | 0.012 | 0.16 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15VOL | 64-17-5 | Ethanol | 1.8 | J | 0.38 | 3.1 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 135 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15VOL | 67-64-1 | Acetone | 6.3 | | 0.34 | 3.0 | ppbv | J+ | s | Surrogate %R | 135 | 70-130 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.059 | J | 0.032 | 0.18 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.095 | J | 0.055 | 0.18 | ppbv | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.091 | J | 0.021 | 0.18 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.058 | J | 0.036 | 0.18 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 67-64-1 | Acetone | 2.8 | J | 0.42 | 3.7 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 108-90-7 | Chlorobenzene | 0.024 | J | 0.014 | 0.18 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 64-17-5 | Ethanol | 2.1 | J | 0.45 | 3.7 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 75-09-2 | Methylene Chloride | 0.33 | J | 0.21 | 0.37 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15VOL | 100-42-5 | Styrene | 0.051 | J | 0.027 | 0.18 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.16 | J | 0.15 | 0.49 | ppbv | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.15 | J | 0.056 | 0.49 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15VOL | 67-64-1 | Acetone | 3.4 | J | 1.1 | 9.9 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15VOL | 100-42-5 | Styrene | 0.13 | J | 0.072 | 0.49 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.22 | J | 0.039 | 0.49 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15VOL | 67-64-1 | Acetone | 3.0 | J | 1.1 | 9.7 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.22 | J | 0.038 | 0.48 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.055 | J | 0.024 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15VOL | 67-64-1 | Acetone | 2.5 | J | 0.32 | 2.8 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15VOL | 64-17-5 | Ethanol | 0.52 | J | 0.34 | 2.8 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-15.0-20221028 | 2022-10-28 | TO15VOL | 56-23-5 | Carbon Tetrachloride | 1.7 | J | 0.64 | 3.4 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-15.0-20221028 | 2022-10-28 | TO15VOL | 127-18-4 | Tetrachloroethene | 0.68 | J | 0.62 | 3.4 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 67-64-1 | Acetone | 4.5 | J | 4.4 | 12 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.40 | J | 0.19 | 1.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 56-23-5 | Carbon Tetrachloride | 0.86 | J | 0.22 | 1.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 75-71-8 | Dichlorodifluoromethane | 0.56 | J | 0.20 | 1.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 127-18-4 | Tetrachloroethene | 0.53 | J | 0.22 | 1.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-44-5.0-20221028 | 2022-10-28 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.36 | J | 0.23 | 1.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.064 | J | 0.037 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 95-63-6 | 1,2,4-Trimethylbenzene | 0.065 | J | 0.065 | 0.22 | ppbv | J+ | l,sp | LSC/LCSD %R, <PQL | 131,- | 70-130 | % |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.15 | J | 0.024 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 123-91-1 | 1,4-Dioxane | 0.048 | J | 0.034 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 78-93-3 | 2-Butanone | 0.35 | J | 0.16 | 1.1 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.054 | J | 0.042 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 67-64-1 | Acetone | 3.8 | J | 0.50 | 4.3 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.13 | J | 0.033 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 64-17-5 | Ethanol | 0.79 | J | 0.52 | 4.3 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 75-09-2 | Methylene Chloride | 0.30 | J | 0.25 | 0.43 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 100-42-5 | Styrene | 0.057 | J | 0.031 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.82 | J | 0.18 | 1.1 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.18 | J | 0.017 | 0.22 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.056 | J | 0.036 | 0.21 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 78-93-3 | 2-Butanone | 0.27 | J | 0.16 | 1.0 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.14 | J | 0.032 | 0.21 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 64-17-5 | Ethanol | 0.87 | J | 0.51 | 4.2 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 75-09-2 | Methylene Chloride | 0.28 | J | 0.24 | 0.42 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 100-42-5 | Styrene | 0.032 | J | 0.031 | 0.21 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.37 | J | 0.17 | 1.0 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15VOL | 75-69-4 | Trichlorofluoromethane | 0.20 | J | 0.017 | 0.21 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.056 | J | 0.025 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 541-73-1 | 1,3-Dichlorobenzene | 0.12 | J | 0.016 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 78-93-3 | 2-Butanone | 0.17 | J | 0.11 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 622-96-8 | 4-Ethyltoluene | 0.029 | J | 0.028 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 108-10-1 | 4-Methyl-2-pentanone | 0.076 | J | 0.052 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 67-64-1 | Acetone | 2.5 | J | 0.33 | 2.9 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 75-27-4 | Bromodichloromethane | 0.037 | J | 0.022 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 108-90-7 | Chlorobenzene | 0.012 | J | 0.011 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 64-17-5 | Ethanol | 0.51 | J | 0.35 | 2.9 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15VOL | 109-99-9 | Tetrahydrofuran | 0.39 | J | 0.12 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 8.9 | | 0.013 | 0.18 | ug/m3 | J | c,s | ICV %D, Surrogate %R | 38.83;140 | 30;70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 79-00-5 | 1,1,2-Trichloroethane | 0.041 | J | 0.018 | 0.16 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 79-00-5 | 1,1,2-Trichloroethane | 0.048 | J | 0.019 | 0.16 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.40 | J | 0.12 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.15 | J | 0.023 | 0.23 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.19 | J | 0.058 | 0.59 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.13 | J | 0.11 | 0.26 | ug/m3 | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.092 | J | 0.075 | 0.17 | ug/m3 | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 75-35-4 | 1,1-Dichloroethene | 0.039 | J | 0.030 | 0.11 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.13 | J | 0.075 | 0.17 | ug/m3 | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.11 | J | 0.095 | 0.22 | ug/m3 | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.12 | J | 0.078 | 0.18 | ug/m3 | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.033 | J | 0.016 | 0.13 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.24 | J | 0.019 | 0.26 | ug/m3 | J- | c,sp | ICV %D, <PQL | 38.83 | 30 | % |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.26 | J | 0.019 | 0.27 | ug/m3 | J- | c,sp | ICV %D, <PQL | 38.83 | 30 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.054 | J | 0.014 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.086 | 0.20 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.76 | 1.8 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.075 | 0.17 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.37 | 0.87 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.15 | 0.35 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.40 | | 0.012 | 0.17 | ug/m3 | J | c,s | ICV %D, Surrogate %R | 38.83;138 | 30;70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.097 | J | 0.070 | 0.16 | ug/m3 | J | c,s,sp | ICAL %RSD, Surrogate %R, <PQL | 35.708;138 | 30;70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.52 | | 0.014 | 0.20 | ug/m3 | J | c,s | ICV %D, Surrogate %R | 38.83;132 | 30;70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 67-66-3 | Chloroform | 99 | | 0.015 | 0.14 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | 0.16 | J | 0.080 | 0.19 | ug/m3 | J | c,s,sp | ICAL %RSD, Surrogate %R, <PQL | 35.708;132 | 30;70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 71-43-2 | Benzene | 0.35 | | 0.024 | 0.25 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 67-66-3 | Chloroform | 15 | | 0.016 | 0.15 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 35 | | 0.011 | 0.11 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.16 | | 0.020 | 0.13 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 179601-23-1 | m,p-xylene | 0.40 | | 0.026 | 0.27 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 95-47-6 | ortho-xylene | 0.17 | | 0.023 | 0.13 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 108-88-3 | Toluene | 0.38 | | 0.021 | 0.29 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 1.1 | | 0.013 | 0.11 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.033 | J | 0.014 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.13 | J | 0.045 | 0.46 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 91-20-3 | Naphthalene | 0.12 | J | 0.12 | 0.41 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.15 | J | 0.023 | 0.23 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 71-43-2 | Benzene | 0.37 | | 0.021 | 0.22 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 127-18-4 | Tetrachloroethene | 0.16 | J | 0.030 | 0.21 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 71-43-2 | Benzene | 0.17 | J | 0.11 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 156-60-5 | trans-1,2-Dichloroethene | 0.016 | J | 0.0092 | 0.61 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 71-43-2 | Benzene | 0.59 | J | 0.23 | 2.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.17 | J | 0.024 | 0.24 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 127-18-4 | Tetrachloroethene | 8.1 | | 0.028 | 0.20 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 75-00-3 | Chloroethane | 1.4 | | 0.0096 | 0.18 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 127-18-4 | Tetrachloroethene | 8.1 | | 0.026 | 0.18 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 75-01-4 | Vinyl Chloride | 0.031 | J | 0.011 | 0.040 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 75-71-8 | Dichlorodifluoromethane | 2.6 | | 0.015 | 0.38 | ug/m3 | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIM | 79-01-6 | Trichloroethene | 0.027 | J | 0.027 | 0.17 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.36 | | 0.019 | 0.27 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 19 | | 0.026 | 0.36 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.31 | | 0.014 | 0.19 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 1.5 | | 0.065 | 0.91 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 2.4 | | 0.13 | 1.9 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.48 | | 0.015 | 0.21 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 108-88-3 | Toluene | 0.28 | | 0.018 | 0.26 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 79-01-6 | Trichloroethene | 1.3 | | 0.024 | 0.15 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.59 | | 0.013 | 0.18 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 79-01-6 | Trichloroethene | 0.18 | | 0.025 | 0.16 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 79-00-5 | 1,1,2-Trichloroethane | 0.043 | J | 0.017 | 0.15 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 75-35-4 | 1,1-Dichloroethene | 0.037 | J | 0.014 | 0.054 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 75-00-3 | Chloroethane | 0.082 | J | 0.020 | 0.38 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.055 | J | 0.018 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 179601-23-1 | m,p-xylene | 0.10 | J | 0.023 | 0.24 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 95-47-6 | ortho-xylene | 0.059 | J | 0.020 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 156-60-5 | trans-1,2-Dichloroethene | 0.027 | J | 0.0081 | 0.54 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 74-87-3 | Chloromethane | 0.29 | J | 0.18 | 1.5 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 74-87-3 | Chloromethane | 0.42 | J | 0.19 | 1.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.040 | J | 0.012 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 75-01-4 | Vinyl Chloride | 0.023 | J | 0.0097 | 0.035 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 67-66-3 | Chloroform | 28 | | 0.014 | 0.13 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 75-71-8 | Dichlorodifluoromethane | 2.4 | J | 0.15 | 3.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIM | 75-71-8 | Dichlorodifluoromethane | 4.2 | | 0.014 | 0.34 | ug/m3 | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.11 | J | 0.094 | 0.63 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.069 | J | 0.020 | 0.13 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.065 | J | 0.038 | 0.25 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.10 | J | 0.019 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.081 | J | 0.021 | 0.14 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.27 | J | 0.19 | 1.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 179601-23-1 | m,p-xylene | 0.69 | J | 0.25 | 2.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 179601-23-1 | m,p-xylene | 0.19 | J | 0.049 | 0.50 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 179601-23-1 | m,p-xylene | 0.22 | J | 0.12 | 1.2 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 179601-23-1 | m,p-xylene | 0.16 | J | 0.026 | 0.26 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 179601-23-1 | m,p-xylene | 0.19 | J | 0.028 | 0.29 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.078 | J | 0.023 | 0.23 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 91-20-3 | Naphthalene | 0.13 | J | 0.13 | 0.44 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 91-20-3 | Naphthalene | 0.12 | J | 0.11 | 0.38 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 95-47-6 | ortho-xylene | 0.43 | J | 0.22 | 1.3 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.12 | J | 0.021 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 95-47-6 | ortho-xylene | 0.10 | J | 0.024 | 0.14 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 95-47-6 | ortho-xylene | 0.14 | J | 0.11 | 0.63 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.082 | J | 0.043 | 0.25 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.088 | J | 0.022 | 0.13 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 127-18-4 | Tetrachloroethene | 0.12 | J | 0.032 | 0.22 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 108-88-3 | Toluene | 0.14 | J | 0.097 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 108-88-3 | Toluene | 0.88 | J | 0.20 | 2.8 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 108-88-3 | Toluene | 0.26 | J | 0.022 | 0.31 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.16 | J | 0.020 | 0.28 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.23 | J | 0.039 | 0.55 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.23 | J | 0.019 | 0.27 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 156-60-5 | trans-1,2-Dichloroethene | 0.010 | J | 0.0090 | 0.60 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 156-60-5 | trans-1,2-Dichloroethene | 0.014 | J | 0.0099 | 0.66 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 91-20-3 | Naphthalene | 0.12 | J | 0.11 | 0.38 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIM | 156-60-5 | trans-1,2-Dichloroethene | 0.0090 | J | 0.0086 | 0.57 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.069 | J | 0.021 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIM | 79-01-6 | Trichloroethene | 0.63 | J | 0.26 | 1.6 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIM | 79-01-6 | Trichloroethene | 0.35 | J | 0.13 | 0.78 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIM | 75-01-4 | Vinyl Chloride | 0.021 | J | 0.012 | 0.042 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIM | 75-01-4 | Vinyl Chloride | 0.015 | J | 0.011 | 0.038 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 75-71-8 | Dichlorodifluoromethane | 2.5 | | 0.014 | 0.36 | ug/m3 | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.063 | J | 0.019 | 0.12 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIM | 179601-23-1 | m,p-xylene | 0.15 | J | 0.025 | 0.25 | ug/m3 | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.076 | 0.18 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.075 | J | 0.023 | 0.24 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 20 | | 0.013 | 0.19 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.058 | J | 0.019 | 0.13 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 179601-23-1 | m,p-xylene | 0.16 | J | 0.025 | 0.26 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.078 | J | 0.022 | 0.13 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.18 | J | 0.020 | 0.28 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIM | 79-01-6 | Trichloroethene | 0.027 | J | 0.026 | 0.16 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.13 | J | 0.015 | 0.15 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 75-35-4 | 1,1-Dichloroethene | 0.027 | J | 0.019 | 0.073 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.020 | J | 0.017 | 0.15 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 71-43-2 | Benzene | 0.17 | J | 0.029 | 0.30 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 7.7 | | 0.017 | 0.23 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 75-00-3 | Chloroethane | 0.16 | J | 0.013 | 0.24 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.15 | J | 0.024 | 0.16 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIM | 79-01-6 | Trichloroethene | 0.19 | J | 0.032 | 0.20 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.38 | J | 0.040 | 0.40 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.25 | 0.59 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 71-43-2 | Benzene | 0.29 | J | 0.077 | 0.79 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 18 | | 0.044 | 0.62 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 75-00-3 | Chloroethane | 0.34 | J | 0.035 | 0.65 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.16 | J | 0.064 | 0.43 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 179601-23-1 | m,p-xylene | 0.58 | J | 0.084 | 0.86 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 95-47-6 | ortho-xylene | 0.22 | J | 0.073 | 0.43 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 108-88-3 | Toluene | 0.62 | J | 0.066 | 0.93 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIM | 79-01-6 | Trichloroethene | 0.43 | J | 0.086 | 0.53 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 75-34-3 | 1,1-Dichloroethane | 0.20 | J | 0.039 | 0.39 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.25 | 0.58 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 71-43-2 | Benzene | 0.11 | J | 0.076 | 0.77 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 1.0 | | 0.043 | 0.61 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 75-00-3 | Chloroethane | 0.10 | J | 0.034 | 0.64 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.21 | J | 0.065 | 0.91 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.060 | J | 0.013 | 0.11 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.072 | 0.17 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.36 | | 0.012 | 0.17 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 75-00-3 | Chloroethane | 0.023 | J | 0.0098 | 0.18 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 74-87-3 | Chloromethane | 0.81 | J | 0.17 | 1.4 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.022 | J | 0.018 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 179601-23-1 | m,p-xylene | 0.047 | J | 0.024 | 0.24 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 95-47-6 | ortho-xylene | 0.025 | J | 0.020 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 127-18-4 | Tetrachloroethene | 0.094 | J | 0.027 | 0.19 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIM | 108-88-3 | Toluene | 0.072 | J | 0.019 | 0.26 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.040 | J | 0.020 | 0.17 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 71-43-2 | Benzene | 0.16 | J | 0.034 | 0.34 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 75-00-3 | Chloroethane | 0.27 | J | 0.015 | 0.28 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.079 | J | 0.028 | 0.19 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 179601-23-1 | m,p-xylene | 0.22 | J | 0.037 | 0.38 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 95-47-6 | ortho-xylene | 0.13 | J | 0.032 | 0.19 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIM | 108-88-3 | Toluene | 0.25 | J | 0.029 | 0.41 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.036 | J | 0.020 | 0.17 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.11 | 0.25 | ug/m3 | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 71-43-2 | Benzene | 0.11 | J | 0.033 | 0.34 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 75-00-3 | Chloroethane | 0.26 | J | 0.015 | 0.28 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.054 | J | 0.027 | 0.18 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 179601-23-1 | m,p-xylene | 0.14 | J | 0.036 | 0.37 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 95-47-6 | ortho-xylene | 0.083 | J | 0.031 | 0.18 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIM | 108-88-3 | Toluene | 0.12 | J | 0.028 | 0.40 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 107-06-2 | 1,2-Dichloroethane | 0.023 | J | 0.014 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 71-43-2 | Benzene | 0.15 | J | 0.023 | 0.23 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 56-23-5 | Carbon Tetrachloride | 0.33 | | 0.013 | 0.18 | ug/m3 | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 75-00-3 | Chloroethane | 0.15 | J | 0.010 | 0.19 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 74-87-3 | Chloromethane | 0.23 | J | 0.18 | 1.5 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 100-41-4 | Ethyl Benzene | 0.050 | J | 0.019 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 179601-23-1 | m,p-xylene | 0.090 | J | 0.025 | 0.25 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 95-47-6 | ortho-xylene | 0.059 | J | 0.021 | 0.12 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 108-88-3 | Toluene | 0.14 | J | 0.019 | 0.27 | ug/m3 | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIM | 79-01-6 | Trichloroethene | 0.11 | J | 0.025 | 0.16 | ug/m3 | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 1.4 | | 0.0021 | 0.029 | ppbv | J | c,s | ICV %D, Surrogate %R | 38.83;140 | 30;70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 79-00-5 | 1,1,2-Trichloroethane | 0.0088 | J | 0.0035 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 79-00-5 | 1,1,2-Trichloroethane | 0.0075 | J | 0.0033 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.038 | J | 0.0058 | 0.058 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.048 | J | 0.014 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.098 | J | 0.029 | 0.30 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.015 | J | 0.012 | 0.029 | ppbv | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.022 | J | 0.018 | 0.043 | ppbv | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-35-4 | 1,1-Dichloroethene | 0.0099 | J | 0.0075 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.021 | J | 0.012 | 0.029 | ppbv | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.020 | J | 0.013 | 0.030 | ppbv | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.018 | J | 0.016 | 0.037 | ppbv | J | c,sp | ICAL %RSD, <PQL | 35.708 | 30 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0082 | J | 0.0038 | 0.033 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.042 | J | 0.0031 | 0.043 | ppbv | J- | c,sp | ICV %D, <PQL | 38.83 | 30 | % |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.038 | J | 0.0030 | 0.042 | ppbv | J- | c,sp | ICV %D, <PQL | 38.83 | 30 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.013 | J | 0.0034 | 0.029 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.014 | 0.033 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.13 | 0.30 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.012 | 0.029 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.062 | 0.14 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.025 | 0.058 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 67-66-3 | Chloroform | 20 | | 0.0031 | 0.029 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.048 | J | 0.0071 | 0.072 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 71-43-2 | Benzene | 0.054 | J | 0.036 | 0.36 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.053 | J | 0.0074 | 0.076 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 71-43-2 | Benzene | 0.18 | J | 0.072 | 0.74 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.041 | J | 0.014 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 127-18-4 | Tetrachloroethene | 1.2 | | 0.0041 | 0.029 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.37 | | 0.021 | 0.30 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 3.0 | | 0.0041 | 0.058 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.050 | | 0.0022 | 0.030 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.24 | | 0.010 | 0.14 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.076 | | 0.0024 | 0.033 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.034 | | 0.0047 | 0.029 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.093 | | 0.0021 | 0.029 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.083 | | 0.0022 | 0.031 | ppbv | J | c,s | ICV %D, Surrogate %R | 38.83;132 | 30;70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 71-43-2 | Benzene | 0.11 | | 0.0076 | 0.078 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.031 | J | 0.0077 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 67-66-3 | Chloroform | 3.2 | | 0.0033 | 0.031 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 75-71-8 | Dichlorodifluoromethane | 0.52 | | 0.0031 | 0.078 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 74-87-3 | Chloromethane | 0.14 | J | 0.088 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 74-87-3 | Chloromethane | 0.20 | J | 0.091 | 0.76 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.010 | J | 0.0029 | 0.029 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 75-71-8 | Dichlorodifluoromethane | 0.49 | J | 0.030 | 0.74 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.036 | | 0.0046 | 0.031 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.091 | | 0.0061 | 0.062 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.016 | J | 0.012 | 0.027 | ppbv | J | c,s,sp | ICAL %RSD, Surrogate %R, <PQL | 35.708;138 | 30;70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.040 | | 0.0053 | 0.031 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0082 | J | 0.0036 | 0.031 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 71-43-2 | Benzene | 0.12 | | 0.0067 | 0.068 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.016 | J | 0.0045 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.025 | J | 0.022 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.024 | J | 0.0043 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.019 | J | 0.0049 | 0.033 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.062 | J | 0.044 | 0.30 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 67-66-3 | Chloroform | 5.7 | | 0.0029 | 0.027 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.015 | J | 0.0086 | 0.058 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-71-8 | Dichlorodifluoromethane | 0.85 | | 0.0027 | 0.068 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.16 | J | 0.058 | 0.59 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.045 | J | 0.011 | 0.12 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 91-20-3 | Naphthalene | 0.024 | J | 0.023 | 0.078 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.038 | J | 0.0059 | 0.060 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.052 | J | 0.028 | 0.29 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.044 | J | 0.0065 | 0.066 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.024 | J | 0.0071 | 0.072 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 127-18-4 | Tetrachloroethene | 1.2 | | 0.0039 | 0.027 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.24 | | 0.0044 | 0.027 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 127-18-4 | Tetrachloroethene | 0.024 | J | 0.0044 | 0.031 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |

**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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 91-20-3 | Naphthalene | 0.024 | J | 0.024 | 0.083 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 91-20-3 | Naphthalene | 0.023 | J | 0.021 | 0.072 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 156-60-5 | trans-1,2-Dichloroethene | 0.0040 | J | 0.0023 | 0.16 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.10 | J | 0.050 | 0.30 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.028 | J | 0.0049 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 75-01-4 | Vinyl Chloride | 0.012 | J | 0.0043 | 0.016 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | 0.027 | J | 0.013 | 0.031 | ppbv | J | c,s,sp | ICAL %RSD, Surrogate %R, <PQL | 35.708;132 | 30;70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.023 | J | 0.0056 | 0.033 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.020 | J | 0.0051 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.032 | J | 0.025 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.019 | J | 0.0099 | 0.058 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 127-18-4 | Tetrachloroethene | 0.017 | J | 0.0047 | 0.033 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 108-88-3 | Toluene | 0.10 | | 0.0055 | 0.078 | ppbv | J+ | s | Surrogate %R | 132 | 70-130 | % |
| 2211031A | RISG-39-13.5-20221026 | 2022-10-26 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.0050 | J | 0.0050 | 0.031 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 132 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 79-00-5 | 1,1,2-Trichloroethane | 0.0078 | J | 0.0031 | 0.027 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-35-4 | 1,1-Dichloroethene | 0.0093 | J | 0.0035 | 0.014 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.014 | J | 0.0043 | 0.029 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.036 | J | 0.0057 | 0.058 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 108-88-3 | Toluene | 0.23 | J | 0.053 | 0.74 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.042 | J | 0.0054 | 0.076 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 108-88-3 | Toluene | 0.070 | J | 0.0059 | 0.083 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.062 | J | 0.010 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.013 | J | 0.0040 | 0.027 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.024 | J | 0.0053 | 0.054 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 108-88-3 | Toluene | 0.037 | J | 0.026 | 0.36 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.061 | J | 0.0052 | 0.072 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 156-60-5 | trans-1,2-Dichloroethene | 0.0026 | J | 0.0023 | 0.15 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 91-20-3 | Naphthalene | 0.023 | J | 0.021 | 0.072 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 156-60-5 | trans-1,2-Dichloroethene | 0.0034 | J | 0.0025 | 0.17 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 156-60-5 | trans-1,2-Dichloroethene | 0.0023 | J | 0.0022 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.014 | J | 0.0046 | 0.027 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 156-60-5 | trans-1,2-Dichloroethene | 0.0068 | J | 0.0020 | 0.14 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.016 | J | 0.0049 | 0.029 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 140 | 70-130 | % |
| 2211031A | RISG-91-15.0-20221025 | 2022-10-25 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.12 | J | 0.048 | 0.30 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-91-5.0-20221025 | 2022-10-25 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.065 | J | 0.023 | 0.14 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-01-4 | Vinyl Chloride | 0.0089 | J | 0.0038 | 0.014 | ppbv | J+ | s,sp | Surrogate %R, <PQL | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.064 | | 0.0019 | 0.027 | ppbv | J | c,s | ICV %D, Surrogate %R | 38.83;138 | 30;70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 8.6 | | 0.0027 | 0.027 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.27 | | 0.0032 | 0.027 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-39-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-01-4 | Vinyl Chloride | 0.0082 | J | 0.0046 | 0.017 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-36-15.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-01-4 | Vinyl Chloride | 0.0059 | J | 0.0042 | 0.015 | ppbv | J | sp | <PQL | | | |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.53 | | 0.0036 | 0.068 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-35-5.0-20221026 | 2022-10-26 | TO15SIMVOL | 108-88-3 | Toluene | 0.073 | | 0.0048 | 0.068 | ppbv | J+ | s | Surrogate %R | 138 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-71-8 | Dichlorodifluoromethane | 0.51 | | 0.0029 | 0.072 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031A | RISG-38-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.096 | | 0.0052 | 0.072 | ppbv | J+ | s | Surrogate %R | 140 | 70-130 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.013 | 0.030 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.024 | J | 0.0072 | 0.074 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 3.2 | | 0.0021 | 0.030 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.013 | J | 0.0044 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.037 | J | 0.0058 | 0.059 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.018 | J | 0.0050 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.049 | J | 0.0053 | 0.074 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-40-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.0051 | J | 0.0048 | 0.030 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.032 | J | 0.0037 | 0.037 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 75-35-4 | 1,1-Dichloroethene | 0.0067 | J | 0.0048 | 0.018 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0051 | J | 0.0043 | 0.037 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 71-43-2 | Benzene | 0.055 | J | 0.0091 | 0.092 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 1.2 | | 0.0026 | 0.037 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.063 | J | 0.0049 | 0.092 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.034 | J | 0.0055 | 0.037 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-12.5-20221028 | 2022-10-28 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.035 | J | 0.0060 | 0.037 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.093 | J | 0.0098 | 0.099 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.042 | 0.099 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 71-43-2 | Benzene | 0.092 | J | 0.024 | 0.25 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 2.9 | | 0.0070 | 0.099 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.13 | J | 0.013 | 0.25 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.037 | J | 0.015 | 0.099 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.13 | J | 0.019 | 0.20 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.052 | J | 0.017 | 0.099 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 108-88-3 | Toluene | 0.16 | J | 0.018 | 0.25 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-42-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.080 | J | 0.016 | 0.099 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-34-3 | 1,1-Dichloroethane | 0.049 | J | 0.0096 | 0.097 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.041 | 0.097 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 71-43-2 | Benzene | 0.035 | J | 0.024 | 0.24 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.16 | | 0.0069 | 0.097 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.040 | J | 0.013 | 0.24 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-13.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.056 | J | 0.017 | 0.24 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.015 | J | 0.0032 | 0.028 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.012 | 0.028 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.058 | | 0.0020 | 0.028 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.0087 | J | 0.0037 | 0.070 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 74-87-3 | Chloromethane | 0.39 | J | 0.084 | 0.70 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.0050 | J | 0.0041 | 0.028 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.011 | J | 0.0054 | 0.056 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.0058 | J | 0.0047 | 0.028 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 127-18-4 | Tetrachloroethene | 0.014 | J | 0.0040 | 0.028 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-43-5.0-20221027 | 2022-10-27 | TO15SIMVOL | 108-88-3 | Toluene | 0.019 | J | 0.0049 | 0.070 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0098 | J | 0.0050 | 0.043 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 71-43-2 | Benzene | 0.051 | J | 0.010 | 0.11 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.10 | J | 0.0058 | 0.11 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.018 | J | 0.0064 | 0.043 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.050 | J | 0.0084 | 0.086 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.029 | J | 0.0073 | 0.043 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15.0-20221028 | 2022-10-28 | TO15SIMVOL | 108-88-3 | Toluene | 0.066 | J | 0.0077 | 0.11 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0089 | J | 0.0049 | 0.042 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 106-46-7 | 1,4-Dichlorobenzene | | U | 0.018 | 0.042 | ppbv | UJ | c | ICAL %RSD | 35.708 | 30 | % |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 71-43-2 | Benzene | 0.034 | J | 0.010 | 0.10 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.10 | J | 0.0056 | 0.10 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.012 | J | 0.0063 | 0.042 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.032 | J | 0.0082 | 0.084 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.019 | J | 0.0072 | 0.042 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-15-DUP-20221028 | 2022-10-28 | TO15SIMVOL | 108-88-3 | Toluene | 0.032 | J | 0.0075 | 0.10 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 107-06-2 | 1,2-Dichloroethane | 0.0058 | J | 0.0034 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 71-43-2 | Benzene | 0.046 | J | 0.0071 | 0.072 | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 56-23-5 | Carbon Tetrachloride | 0.053 | | 0.0021 | 0.029 | ppbv | J- | c | ICV %D | 38.83 | 30 | % |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 75-00-3 | Chloroethane | 0.056 | J | 0.0039 | 0.072 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 74-87-3 | Chloromethane | 0.11 | J | 0.088 | 0.72 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 100-41-4 | Ethyl Benzene | 0.011 | J | 0.0043 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 179601-23-1 | m,p-xylene | 0.021 | J | 0.0057 | 0.058 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 95-47-6 | ortho-xylene | 0.014 | J | 0.0049 | 0.029 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 108-88-3 | Toluene | 0.036 | J | 0.0052 | 0.072 | ppbv | J | sp | <PQL | | | |
| 2211031B | RISG-45-5.0-20221028 | 2022-10-28 | TO15SIMVOL | 79-01-6 | Trichloroethene | 0.020 | J | 0.0047 | 0.029 | ppbv | J | sp | <PQL | | | |

**ATTACHMENT A**
**VOC Data Validation Report**

**Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Method TO-15 and Method 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 method.

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

| SDG | Date | Analyte | %RSD | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|---|
| 2211031A | 09/29/22 | 1,4-Dichlorobenzene | 35.708 | RISG-91-15.0-20221025**<br>RISG-91-5.0-20221025<br>RISG-39-13.5-20221026<br>RISG-39-5.0-20221026**<br>RISG-35-5.0-20221026<br>RISG-36-5.0-20221027**<br>RISG-36-15.0-20221027<br>RISG-38-15.0-20221027<br>RISG-38-5.0-20221027 | J (all detects)<br>UJ (all non-detects) | P |
| 2211031B | 09/29/22 | 1,4-Dichlorobenzene | 35.708 | RISG-40-5.0-20221027<br>RISG-43-13.0-20221027<br>RISG-43-5.0-20221027<br>RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028<br>RISG-45-15-Dup-20221028<br>RISG-45-5.0-20221028 | J (all detects)<br>UJ (all non-detects) | P |

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

| SDG | Date | Analyte | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|---|
| 2211031A | 09/30/22 | Carbon tetrachloride | 38.83 | RISG-91-15.0-20221025**<br>RISG-91-5.0-20221025<br>RISG-39-13.5-20221026<br>RISG-39-5.0-20221026**<br>RISG-35-5.0-20221026<br>RISG-36-5.0-20221027**<br>RISG-36-15.0-20221027<br>RISG-38-15.0-20221027<br>RISG-38-5.0-20221027 | J- (all detects) | P |
| 2211031B | 09/30/22 | Carbon tetrachloride | 38.83 | RISG-40-5.0-20221027<br>RISG-43-13.0-20221027<br>RISG-43-5.0-20221027<br>RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028<br>RISG-45-15-Dup-20221028<br>RISG-45-5.0-20221028 | J- (all detects) | P |

## 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 analytes.

## 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 | Analysis Date | Analyte | Concentration | Associated Samples |
|---|---|---|---|---|---|
| 2211031A | LB-14C | 11/15/22 | Carbon disulfide | 0.45 ug/$m^3$ | RISG-36-5.0-20221027**<br>RISG-36-15.0-20221027<br>RISG-38-15.0-20221027<br>RISG-38-5.0-20221027 |
| 2211031B | LB-24A | 11/15/20 | Carbon disulfide | 0.45 ug/$m^3$ | RISG-40-5.0-20221027<br>RISG-43-13.0-20221027<br>RISG-43-5.0-20221027<br>RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028<br>RISG-45-15-Dup-20221028<br>RISG-45-5.0-20221028 |

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 | Analyte | Reported Concentration | Modified Final Concentration |
|---|---|---|---|---|
| 2211031A | RISG-36-5.0-20221027** (1.45X) | Carbon disulfide | 1.0 ug/$m^3$ | 1.0J ug/$m^3$ |
| 2211031A | RISG-36-15.0-20221027 (1.51X) | Carbon disulfide | 0.72 ug/$m^3$ | 0.72J ug/$m^3$ |
| 2211031A | RISG-38-15.0-20221027 (2.90X) | Carbon disulfide | 2.3 ug/$m^3$ | 2.3J ug/$m^3$ |

## VI. Field Blanks

No field blanks were identified in these SDGs.

## VII. Surrogates

Although surrogates were not required by the method, surrogate analysis was performed by the laboratory. Surrogate recoveries (%R) were within QC limits with the following exceptions:

| SDG | Sample | Surrogate | %R (Limits) | Affected Analyte | Flag | A or P |
|---|---|---|---|---|---|---|
| 2211031A | RISG-39-13.5-20221026 (Full) | 1,2-Dichloroethane-d4 | 135 (70-130) | All analytes | J+ (all detects) | A |
| 2211031A | RISG-39-13.5-20221026 (SIM) | 1,2-Dichloroethane-d4 | 132 (70-130) | All analytes | J+ (all detects) | A |
| 2211031A | RISG-35-5.0-20221026 (Full) | 1,2-Dichloroethane-d4 | 139 (70-130) | All analytes | J+ (all detects) | A |
| 2211031A | RISG-35-5.0-20221026 (SIM) | 1,2-Dichloroethane-d4 | 138 (70-130) | All analytes | J+ (all detects) | A |
| 2211031A | RISG-38-5.0-20221027 (Full) | 1,2-Dichloroethane-d4 | 140 (70-130) | All analytes | J+ (all detects) | A |
| 2211031A | RISG-38-5.0-20221027 (SIM) | 1,2-Dichloroethane-d4 | 140 (70-130) | All analytes | J+ (all detects) | A |
| 2211031B | RISG-40-5.0-20221027 (Full) | 1,2-Dichloroethane-d4 | 135 (70-130) | All analytes | J+ (all detects) | A |

## 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 method. Percent recoveries (%R) were within QC limits with the following exceptions:

| SDG | LCS ID (Associated Samples) | Analyte | LCS %R (Limits) | LCSD %R (Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| 2211031A | LCS/LCSD 16A, 16AA (RISG-91-15.0-20221025** RISG-91-5.0-20221025 RISG-39-13.5-20221026 RISG-39-5.0-20221026** RISG-35-5.0-20221026) | 2-Hexanone<br>alpha-Chlorotoluene | -<br>- | 132 (70-130)<br>131 (70-130) | NA | - |
| 2211031A | LCS/LCSD 16C, 16CC (RISG-36-5.0-20221027**) | 1,2,4-Trimethylbenzene | 131 (70-130) | - | J+ (all detects) | P |
| 2211031A | LCS/LCSD 16C, 16CC (RISG-36-15.0-20221027 RISG-38-15.0-20221027 RISG-38-5.0-20221027) | 1,2,4-Trimethylbenzene | 131 (70-130) | - | NA | - |
| 2211031B | LCS/LCSD 26A, 26AA (RISG-42-5.0-20221028 RISG-42-12.5-20221028 RISG-45-15.0-20221028) | 1,2,4-Trimethylbenzene | 131 (70-130) | - | J+ (all detects) | P |
| 2211031B | LCS/LCSD 26A, 26AA (RISG-40-5.0-20221027 RISG-43-13.0-20221027 RISG-43-5.0-20221027 RISG-45-15-Dup-20221028 RISG-45-5.0-20221028) | 1,2,4-Trimethylbenzene | 131 (70-130) | - | NA | - |

Relative percent differences (RPD) were within QC limits.

## X. Field Duplicates

Samples RISG-45-15.0-20221028 and RISG-45-15-Dup-20221028 (both from SDG 2211031B) were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

| SDG | Analyte | Concentration ($ug/m^3$) | | RPD(Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| | | RISG-45-15.0-20221028 | RISG-45-15-Dup-20221028 | | | |
| 2211031B | 1,2,4-Trimethylbenzene | 0.32 | 0.73U | 200 (≤50) | NQ | - |
| | 1,3-Dichlorobenzene | 0.92 | 1.4 | 41 (≤50) | - | - |
| | 1,4-Dioxane | 0.17 | 0.53U | 200 (≤50) | NQ | - |
| | 2-Butanone | 1.0 | 0.80 | 22 (≤50) | - | - |
| | 4-Ethyltoluene | 0.27 | 1.0U | 200 (≤50) | NQ | - |
| | Acetone | 9.1 | 16 | 55 (≤50) | NQ | - |

| SDG | Analyte | Concentration (ug/m$^3$) | | RPD(Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| | | RISG-45-15.0-20221028 | RISG-45-15-Dup-20221028 | | | |
| 2211031B | Bromodichloromethane | 0.90 | 0.94 | 4 (≤50) | - | - |
| | Ethanol | 1.5 | 1.6 | 6 (≤50) | - | - |
| | Freon 11 | 0.98 | 1.1 | 12 (≤50) | - | - |
| | Freon 113 | 0.49 | 0.43 | 13 (≤50) | - | - |
| | Methylene chloride | 1.0 | 0.99 | 1 (≤50) | - | - |
| | Styrene | 0.24 | 0.14 | 53 (≤50) | NQ | - |
| | Tetrahydrofuran | 2.4 | 1.1 | 74 (≤50) | NQ | - |
| | 1,1-Dichloroethane | 0.80 | 0.82 | 2 (≤50) | - | - |
| | 1,2-Dichloroethane | 0.040 | 0.036 | 11 (≤50) | - | - |
| | 1,4-Dichlorobenzene | 0.13 | 0.15U | 200 (≤50) | NQ | - |
| | Benzene | 0.16 | 0.11 | 37 (≤50) | - | - |
| | Carbon tetrachloride | 0.26 | 0.24 | 8 (≤50) | - | - |
| | Chloroethane | 0.27 | 0.26 | 4 (≤50) | - | - |
| | Chloroform | 130 | 130 | 0 (≤50) | - | - |
| | Ethylbenzene | 0.079 | 0.054 | 38 (≤50) | - | - |
| | Freon 12 | 2.3 | 2.3 | 0 (≤50) | - | - |
| | m,p-Xylene | 0.22 | 0.14 | 44 (≤50) | - | - |
| | o-Xylene | 0.13 | 0.083 | 44 (≤50) | - | - |
| | Tetrachloroethene | 3.9 | 4.6 | 16 (≤50) | - | - |
| | Toluene | 0.25 | 0.12 | 70 (≤50) | NQ | - |
| | Trichloroethene | 0.46 | 0.48 | 4 (≤50) | - | - |

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. Target Analyte Quantitation

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

## XIII. Target Analyte Identification

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

## XIV. Leak Check Compounds

The leak check compound, Helium, was detected in sample RISG-92-10.0-20221026 (from SDG 2211031A) and samples RISG-45-15.0-20221028 and RISG-45-15-Dup-20221028 (both from SDG 2211031B). The Helium concentration determined in the sample to the Helium concentration recorded in the shroud was less than 5% and therefore, not qualified.

## XV. Overall Assessment of Data

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

Due to initial calibration %RSD, ICV %D, surrogate %R, and LCS/LCSD %R, data were qualified as estimated in twenty-three samples.

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

## NERT RI, Phase 3, November 2022
## Volatiles - Data Qualification Summary - SDGs 2211031A, 2211031B

| SDG | Sample | Analyte | Flag | A or P | Reason (Code) |
|---|---|---|---|---|---|
| 2211031A | RISG-91-15.0-20221025**<br>RISG-91-5.0-20221025<br>RISG-39-13.5-20221026<br>RISG-39-5.0-20221026**<br>RISG-35-5.0-20221026<br>RISG-36-5.0-20221027**<br>RISG-36-15.0-20221027<br>RISG-38-15.0-20221027<br>RISG-38-5.0-20221027 | 1,4-Dichlorobenzene | J (all detects)<br>UJ (all non-detects) | P | Initial calibration (%RSD) (c) |
| 2211031B | RISG-40-5.0-20221027<br>RISG-43-13.0-20221027<br>RISG-43-5.0-20221027<br>RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028<br>RISG-45-15-Dup-20221028<br>RISG-45-5.0-20221028 | 1,4-Dichlorobenzene | J (all detects)<br>UJ (all non-detects) | P | Initial calibration (%RSD) (c) |
| 2211031A | RISG-91-15.0-20221025**<br>RISG-91-5.0-20221025<br>RISG-39-13.5-20221026<br>RISG-39-5.0-20221026**<br>RISG-35-5.0-20221026<br>RISG-36-5.0-20221027**<br>RISG-36-15.0-20221027<br>RISG-38-15.0-20221027<br>RISG-38-5.0-20221027 | Carbon tetrachloride | J- (all detects) | P | Initial calibration verification (%D) (c) |
| 2211031B | RISG-40-5.0-20221027<br>RISG-43-13.0-20221027<br>RISG-43-5.0-20221027<br>RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028<br>RISG-45-15-Dup-20221028<br>RISG-45-5.0-20221028 | Carbon tetrachloride | J- (all detects) | P | Initial calibration verification (%D) (c) |
| 2211031A | RISG-39-13.5-20221026 (Full)<br>RISG-39-13.5-20221026 (SIM)<br>RISG-35-5.0-20221026 (Full)<br>RISG-35-5.0-20221026 (SIM)<br>RISG-38-5.0-20221027 (Full)<br>RISG-38-5.0-20221027 (SIM) | All analytes | J+ (all detects) | A | Surrogates (%R) (s) |
| 2211031B | RISG-40-5.0-20221027 (Full) | All analytes | J+ (all detects) | A | Surrogates (%R) (s) |
| 2211031A | RISG-36-5.0-20221027** | 1,2,4-Trimethylbenzene | J+ (all detects) | P | Laboratory control samples (%R) (l) |
| 2211031B | RISG-42-5.0-20221028<br>RISG-42-12.5-20221028<br>RISG-45-15.0-20221028 | 1,2,4-Trimethylbenzene | J+ (all detects) | P | Laboratory control samples (%R) (l) |

**NERT RI, Phase 3, November 2022**
**Volatiles - Laboratory Blank Data Qualification Summary - SDGs 2211031A, 2211031B**

| SDG | Sample | Analyte | Modified Final Concentration | A or P | Code |
|---|---|---|---|---|---|
| 2211031A | RISG-36-5.0-20221027** (1.45X) | Carbon disulfide | 1.0J ug/$m^3$ | A | bl,bb |
| 2211031A | RISG-36-15.0-20221027 (1.51X) | Carbon disulfide | 0.72J ug/$m^3$ | A | bl,bb |
| 2211031A | RISG-38-15.0-20221027 (2.90X) | Carbon disulfide | 2.3J ug/$m^3$ | A | bl,bb |

**NERT RI, Phase 3, November 2022**
**Volatiles - Field Blank Data Qualification Summary - SDGs 2211031A, 2211031B**

No Sample Data Qualified in these SDGs

**ATTACHMENT B**
**Helium Data Validation Report**

**Helium by American Society for Testing and Material (ASTM) D-1946**

## 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% for all analytes.

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

## III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all analytes.

## 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 this SDG.

## VI. Surrogates

Surrogates were not required by the method.

## VII. Duplicate Sample Analysis

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

## VIII. 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.

## IX. Field Duplicates

Samples RISG-45-15.0-20221028 and RISG-45-15-Dup-20221028 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 |
|---|---|---|---|---|---|---|
| | | RISG-45-15.0-20221028 | RISG-45-15-Dup-20221028 | | | |
| 2211031C | Helium | 0.18 | 0.13 | 32 (≤50) | - | - |

## X. Target Analyte Quantitation

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

## XI. Target Analyte Identification

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

## XII. Overall Assessment of Data

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

**NERT RI, Phase 3, November 2022**
**Helium - Data Qualification Summary - SDG 2211031C**

No Sample Data Qualified in this SDG

**NERT RI, Phase 3, November 2022**
**Helium - Laboratory Blank Data Qualification Summary - SDG 2211031C**

No Sample Data Qualified in this SDG

**NERT RI, Phase 3, November 2022**
**Helium - Field Blank Data Qualification Summary - SDG 2211031C**

No Sample Data Qualified in this SDG