Prepared for:
Nevada Environmental Response Trust
Henderson, Nevada

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Date:
March 24, 2021

Project Number:
1690020169-028

SOIL BACKGROUND DATA SET SUMMARY REPORT, REVISION 2

NEVADA ENVIRONMENTAL RESPONSE TRUST SITE HENDERSON, NEVADA

RAMBOLL

Soil Background Data Set Summary Report, Revision 2

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

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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: 3/23/21

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Responsible Certified Environmental Manager (CEM) for this project

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

3/23/2021

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Principal

Date

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1 INTRODUCTION

Ramboll US Consulting, Inc. (Ramboll) has prepared this Soil Background Data Set Summary Report to summarize the soil background data to be used in the Remedial Investigation (RI) of the Nevada Environmental Response Trust (NERT) Site in Henderson, Nevada (the "Site"). Ramboll originally prepared a Soil Background Evaluation Report to summarize the results of the soil background concentration study undertaken as part of the RI and to evaluate Site soils using this new background data set. That report was submitted to the Nevada Division of Environmental Protection (NDEP) on August 30, 2019. NDEP issued a comment letter on October 24, 2019 that recommended splitting the report into two deliverables. A meeting was held on December 10, 2019 with the Trust, NDEP, and consultants to the Trust and NDEP to discuss the comments, during which it was agreed that the report would be split in two deliverables. This report comprises the first of the revised deliverables. A second deliverable that will evaluate Site soils will be incorporated into the forthcoming RI Report for Operable Units 1 and 2 (OU-1 and OU-2).

1.1 Objectives and Purpose

In the forthcoming RI Report for OU-1 and OU-2, soil analytical results for metals and radionuclides from the NERT Site will be compared to relevant background data from the surrounding region to determine which chemicals of potential concern (COPCs) at the Site are present at concentrations above naturally-occurring levels in the region surrounding the Site.

In 2018, additional background soil samples were collected to supplement existing background data in response to the July 13, 2016 letter from the NDEP commenting on the Remedial Investigation Data Evaluation Technical Memorandum ("RI Tech Memo"; Ramboll Environ 2016). Specifically, NDEP Comment #5 indicated that the background data set used should apply to the NERT site; however, the only background data set approved for use at the NERT site at the time was limited to the top ten feet of soil. The response from NERT on August 12, 2016 indicated that background concentrations may change with depth as a result of lithologic changes, and that the issue would be addressed in the forthcoming RI Report. To address this issue, a work plan was prepared to collect additional background soil samples below the top ten feet of soil (the "Work Plan"; Ramboll Environ 2017). This Work Plan was subsequently approved by NDEP on October 16, 2017.

The purpose of this report is to summarize all the background data sets that will be used in the forthcoming RI Report for OU-1 and OU-2 and associated risk assessments[1] and discuss the incorporation of the additional background samples collected in 2018 into the background data sets used at the BMI complex.

1.2 Site Location and Geologic Setting

The NERT Site is located on the eastern edge of the Las Vegas Valley in Clark County, Nevada, approximately one mile north of the McCullough Mountain Range. The mountains

[1] The risk assessments will use background data sets that are limited to the top ten feet of soil, which are not affected by the additional background soil samples collected in 2018. These background data sets are included here to provide a complete reference, but no changes from prior studies are made for these data sets in this report.

on the south (McCullough Range) and southeast (River Range) sides of the Las Vegas Valley consist primarily of Tertiary volcanic rocks (basalts, rhyolites, andesites, and related rocks) that overlie Precambrian metamorphic and granitic rocks (ENSR 2007). At and in the vicinity of the Site, three main geologic units are present, described as follows:

Alluvium

The uppermost unit is composed of Quaternary alluvial deposits (Qal) originating from the McCullough Range that slope north toward Las Vegas Wash. On the surficial geologic map presented in Figure 1a, the specific alluvial unit in OU-1 is termed Qh or Qh1. The alluvium consists of a reddish-brown heterogeneous mixture of well-graded sand and gravel with lesser amounts of silt, clay, and caliche. Clasts within the alluvium are primarily composed of volcanic material. Boulders and cobbles are common. Due to the mode of deposition, no distinct beds or units are continuous in the vicinity of the Site. The thickness of the alluvial deposits ranges from less than 1 foot to more than 50 feet below ground surface (bgs) beneath the Site. Soil types identified in on-site soil borings include poorly sorted gravel, silty gravel, poorly sorted sand, well sorted sand, and silty sand.

Transitional (or reworked) Muddy Creek Formation

Where present, Transitional Muddy Creek Formation (xMCf) is encountered at the base of the alluvium. The Transitional Muddy Creek Formation consists of reworked sediments derived from the Muddy Creek Formation, which is described below. Therefore, the xMCf appears similar to the Muddy Creek Formation, but it consists of reworked, less consolidated and indurated sediments.

Muddy Creek Formation

The Muddy Creek Formation of Tertiary age is a widespread geologic unit within the Lake Mead region, and Las Vegas Valley is situated at its western extent. At the time of deposition, Las Vegas Valley was a closed inland basin, forming a terminal playa in the Lake Mead region drainage network (Faulds et al. 2016). Within the arid closed inland basin, sediments were transported by surface water runoff from the mountains surrounding the basin towards the basin interior, becoming finer grained with increasing distance from the mountains. Coarse-grained alluvial fan aprons along the mountain front transition to finer-grained sand flats, then mud flats, and finally to saline lacustrine/mudflat deposits in the basin interior. The saline mudflats in the basin interior are characterized by abundant gypsum and other evaporite salt deposits. Sediments in the sand flat and dry mudflat environments are often characterized by carbonate caliche deposits. During the period of basin fill (typically many thousands to millions of years), the shoreline of the interior playa lake and the transitions between the surrounding mudflats and alluvial fans have expanded and receded in response to variations in rainfall and storm events over that period of geologic time. This has resulted in extensive interfingering of these deposits at depth within the basin.

Within the NERT RI Study Area, the Muddy Creek Formation does not crop out but instead subcrops beneath a veneer of Qal. Subsurface investigation in the NERT RI Study Area has been focused on characterization of the alluvium and the Muddy Creek Formation to depths of approximately 300-400 feet. Therefore, the Muddy Creek Formation has been informally termed the Upper Muddy Creek Formation (UMCf) in this area.

As discussed above, the UMCf occurs in the Las Vegas Valley as valley-fill deposits that are coarse-grained near mountain fronts and become progressively finer-grained toward the center of the valley. Figure 1b shows the approximate thickness of the valley-fill deposits and the relative positions of all UMCf background sample locations. Where encountered beneath the Site, the UMCf is composed of at least two thicker units of fine-grained sediments of clay and silt (the first and second fine-grained facies) interbedded with at least two thinner units of coarse-grained sediments of sand, silt, and gravel (the first and second coarse-grained facies). Except for the southernmost 1,000 ft adjacent to Lake Mead Parkway, the first fine-grained facies (UMCf-fg1) separates the first coarse-grained facies (UMCf-cg1) from the overlying Quaternary alluvium at the Site. Within the southern 1,000 feet of the Site, the Muddy Creek Formation's UMCf-fg1 pinches out along a roughly west-northwesterly trending line. In the southern area of the Site, the UMCf-cg1 directly underlies the alluvium.

1.3 Prior Background Studies and Data Sets

There are three background data sets that were collected previously that are relevant to the NERT Site background evaluation: the NERT Remediation Zone A (RZ-A) background data set, the BMI shallow background data set, and the BMI deep background data set. The RZ-A and BMI shallow data sets include samples from the alluvium at depths less than 10 feet bgs, and the BMI deep data set includes samples from alluvium deeper than 10 feet bgs and from the UMCf. A summary of each data set is provided below.

RZ-A Background Data Set

The primary background data set approved for use at the NERT site by NDEP is from Remediation Zone A ("RZ-A"; NDEP 2010b). The RZ-A background data set, collected by Tronox in August and September 2009, has 31 samples from depths ranging between 0 and 10 feet bgs. The analytical results from the RZ-A data set are summarized in Table 1. The RZ-A background data set includes results for the metals on the NERT RI analyte list except for the following four analytes: lithium, niobium, palladium and zirconium.

BMI Shallow Background Data Set

The BMI shallow background data set for depths ranging between 0 and 10 feet bgs includes 16 samples collected in 2002 by ENVIRON and 104 samples collected in 2005 by TIMET and BRC (TIMET/BRC 2007). This data set contains a total of 120 alluvial samples from the McCullough and River Range sources (101 samples are from the McCullough Range alluvium, and 19 are from the River Range or mixed River/McCullough Range alluvium), and therefore applies to the BMI Complex and Common Areas Vicinity, not the NERT Site specifically. Because geology at the NERT Site is not associated with the River Range alluvium, the 19 samples from the River Range or mixed River/McCullough Range alluvium were removed from the data set for the purposes of this background analysis. Additionally, for consistency with most risk assessment reports for the BMI Complex since 2011, the six McCullough Range samples from the ENVIRON data set were also removed from the data set (NDEP 2018). Therefore, only the 95 McCullough Range samples from the TIMET/BRC data set were used. This approach is consistent with current guidance on usage of soil background data sets (NDEP 2018). Although this data set consists of 95 samples, total uranium and radium-228 have fewer than 95 results due to variability of analyses. Unlike the RZ-A data set, the BMI shallow data set includes all metals on the NERT RI analyte list.

The metal and radionuclide analytical results from these samples are summarized in Table 2.

BMI Deep Background Data Set

The BMI deep background data set includes samples from soils deeper than 10 feet bgs. BRC completed this deep soil background study in 2008 (ERM 2009), obtaining 82 samples in the McCullough Range alluvium below 10 ft bgs (three of these samples were analyzed solely for hexavalent chromium), 66 samples from the River Range or mixed River/McCullough Range alluvium below 10 ft bgs (six of these samples were analyzed solely for hexavalent chromium), and 24 samples within the fine grained UMCf. Due to the presence of River Range samples, this background data set applies generally to the BMI Complex and Common Areas Vicinity and not the NERT Site specifically. Because the NERT Site is not associated with the River Range alluvium, the 66 samples containing River Range alluvium were removed from the data set for the purposes of this background analysis, leaving 82 McCullough Range and 24 fine-grained UMCf samples. For the purpose of comparison to Site data, this data set will be split by lithology into the "BRC deep McCullough Qal" data set and the "BRC deep UMCf" data set. Although the BRC deep McCullough Qal data set consists of 82 samples, all analytes have fewer than 82 results due to variability of analyses performed on individual samples, and although the BRC deep UMCf data set has 24 samples, some analytes have fewer than 24 results. The metal and radionuclide analytical results from the McCullough Range Qal and UMCf samples are summarized in Tables 3 and 4, respectively.

1.4 Rationale for Collecting Additional UMCf Background Data

A statistical analysis of Site data for arsenic and several other metals and radionuclides indicated that at least 35 background samples would be necessary to determine if site data in the UMCf were consistent with background levels (Ramboll Environ 2017; NDEP 2017). With only 24 existing background samples from the UMCf, this analysis indicated the need to collect additional samples. Given the depositional environment described above, spatial variability in the degree of intermixing of source sediments during UMCf deposition would have caused variability in naturally occurring concentrations of metals and radionuclides. As shown on Figure 1b, the BRC deep UMCf samples were collected to the east and south of the NERT RI Study Area. In order to better characterize the full range of naturally occurring concentrations, the additional UMCf samples were collected to the west of the NERT RI Study Area. This new data set (the "RI UMCf background data set") was collected to be combined with the existing BRC deep UMCf data set to characterize the background concentrations in the UMCf in the vicinity of the Site (Ramboll Environ 2017).

An evaluation of arsenic soil concentration in NERT site soil relative to depth suggests the importance of establishing background concentrations for different lithologic units at the Site. Figure 2 shows arsenic concentrations in Site soil as presented in the RI Tech Memo (Ramboll Environ 2016), with samples collected in the alluvium and UMCf colored blue and red, respectively. A single depth cannot be used to differentiate alluvial and UMCf samples due to the varying depth of the alluvium-UMCf contact around the Site. The site-specific target remediation goal of 7.2 mg/kg (NDEP 2010a) is also shown for reference. Though this goal only applies to the top ten feet of soil, no other Site-specific remediation goal for arsenic has been established to date. Most of the samples collected in the deeper soil (i.e., in the UMCf) have arsenic concentrations above the site-specific remediation goal. Since it is unlikely that arsenic contamination has migrated to these deeper soils to such a degree, Figure 2 suggests that the background concentration of arsenic increases with depth and that this increase may be related to changes in lithology at the Site. Whether these increases with depth are the result of natural background levels changing with lithology or are the result of Site activities, this observation confirms the need to further characterize background concentrations in the different lithologies/depths surrounding the Site.

1.5 Lithologic Reassignment of Existing Background Samples

Though the Work Plan proposed reclassifying the lithology of certain background samples and provided a rationale for collecting more alluvial samples (Ramboll Environ 2017), the approval from NDEP (2017) indicated that the existing alluvial soil background data sets are appropriate and that the work should proceed only for the UMCf-fg1 unit. Therefore, no lithologic reassignments are requested except to note that the 24 UMCf samples from the BMI deep background data set are in fact from the UMCf-fg1 unit.

2 RI UMCF BACKGROUND SAMPLE COLLECTION

2.1 Sample Locations

Consistent with the Work Plan, the RI UMCf background soil samples were collected in 2018 from the general area shown in Figure 3a. During the BRC deep background soil investigation conducted in 2008, samples of the UMCf-fg1 were collected from borings located southeast of the NERT RI Study Area (also shown on Figure 3a). To complement this existing data set, the RI UMCf background investigation was conducted in an area west of the Endeavour (former AMPAC) perchlorate plume. The alluvium in this area (termed Qas; see Figure 1a) is from a different source area than the Qh/Qh1 alluvium beneath the Site. However, based on a review of regional geologic studies, the UMCf-fg1 unit extends throughout this area, and it is present directly beneath the alluvium in the RI UMCf background investigation area. The area utilized for this investigation was an off-Site location in relatively close proximity to the Site that is cross-gradient of known industrial operations in the area, so that adverse subsurface impacts from the Site or other industrial operations are not likely.

Figure 3b shows soil boring locations where RI UMCf background soil samples were collected. The soil boring locations were determined based on access limitations, buried underground utilities, and potential hazards such as proximity to overhead electrical power lines. A total of five borings were advanced for the investigation. The alluvium in this area was between 2 and 25 feet thick. The borings extended 25 to 30 feet below the UMCf contact, for total depths ranging between 32 and 50 feet bgs. Between eight and ten samples were collected from each boring at three-foot intervals, for a total of 46 samples including four field duplicate (FD) samples. All samples were verified to be from the UMCf-fg1 lithologic unit. In this area, the UMCf-fg1 unit is much shallower than at the Site, and two samples (RIBK-12-8.0-20180613 and RIBK-12-8.0-20180613-FD) were sampled at a depth shallower than 10 ft bgs. Even though samples shallower than 10 ft bgs are generally considered separately from deeper samples, these samples should not be considered part of any shallow background data set because they are representative of the deeper lithology present at the Site.

2.2 Sampling Procedures

Field Procedures

All soil sampling and related activities conducted as part of this investigation were performed in general concurrence with the NDEP-approved Sampling and Analysis Plan, Revision 1 (SAP) for the Site. The SAP is comprised of the Field Sampling Plan ("FSP"; ENVIRON 2014a), Health and Safety Plan ("HASP"; ENVIRON 2014b), and the Quality Assurance Project Plan ("QAPP"; ENVIRON 2014c).

Ramboll identified specific drilling locations for the five soil borings for this investigation. The borings were located in COH public rights-of-way. Following the selection of the proposed boring locations, Ramboll worked with the Trust to procure the necessary COH access agreements.

Boring locations were then field-marked for Underground Service Alert notifications for underground utilities. Prior to drilling activities at each location, preliminary utility clearance was initiated by establishing dig tickets through the Underground Service Alert (USA) North One-Call System (#811). Private and municipal utility location personnel were utilized as necessary to establish the estimated location of subsurface utilities relative to planned drilling locations. Direct utility clearance was conducted using a combination of third-party utility location services (i.e., ground penetrating radar [GPR] and electrical line locating) and direct underground clearance via air vacuum (air knife).

Cascade, a Nevada-state certified drilling company, was retained to conduct drilling activities for this investigation. Rotary sonic was the drilling method utilized to advance the five soil borings due to the method's relative ease of use, speed, and presence of an outer casing in the drill tooling. Continuous soil core was vibrated from the core barrels directly into 2.5-foot length plastic sleeves and retained in wooden core boxes for processing by Ramboll geologists. Soil sampling was conducted in June 2018.

Sample Collection and Analysis

Discrete depth samples at approximately three-foot intervals were collected from the soil cores produced during drilling and submitted to Test America, a Nevada-state certified laboratory in accordance with the SAP. Soil samples collected during the investigation were analyzed for a full suite of metals and selected radionuclides. Detection limits and other data quality indicators are detailed in Section 1.6.2 and Table 2 of the QAPP, and quality assurance / quality control (QA/QC) procedures that were followed during this investigation are detailed in Section 2.5 and Table 6 of the QAPP.

2.3 Data Validation and Usability

All of the data were subjected to Level 2B data validation. In addition to the Level 2B review, approximately 50 percent of all data were subjected to full Level 4 data validation. Details of the data validation and usability can be found in the Soil Background Concentration Study DVSR (Ramboll 2019), which was approved by NDEP on February 21, 2019. All data were found to be usable, with the exception of all (46) of the niobium results, which were rejected due to matrix spike recovery exceedances. The results were rejected because the spike concentrations were not detected; however, this non-detection was due to matrix interference. Since all of the niobium data from the normal and field duplicate samples were also non-detects with elevated sample quantitation limits due to matrix interference, the niobium data would not be useful in a background evaluation (see Section 3.2). Thus, the niobium results will not be used in the background evaluation of the NERT Site.

2.4 Results

A summary of the analytical results from the RI UMCf background data set, including descriptive statistics and individual results, is presented in Table 5. Note that radionuclide data for this data set and all prior background data sets are used and presented as the uncensored results, not the minimum detectable concentrations. Radionuclide results below the minimum detectable concentrations are shown with a "U" qualifier in Tables 2-5, but the values shown are the uncensored results and not the minimum detectable concentrations. Likewise, radionuclide results that are below minimum detectable concentrations from the RI UMCf data set are plotted on figures with open symbols at the value of the uncensored results. Where radionuclide results are shown or statistically tested on a logarithmic scale, any result at or below zero is set to 0.001 picocuries per gram (pCi/g).

2.5 Outlier Evaluation

Potential high-concentration outliers were identified by comparing the data to a potential outlier threshold value for chemicals with a detection frequency greater than 25% (see Table 5). The potential outlier threshold was calculated by adding 1.5 times the interquartile range to the upper quartile. Any potential outliers greater than the threshold were examined to ensure that the result was not the product of a verifiable error. No verifiable errors were found, and all data were therefore retained in the background data set.

2.6 Field Duplicate Evaluation

There are five soil boring locations that were sampled for the RI UMCf background data set, for a total of 46 samples from various depths including four field duplicate pairs. Although field duplicate pairs are collected very close to each other, they are not truly duplicates because of the small-scale heterogeneity of the soil matrix. Depending on the scale and degree of heterogeneity, it may be appropriate to treat field duplicates as statistically independent when conducting a statistical analysis. Other potential approaches to the treatment of field duplicates include excluding the duplicate samples from the analysis or averaging the duplicate sample pairs prior to analysis (NDEP 2008).

The statistical independence of the field duplicates was evaluated by comparing the pair-wise differences of the field duplicates to the pair-wise differences of the entire data set. If the duplicates are statistically independent, then the pair-wise differences between duplicate samples will look similar to the differences between any randomly selected pair of samples that are not duplicates. Box plots showing the differences of all sample pairs (1,035 sample pairs per chemical) and the differences of only the field duplicate pairs are shown in Figures 4a through 4f. These box plots show that while the field duplicate pair differences are generally below the median pair difference (as expected; the highest difference of all pairs is equal to the full range of the data set), the field duplicate pair differences are not significantly different from all sample pair differences. Therefore, the 46 samples from the RI UMCf background data set can be treated as statistically independent, consistent with the methodology employed by BRC (ERM 2009) and recommended by NDEP (NDEP 2008).

3 EVALUATION OF UMCF BACKGROUND DATA

The newly collected RI UMCf background data set will be combined with the existing BRC deep UMCf background data set to form a combined UMCf background data set that will be used to represent UMCf background concentrations. In this section, exploratory data analysis (EDA) and evaluations of detection limits and secular equilibrium were conducted to determine the suitability of using the combined data set in the background evaluation that will be presented in the RI Report for OU-1 and OU-2.

3.1 Exploratory Data Analysis

Boxplots, quantile-quantile plots, and depth vs concentration plots of the two background data sets are presented in Figures 5a through 5ai. The box plots and quantile-quantile plots also include a presentation of a combined background data set consisting of all 70 samples taken in the UMCf-fg1 lithologic unit. Though they should not be directly compared as the UMCf lithology is not encountered in the top 10 feet of soil at the Site, health-based soil screening levels are provided on these figures for reference. The Figure 5 series was used to support the conclusions presented below.

For the following analytes, the RI UMCf data set is visually consistent with the BRC deep UMCf data set:

- Copper
- Magnesium
- Phosphorus (total)
- Uranium (total)
- Vanadium
- Thorium-228
- Thorium-230
- Thorium-232
- Uranium-235

For the following analytes, the RI UMCf data set is noticeably different from the BRC deep UMCf data set:

- Aluminum
- Arsenic
- Barium
- Boron
- Chromium (total)
- Cobalt
- Iron
- Lead
- Manganese
- Nickel
- Strontium
- Zirconium
- Radium-226
- Radium-228
- Uranium-234
- Uranium-238

The following analytes had fewer than 25% detections in either data set; therefore, visual comparisons are inconclusive:

- Antimony
- Cadmium
- Chromium VI
- Mercury
- Molybdenum
- Palladium
- Selenium
- Silver
- Thallium
- Tungsten

Differences between the RI UMCf and the BRC deep UMCf data sets are expected given that the UMCf-fg1 unit is comprised of intermixed sediments from multiple source rocks. Due to the spatial variability of the intermixing during its formation, the UMCf-fg1 unit is expected to have significant areal and vertical variability in both range and standard deviation of metal and radionuclide concentrations. The RI UMCf data set was obtained from an area to the west of the Site, while the BRC deep UMCf data set was obtained from the east and south of the Site (see Figure 1b). Thus, the RI UMCf data set is likely capturing additional natural concentrations of the lithologic unit that the BRC deep UMCf data set did not. It is therefore recommended that the 46 samples from the RI UMCf data set be combined with the 24 samples from the BRC deep UMCf data set to create a single UMCf background data set of 70 samples for all analytes listed above (except for instances of data quality issues as outlined below).

3.2 Detection Limits

There were no detections of the following chemicals in the RI UMCf data set: antimony, cadmium, palladium, silver, thallium, and tungsten. The sample quantitation limits for all of these analytes except palladium are above the detected concentrations in the BRC deep UMCf data set, indicating that the laboratory analyses for the RI UMCf samples were not sensitive enough to compare the true concentrations of the RI and BRC UMCf samples. As mentioned in Section 2.3, had the niobium results in the RI UMCf data set not been rejected, they would also be included in this category. Because high sample quantitation limits do not provide additional information about the distribution of these analytes in the UMCf-fg1 lithologic unit, it is recommended that the RI UMCf data for these analytes be excluded from the UMCf background data set. For all these analytes with the exception of palladium, the background data set for the UMCf-fg1 lithologic unit should be comprised of the data from the BRC deep UMCf data set only.

For palladium, the RI UMCf data set has no detections, but the sample quantitation limits are lower than the detected concentrations in the BRC deep UMCf data set. Likewise, for selenium, the BRC deep UMCf data set has no detections, and the sample quantitation limits are lower than the detected concentrations in the RI UMCf data set. These sample quantitation limits are sensitive enough to provide useful information about the distribution of these analytes in the UMCf-fg1 lithologic unit and it is therefore recommended that both the RI UMCf and BRC deep UMCf data sets be included in the UMCf background data set for these analytes.

For chromium VI, mercury, and molybdenum, although the sample quantitation limits in the RI UMCf data set are generally higher than those in the BRC deep UMCf data set, there are several detections for each analyte that provide additional information. It is therefore recommended that the RI UMCf data be included in the UMCf background data set for these analytes.

3.3 Secular Equilibrium

Based on an evaluation of secular equilibrium, data quality issues with the RI UMCf radium-228 results and BRC UMCf radium-226, uranium-234, and uranium-238 results were identified. Figure 6 shows box plots for the uranium-238 and thorium-232 decay chains for each data set, and statistical secular equilibrium testing results of each data set is provided in Table 6. If the decay chains are in secular equilibrium, the activity of each of the isotopes within each decay chain should be approximately equal. Figure 6 shows that the uranium-238 decay chain is in approximate secular equilibrium in both background data sets and that the thorium-232 decay chain is in approximate secular equilibrium for the BRC deep UMCf background data set. However, the thorium-232 decay chain is not in secular equilibrium for the RI UMCf background data set. Radium-228 has a significantly lower concentration than either isotope of thorium. Furthermore, when the data sets are fully combined, radium-228 is still out of secular equilibrium with respect to the two isotopes of thorium. This suggests an analytical problem with the radium-228 data; however, the analytical laboratory was unable to find a source of error for these analyses. Nevertheless, the radium-228 data from the RI UMCf data set will not be used in the background evaluation.

For the uranium-238 decay chain, each data set appears to be in approximate secular equilibrium; however, the data sets appear to be visually inconsistent with each other for radium-226, uranium-234, and uranium-238. Only thorium-230 appears visually consistent between the data sets. Ideally, if two data sets are each in approximate secular equilibrium, it should be the case that either all the radionuclides in that decay chain are consistent or they are all inconsistent. This suggests a data quality issue and therefore, the BRC data were reviewed in more detail. Radionuclides should be reported at the observed result regardless of the minimum detectable concentration, but the BRC UMCf data are inconsistently reported. For uranium-238, uranium-234, and radium-226, up to 50% of the results were censored at a reporting limit of 1 pCi/g, artificially inflating the BRC UMCf distribution relative to the RI UMCf distribution (see Figures 5ab, 5ag, and 5ai). The original laboratory reports with uncensored data for the BRC UMCf radionuclide analyses are not available, so the radium-226, uranium-234, and uranium-238 data from the BRC UMCf data set will not be used in the background evaluation. The thorium-230 data from the BRC UMCf data set will also not be used in the background evaluation for consistency with the rest of the uranium-238 decay chain. It should be noted that this data quality issue does not impact the BRC Deep McCullough data set.

3.4 Summary

The RI UMCf data set appears to reflect background conditions for Site soils due to the relative lack of data indicative of contamination and lack of any identified historical uses that would have been expected to have impacted the area. When the RI UMCf and BRC deep UMCf data sets are combined, the data generally appear to be representative of a single population that simply has a greater range than either individual data set. It is therefore recommended that the RI UMCf and the BRC deep UMCf data sets be combined into one UMCf-fg1 background data set for all analytes with the exceptions of antimony, cadmium, niobium, silver, thallium, tungsten, radium-226, radium-228, uranium-234, and uranium-238. It is recommended that the UMCf data set be solely comprised of the BRC deep UMCf data set of 24 samples for these analytes with the exceptions of radium-226, thorium-230, uranium-234, and uranium-238. For radium-226, thorium-230, uranium-234, and uranium-238, it is recommended that the UMCf data set be solely comprised of the RI UMCf data set of 46 samples. A statistical summary of the combined UMCf data set is provided in Table 7, and statistical secular equilibrium testing results of the combined UMCf data set is provided in Table 6. Figure 6 also shows exploratory analysis of secular equilibrium for the final combined UMCf data set, as any sample in which one or more results are unavailable are not included in the formal secular equilibrium calculation.

4 SUMMARY AND CONCLUSIONS

Due to the spatial variability of the degree of source rock sediment intermixing during the formation of the UMCf, additional UMCf soil background samples were collected to provide a more representative data set for metals and radionuclides in the UMCf for comparison to the results from the NERT RI. The RI UMCf background data set was generally found to be appropriate for supporting future assessment and decision making with respect to UMCf soils, and when combined with the BRC deep UMCf data set, likely captures the full range of background concentrations of UMCf-fg1 soils relevant to the NERT Site and the BMI complex. It is therefore recommended that the RI UMCf data set be combined with the BRC deep UMCf data set to create a single UMCf background data set of 70 samples for all analytes with the exceptions of antimony, cadmium, niobium, silver, thallium, tungsten, radium-226, radium-228, thorium-230, uranium-234, and uranium-238. It is recommended that the UMCf data set be solely comprised of the BRC deep UMCf data set of 24 samples for these analytes with the exceptions of radium-226, thorium-230, uranium-234, and uranium-238. For radium-226, thorium-230, uranium-234, and uranium-238, it is recommended that the UMCf data set be solely comprised of the RI UMCf data set of 46 samples.

The results of the background data set summary and evaluation presented in this report will be used during the COPC screening and selection process in the forthcoming RI Report for OU-1 and OU-2. The new combined UMCf data set of 70 samples will be used to evaluate concentrations in unsaturated Site UMCf soil. The existing deep alluvium background data set of 82 samples collected by BRC from the McCullough range will be used to evaluate concentrations in unsaturated Site alluvial soil at depths greater than 10 feet bgs.

In the forthcoming RI Report for OU-1 and OU-2 as well as in the associated risk assessments, the RZ-A background data set of 31 samples, as presented in this report, will be used to evaluate concentrations in the top ten feet of alluvial soil from the southern portion of the Site, consistent with current guidance on usage of soil background data sets (NDEP 2018). The TIMET/BRC background data set of 95 samples will be used to evaluate concentrations in the top ten feet of alluvial soil in the northern portion of the Site. For analytes not available in the RZ-A data set, and for Site risk assessments that include data from RZ-A as part of the Site data set, the TIMET/BRC background data set will be used to evaluate concentrations in the top ten feet of alluvial soil throughout the entire Site.

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TABLES

TABLE 1. RZ-A Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects							RSAS3			RSAS4
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range	Potential Outlier Threshold	RSAS3-0.5B	RSAS3-10B	RSAS3009-0.5B	RSAS4-0.5B
Metals	Aluminum	mg/kg	31	31	100	--	--	7,340	11,400	9,000	9,000	890	880	11,000	**8,940**	**8,520**	**8,800**	**7,980**
	Antimony	mg/kg	31	3	9.7	0.5 UJ	<2.2	0.6 J-	3.4	0.9	1.6	1.5	--	--	<2.1	<2.1	<2.1	**0.6 J-**
	Arsenic	mg/kg	31	31	100	--	--	1.6	4.25	2.4	2.4	0.54	0.66	3.6	**1.8**	**2.54**	**1.66**	**1.81**
	Barium	mg/kg	31	31	100	--	--	111	213	160	170	22	28	220	**199**	**158**	**159**	**135**
	Beryllium	mg/kg	31	31	100	--	--	0.362	0.588 J	0.46	0.46	0.048	0.054	0.57	**0.466**	**0.431**	**0.451**	**0.429**
	Boron	mg/kg	31	7	22.6	<10.2	<11	3.6 J	11.7	6.2	6.7	2.7	2.6	12	<10.4	<10.5	<10.5	<10.6
	Cadmium	mg/kg	31	25	80.6	<0.04	<0.04	0.11	0.48	0.19	0.2	0.085	0.1	0.38	**0.19**	**0.19**	**0.23**	**0.15**
	Chromium (total)	mg/kg	31	31	100	--	--	5.57	10.7 J	7.5	7.7	1.2	1.2	10	**7.72**	**8.85**	**7.33**	**6.62**
	Chromium VI	mg/kg	31	1	3.2	<0.18	<0.24	0.29 J	0.29 J	0.29	0.29	--	--	--	<0.19	<0.19	<0.19	<0.18
	Cobalt	mg/kg	31	31	100	--	--	5.4	9.1	7.3	7.3	0.76	0.8	8.9	**7.7**	**7.1**	**7.5**	**6.6**
	Copper	mg/kg	31	31	100	--	--	15.8	140	19	23	22	2.3	23	**19.6**	**17.4**	**18.7**	**18.8**
	Iron	mg/kg	31	31	100	--	--	11,300	20,600	16,000	16,000	2,100	3,000	21,000	**17,900**	**16,300**	**16,600**	**14,000**
	Lead	mg/kg	31	31	100	--	--	7.1	72.8	8.9	11	12	1.7	12	**9.8**	**7.8**	**8.6**	**8.3**
	Magnesium	mg/kg	31	31	100	--	--	7,700	13,000	9,800	10,000	1,300	1,700	13,000	**8,600**	**10,800**	**8,060**	**7,700**
	Manganese	mg/kg	31	31	100	--	--	262	537	360	370	61	65	490	**497**	**303**	**384**	**312 J+**
	Mercury	mg/kg	31	27	87.1	<0.017	<0.019	0.006 J	0.362	0.016	0.036	0.069	0.0065	0.028	**0.016 J**	**0.011 J**	**0.015 J**	**0.018**
	Molybdenum	mg/kg	31	30	96.8	<0.31	<0.31	0.31	32.7	0.49	1.7	5.9	0.27	1.1	<0.31	**0.68**	**0.32**	**0.44**
	Nickel	mg/kg	31	31	100	--	--	12.7	21.4	16	16	1.8	1.6	19	**16.3**	**15.6**	**16.5**	**15.6**
	Platinum	mg/kg	31	19	61.3	<0.1	<0.11	0.006 J	0.046 J	0.01	0.012	0.0085	0.003	0.017	<0.1	<0.1	<0.1	<0.11
	Selenium	mg/kg	31	3	9.7	<0.7	<4.3	0.8 J	0.9 J	0.8	0.83	0.058	--	--	<0.7	<0.7	<0.7	<0.7
	Silver	mg/kg	31	0	0	<0.2	<0.2	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.2
	Strontium	mg/kg	31	31	100	--	--	129	339	210	220	57	82	380	**152**	**246**	**140**	**141**
	Thallium	mg/kg	31	31	100	--	--	0.071	0.193 J	0.092	0.11	0.033	0.028	0.16	**0.088**	**0.071**	**0.091**	**0.087**
	Tin	mg/kg	31	0	0	<10.2	<11	--	--	--	--	--	--	--	<10.4	<10.5	<10.5	<10.6
	Titanium	mg/kg	31	31	100	--	--	480	1,080	830	790	160	270	1,300	**1,080**	**914**	**925**	**718**
	Tungsten	mg/kg	31	30	96.8	<0.11	<0.11	0.12	0.62	0.17	0.21	0.11	0.078	0.35	**0.12**	**0.16**	**0.12**	**0.16 J-**
	Uranium (total)	mg/kg	31	31	100	--	--	0.655	1.94	0.98	1.1	0.36	0.41	1.9	**0.709**	**1.58**	**0.699**	**0.873**
	Vanadium	mg/kg	31	31	100	--	--	28	54.9	46	44	7.6	13	69	**52.8**	**46.8**	**49.9**	**40.8 J**
	Zinc	mg/kg	31	31	100	--	--	25.8	254	33	40	40	5.5	44	**34.6**	**30.6**	**32.3**	**28.9**

Notes:

mg/kg: milligrams per kilogram
bold value: detection
<: Not detected above laboratory reporting limits

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 1. RZ-A Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	RSAS4	RSAS6		RSAS7			RSAT3		RSAT4		RSAT5		RSAT6		RSAT7	
			RSAS4-10B	RSAS6-0.5B	RSAS6-10B	RSAS7-0.5B	RSAS7-10B	RSAS7009-0.5B	RSAT3-0.5B	RSAT3-10B	RSAT4-0.5B	RSAT4-10B	RSAT5-0.5B	RSAT5-10B	RSAT6-0.5B	RSAT6-10B	RSAT7-0.5B	RSAT7-10B
Metals	Aluminum	mg/kg	**9,180**	**8,760**	**9,210**	**9,710**	**10,800**	**9,790**	**9,410**	**9,420**	**7,340**	**9,850**	**11,400**	**9,680**	**10,100**	**9,350**	**8,970**	**9,310**
	Antimony	mg/kg	**0.9 J-**	<2.1	<2.2	0.5 UJ	0.5 UJ	0.5 UJ	<2.1	0.5 UJ	<2.1	<2.1	**3.4**	<0.5	<2.1	<2.1	0.5 UJ	0.5 UJ
	Arsenic	mg/kg	**2.74**	**2.22**	**2.82**	**1.75**	**2.05**	**2.19**	**2.64**	**2.46**	**1.73**	**2.25**	**4.25**	**3.13**	**2.03**	**2.11**	**1.93**	**2.8**
	Barium	mg/kg	**158**	**161**	**175**	**165**	**188**	**168**	**157**	**151**	**111**	**152**	**205**	**179**	**169**	**197**	**159**	**185**
	Beryllium	mg/kg	**0.52**	**0.447**	**0.43**	**0.484**	**0.423**	**0.525**	**0.459**	**0.484**	**0.362**	**0.436**	**0.439**	**0.471**	**0.524**	**0.447**	**0.437**	**0.528**
	Boron	mg/kg	<10.6	**4.7 J**	**8.1 J**	<10.7	**11.7**	<10.4	<10.6	<10.6	<10.4	<10.7	<11	<10.8	<10.4	<10.5	**5.3 J**	**7.1 J**
	Cadmium	mg/kg	**0.15**	<0.04	<0.04	**0.15**	**0.13**	**0.13**	**0.21**	**0.11**	**0.23**	**0.38**	**0.48**	**0.19**	**0.17**	**0.27**	<0.04	<0.04
	Chromium (total)	mg/kg	**10.2**	**7.53**	**7.94**	**6.9**	**7.48**	**8.63**	**7.48**	**8.09**	**5.57**	**9.22**	**7.5**	**8.7**	**7.14**	**5.6**	**6 J**	**9.42 J**
	Chromium VI	mg/kg	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.2	<0.2	<0.19	<0.18	<0.19	<0.24	**0.29 J**
	Cobalt	mg/kg	**7.5**	**7.3**	**7.9**	**7.1**	**7.3**	**7.8**	**7.3**	**7.4**	**5.4**	**7.1**	**8.3**	**8.5**	**9.1**	**7.4**	**8.6**	**8.5**
	Copper	mg/kg	**21**	**19**	**21.3**	**19.9**	**18.9**	**21.2**	**19.1**	**19.7**	**15.8**	**19.5**	**140**	**27.4**	**21.1**	**21.6**	**19.7 J**	**19.1 J**
	Iron	mg/kg	**17,200**	**17,300**	**17,600**	**16,200**	**17,000**	**17,800**	**15,700**	**16,500**	**11,300**	**15,700**	**20,600**	**15,700**	**18,500**	**16,100**	**15,200**	**16,600**
	Lead	mg/kg	**9.6**	**12.5**	**7.8**	**8.8**	**8.9**	**9.2**	**15.6**	**9.6**	**7.1**	**9**	**72.8**	**9.9**	**10**	**9.7**	**15.4**	**9.3**
	Magnesium	mg/kg	**9,630**	**10,000**	**13,000**	**8,930**	**12,400**	**9,420**	**9,620**	**10,200**	**8,280**	**9,230**	**10,400**	**11,800**	**11,400**	**10,200**	**11,500 J**	**12,100 J**
	Manganese	mg/kg	**381 J+**	**329**	**351**	**367 J+**	**356 J+**	**417 J+**	**326**	**361 J+**	**262**	**375**	**401**	**489**	**402**	**360**	**537**	**334**
	Mercury	mg/kg	<0.017	**0.012 J**	**0.011 J**	**0.018**	<0.019	**0.019**	**0.062**	<0.019	**0.362**	**0.094**	**0.043**	<0.017	**0.02**	**0.015 J**	**0.017 J**	**0.01 J**
	Molybdenum	mg/kg	**0.72**	**0.43**	**0.56**	**0.36**	**0.37**	**0.36**	**0.38**	**0.53**	**0.42**	**0.6**	**32.7**	**2.83**	**0.31**	**0.34**	**0.54**	**0.71**
	Nickel	mg/kg	**18.6**	**16**	**16.7**	**16.9**	**16.7**	**18.7**	**15.6**	**18**	**15.3**	**16**	**16.2**	**21.4**	**18.6**	**16.2**	**15.8**	**15**
	Platinum	mg/kg	<0.11	**0.008 J**	**0.009 J**	<0.11	<0.11	<0.11	<0.11	<0.11	**0.007 J**	**0.01 J**	**0.014 J**	**0.01 J**	<0.1	<0.1	**0.046 J**	**0.01 J**
	Selenium	mg/kg	<0.7	<4.3	<4.3	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7	<0.7	<0.8	<4.3	<0.7	<0.7	<0.7	<0.8
	Silver	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Strontium	mg/kg	**214**	**190**	**249**	**185**	**323**	**176**	**186**	**177**	**129**	**180**	**266**	**258**	**231**	**239**	**177**	**284**
	Thallium	mg/kg	**0.189**	**0.147**	**0.074**	**0.111**	**0.1**	**0.118**	**0.096**	**0.181**	**0.119**	**0.109**	**0.092**	**0.111**	**0.08**	**0.091**	**0.193 J**	**0.151 J**
	Tin	mg/kg	<10.6	<10.6	<10.7	<10.7	<10.7	<10.4	<10.6	<10.6	<10.4	<10.7	<11	<10.8	<10.4	<10.5	<10.5	<10.8
	Titanium	mg/kg	**934**	**946**	**829**	**894**	**909**	**948**	**839**	**857**	**593**	**829**	**1,010**	**810**	**981**	**978**	**829**	**768**
	Tungsten	mg/kg	**0.23 J-**	**0.35**	**0.16**	**0.15 J-**	**0.17 J-**	**0.18 J-**	**0.17**	**0.19 J-**	**0.41**	**0.23**	**0.24**	**0.18**	**0.15**	**0.18**	**0.62**	**0.41**
	Uranium (total)	mg/kg	**1.14**	**0.805**	**1.59**	**0.67**	**1.38**	**0.855**	**0.913**	**1.01**	**0.853**	**0.987**	**0.983**	**1.11**	**0.932**	**0.913**	**0.655**	**1.94**
	Vanadium	mg/kg	**50.9 J**	**53.7**	**53.1**	**43.8 J**	**50.7 J**	**48.7 J**	**44**	**46 J**	**30.7**	**49.5**	**50.7**	**42.9**	**54.9**	**47.2**	**45**	**50.4**
	Zinc	mg/kg	**33.3**	**34.5**	**33.4**	**33.3**	**31.3**	**34.5**	**38.7**	**32.6**	**25.8**	**36.2**	**254**	**36.4**	**38.3**	**35.3**	**43.2**	**46**

Notes:

mg/kg: milligrams per kilogram
bold value: detection
<: Not detected above laboratory reporting limits

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 1. RZ-A Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	RSAT8		SA115			SA116		SA118		SA119	
			RSAT8-0.5B	RSAT8-10B	SA115-0.5B	SA115-10B	SA115009-10B	SA116-0.5B	SA116-10B	SA118-0.5B	SA118-10B	SA119-0.5B	SA119-10B
Metals	Aluminum	mg/kg	8,930	8,970	8,200	8,030	8,630	7,760	7,460	8,240	9,270	9,010	8,540
	Antimony	mg/kg	0.5 UJ	0.5 UJ	<0.5	<0.5	<0.5	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	<0.5	<0.5
	Arsenic	mg/kg	1.6	2.44	2.44	2.52	2.63	2.36	2.41	1.96	2.76	2.67	3.12
	Barium	mg/kg	145	198	146	142	152	165	141	180	213	162	162
	Beryllium	mg/kg	0.476	0.499	0.491	0.444	0.468	0.524 J	0.431 J	0.481 J	0.588 J	0.392	0.388
	Boron	mg/kg	3.6 J	6.2 J	<10.4	<10.8	<10.6	<10.5	<10.2	<10.3	<10.5	<10.7	<10.6
	Cadmium	mg/kg	<0.04	<0.04	0.12	0.13	0.13	0.23	0.24	0.23	0.23	0.14	0.12
	Chromium (total)	mg/kg	6.91 J	10.7 J	7.44	7.93	7.93	7.4 J	8.12 J	6.47 J	8.79 J	7.11	7.49
	Chromium VI	mg/kg	<0.19	<0.19	<0.19	<0.19	<0.2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
	Cobalt	mg/kg	7.7	7	6.3	6.4	7.1	6.8	6.7	6.8	6.7	7.1	7.4
	Copper	mg/kg	20 J	18.2 J	16.6	17.6	19.7	17.1	17.6	16.8	17.2	16.8	18.4
	Iron	mg/kg	16,600	15,700	12,600	11,600	12,700	13,500	13,300	13,700	13,800	13,800	13,700
	Lead	mg/kg	9.9	7.3	7.9	7.2	7.9	7.7 J	8.2 J	9 J	8.5 J	8.4	8.3
	Magnesium	mg/kg	8,880 J	9,250 J	8,480	10,400	10,800	9,740	10,800	9,300	9,810	8,470	10,500
	Manganese	mg/kg	421	310	332	295	363	336 J	313 J	419 J	352 J	302	362
	Mercury	mg/kg	0.017 J	0.017 J	0.016 J	0.013 J	0.012 J	0.015 J	0.012 J	0.102	0.01 J	0.015 J	0.006 J
	Molybdenum	mg/kg	0.48	1.24	0.44	0.6	0.6	0.44	0.75	0.35	0.48	0.5	0.86
	Nickel	mg/kg	13.5	12.7	14.4	13.8	15.1	14	14.6	14.1	15.4	15.2	15
	Platinum	mg/kg	0.007 J	0.012 J	0.009 J	0.01 J	0.011 J	0.013 J	0.011 J	0.012 J	0.012 J	0.009 J	0.006 J
	Selenium	mg/kg	<0.7	<0.7	0.8 J	0.9 J	<0.7	<0.7	0.8 J	<0.7	<0.7	<0.7	<0.7
	Silver	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Strontium	mg/kg	140	295	191	248	263	299	255	211	339	203	282
	Thallium	mg/kg	0.088 J	0.1 J	0.098	0.09	0.086	0.092	0.078	0.083	0.125	0.084	0.083
	Tin	mg/kg	<10.5	<10.5	<10.4	<10.8	<10.6	<10.5	<10.2	<10.3	<10.5	<10.7	<10.6
	Titanium	mg/kg	871	792	518	480	539	653 J	656 J	647 J	636 J	597	594
	Tungsten	mg/kg	0.17	0.28	0.12	0.14	0.17	0.12 J-	0.23 J-	0.15 J-	0.29 J-	<0.11	0.16
	Uranium (total)	mg/kg	0.709	1.6	0.919	1.01	1.09	1.01	1.34	0.792	1.76	0.699	1.71
	Vanadium	mg/kg	46.1	46.5	32	28	30.6	35.7	37.4	38	37.5	37.7	36.8
	Zinc	mg/kg	38	33.4	27.8	26.8	29	30.1	30.4	32.4	32.7	29.2	29.9

Notes:

mg/kg: milligrams per kilogram
bold value: detection
<: Not detected above laboratory reporting limits

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects							BRC-BKG-01A			BRC-BKG-01B
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range	Potential Outlier Threshold	BRC-BKG-01A-0-0.5	BRC-BKG-01A-4-6	BRC-BKG-01A-9-11	BRC-BKG-01B-0-0.5
Metals	Aluminum	mg/kg	95	95	100	--	--	3,740 J	15,300 J	8,400	9,000	2,700	4,400	18,000	**13,900 J**	**5,090 J**	**5,570 J**	**11,400 J**
	Antimony	mg/kg	95	43	45.3	0.33 UJ-	0.33 UJ-	0.12 J-	0.5 J-	0.22	0.24	0.099	0.13	0.49	**0.5 J-**	0.33 UJ-	0.33 UJ-	**0.46 J-**
	Arsenic	mg/kg	95	95	100	--	--	2.5	7.2 J	4	4.2	1.1	1.6	7.3	**5.4 J**	**3.4 J**	**5.1 J**	**5.3 J**
	Barium	mg/kg	95	95	100	--	--	73	445 J	170	180	59	74	330	**190**	**111**	**147**	**181**
	Beryllium	mg/kg	95	95	100	--	--	0.16 J	0.89	0.57	0.59	0.16	0.27	1.1	**0.78**	**0.38 J**	**0.37 J**	**0.73**
	Boron	mg/kg	95	34	35.8	<3.2	<3.2	5.2 J+	11.6 J+	6.8	7.1	1.6	2.5	12	**7.5 J+**	<3.2	**7.1 J+**	**6 J+**
	Cadmium	mg/kg	95	0	0	<0.129	<0.129	--	--	--	--	--	--	--	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	95	95	100	--	--	2.6	16.7	9	9.1	3.1	4.4	18	**13.9**	**4.5**	**5.4**	**13.5**
	Chromium VI	mg/kg	95	0	0	<0.25	<0.32	--	--	--	--	--	--	--	<0.25	<0.26	<0.26	<0.25
	Cobalt	mg/kg	95	95	100	--	--	3.7 J	16.3 J	9	8.8	2.3	2.8	14	**9.8**	**4.8**	**6.7**	**8.2**
	Copper	mg/kg	95	95	100	--	--	10.2	25.9 J	18	18	3.4	4.9	27	**23.7**	**12**	**17.9**	**18.2**
	Iron	mg/kg	95	95	100	--	--	5,410	19,700	13,000	13,000	3,400	5,000	23,000	**15,100**	**6,640**	**6,870**	**14,400**
	Lead	mg/kg	95	95	100	--	--	3 J	35.1	7.2	8.2	4.2	3.2	14	**11.5 J**	**4.9 J**	**4.5 J**	**11.8 J**
	Lithium	mg/kg	95	95	100	--	--	7.5	26.5	13	14	4.4	6	26	**18**	**11.5**	**14**	**17.5**
	Magnesium	mg/kg	95	95	100	--	--	4,690 J	17,500 J	10,000	10,000	2,800	3,900	18,000	**14,200 J**	**5,470 J**	**8,910 J**	**12,700 J**
	Manganese	mg/kg	95	95	100	--	--	151	863 J	410	410	130	170	740	**511**	**183**	**339**	**409**
	Mercury	mg/kg	95	73	76.8	<0.0072	<0.0072	0.0084 J	0.11	0.018	0.023	0.017	0.015	0.05	**0.023 J**	**0.01 J**	**0.0092 J**	**0.033 J**
	Molybdenum	mg/kg	95	95	100	--	--	0.3 J	2	0.49	0.55	0.25	0.2	0.91	**0.9 J**	**0.4 J**	**1.9**	**0.75 J**
	Nickel	mg/kg	95	95	100	--	--	7.9 J	30 J	16	16	4	5	26	**20.9**	**9.6**	**11.3**	**17.5**
	Niobium	mg/kg	95	0	0	1.01 UJ-	1.01 UJ-	--	--	--	--	--	--	--	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	95	95	100	--	--	0.16	1.5	0.42	0.48	0.24	0.27	0.99	**0.31**	**0.42**	**0.8**	**0.23**
	Phosphorus (total)	mg/kg	95	95	100	--	--	862	2,010	1,500	1,500	280	420	2,300	**1,440**	**938**	**1,120**	**1,250**
	Platinum	mg/kg	95	5	5.3	<0.0435	<0.0435	0.045 J	0.099 J	0.064	0.071	0.02	0.018	0.11	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	95	33	34.7	<0.158	<0.158	0.23 J	0.6	0.31	0.33	0.076	0.07	0.46	**0.29 J**	<0.158	<0.158	**0.27 J**
	Silver	mg/kg	95	0	0	<0.261	<0.261	--	--	--	--	--	--	--	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	95	95	100	--	--	75.5	808 J	190	230	130	120	440	**145**	**209**	**488**	**118**
	Thallium	mg/kg	95	21	22.1	<0.543	<0.543	1.1	1.8	1.4	1.4	0.25	0.4	2.2	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	95	95	100	--	--	0.24 J	0.8 J	0.51	0.5	0.11	0.15	0.8	**0.78 J**	**0.32 J**	**0.41 J**	**0.66 J**
	Titanium	mg/kg	95	95	100	--	--	262	1,010 J	540	560	150	190	950	**681**	**376**	**490**	**571**
	Tungsten	mg/kg	95	0	0	0.0175 UJ	0.0175 UJ	--	--	--	--	--	--	--	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	94	94	100	--	--	0.62 J	2.7	0.97	1	0.31	0.26	1.5	**1**	**0.86 J**	**1.3**	**0.85 J**
	Vanadium	mg/kg	95	95	100	--	--	20.2	59.1 J	38	39	8.4	11	62	**44.9 J**	**25.5 J**	**30.5 J**	**34.1 J**
	Zinc	mg/kg	95	95	100	--	--	15.4	121	38	38	13	12	62	**48**	**20.7**	**19.7**	**48.5**
	Zirconium	mg/kg	95	95	100	--	--	86.1 J	179 J	130	130	22	30	190	**121 J-**	**105 J-**	**106 J-**	**112 J-**
Radionuclides	Radium-226	pCi/g	95	95	100	--	--	0.494 J	2.36	1.1	1.1	0.34	0.31	1.7	**1.58 J**	**1.32**	**1.5**	**0.968 J**
	Radium-228	pCi/g	81	81	100	--	--	0.946 U	2.92	1.9	1.9	0.39	0.48	2.9	**2.05**	**2.21**	**1.67 J**	**1.28 J**
	Thorium-228	pCi/g	95	95	100	--	--	1.15	2.28	1.8	1.7	0.26	0.41	2.5	**2.09**	**1.83**	**1.5**	**1.67**
	Thorium-230	pCi/g	95	95	100	--	--	0.73 J	3.01	1.2	1.3	0.4	0.45	2.2	**1.25**	**1.28**	**1.55**	**1.42**
	Thorium-232	pCi/g	95	95	100	--	--	1.22	2.23	1.7	1.7	0.26	0.43	2.5	**1.78**	**1.43**	**1.46**	**1.94**
	Uranium-234	pCi/g	95	95	100	--	--	0.63 U	2.84	1.1	1.2	0.47	0.34	1.8	**0.63 U**	**2.44**	**1.73**	**0.72 U**
	Uranium-235	pCi/g	95	95	100	--	--	0.0009	0.21 J	0.06	0.07	0.038	0.045	0.16	**0.011**	**0.12 J**	**0.043 J**	**0.042 J**
	Uranium-238	pCi/g	95	95	100	--	--	0.65 J	2.37	1.1	1.2	0.36	0.4	1.9	**0.77 J**	**1.43**	**1.38**	**0.78 J**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-01B		BRC-BKG-01C			BRC-BKG-02A			BRC-BKG-02B			BRC-BKG-02C			BRC-BKG-03A	
			BRC-BKG-01B-4-6	BRC-BKG-01B-9-11	BRC-BKG-01C-0-0.5	BRC-BKG-01C-4-6	BRC-BKG-01C-9-11	BRC-BKG-02A-0-0.5	BRC-BKG-02A-4-6	BRC-BKG-02A-9-11	BRC-BKG-02B-0-0.5	BRC-BKG-02B-4-6	BRC-BKG-02B-9-11	BRC-BKG-02C-0-0.5	BRC-BKG-02C-4-6	BRC-BKG-02C-9-11	BRC-BKG-03A-0-0.5	BRC-BKG-03A-3-7
Metals	Aluminum	mg/kg	6,670 J	3,740 J	10,300 J	5,230 J	4,130 J	6,980 J	6,530 J	6,420 J	9,620 J	7,650 J	6,560 J	10,800 J	6,470	8,450	11,400	8,990
	Antimony	mg/kg	0.14 J-	0.25 J-	0.38 J-	0.13 J-	0.33 UJ-	0.23 J-	0.14 J-	0.33 UJ-	0.24 J-	0.33 UJ-	0.16 J-	0.21 J-	0.17 J-	0.14 J-	0.23 J-	0.35 J-
	Arsenic	mg/kg	4.4 J	4.6	6.9	4	4.8	4.2 J	3 J	3.4 J	6.3 J	3.6 J	3.9 J	5.9 J	3.6	3.7	4.7	3.5
	Barium	mg/kg	187	82.5 J+	162 J+	114 J+	102 J+	90.4	216	174	131	224	177	146	167	184	205	221
	Beryllium	mg/kg	0.48 J	0.46 J	0.85	0.54	0.5 J	0.54	0.55	0.53	0.72	0.54	0.5 J	0.8	0.47 J	0.54	0.57	0.44 J
	Boron	mg/kg	5.9 J+	<3.2	8.2 J+	<3.2	<3.2	<3.2	<3.2	<3.2	5.9 J+	<3.2	<3.2	5.7 J+	<3.2	<3.2	6.1 J+	6.8 J+
	Cadmium	mg/kg	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	5.9	2.9	11.6	3.1	2.6	8	6.4	8.4	11.1	12	5.8	10.1	5.8	6	12	6.4
	Chromium VI	mg/kg	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26
	Cobalt	mg/kg	6.2	3.7 J	6.8 J	5.4 J	3.9 J	5.7	5.9	6.1	7.3	7.4	5.8	7.3	5.7 J	7 J	8.1 J	6.6 J
	Copper	mg/kg	14.7	10.2	16.7	11.9	11	13.7	13.5	14.9	18.6	20.6	14.7	19.1	13.6	15.7	17.8	24.2
	Iron	mg/kg	8,260	5,410	13,300	6,350	5,510	10,500	9,430	10,200	13,200	11,200	9,170	12,500	9,450	10,100	13,200	8,890
	Lead	mg/kg	6.2 J	3 J	12.2 J	5 J	3.6 J	7.5 J	6.6 J	6 J	9.2 J	6.8 J	5.7 J	9 J	6.6	7.2	11	5.7
	Lithium	mg/kg	12.7	13.7	18.2	10	12.1	12.9	10.8	11.9	18.9	11.9	11.5	17.3	10.6	11.8	14.5	11.5
	Magnesium	mg/kg	6,370 J	5,960 J	14,000 J	5,070 J	6,680 J	7,380 J	4,690 J	5,530 J	10,000 J	5,670 J	5,640 J	10,200 J	4,960	6,340	12,500	7,590
	Manganese	mg/kg	270	157	376	256	151	263	323	266	344	353	290	340	270 J	339 J	464 J	304 J
	Mercury	mg/kg	0.015 J	<0.0072	0.01 J	<0.0072	<0.0072	0.027 J	<0.0072	0.0098 J	0.015 J	<0.0072	0.012 J	0.014 J	0.0086 J	<0.0072	<0.0072	<0.0072
	Molybdenum	mg/kg	0.64 J	0.33 J	0.72 J	0.35 J	0.43 J	0.47 J	0.53 J	0.51 J	0.61 J	2	0.6 J	0.59 J	0.51 J	0.61 J	0.77 J	0.76 J
	Nickel	mg/kg	11.4	7.9 J	15 J	9.2 J	8 J	11.8	10.6	11.7	16.3	14.1	11.1	16	10 J	12.8 J	17.1 J	13.2 J
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	<1.01	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	0.55	0.7	0.32	0.51	0.84	0.23	0.37	0.4	0.41	0.43	0.52	0.37	0.35	0.53	0.3	0.58
	Phosphorus (total)	mg/kg	1,020	1,030	1,280	1,330	970	1,300	1,200	1,530	1,510	1,600	1,370	1,520	1,480	1,440	1,240	1,160
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	<0.158	0.32 J	<0.158	<0.158	0.36 J	<0.158	<0.158	0.3 J	0.36 J	<0.158	0.29 J	0.34 J	0.31 J	0.3 J	0.23 J
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	258	356	147	219	363	105	168	202	188	209	225	173	184 J-	239 J-	145 J-	294 J-
	Thallium	mg/kg	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	0.45 J	0.29 J	0.56 J	0.25 J	0.24 J	0.38 J	0.43 J	0.4 J	0.53 J	0.62 J	0.43 J	0.56 J	0.4 J	0.51 J	0.67 J	0.52 J
	Titanium	mg/kg	570	262	472	311	352	371	536	586	549	703	582	530	495	616	641	673
	Tungsten	mg/kg	0.0175 UJ	<0.0175	<0.0175	<0.0175	<0.0175	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	1.1	0.74 J	0.93 J	0.81 J	1.1	0.64 J	0.76 J	0.68 J	0.96 J	0.84 J	0.83 J	1.1	0.73 J	0.84 J	0.97 J	0.99 J
	Vanadium	mg/kg	33.5 J	20.2	29.6	23.9	22.9	23.6 J	30.8 J	34.6 J	36 J	39.9 J	33.9 J	34.2 J	30.5 J	36.6 J	40.6 J	36.2 J
	Zinc	mg/kg	25.4	15.4	42.7	17.6	17.1	31.7	25.9	26.3	42.3	26.9	24.4	43.1	26.9	28.5	38.9	25.5
	Zirconium	mg/kg	117 J-	91.9	103	120	93.8	99.3 J-	125 J-	125 J-	130 J-	138 J-	126 J-	134 J-	131	133	111	112
Radionuclides	Radium-226	pCi/g	1.15 J	2.1 J	0.855 J	1.54	2.36	1.2	1.15	1.07 J	0.945 J	0.965 J	1.03 J	1.06 J	1.37	1.27	1.18	0.952 J
	Radium-228	pCi/g	1.83 J	--	--	--	--	2.17	2.01	2.04	2.34	2.36	2.05	1.91 J	1.61 J	2.92	2.05	2.29
	Thorium-228	pCi/g	1.91	1.38	2.28	1.95	1.38	2.09	1.97	1.86	1.66	2.03	1.56	1.9	2.08	1.97	1.89	1.85
	Thorium-230	pCi/g	1.2	1.65	1.24	1.09	1.62	1.7	1.15	1.56	1.21	1.07	1.03	1.41	1.46	1.1	1.22	1.67
	Thorium-232	pCi/g	1.63	1.52	2.23	1.51	1.5	1.9	2.06	1.69	1.81	2	1.37	2.12	2.04	1.98	2.05	1.5
	Uranium-234	pCi/g	1.73	1.95	0.82 U	1.59	1.92	1.22 J+	0.92 U	1.16 U	1 U	1.01 U	1.03 U	1.22 J+	1.14 U	1.17 U	0.85 U	1.16 U
	Uranium-235	pCi/g	0.04	0.06	0.064	0.058	0.17 J	0.076 J	0.014	0.05	0.011	0.086	0.031	0.1	0.067	0.001	0.059	0.045
	Uranium-238	pCi/g	1.56	1.53	0.88 J	1.32	1.75	1.38	1.02	1.31	1.08	0.99 J	1.07	1.14	1.07	1.1	0.74 J	1.23

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-03A	BRC-BKG-03B			BRC-BKG-03C			BRC-BKG-04A			BRC-BKG-04B			BRC-BKG-04C		
			BRC-BKG-03A-9-11	BRC-BKG-03B-0-0.5	BRC-BKG-03B-4-6	BRC-BKG-03B-9-11	BRC-BKG-03C-0-0.5	BRC-BKG-03C-4-6	BRC-BKG-03C-9-11	BRC-BKG-04A-0-0.5	BRC-BKG-04A-4-6	BRC-BKG-04A-9-11	BRC-BKG-04B-0-0.5	BRC-BKG-04B-4-6	BRC-BKG-04B-9-11	BRC-BKG-04C1-0-0.5	BRC-BKG-04C-0-0.5	BRC-BKG-04C-4-6
Metals	Aluminum	mg/kg	**5,300**	**9,570**	**6,730**	**6,100**	**12,800**	**7,320**	**6,310**	**12,600 J**	**14,700 J**	**12,500 J**	**13,400 J**	**11,800 J**	**13,300 J**	--	**13,300 J**	**10,900 J**
	Antimony	mg/kg	**0.12 J-**	**0.32 J-**	**0.2 J-**	**0.15 J-**	**0.2 J-**	0.33 UJ-	0.33 UJ-	0.33 UJ-	<0.33	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	--	0.33 UJ-	0.33 UJ-
	Arsenic	mg/kg	**4.3**	**4.1**	**4**	**5.7**	**4.9**	**3.5**	**6**	**2.5**	**3.1**	**3.2**	**2.6**	**2.8**	**3.1**	--	**2.5**	**2.9**
	Barium	mg/kg	**136**	**171**	**177**	**135**	**215**	**217**	**175**	**220 J**	**272 J**	**191 J**	**218 J**	**183 J**	**245 J**	--	**445 J**	**188 J**
	Beryllium	mg/kg	**0.44 J**	**0.57**	**0.44 J**	**0.41 J**	**0.84**	**0.5 J**	**0.41 J**	**0.44 J**	**0.5 J**	**0.43 J**	**0.45 J**	**0.45 J**	**0.5 J**	--	**0.41 J**	**0.46 J**
	Boron	mg/kg	<3.2	**5.2 J+**	**8.3 J+**	**7.7 J+**	**5.3 J+**	<3.2	**8.6 J+**	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	--	<3.2	<3.2
	Cadmium	mg/kg	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	--	0.129 UJ-	0.129 UJ-
	Chromium (total)	mg/kg	**6.2**	**9**	**6.2**	**5.8**	**12.8**	**5**	**4.4**	**6.4**	**7.1**	**7.5**	**7**	**8.1**	**9.1**	--	**7.7**	**7.5**
	Chromium VI	mg/kg	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.27	<0.26	<0.26	<0.26	<0.25	<0.25	<0.26
	Cobalt	mg/kg	**4.8 J**	**7.5 J**	**6 J**	**4.4 J**	**9.3 J**	**6.2 J**	**4.7 J**	**11.2 J**	**12.5 J**	**11.6 J**	**11.9 J**	**10.8 J**	**16.3 J**	--	**14.6 J**	**10.6 J**
	Copper	mg/kg	**14.6**	**17**	**14.4**	**12.8**	**18.7**	**15.4**	**14.6**	**19.9 J**	**22.7 J**	**19.8 J**	**19.6 J**	**17.6 J**	**22.1 J**	--	**23.8 J**	**20.9 J**
	Iron	mg/kg	**8,100**	**12,100**	**9,780**	**7,400**	**15,500**	**8,940**	**6,570**	**16,800**	**18,600**	**16,800**	**18,300**	**18,800**	**19,100**	--	**16,600**	**18,500**
	Lead	mg/kg	**4.8**	**9.6**	**6**	**4.2**	**11.9**	**6.5**	**4.4**	**7.3**	**7.2**	**6.3**	**8.2**	**7.7**	**7.3**	--	**6**	**6.6**
	Lithium	mg/kg	**11.8**	**13.4**	**12.1**	**16.5**	**17.3**	**10.9**	**24.9**	**7.5**	**9.9**	**10.1**	**8.9**	**9.4**	**10**	--	**8.4**	**9.8**
	Magnesium	mg/kg	**6,320**	**9,550**	**6,280**	**10,400**	**9,240**	**5,830**	**16,900**	**17,500 J**	**12,900 J**	**12,700 J**	**12,200 J**	**11,100 J**	**12,500 J**	--	**13,400 J**	**11,700 J**
	Manganese	mg/kg	**198 J**	**430 J**	**270 J**	**191 J**	**495 J**	**321 J**	**169 J**	**544 J**	**618 J**	**566 J**	**550 J**	**488 J**	**641 J**	--	**593 J**	**471 J**
	Mercury	mg/kg	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	**0.023 J**	**0.028 J**	**0.11**	**0.032 J**	**0.021 J**	**0.028 J**	--	**0.029 J**	**0.03 J**
	Molybdenum	mg/kg	**0.55 J**	**0.72 J**	**0.62 J**	**0.78 J**	**0.7 J**	**0.58 J**	**0.51 J**	**0.32 J**	**0.38 J**	**0.46 J**	**0.32 J**	**0.3 J**	**0.6 J**	--	**0.36 J**	**0.33 J**
	Nickel	mg/kg	**9.7 J**	**15 J**	**10.6 J**	**10.1 J**	**17.6 J**	**11.6 J**	**11.5 J**	**16.8 J**	**18.7 J**	**18 J**	**16.8 J**	**15.5 J**	**20.3 J**	--	**30 J**	**19 J**
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	--	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	**0.51**	**0.29**	**0.46**	**0.99**	**0.27**	**0.45**	**1.2**	**0.57**	**0.81**	**0.55**	**0.73**	**0.46**	**0.71**	--	**1.5**	**0.42**
	Phosphorus (total)	mg/kg	**1,260**	**1,460**	**1,110**	**1,050**	**1,300**	**1,540**	**862**	**1,810**	**1,900**	**1,800**	**1,990**	**2,010**	**1,960**	--	**1,890**	**1,870**
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	--	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	**0.33 J**	**0.39 J**	**0.27 J**	**0.34 J**	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	**0.26 J**	--	<0.158	<0.158
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	--	<0.261	<0.261
	Strontium	mg/kg	**240 J-**	**144 J-**	**219 J-**	**567 J-**	**127 J-**	**230 J-**	**684 J-**	**249 J**	**441 J**	**267 J**	**402 J**	**219 J**	**406 J**	--	**808 J**	**182 J**
	Thallium	mg/kg	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	**1.5**	**1.8**	**1.5**	**1.7**	**1.4**	**1.5**	--	**1.3**	**1.8**
	Tin	mg/kg	**0.4 J**	**0.54 J**	**0.4 J**	**0.4 J**	**0.66 J**	**0.44 J**	**0.37 J**	**0.58 J**	**0.68 J**	**0.5 J**	**0.61 J**	**0.57 J**	**0.63 J**	--	**0.65 J**	**0.53 J**
	Titanium	mg/kg	**483**	**562**	**531**	**448**	**558**	**539**	**414**	**702 J**	**958 J**	**701 J**	**936 J**	**704 J**	**758 J**	--	**779 J**	**749 J**
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	--	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	**0.9 J**	**0.8 J**	**0.8 J**	**1.1**	**0.86 J**	**0.78 J**	**1.7**	**0.89 J**	**1.1**	**0.94 J**	**0.94 J**	--	**1.1**	--	**1.1**	**1 J**
	Vanadium	mg/kg	**28.1 J**	**34.5 J**	**34.1 J**	**28.3 J**	**35.5 J**	**31.1 J**	**28.8 J**	**54.2 J**	**59.1 J**	**49.2 J**	**55.3 J**	**50 J**	**57.5 J**	--	**57.3 J**	**49.2 J**
	Zinc	mg/kg	**22.3**	**35.8**	**25.8**	**20.4**	**48.2**	**24.5**	**21.9**	**42.2**	**43.8**	**43**	**43.1**	**42.8**	**43.4**	--	**38.5**	**43.2**
	Zirconium	mg/kg	**112**	**123**	**108**	**102**	**133**	**124**	**101**	**146 J**	**175 J**	**164 J**	**168 J**	**167 J**	**177 J**	--	**176 J**	**178 J**
Radionuclides	Radium-226	pCi/g	**1.22 J**	**1.57**	**1.02**	**1.23**	**1.26**	**1.09**	**1.32**	**1.03 J**	**0.577 J**	**0.507 J**	**0.893 J**	**1.04 J**	**0.635 J**	--	**0.494 J**	**0.817 J**
	Radium-228	pCi/g	**1.75 J**	**2.35**	**1.85 J**	--	--	--	--	**1.46 U**	**1.59 U**	**2.02**	**1.78 U**	**1.35 U**	**1.91 U**	--	--	**1.47 U**
	Thorium-228	pCi/g	**1.81**	**1.52**	**1.93**	**1.47**	**2.09**	**2.14**	**1.38**	**1.15**	**1.33**	**1.43**	**1.85**	**1.63**	**1.27**	--	**1.76**	**1.4**
	Thorium-230	pCi/g	**1.5**	**0.99 J**	**1.11**	**1.57**	**1.55**	**1.7**	**2.24**	**0.88 J**	**0.92 J**	**0.98 J**	**0.77 J**	**0.95 J**	**0.81 J**	--	**0.86 J**	**1.05**
	Thorium-232	pCi/g	**2.1**	**1.77**	**1.53**	**1.52**	**2.09**	**1.97**	**1.38**	**1.32**	**1.3**	**1.42**	**1.77**	**1.5**	**1.52**	--	**1.34**	**1.38**
	Uranium-234	pCi/g	**1.56**	**1.05 U**	**1.23 J+**	**1.84**	**0.84 U**	**1.07 U**	**2.3**	**0.89 U**	**0.9 U**	**1.07 U**	**0.76 U**	**0.76 U**	**0.85 U**	--	**0.85 U**	**0.76 U**
	Uranium-235	pCi/g	**0.077 J**	**0.03**	**0.13 J**	**0.099 J**	**0.098 J**	**0.0009**	**0.13 J**	**0.059 J**	**0.043 J**	**0.076**	**0.036**	**0.001**	**0.087 J**	--	**0.061 J**	**0.084**
	Uranium-238	pCi/g	**1.39**	**1.16**	**1.17**	**1.46**	**0.83 J**	**0.98 J**	**1.95**	**0.77 J**	**1.14**	**1.05**	**1.02**	**0.82 J**	**0.85 J**	--	**0.84 J**	**1.02**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-04C	BRC-BKG-04C1	BRC-BKG-05A					BRC-BKG-05AR			BRC-BKG-05B				BRC-BKG-05BR	
			BRC-BKG-04C-9-11	BRC-BKG-04C1-0-0.5	BRC-BKG-05A-0-0.5	BRC-BKG-05A-4-6	BRC-BKG-05AR-0-0.5	BRC-BKG-05AR-4-6	BRC-BKG-05AR-9-11	BRC-BKG-05AR-0-0.5	BRC-BKG-05AR-4-6	BRC-BKG-05AR-9-11	BRC-BKG-05B-0-0.5	BRC-BKG-05BR-0-0.5	BRC-BKG-05BR-4-6	BRC-BKG-05BR-9-11	BRC-BKG-05BR-0-0.5	BRC-BKG-05BR-4-6
Metals	Aluminum	mg/kg	**12,200 J**	**10,600**	**7,240 J**	**10,600 J**	--	--	--	**7,500 J**	**5,660 J**	**6,530 J**	**7,130 J**	--	--	--	**7,820 J**	**5,740**
	Antimony	mg/kg	0.33 UJ-	**0.28 J-**	0.33 UJ-	0.33 UJ-	--	--	--	**0.39 J-**	0.33 UJ-	**0.12 J-**	0.33 UJ-	--	--	--	**0.2 J-**	**0.23 J**
	Arsenic	mg/kg	**3.2**	**3.4**	**2.6**	**3.6**	--	--	--	**3.7**	**3.1**	**3.7**	**2.6**	--	--	--	**3.3**	**3.4**
	Barium	mg/kg	**197 J**	**157**	**152 J**	**143 J**	--	--	--	**122 J+**	**77.2 J+**	**118 J+**	**145 J**	--	--	--	**141 J+**	**96.7**
	Beryllium	mg/kg	**0.47 J**	**0.65**	**0.35 J**	**0.54 J**	--	--	--	**0.84**	**0.69**	**0.89**	**0.33 J**	--	--	--	**0.89**	**0.76**
	Boron	mg/kg	<3.2	**5.6 J+**	<3.2	<3.2	--	--	--	<3.2	<3.2	<3.2	<3.2	--	--	--	<3.2	<3.2
	Cadmium	mg/kg	0.129 UJ-	<0.129	0.129 UJ-	0.129 UJ-	--	--	--	<0.129	<0.129	<0.129	0.129 UJ-	--	--	--	<0.129	<0.129
	Chromium (total)	mg/kg	**8.2**	**11.9**	**3.6**	**12.1**	--	--	--	**10.9**	**6.5**	**10.8**	**4.8**	--	--	--	**11.9**	**6.9**
	Chromium VI	mg/kg	<0.26	--	<0.26	<0.27	<0.25	<0.32	<0.27	--	--	--	<0.26	<0.25	<0.26	<0.26	--	--
	Cobalt	mg/kg	**12.2 J**	**9.5 J**	**8.8 J**	**11.4 J**	--	--	--	**8.8 J**	**8.1 J**	**8.9 J**	**8.7 J**	--	--	--	**9.5 J**	**8.3**
	Copper	mg/kg	**18.2 J**	**15.7**	**23.9 J**	**20.5 J**	--	--	--	**18.2**	**15.3**	**16.7**	**22.9 J**	--	--	--	**18.6**	**15.5**
	Iron	mg/kg	**17,400**	**19,700**	**10,500**	**16,200**	--	--	--	**14,500**	**11,900**	**14,700**	**10,700**	--	--	--	**15,700**	**12,300**
	Lead	mg/kg	**6.7**	**9.4**	**9.1**	**6.4**	--	--	--	**9.1 J**	**6.7 J**	**7.8 J**	**8.1**	--	--	--	**7.9 J**	**6.9**
	Lithium	mg/kg	**9.9**	**10.8**	**9.6**	**14.3**	--	--	--	**11.3**	**8.7**	**11.7**	**8.8**	--	--	--	**11.1**	**8.5**
	Magnesium	mg/kg	**11,100 J**	**12,100**	**9,830 J**	**11,200 J**	--	--	--	**9,190 J**	**7,000 J**	**8,910 J**	**8,470 J**	--	--	--	**8,970 J**	**7,090**
	Manganese	mg/kg	**489 J**	**481 J**	**503 J**	**369 J**	--	--	--	**357**	**308**	**400**	**407 J**	--	--	--	**404**	**397 J**
	Mercury	mg/kg	**0.028 J**	**0.034**	**0.033 J**	**0.034 J**	--	--	--	**0.021 J**	<0.0072	**0.011 J**	**0.025 J**	--	--	--	**0.016 J**	**0.0084 J**
	Molybdenum	mg/kg	**0.41 J**	**0.36 J**	**0.39 J**	**0.51 J**	--	--	--	**0.42 J**	**0.35 J**	**0.42 J**	**0.36 J**	--	--	--	**0.42 J**	**0.37 J**
	Nickel	mg/kg	**17.2 J**	**15.3 J**	**18.9 J**	**22.2 J**	--	--	--	**17.5 J**	**16.4 J**	**17.6 J**	**17.4 J**	--	--	--	**18.8 J**	**16.4**
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	--	--	--	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	--	--	--	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	**0.59**	**0.37**	**0.27**	**0.3**	--	--	--	**0.26**	**0.19**	**0.25**	**0.28**	--	--	--	**0.24**	**0.16**
	Phosphorus (total)	mg/kg	**1,800**	**1,730**	**1,620**	**1,810**	--	--	--	**1,580**	**1,820**	**1,690**	**1,590**	--	--	--	**1,590**	**1,730**
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	--	--	--	<0.0435	<0.0435	**0.064 J**	<0.0435	--	--	--	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	**0.39 J**	<0.158	<0.158	--	--	--	**0.37 J**	**0.37 J**	<0.158	<0.158	--	--	--	**0.54**	<0.158
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	--	--	--	<0.261	<0.261	<0.261	<0.261	--	--	--	<0.261	<0.261
	Strontium	mg/kg	**258 J**	**165 J-**	**142 J**	**140 J**	--	--	--	**113**	**87.9**	**124**	**131 J**	--	--	--	**119**	**75.5**
	Thallium	mg/kg	**1.2**	<0.543	<0.543	**1.8**	--	--	--	**1.4**	<0.543	**1.6**	**1.1**	--	--	--	**1.5**	<0.543
	Tin	mg/kg	**0.53 J**	**0.5 J**	**0.59 J**	**0.55 J**	--	--	--	**0.47 J**	**0.37 J**	**0.46 J**	**0.55 J**	--	--	--	**0.52 J**	**0.48 J**
	Titanium	mg/kg	**739 J**	**510**	**839 J**	**515 J**	--	--	--	**535**	**388**	**436**	**659 J**	--	--	--	**624**	**432**
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	--	--	--	<0.0175	<0.0175	<0.0175	0.0175 UJ	--	--	--	<0.0175	0.0175 UJ
	Uranium (total)	mg/kg	**0.92 J**	**0.62 J**	**1.2**	**1 J**	--	--	--	**0.73 J**	**0.8 J**	**0.95 J**	**0.89 J**	--	--	--	**1.1**	**1 J**
	Vanadium	mg/kg	**47.1 J**	**43.9 J**	**38.4 J**	**42.5 J**	--	--	--	**35**	**28.6**	**35.9**	**33.5 J**	--	--	--	**41.2**	**29.2 J**
	Zinc	mg/kg	**41.6**	**49.1**	**29.3**	**40.2**	--	--	--	**39**	**35.5**	**51.7**	**33.7**	--	--	--	**37.7**	**33.1**
	Zirconium	mg/kg	**165 J**	**119 J**	**167 J**	**179 J**	--	--	--	**127**	**144**	**151**	**154 J**	--	--	--	**133**	**135 J**
Radionuclides	Radium-226	pCi/g	**0.925 J**	**0.595 J**	**0.714 J**	**1.15**	--	--	--	**1.36**	**1.12**	**1.28**	**0.879 J**	--	--	--	**1.12**	**1.22**
	Radium-228	pCi/g	**0.946 U**	**1.82 U**	**2.37**	**1.5 U**	--	--	--	**2.65**	**2.4**	**2.14**	**1.86 U**	--	--	--	**2.06**	**2.31**
	Thorium-228	pCi/g	**1.82**	**1.41**	**2.01**	**2.03**	--	--	--	**1.71**	**2.15**	**2.11**	**1.65**	--	--	--	**1.55**	**2.06**
	Thorium-230	pCi/g	**0.92 J**	**0.82 J**	**0.93 J**	**1.08**	--	--	--	**1**	**1.19**	**0.97 J**	**1.15**	--	--	--	**0.73 J**	**1.42**
	Thorium-232	pCi/g	**1.69**	**1.43**	**1.53**	**1.55**	--	--	--	**1.75**	**1.92**	**2.06**	**1.57**	--	--	--	**1.52**	**1.91**
	Uranium-234	pCi/g	**0.86 U**	**0.68 U**	**0.9 U**	**0.83 U**	--	--	--	**0.83 U**	**1.02 U**	**0.96 U**	**0.88 U**	--	--	--	**0.83 U**	**0.95 U**
	Uranium-235	pCi/g	**0.101 J**	**0.032**	**0.048**	**0.083 J**	--	--	--	**0.049**	**0.053 J**	**0.037 J**	**0.124 J**	--	--	--	**0.073**	**0.062**
	Uranium-238	pCi/g	**1.06**	**0.81 J**	**1**	**1.16**	--	--	--	**0.89 J**	**1.02**	**0.94 J**	**1.08**	--	--	--	**0.94 J**	**0.97 J**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-05BR	BRC-BKG-05C				BRC-BKG-05CR			BRC-BKG-06A			BRC-BKG-06B			BRC-BKG-06C	
			BRC-BKG-05BR-9-11	BRC-BKG-05C-0-0.5	BRC-BKG-05CR-0-0.5	BRC-BKG-05CR-4-6	BRC-BKG-05CR-9-11	BRC-BKG-05CR-0-0.5	BRC-BKG-05CR-4-6	BRC-BKG-05CR-9-11	BRC-BKG-06A-0-0.5	BRC-BKG-06A-4-6	BRC-BKG-06A-9-11	BRC-BKG-06B-0-0.5	BRC-BKG-06B-4-6	BRC-BKG-06B-9-11	BRC-BKG-06C-0-0.5	BRC-BKG-06C-4-6
Metals	Aluminum	mg/kg	**7,880**	**8,730 J**	--	--	--	**6,620**	**5,220**	**7,660**	**11,600 J**	**11,700 J**	**10,300 J**	**13,800 J**	**11,600 J**	**10,800 J**	**12,400 J**	**10,300 J**
	Antimony	mg/kg	**0.21 J**	0.33 UJ-	--	--	--	**0.2 J**	<0.33	**0.29 J**	**0.28 J-**	0.33 UJ-	0.33 UJ-	**0.12 J-**	**0.17 J-**	0.33 UJ-	**0.25 J-**	0.33 UJ-
	Arsenic	mg/kg	**3.9**	**2.6**	--	--	--	**3**	**4.4**	**3.4**	**5.4**	**4.9**	**5.7**	**6.3**	**5.1**	**4.7**	**5.6**	**5.5**
	Barium	mg/kg	**122**	**154 J**	--	--	--	**139**	**73**	**121**	**150 J**	**213 J**	**142 J**	**193 J**	**210 J**	**202 J**	**218 J**	**204 J**
	Beryllium	mg/kg	**0.79**	**0.37 J**	--	--	--	**0.73**	**0.61**	**0.88**	**0.69**	**0.69**	**0.5 J**	**0.77**	**0.64**	**0.63**	**0.76**	**0.62**
	Boron	mg/kg	<3.2	<3.2	--	--	--	<3.2	<3.2	<3.2	**7.5 J+**	**9.1 J+**	**6.2 J+**	**8.3 J+**	**6.3 J+**	<3.2	**6.1 J+**	**5.4 J+**
	Cadmium	mg/kg	<0.129	0.129 UJ-	--	--	--	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	**9.9**	**4.7**	--	--	--	**6.8**	**6**	**12.9**	**15**	**11.2**	**10.3**	**14.5**	**9.5**	**9.4**	**13.5**	**9.5**
	Chromium VI	mg/kg	--	<0.25	<0.25	<0.27	<0.26	--	--	--	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26
	Cobalt	mg/kg	**10**	**9.3 J**	--	--	--	**8.8**	**7**	**9.7**	**8.4 J**	**10.2 J**	**8.8 J**	**10.1 J**	**10.3 J**	**9.9 J**	**9.5 J**	**9.7 J**
	Copper	mg/kg	**19**	**21 J**	--	--	--	**18.7**	**13.8**	**19.9**	**15.4 J**	**17.1 J**	**17.2 J**	**19.2 J**	**19 J**	**16.1 J**	**19.1 J**	**18.8 J**
	Iron	mg/kg	**12,300**	**10,700**	--	--	--	**11,700**	**8,740**	**14,100**	**16,600**	**17,000**	**14,100**	**17,200**	**15,500**	**15,300**	**17,900**	**16,100**
	Lead	mg/kg	**6**	**8**	--	--	--	**7.6**	**5.3**	**7.7**	**10.3**	**9.2**	**5.3**	**10.5**	**6.9**	**6.7**	**10.9**	**7.2**
	Lithium	mg/kg	**12.8**	**9.2**	--	--	--	**9.7**	**8.8**	**11.5**	**20.4**	**21.3**	**24.4**	**22**	**17.1**	**18.5**	**20.5**	**17.3**
	Magnesium	mg/kg	**9,700**	**9,600 J**	--	--	--	**9,750**	**7,710**	**9,440**	**11,700 J**	**13,600 J**	**13,500 J**	**14,600 J**	**13,600 J**	**12,700 J**	**13,400 J**	**12,300 J**
	Manganese	mg/kg	**433 J**	**402 J**	--	--	--	**522 J**	**268 J**	**398 J**	**387 J**	**553 J**	**351 J**	**534 J**	**478 J**	**446 J**	**562 J**	**559 J**
	Mercury	mg/kg	**0.01 J**	**0.021 J**	--	--	--	**0.016 J**	**0.01 J**	**0.011 J**	**0.019 J**	**0.02 J**	**0.018 J**	**0.0093 J**	**0.023 J**	**0.014 J**	**0.012 J**	**0.012 J**
	Molybdenum	mg/kg	**0.47 J**	**0.36 J**	--	--	--	**0.43 J**	**0.32 J**	**0.58 J**	**0.43 J**	**0.73 J**	**0.63 J**	**0.64 J**	**0.49 J**	**0.38 J**	**0.57 J**	**0.52 J**
	Nickel	mg/kg	**22.1**	**19.8 J**	--	--	--	**17.4**	**14.8**	**20.6**	**15.4 J**	**15.6 J**	**15.2 J**	**19.4 J**	**17.2 J**	**15.2 J**	**16.6 J**	**16.3 J**
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	--	--	--	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	**0.26**	**0.36**	--	--	--	**0.24**	**0.17**	**0.25**	**0.36**	**0.72**	**0.77**	**0.38**	**0.84**	**0.88**	**0.48**	**0.68**
	Phosphorus (total)	mg/kg	**1,520**	**1,630**	--	--	--	**1,710**	**1,670**	**1,650**	**1,410**	**1,590**	**1,440**	**1,460**	**1,550**	**1,450**	**1,550**	**1,490**
	Platinum	mg/kg	<0.0435	<0.0435	--	--	--	<0.0435	<0.0435	<0.0435	<0.0435	**0.045 J**	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	**0.29 J**	<0.158	--	--	--	<0.158	<0.158	<0.158	**0.37 J**	**0.27 J**	<0.158	**0.23 J**	**0.35 J**	<0.158	<0.158	<0.158
	Silver	mg/kg	<0.261	<0.261	--	--	--	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	**117**	**166 J**	--	--	--	**108**	**77.8**	**114**	**159 J**	**321 J**	**379 J**	**163 J**	**347 J**	**411 J**	**200 J**	**320 J**
	Thallium	mg/kg	<0.543	**1.1**	--	--	--	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	**0.52 J**	**0.61 J**	--	--	--	**0.44 J**	**0.4 J**	**0.52 J**	**0.51 J**	**0.52 J**	**0.39 J**	**0.61 J**	**0.46 J**	**0.39 J**	**0.55 J**	**0.44 J**
	Titanium	mg/kg	**509**	**673 J**	--	--	--	**458**	**368**	**512**	**478 J**	**545 J**	**533 J**	**589 J**	**651 J**	**481 J**	**540 J**	**590 J**
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	--	--	--	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	**0.89 J**	**1**	--	--	--	**0.82 J**	**0.72 J**	**0.84 J**	**0.81 J**	**1.2**	**1.4**	**1.1**	**1.3**	**1.2**	**1**	**1.3**
	Vanadium	mg/kg	**36.9 J**	**35.6 J**	--	--	--	**32.5 J**	**21.8 J**	**38.9 J**	**31.6 J**	**42.9 J**	**45.6 J**	**42.1 J**	**48 J**	**47.3 J**	**40.4 J**	**47.6 J**
	Zinc	mg/kg	**34.8**	**30.4**	--	--	--	**34.4**	**32.2**	**46**	**51.6 J+**	**48.6 J+**	**39.6 J+**	**51.2 J+**	**41.6 J+**	**41.9 J+**	**52 J+**	**39.7 J+**
	Zirconium	mg/kg	**129 J**	**158 J**	--	--	--	**140 J**	**152 J**	**152 J**	**117 J**	**139 J**	**119 J**	**120 J**	**135 J**	**123 J**	**123 J**	**134 J**
Radionuclides	Radium-226	pCi/g	**0.978 U**	**1.05**	--	--	--	**0.977 U**	**1.07**	**0.939 U**	**1.06 J**	**1.18 J**	**1.53 J**	**1.02**	**1.09 J**	**0.984 J**	**0.693 J**	**0.807 J**
	Radium-228	pCi/g	**2.51**	**1.92 J**	--	--	--	**1.93 U**	**2.41**	**2.17**	**2.03**	**1.69 J**	**1.74 J**	**1.85 J**	**2.02**	**1.86 J**	**1.97 J**	**1.15 J**
	Thorium-228	pCi/g	**1.91**	**1.99**	--	--	--	**1.93**	**2.09**	**1.66**	**1.67**	**1.79**	**1.5**	**2.09**	**1.62**	**1.64**	**1.96**	**1.41**
	Thorium-230	pCi/g	**0.98 J**	**0.93 J**	--	--	--	**0.94 J**	**1.32**	**1.16**	**1.23**	**1.21**	**1.92**	**1.26**	**1.18**	**1.45**	**1.33**	**1.5**
	Thorium-232	pCi/g	**1.77**	**1.84**	--	--	--	**1.8**	**1.78**	**1.79**	**1.82**	**1.7**	**1.59**	**2.08**	**1.24**	**1.33**	**2**	**1.3**
	Uranium-234	pCi/g	**1.23 J+**	**1.16 U**	--	--	--	**1 U**	**1.14 U**	**1.04 U**	**0.96**	**1.07**	**1.84**	**1.23**	**1.21**	**1.37**	**1.13**	**1.24**
	Uranium-235	pCi/g	**0.102**	**0.054 J**	--	--	--	**0.08**	**0.027**	**0.087 J**	**0.038**	**0.034**	**0.052**	**0.09**	**0.055**	**0.092**	**0.1**	**0.048**
	Uranium-238	pCi/g	**1.36**	**1.04**	--	--	--	**0.96 J**	**1.51**	**0.89 J**	**0.92**	**0.91**	**1.59**	**0.94**	**1.09**	**1.47**	**0.91**	**1.23**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-06C	BRC-BKG-07A			BRC-BKG-07B			BRC-BKG-07C			BRC-BKG-08A			BRC-BKG-08B		
			BRC-BKG-06C-8-12	BRC-BKG-07A-0-0.5	BRC-BKG-07A-4-6	BRC-BKG-07A-9-11	BRC-BKG-07B-0-0.5	BRC-BKG-07B-4-6	BRC-BKG-07B-9-11	BRC-BKG-07C-0-0.5	BRC-BKG-07C-4-6	BRC-BKG-07C-9-11	BRC-BKG-08A-0-0.5	BRC-BKG-08A-4-6	BRC-BKG-08A-9-11	BRC-BKG-08B-0-0.5	BRC-BKG-08B-4-6	BRC-BKG-08B-9-11
Metals	Aluminum	mg/kg	11,600 J	13,100 J	7,190 J	9,210 J	12,200 J	8,400 J	9,880 J	11,200 J	7,890 J	10,300 J	8,080 J	6,800 J	8,440 J	6,360 J	8,100 J	7,270 J
	Antimony	mg/kg	0.33 UJ-	0.29 J-	0.33 UJ-	0.33 UJ-	0.27 J-	0.33 UJ-	0.33 UJ-	0.36 J-	0.33 UJ-	0.33 UJ-	0.18 J-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.32 J-	0.33 UJ-
	Arsenic	mg/kg	4.4	7.2 J	5.2 J	4.1 J	5.2	6.1 J	3.3 J	6.4 J	5.6 J	5.4 J	3.6	3.7	4	3	3.8	4.2
	Barium	mg/kg	169 J	219	226	231	230 J	311	340	215	277	309	119 J	140 J	154 J	117 J	254 J	203 J
	Beryllium	mg/kg	0.62	0.81	0.48 J	0.52	0.74	0.71	0.48 J	0.82	0.59	0.58	0.66	0.6	0.62	0.54	0.77	0.64
	Boron	mg/kg	<3.2	11.6 J+	<3.2	<3.2	5.8 J+	<3.2	<3.2	7.8 J+	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2
	Cadmium	mg/kg	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	8.6	15.5	6.7	9.2	14.5	10.8	8.1	16.7	9.8	9	12	11.3	7.8	7.6	7.9	7.4
	Chromium VI	mg/kg	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.27	<0.26
	Cobalt	mg/kg	10.2 J	9.6	6.4	9	9.4 J	8.6	10.2	8.4	7.1	10.2	10.4 J	9.4 J	9.5 J	9 J	14.8 J	8.1 J
	Copper	mg/kg	19.1 J	20.4	13.1	13.3	16.6 J	15	15.2	17.2	13.6	17	21 J	20.3 J	20.9 J	18.5 J	22.9 J	17.1 J
	Iron	mg/kg	15,600	16,700	10,200	13,500	16,900	16,500	13,500	17,400	13,100	14,900	15,200	14,000	12,500	12,100	13,000	12,300
	Lead	mg/kg	5.6	10.1 J	5.9 J	6 J	10.9	10.9 J	6.8 J	12.2 J	7.3 J	6.3 J	9.3	6.5	5.9	7.4	7.8	7.3
	Lithium	mg/kg	19.5	23.9	13.6	16.5	18.6	15.3	15.8	22.2	18.8	26.2	11.8	10.6	13	8.7	11.8	14.1
	Magnesium	mg/kg	13,000 J	14,400 J	9,370 J	11,000 J	11,400 J	8,240 J	10,900 J	11,600 J	10,600 J	13,500 J	10,200 J	8,200 J	11,600 J	8,370 J	10,400 J	9,540 J
	Manganese	mg/kg	432 J	506	291	452	498 J	683	462	469	366	529	414 J	430 J	382 J	438 J	863 J	605 J
	Mercury	mg/kg	0.011 J	0.0091 J	0.022 J	0.057	0.02 J	<0.0072	0.015 J	0.014 J	0.013 J	<0.0072	0.022 J	0.014 J	0.012 J	0.038	0.021 J	0.019 J
	Molybdenum	mg/kg	0.38 J	0.84 J	0.37 J	0.68 J	0.53 J	0.51 J	0.39 J	0.79 J	0.42 J	0.47 J	0.48 J	0.58 J	0.56 J	0.38 J	1 J	0.54 J
	Nickel	mg/kg	17.9 J	20.2	11	13	16.4 J	13	15.5	17.1	12.1	14.1	20.6 J	19.5 J	20.2 J	15.8 J	19.7 J	16 J
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	0.88	0.42	0.47	0.58	0.25	0.32	0.86	0.24	0.5	0.91	0.26	0.3	0.5	0.21	0.34	0.35
	Phosphorus (total)	mg/kg	1,640	1,340	1,020	1,150	1,340	1,500	1,370	1,280	1,300	1,320	1,830	1,820	1,640	1,720	1,780	1,880
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	0.064 J	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	0.34 J	<0.158	<0.158	0.6	<0.158	<0.158	0.31 J	0.31 J	<0.158	0.32 J	<0.158	<0.158	<0.158	<0.158	<0.158
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	394 J	190	244	277	105 J	156	496	129	253	510	126 J	135 J	211 J	97.7 J	158 J	160 J
	Thallium	mg/kg	<0.543	<0.543	<0.543	<0.543	1.1	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	0.38 J	0.63 J	0.48 J	0.33 J	0.54 J	0.42 J	0.36 J	0.54 J	0.43 J	0.39 J	0.63 J	0.53 J	0.58 J	0.41 J	0.53 J	0.45 J
	Titanium	mg/kg	503 J	481	299	330	550 J	393	312	467	366	386	683 J	673 J	657 J	509 J	600 J	473 J
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	1.3	1.3	1.2	0.93 J	0.76 J	0.91 J	0.93 J	0.85 J	1.1	1.2	1 J	1	1.3	0.82 J	1.2	0.95 J
	Vanadium	mg/kg	46.2 J	41.9 J	32.6 J	44.9 J	36.1 J	41.1 J	45.1 J	36.7 J	33.8 J	51.8 J	46.8 J	43.6 J	40.5 J	34.7 J	41.6 J	33.4 J
	Zinc	mg/kg	40 J+	121	31.2	38.2	52.1 J+	51.3	38.9	55.2	39.1	40.3	41.6 J+	36 J+	34.3 J+	32.5 J+	35.6 J+	34.1 J+
	Zirconium	mg/kg	124 J	118 J-	108 J-	94.9 J-	112 J	132 J-	103 J-	120 J-	113 J-	107 J-	141 J	148 J	145 J	132 J	157 J	158 J
Radionuclides	Radium-226	pCi/g	1.34	1.27	1.38	1.79	0.968 J	0.773 J	1.7	1.22 J	1.82 J	1.91 J	0.89 J	1.2	0.833 J	0.96 J	1.46	1.11
	Radium-228	pCi/g	2.02	1.41 J	1.3 J	2.08	1.67 J	1.49 J	1.42 J	2.66	2.21	1.34 J	2.1	2.05	2.57	1.95 J	2.23	2.04
	Thorium-228	pCi/g	1.5	1.83	1.34	1.16	1.82	1.61	1.42	1.88	1.5	1.22	1.85	1.97	1.86	1.8	1.79	1.91
	Thorium-230	pCi/g	1.61	1.36	1.73	1.81	1.15	1.49	1.67	1.24	2.44	2.15	1.16	1.21	1.22	0.95	1.16	1.23
	Thorium-232	pCi/g	1.28	1.89	1.22	1.26	1.45	1.31	1.34	1.97	1.26	1.23	1.82	2.01	1.9	1.79	1.57	1.89
	Uranium-234	pCi/g	1.21	1.02 U	1.27	1.94	0.96	1.15	1.9	1.02 U	1.99	2.06	0.85	0.94	1.24	0.7	1.08	1.48
	Uranium-235	pCi/g	0.107	0.059	0.093 J	0.126 J	0.068	0.047	0.058	0.066	0.089 J	0.21 J	0.054	0.047	0.047	0.03	0.043	0.077
	Uranium-238	pCi/g	1.59	0.92 J	1.66	1.86	0.89	1.16	2.01	1.17	1.95	2.37	0.86	1.17	1.24	1.14	1.03	1.42

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
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J qualifier indicates an estimated detected concentration
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J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit
UJ- qualifier indicates a non-detected concetration with an estimated detection limit with a negative bias

TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-08C			BRC-BKG-09A			BRC-BKG-09B			BRC-BKG-09C			BRC-BKG-11A			BRC-BKG-11B
			BRC-BKG-08C-0-0.5	BRC-BKG-08C-4-6	BRC-BKG-08C-9-11	BRC-BKG-09A-0-0.5	BRC-BKG-09A-4-6	BRC-BKG-09A-9-11	BRC-BKG-09B-0-0.5	BRC-BKG-09B-4-6	BRC-BKG-09B-9-11	BRC-BKG-09C-0-0.5	BRC-BKG-09C-4-6	BRC-BKG-09C-9-11	BRC-BKG-11A-0-0.5	BRC-BKG-11A-4-6	BRC-BKG-11A-9-11	BRC-BKG-11B-0-0.5
Metals	Aluminum	mg/kg	6,820 J	8,010 J	8,250 J	11,200 J	11,100 J	12,000 J	6,340 J	15,300 J	8,560 J	10,400 J	12,600 J	11,200 J	8,220 J	6,520 J	8,470 J	7,220
	Antimony	mg/kg	0.33 UJ-	0.33 UJ-	0.15 J-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.33 UJ-	0.4 J-	0.33 UJ-	0.41 J-	0.22 J
	Arsenic	mg/kg	3.4	3.7	3.7	4.3	3.6	4	2.9	4.5	4.2	3.7	3.9	3.6	4.2	4	6	3.5
	Barium	mg/kg	127 J	118 J	139 J	142 J	218 J	171 J	154 J	240 J	146 J	190 J	264 J	154 J	185 J+	138 J+	166 J+	202
	Beryllium	mg/kg	0.62	0.66	0.67	0.32 J	0.42 J	0.42 J	0.16 J	0.47 J	0.29 J	0.45 J	0.49 J	0.42 J	0.85	0.77	0.81	0.8
	Boron	mg/kg	<3.2	<3.2	<3.2	8.8 J+	5.8 J+	5.5 J+	<3.2	9.1 J+	<3.2	<3.2	6.8 J+	<3.2	<3.2	<3.2	10.2 J+	<3.2
	Cadmium	mg/kg	<0.129	<0.129	<0.129	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	0.129 UJ-	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	13.1	9.1	10	7.5	9.8	14.1	8.4	9.7	7.6	11.3	11.6	8.2	14.5	8.8	10.3	13.3
	Chromium VI	mg/kg	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.26	<0.26	<0.25	<0.27	<0.26	<0.25	<0.26	<0.26	<0.25
	Cobalt	mg/kg	9.4 J	9.1 J	9.2 J	12.2 J	9.7 J	11.3 J	10.1 J	11.1 J	8.2 J	9.9 J	12.2 J	11.3 J	9.4 J	7.7 J	7.9 J	9.3
	Copper	mg/kg	19 J	19.7 J	20.4 J	25.9 J	20.8 J	23.9 J	23.1 J	19.6 J	22.5 J	19.6 J	21.2 J	21.7 J	19.5	13.3	17	17.2
	Iron	mg/kg	14,600	12,600	13,200	13,700	14,600	14,300	9,030	14,200	11,700	17,400 J	16,600 J	14,900 J	16,300	11,400	12,700	15,100
	Lead	mg/kg	10.5	7.2	6.3	25.6	9.3	6.6	35.1	9.8	5.9	11.1	8.8	5.6	19.1 J	5.7 J	6.3 J	16.4
	Lithium	mg/kg	10.2	11.6	13.4	12.4	14.4	16	10	15.8	13.4	13.2	15.4	14.1	11.9	13.5	26.5	10.9
	Magnesium	mg/kg	8,590 J	9,440 J	11,500 J	13,700 J	11,000 J	12,400 J	10,500 J	11,600 J	8,450 J	10,300 J	12,700 J	11,600 J	10,300 J	9,410 J	16,600 J	8,600
	Manganese	mg/kg	434 J	350 J	390 J	460 J	380 J	499 J	282 J	383 J	327 J	445 J	556 J	465 J	747	302	343	678 J
	Mercury	mg/kg	0.0098 J	<0.0072	0.07	0.049	0.027 J	0.013 J	0.082	0.019 J	0.017 J	0.034	0.027 J	0.011 J	<0.0072	<0.0072	<0.0072	0.017 J
	Molybdenum	mg/kg	0.43 J	0.48 J	0.52 J	0.45 J	0.45 J	0.42 J	0.34 J	0.35 J	0.45 J	0.51 J	0.55 J	0.66 J	0.77 J	0.41 J	0.54 J	0.62 J
	Nickel	mg/kg	18.1 J	19.5 J	19.3 J	25.9 J	17.5 J	19.1 J	27.8 J	18.1 J	14.7 J	18.9 J	22.7 J	22.1 J	17.8 J	13.7 J	16.6 J	15.6
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	0.27	0.34	0.39	0.45	0.55	0.33	0.3	0.62	0.29	0.45	0.5	0.49	0.34	0.52	1	0.29
	Phosphorus (total)	mg/kg	1,830	1,810	1,660	1,760	1,230	1,420	1,220	1,060	1,240	1,540 J	1,460 J	1,880 J	1,530	1,200	1,070	1,610
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	0.082 J	0.099 J	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	<0.158	0.27 J	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	<0.158	0.26 J	0.29 J	<0.158	<0.158
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	119 J	159 J	177 J	192 J	260 J	153 J	143 J	364 J	149 J	203 J	229 J	206 J	149	225	461	133
	Thallium	mg/kg	<0.543	<0.543	<0.543	1.2	<0.543	1.2	<0.543	<0.543	1.1	1.7	<0.543	1.2	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	0.53 J	0.49 J	0.55 J	0.59 J	0.55 J	0.51 J	0.8 J	0.75 J	0.46 J	0.69 J	0.63 J	0.59 J	0.61 J	0.39 J	0.44 J	0.51 J
	Titanium	mg/kg	618 J	531 J	621 J	677 J	671 J	674 J	438 J	1,010 J	597 J	864 J	879 J	858 J	572	446	504	618
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	<0.0175	<0.0175	<0.0175	0.0175 UJ
	Uranium (total)	mg/kg	0.92 J	1 J	1.2	1.1	0.9 J	1.1	0.87 J	1.1	0.93 J	0.97 J	1.1	1.3	0.79 J	1 J	2.7	0.71 J
	Vanadium	mg/kg	47 J	37 J	39.4 J	43.4 J	42.7 J	44.4 J	33.9 J	50.3 J	38.8 J	46.1 J	48 J	56 J	43.9	33.5	48.6	46.8 J
	Zinc	mg/kg	35.7 J+	35.8 J+	36.9 J+	45.9	37.9	37.4	38.9	40.5	27.8	63.6	45	34.9	60.4	28.5	30.8	44.4
	Zirconium	mg/kg	132 J	149 J	142 J	166 J	138 J	149 J	117 J	146 J	134 J	145 J	151 J	171 J	119	127	112	118 J
Radionuclides	Radium-226	pCi/g	0.987 J	1.07	1.13	0.792 J	0.865 J	1.13	0.877 J	0.784 J	1.54	1.14 J	0.97 J	0.938 J	1.16 J	1.24	1.65	1.13
	Radium-228	pCi/g	1.3 J	2.11	1.93 J	1.7 J	1.44 J	1.73 J	1.11 U	1.66 J	2.18	1.97 J	1.37 J	2.18	--	--	--	--
	Thorium-228	pCi/g	1.74	1.87	1.84	1.5	1.82	1.37	1.77	1.98	1.78	1.9	1.67	2.13	1.92	1.31	1.6	1.62
	Thorium-230	pCi/g	1.35	1.27	1.66	0.92 J	1.13	1.3	0.91 J	1.04	1.69	1.2	0.75 J	1.39	1.06	0.8 J	3.01	1.35
	Thorium-232	pCi/g	1.52	1.77	1.91	1.57	1.97	1.41	1.71	1.74	1.85	1.54	1.4	1.69	1.7	1.36	1.34	1.72
	Uranium-234	pCi/g	0.9	1.17	1.13	0.98 U	0.92 U	0.95 U	0.97 U	0.94 U	1.25 J+	0.79 U	0.76 U	1.31	0.98 U	1.05 U	2.66	0.78 U
	Uranium-235	pCi/g	0.097	0.081	0.14	0.11	0.12 J	0.087 J	0.101 J	0.057	0.016	0.054 J	0.052	0.041	0.13 J	0.027	0.1	0.088
	Uranium-238	pCi/g	0.93	0.95	1.01	0.65 J	1.01	1.36	1.05	0.93 J	1.2	0.69 J	0.87 J	0.94 J	1.15	1.02	2.02	1.06

Notes:

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TABLE 2. BRC/TIMET Shallow Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	BRC-BKG-11B		BRC-BKG-11C		
			BRC-BKG-11B-4-6	BRC-BKG-11B-9-11	BRC-BKG-11C-0-0.5	BRC-BKG-11C-4-6	BRC-BKG-11C-9-11
Metals	Aluminum	mg/kg	**6,950**	**6,720**	**6,850**	**6,920**	**6,730**
	Antimony	mg/kg	**0.15 J**	<0.33	**0.15 J**	<0.33	<0.33
	Arsenic	mg/kg	**3.7**	**5**	**3.9**	**4.2**	**6.7**
	Barium	mg/kg	**130**	**175**	**152**	**143**	**88.9**
	Beryllium	mg/kg	**0.76**	**0.64**	**0.73**	**0.76**	**0.72**
	Boron	mg/kg	<3.2	**5.8 J+**	<3.2	**7.3 J+**	**8.5 J+**
	Cadmium	mg/kg	<0.129	<0.129	<0.129	<0.129	<0.129
	Chromium (total)	mg/kg	**9.9**	**7.8**	**10.7**	**9.1**	**9.1**
	Chromium VI	mg/kg	<0.26	<0.26	<0.25	<0.27	<0.26
	Cobalt	mg/kg	**8**	**9.2**	**7.4**	**7.3**	**7.6**
	Copper	mg/kg	**15.4**	**14.5**	**14.8**	**15.2**	**13.8**
	Iron	mg/kg	**12,400**	**8,790**	**12,800**	**11,400**	**10,400**
	Lead	mg/kg	**6.9**	**4.9**	**13.7**	**6.4**	**5.7**
	Lithium	mg/kg	**13.2**	**18.3**	**10.4**	**15.9**	**22.3**
	Magnesium	mg/kg	**9,360**	**13,000**	**8,840**	**11,800**	**14,000**
	Manganese	mg/kg	**312 J**	**449 J**	**455 J**	**288 J**	**287 J**
	Mercury	mg/kg	**0.017 J**	**0.014 J**	**0.034**	**0.012 J**	**0.011 J**
	Molybdenum	mg/kg	**0.49 J**	**0.74 J**	**0.46 J**	**0.44 J**	**0.45 J**
	Nickel	mg/kg	**15.5**	**13.6**	**13.8**	**15.3**	**13.8**
	Niobium	mg/kg	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-	1.01 UJ-
	Palladium	mg/kg	**0.4**	**0.84**	**0.27**	**0.44**	**0.75**
	Phosphorus (total)	mg/kg	**1,170**	**1,030**	**1,470**	**1,190**	**1,090**
	Platinum	mg/kg	<0.0435	<0.0435	<0.0435	<0.0435	<0.0435
	Selenium	mg/kg	<0.158	<0.158	<0.158	<0.158	<0.158
	Silver	mg/kg	<0.261	<0.261	<0.261	<0.261	<0.261
	Strontium	mg/kg	**178**	**408**	**126**	**211**	**342**
	Thallium	mg/kg	<0.543	<0.543	<0.543	<0.543	<0.543
	Tin	mg/kg	**0.42 J**	**0.32 J**	**0.41 J**	**0.4 J**	**0.34 J**
	Titanium	mg/kg	**492**	**416**	**459**	**461**	**402**
	Tungsten	mg/kg	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ	0.0175 UJ
	Uranium (total)	mg/kg	**0.82 J**	**1.7**	**1.8**	**1.1**	**2.3**
	Vanadium	mg/kg	**38 J**	**35.6 J**	**32.5 J**	**36.4 J**	**40.3 J**
	Zinc	mg/kg	**34.1**	**22.8**	**41.9**	**31.1**	**29.4**
	Zirconium	mg/kg	**116 J**	**86.1 J**	**109 J**	**117 J**	**103 J**
Radionuclides	Radium-226	pCi/g	**1.13**	**1.96 J**	**0.999 U**	**1.06**	**1.87**
	Radium-228	pCi/g	**2 U**	**1.55 U**	**1.34 U**	--	**1.68 U**
	Thorium-228	pCi/g	**1.73**	**1.45**	**1.72**	**1.65**	**1.28**
	Thorium-230	pCi/g	**1.12**	**2.25**	**1.19**	**1.39**	**2.32**
	Thorium-232	pCi/g	**1.74**	**1.47**	**1.51**	**1.6**	**1.25**
	Uranium-234	pCi/g	**1.45**	**2.84**	**1.09 U**	**1.2 J+**	**2.73**
	Uranium-235	pCi/g	**0.09**	**0.06**	**0.06 J**	**0.058 J**	**0.18 J**
	Uranium-238	pCi/g	**1.27**	**2.28**	**1.03**	**0.95 J**	**2.21**

Notes:

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TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects							DBSA-01			
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range	Potential Outlier Threshold	DBSA-1-Q-20	DBSA-1-Q-30	DBSA-1-Q-40	DBSA-1-Q-50
Metals	Aluminum	mg/kg	79	79	100	--	--	5,060 J	15,100 J	8,800	8,700	1,800	2,600	14,000	**6,250 J**	**8,020 J**	**7,580 J**	**6,770 J**
	Antimony	mg/kg	79	73	92.4	0.105 UJ	0.105 UJ	0.089 J-	0.22 J-	0.15	0.15	0.026	0.03	0.21	**0.15 J-**	**0.12 J-**	**0.12 J-**	**0.16 J-**
	Arsenic	mg/kg	79	79	100	--	--	2.2	13.1	3.8	4.4	2	1.8	7.7	**2.2**	**3.3**	**2.8**	**4**
	Barium	mg/kg	79	79	100	--	--	84.7 J+	539	140	160	70	56	260	**114 J**	**122 J**	**163 J**	**122 J**
	Beryllium	mg/kg	79	79	100	--	--	0.29	0.67	0.55	0.56	0.063	0.085	0.73	**0.56**	**0.61**	**0.59**	**0.61**
	Boron	mg/kg	79	20	25.3	<2.82	<2.82	3 J	7.6 J	5.6	5.4	1.4	2.1	9.4	<2.82	<2.82	<2.82	<2.82
	Cadmium	mg/kg	79	73	92.4	<0.01	<0.01	0.05 J	0.13	0.084	0.087	0.016	0.022	0.13	**0.069 J**	**0.08 J**	**0.077 J**	**0.085 J**
	Chromium (total)	mg/kg	79	79	100	--	--	7.1	16.6	10	11	1.8	2.4	15	**10.1**	**11.8**	**10.6**	**10.8**
	Chromium VI	mg/kg	80	18	22.5	<0.16	<0.19	0.18 J	1.6 J	0.26	0.41	0.41	0.18	0.66	<0.17	<0.17	<0.17	<0.17
	Cobalt	mg/kg	79	79	100	--	--	5.3 J	10.8 J	7.5	7.8	1.3	1.8	11	**7.9 J**	**7.4 J**	**7.5 J**	**6.6 J**
	Copper	mg/kg	79	79	100	--	--	8.8 J+	24	16	16	2.1	1.9	20	**17**	**18.7**	**19.7**	**18.9**
	Iron	mg/kg	79	79	100	--	--	11,200	22,500 J	15,000	15,000	2,800	3,500	22,000	**13,700 J**	**14,200 J**	**12,700 J**	**12,800 J**
	Lead	mg/kg	79	79	100	--	--	4.9	15.8 J	7.1	7.4	1.6	1.9	11	**8.1 J**	**6.4 J**	**6.6 J**	**6.3 J**
	Lithium	mg/kg	79	67	84.8	<1.46	<3.66	7.5	124	17	20	14	5.2	29	**15.8**	**18.8**	**22.9**	**21.8**
	Magnesium	mg/kg	79	79	100	--	--	4,990 J	12,500	9,500	9,600	1,500	1,900	13,000	**7,780 J**	**8,540 J**	**9,150 J**	**8,640 J**
	Manganese	mg/kg	79	79	100	--	--	217	579 J	320	340	84	110	550	**371 J**	**319 J**	**318 J**	**352 J**
	Mercury	mg/kg	79	35	44.3	<0.00668	<0.00668	0.0072 J	0.0235 J	0.013	0.013	0.0042	0.0059	0.023	<0.00668	**0.0114 J**	**0.011 J**	**0.0135 J**
	Molybdenum	mg/kg	79	62	78.5	<0.105	<0.105	0.31 J	1.9	0.57	0.67	0.31	0.34	1.3	**0.38 J**	**0.97 J**	**0.93 J**	**0.8 J**
	Nickel	mg/kg	79	79	100	--	--	8.5	27.5	15	16	2.4	1.8	19	**16**	**16.1**	**18.6**	**15.6**
	Niobium	mg/kg	79	6	7.6	<1.51	<1.51	1.7 J+	3.8 J+	3.3	3.1	0.74	0.4	4.1	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	79	79	100	--	--	0.2 J	2.2	0.61	0.67	0.37	0.43	1.5	**0.26**	**0.37**	**0.35**	**0.28**
	Phosphorus (total)	mg/kg	79	79	100	--	--	649 J	1,930 J	1,400	1,400	210	250	1,900	**1,530 J**	**1,420 J**	**1,420 J**	**1,230 J**
	Platinum	mg/kg	79	7	8.9	<0.02	<0.02	0.022 J	0.049 J	0.025	0.032	0.011	0.017	0.066	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	79	0	0	<0.32	<0.32	--	--	--	--	--	--	--	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	79	79	100	--	--	0.074 J	2.2	0.15	0.25	0.38	0.09	0.34	**0.088 J**	**0.11 J**	**0.092 J**	**0.1 J**
	Strontium	mg/kg	79	79	100	--	--	123 J	793 J	250	270	100	100	460	**182 J**	**248 J**	**261 J**	**188 J**
	Thallium	mg/kg	79	4	5.1	<0.2	<0.2	0.15 J+	0.34 J+	0.21	0.23	0.081	0.062	0.34	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	79	76	96.2	<0.0526	<0.0526	0.25 J	0.78	0.55	0.55	0.096	0.1	0.77	**0.52**	**0.65**	**0.55**	**0.54**
	Titanium	mg/kg	79	79	100	--	--	445 J	912 J	670	680	110	150	980	**726 J**	**751 J**	**648 J**	**664 J**
	Tungsten	mg/kg	79	25	31.6	0.2 UJ	0.2 UJ	0.19 J	3.6 J	0.31	0.45	0.66	0.09	0.5	**0.38 J-**	**0.31 J-**	**0.28 J-**	**0.46 J-**
	Uranium (total)	mg/kg	79	79	100	--	--	0.89	2.8	1.4	1.6	0.42	0.55	2.6	**0.94**	**1.1**	**1.3**	**1.4**
	Vanadium	mg/kg	79	79	100	--	--	26.7 J+	73.3 J	43	46	10	15	75	**45.1 J**	**43 J**	**35.9 J**	**39.7 J**
	Zinc	mg/kg	79	79	100	--	--	18.1 J-	41.2	32	32	3.8	3.9	40	**32.7 J-**	**36.5 J-**	**36.4 J-**	**32.5 J-**
	Zirconium	mg/kg	79	79	100	--	--	15.9 J-	33.9 J	26	25	3.7	4.9	35	**26.5**	**30**	**26.1**	**27.8**
Radionuclides	Radium-226	pCi/g	65	65	100	--	--	0.981 J-	2.29 J-	1.6	1.7	0.33	0.55	2.8	**1.5 J-**	**1.47 J-**	**1.39 J-**	**1.51 J-**
	Radium-228	pCi/g	64	64	100	--	--	0.855 J	2.31 J-	1.4	1.5	0.3	0.43	2.3	**1.28 J-**	**1.54 J-**	**2.25 J-**	**1.74 J-**
	Thorium-228	pCi/g	79	79	100	--	--	1.11	2.3	1.8	1.8	0.25	0.37	2.5	**2.18**	**2.01**	**1.57**	**1.63**
	Thorium-230	pCi/g	79	79	100	--	--	1.05	2.72	1.6	1.7	0.36	0.5	2.7	**1.36**	**1.51**	**1.76**	**1.44**
	Thorium-232	pCi/g	79	79	100	--	--	0.908	2.01	1.5	1.6	0.21	0.23	2	**1.91**	**1.75**	**1.57**	**1.69**
	Uranium-234	pCi/g	76	76	100	--	--	0.868 J	2.63	1.6	1.6	0.37	0.38	2.4	**1.64**	**1.43**	**1.4**	**1.5**
	Uranium-235	pCi/g	76	76	100	--	--	0.0121 U	0.116 J	0.065	0.063	0.022	0.03	0.12	**0.0496 J**	**0.0642 J**	**0.0442 J**	**0.0795 J**
	Uranium-238	pCi/g	76	76	100	--	--	0.993 J	2.79	1.5	1.5	0.37	0.4	2.3	**1.38**	**1.24**	**1.6**	**1.17**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-01				DBSA-02								DBSA-03			
			DBSA-1-Q-60	DBSA-1-Q-70	DBSA-1-Q-80	DBSA-1-Q-90	DBSA-2-Q-20	DBSA-2-Q-20-FD	DBSA-2-Q-30	DBSA-2-Q-40	DBSA-2-Q-50	DBSA-2-Q-60	DBSA-2-Q-70	DBSA-2-Q-80	DBSA-3-Q-20	DBSA-3-Q-20-FD	DBSA-3-Q-30	DBSA-3-Q-40
Metals	Aluminum	mg/kg	6,150 J	7,270 J	6,880 J	7,230 J	7,350	6,990	6,480	6,440	8,250	7,410	9,730	6,970	8,630	8,790	9,840	8,730
	Antimony	mg/kg	0.105 UJ	0.13 J-	0.12 J-	0.15 J-	0.15 J-	0.16 J-	0.12 J-	0.105 UJ	0.12 J-	0.17 J-	0.12 J-	0.105 UJ	0.13 J-	0.13 J-	0.13 J-	0.105 UJ
	Arsenic	mg/kg	3.2	3.5	3.1	3.8	2.9	2.9	2.3	2.2	2.4	2.2	2.7	2.5	4	3.7	4.7	3.2
	Barium	mg/kg	136 J	153 J	108 J	145 J	168 J+	166 J+	117 J+	84.7 J+	138 J+	151 J+	482 J+	132 J+	131	120	103	139
	Beryllium	mg/kg	0.64	0.62	0.66	0.59	0.52	0.54	0.51	0.49	0.55	0.55	0.54	0.42	0.54	0.54	0.56	0.61
	Boron	mg/kg	<2.82	2.82 UJ	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82
	Cadmium	mg/kg	0.071 J	0.092 J	0.074 J	0.074 J	0.084 J	0.09 J	0.11	0.057 J	0.095 J	0.11	0.073 J	0.077 J	0.092 J	0.083 J	0.11 J	0.073 J
	Chromium (total)	mg/kg	8.3	9.2	9.9	10	11.2	8.7	9.8	7.8	9.6	11.9	11.2	9.2	10.1	9.4	11.8	9.1
	Chromium VI	mg/kg	<0.17	<0.17	0.38 J	<0.17	0.39	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.2 J	<0.16	<0.16	<0.16
	Cobalt	mg/kg	6.1 J	6.3 J	7.1 J	6.3 J	7.5	6.8	5.9	6.8	6.5	8	7.7	6.1	6.6 J	7.5 J	6.9 J	7.8 J
	Copper	mg/kg	16.1	16.5	17.3	24	20.4 J-	18.9 J-	17.6 J-	17.8 J-	16.1 J-	19.2 J-	21.3 J-	16.5 J-	15.3	17.4	14.6	18.1
	Iron	mg/kg	11,900 J	11,900 J	12,700 J	11,900 J	14,800	14,100	12,700	11,300	12,500	15,500	13,700	11,200	14,100	14,900	14,700	14,400
	Lead	mg/kg	6.8 J	6.5 J	6.6 J	6.3 J	6.4	8.8	5.9	4.9	7	7.5	6.1	5.8	6.4	6.5	6.7	6.5
	Lithium	mg/kg	17	23.7	21.3	24	16.3	17.4	13.5	16.5	13.4	14.7	17.4	13.5	18.9	21.4	26.9	15.4
	Magnesium	mg/kg	6,490 J	8,080 J	7,400 J	8,710 J	9,300 J+	9,610 J+	7,990 J+	8,800 J+	9,200 J+	8,980 J+	12,300 J+	8,170 J+	10,500	11,800	11,800	8,820
	Manganese	mg/kg	301 J	295 J	288 J	337 J	366	415	281	217	271	497	260	249	283	294	262	306
	Mercury	mg/kg	0.0083 J	0.008 J	0.0084 J	0.0092 J	<0.00668	0.0086 J	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668
	Molybdenum	mg/kg	0.42 J	0.65 J	0.5 J	0.78 J	0.58 J	0.64 J	0.64 J	0.34 J	0.52 J	0.59 J	0.48 J	0.56 J	<0.105	<0.105	<0.105	<0.105
	Nickel	mg/kg	13.4	15	16.5	15.3	16.4	15	14.9	18.1	22.8	20.5	27.5	21.4	14	15.4	15.1	14.8
	Niobium	mg/kg	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	0.28	0.48	0.37	0.48	0.35	0.31	0.27	0.22	0.28	0.34	0.35	0.24	0.44	0.4	0.37	0.39
	Phosphorus (total)	mg/kg	1,380 J	1,370 J	1,550 J	1,520 J	1,440 J+	1,460 J+	1,460 J+	1,770 J+	1,370 J+	1,560 J+	1,700 J+	1,220 J+	1,220 J	1,390 J	1,600 J	1,540 J
	Platinum	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	0.091 J	0.12 J	0.1 J	0.11 J	0.13 J	0.12 J	0.12 J	0.074 J	0.1 J	0.13 J	0.11 J	0.086 J	0.11 J	0.11 J	0.082 J	0.085 J
	Strontium	mg/kg	206 J	235 J	206 J	250 J	242 J+	211 J+	192 J+	153 J+	216 J+	222 J+	252 J+	186 J+	277 J	267 J	236 J	250 J
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	0.15 J+	<0.2	<0.2	<0.2	<0.2	0.34 J+	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	0.53	0.57	0.57	0.51	0.62	0.61	0.53	<0.0526	0.52	0.57	0.49	0.47	0.56	0.53	<0.0526	0.48
	Titanium	mg/kg	773 J	693 J	614 J	684 J	897	905	664	493	775	871	758	592	792 J	741 J	597 J	722 J
	Tungsten	mg/kg	0.24 J-	0.33 J-	0.28 J-	0.28 J-	3.6 J	0.2 UJ	<0.2	<0.2	<0.2	0.23 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Uranium (total)	mg/kg	1.2	1.3	1.2	1.1	1.2	1.2	1.1	0.89	1.2	1.2	1.4	1.1	1.4	1.4	1.4	1.2
	Vanadium	mg/kg	35.3 J	37.5 J	36.9 J	34.4 J	45.9 J+	42.9 J+	37.3 J+	30.9 J+	38.6 J+	52.5 J+	36.2 J+	26.7 J+	41 J	42.1 J	43.2 J	41.5 J
	Zinc	mg/kg	31.2 J-	29.6 J-	30.8 J-	36.4 J-	32.6 J-	31.9 J-	28.4 J-	32 J-	33.2 J-	34.9 J-	32.5 J-	28.5 J-	32.1 J-	35.2 J-	35.3 J-	33.4 J-
	Zirconium	mg/kg	26.9	29.1	24.4	26.9	32.4	28.9	26.9	19.6 J	27.4	31	22.4	23.8	27.5	25.8	21.6 J	22.8
Radionuclides	Radium-226	pCi/g	2.08 J-	--	--	--	1.6 J-	1.87 J-	2 J-	1.98 J-	1.6 J-	2.12 J-	--	--	2.11 J-	2.21 J-	1.28 J-	1.59 J-
	Radium-228	pCi/g	--	--	--	--	1.49 J-	1.87 J-	1.83 J-	2.08 J-	1.77 J-	2.31 J-	--	--	1.86 J-	1.8 J-	1.84 J-	1.71 J-
	Thorium-228	pCi/g	1.84	2.05	1.96	1.64	2.01	1.9	1.77	1.52	1.91	1.52	1.46	1.75	1.52	1.34	1.63	1.96
	Thorium-230	pCi/g	1.45	1.42	1.54	1.78	1.89	1.91	1.5	1.53	1.45	1.56	1.49	1.33	1.93	1.84	1.31	2.02
	Thorium-232	pCi/g	1.66	1.62	1.85	1.77	1.99	1.49	1.31	1.53	1.71	1.81	1.65	1.29	1.37	1.22	1.52	1.54
	Uranium-234	pCi/g	1.63	1.37	1.85	1.78	1.68	1.72	1.65	1.48	1.21	1.18	1.64	1.71	2.29	2.13	1.25	1.69
	Uranium-235	pCi/g	0.0758 J	0.0318 J	0.0771 J	0.102 J	0.0781 J	0.116 J	0.0764 J	0.0765 J	0.0206 U	0.0438 U	0.0771 J	0.0721 J	0.0804 J	0.113 J	0.0502 J	0.0452 J
	Uranium-238	pCi/g	1.47	1.47	1.68	1.95	1.43	1.71	1.65	1.55	1.35	1.18	1.52	1.68	2.16	2.15	1.15	1.75

Notes:

mg/kg: milligrams per kilogram
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J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-03				DBSA-04						DBSA-08					
			DBSA-3-Q-50	DBSA-3-Q-60	DBSA-3-Q-70	DBSA-3-Q-80	DBSA-4-Q-20	DBSA-4-Q-20-FD	DBSA-4-Q-30	DBSA-4-Q-40	DBSA-4-Q-50	DBSA-4-Q-50-FD	DBSA-8-Q-20	DBSA-8-Q-20-FD	DBSA-8-Q-30	DBSA-8-Q-40	DBSA-8-Q-50	DBSA-8-Q-50-FD
Metals	Aluminum	mg/kg	7,140	7,550	6,740	6,630	6,960	6,070	7,240	6,400	5,870	5,980	8,100 J	7,930 J	7,600 J	6,980 J	9,010 J	10,700 J
	Antimony	mg/kg	0.12 J-	0.13 J-	0.12 J-	0.13 J-	0.17 J-	0.14 J-	0.16 J-	0.17 J-	0.14 J-	0.17 J-	0.14 J-	0.13 J-	0.15 J-	0.16 J-	0.105 UJ	0.15 J-
	Arsenic	mg/kg	3.3	3.5	3.7	3.4	3.5	3.2	3.1	4.1	3.7	4.1	3.7	3.7	4.7	5.5	4.7	6.9
	Barium	mg/kg	111	101	84.9	121	120 J-	101 J-	167 J-	125 J-	182 J-	133 J-	108 J+	104 J+	125 J+	140 J+	126 J+	204 J+
	Beryllium	mg/kg	0.56	0.55	0.55	0.51	0.52	0.46	0.51	0.49	0.45	0.48	0.51	0.49	0.54	0.49	0.46	0.67
	Boron	mg/kg	<2.82	<2.82	<2.82	<2.82	5.9 J	3.9 J	3.6 J	3.5 J	3 J	3.3 J	2.82 UJ	2.82 UJ	4.6 J-	2.82 UJ	2.82 UJ	2.82 UJ
	Cadmium	mg/kg	0.083 J	0.081 J	0.068 J	0.1 J	0.084 J	0.078 J	0.076 J	0.072 J	0.074 J	0.076 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Chromium (total)	mg/kg	10.5	10.5	8.9	9.6	12.5	13.6	12.1	10.8	10.4	15.3	16.6	11.5	8.8	9.7	9.4	14.1
	Chromium VI	mg/kg	<0.16	<0.16	<0.16	<0.16	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.19	<0.17	0.29 J
	Cobalt	mg/kg	7.2 J	7.6 J	7.5 J	6.4 J	7.7	7	10.3	7.3	7.2	9.8	5.8 J	6.6 J	7.2 J	7.1 J	7.1 J	10.7 J
	Copper	mg/kg	16.7	13.7	15.8	17.5	16.2 J-	16.8 J-	16.9 J-	15.6 J-	15.5 J-	17 J-	16 J+	15.5 J+	14.2 J+	14.5 J+	13.1 J+	18.1 J+
	Iron	mg/kg	13,300	11,800	13,100	12,300	15,800 J	16,400 J	16,100 J	15,400 J	14,600 J	15,400 J	12,300 J	12,700 J	14,200 J	12,500 J	13,000 J	19,500 J
	Lead	mg/kg	6.5	5.9	6.2	5.6	7.3	6.5	9.2	6.5	7	7.9	6.6	6.2	7.6	9.5	5.6	9
	Lithium	mg/kg	18.9	17.3	25.5	19	17.2	15.6	<1.46	124	17.9	7.5	25	27.9	23	14.4	14	19.1
	Magnesium	mg/kg	7,960	11,200	9,310	8,190	8,880	7,750	9,660	8,130	6,890	7,620	10,800 J	11,400 J	9,070 J	7,400 J	8,180 J	10,300 J
	Manganese	mg/kg	299	291	302	271	261	243	507	247	455	303	256 J	261 J	289 J	299 J	259 J	415 J
	Mercury	mg/kg	<0.00668	<0.00668	<0.00668	<0.00668	0.0084 J-	0.00668 UJ	0.01 J-	0.0156 J-	0.0222 J-	0.00668 UJ	0.0085 J-	0.0166 J-	0.0215 J-	0.0146 J-	0.0141 J-	0.0145 J-
	Molybdenum	mg/kg	<0.105	<0.105	<0.105	<0.105	1 J	1.1	0.58 J	0.5 J	0.5 J	0.47 J	1.9	<0.105	<0.105	<0.105	<0.105	<0.105
	Nickel	mg/kg	15.4	17.4	14.7	14.9	15.8	14.9	16.5	15.3	14.9	17.8	13.1	13.6	13.8	14.2	11.5	17.7
	Niobium	mg/kg	<1.51	<1.51	<1.51	<1.51	3.8 J+	<1.51	<1.51	<1.51	<1.51	<1.51	1.51 UJ	<1.51	<1.51	<1.51	<1.51	1.51 UJ
	Palladium	mg/kg	0.27	0.28	0.2 J	0.26	0.62	0.5	0.6	0.56	0.49	0.43	0.7	0.62	0.61	0.88	0.59 J	1 J
	Phosphorus (total)	mg/kg	1,550 J	1,930 J	1,560 J	1,320 J	1,300 J	1,230 J	1,130 J	1,070 J	1,110 J	1,380 J	836 J	985 J	1,290 J	1,430 J	1,440 J	1,610 J
	Platinum	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	0.083 J	0.079 J	0.087 J	0.094 J	0.18 J	0.19 J	0.25 J	0.14 J	0.14 J	0.12 J	2.2	1.6	0.48	0.44	0.53	0.87
	Strontium	mg/kg	169 J	175 J	123 J	170 J	241 J+	191 J+	218 J+	221 J+	187 J+	155 J+	294	260	249	337	223	354
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	0.52	0.48	0.44	0.47	0.68	0.57	0.56	0.53	0.52	0.58	0.76	0.62	0.57	0.5	0.55	0.78
	Titanium	mg/kg	652 J	560 J	681 J	648 J	750	668	735	695	761	630	558	511	680	466	670	892
	Tungsten	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
	Uranium (total)	mg/kg	1.2	1.2	1.3	1.3	1.4	1.2	1.5	1.5	1.6	1.7	1.4	1.4	1.8	1.8	1.7	2.4
	Vanadium	mg/kg	42.2 J	38.3 J	38.1 J	39.9 J	54.7 J	56.9 J	59.9 J	56.5 J	58.4 J	59.3 J	34.7 J+	40.6 J+	47.2 J+	40.6 J+	36.9 J+	54.1 J+
	Zinc	mg/kg	33.6 J-	33.3 J-	35.3 J-	31.1 J-	27.7 J-	27.9 J-	29.9 J-	28.8 J-	27.4 J-	33.3 J-	25	24.8	31	30.6	31.4	41.2
	Zirconium	mg/kg	21.8	19.6 J	22.2	25.5	26.8 J-	25.2 J-	25.7 J-	26.6 J-	25.8 J-	20.8 J-	22.7 J-	20.2 J-	24.2 J-	19.2 J-	18.2 J-	27.3 J-
Radionuclides	Radium-226	pCi/g	1.25 J-	0.981 J-	--	--	1.98	1.75	1.47	1.77	1.87	1.83	2.06	2.2	1.29	1.61	1.79	1.23
	Radium-228	pCi/g	1.65 J-	1.19 J-	--	--	1.25 J	1.36 J	1.53 J	1.38 J	1.79 J	1.23 J	1.28 J-	1.35 J-	1.66 J-	1.4 J	1.74 J	1.06 J
	Thorium-228	pCi/g	1.74	1.62	1.49	2.16	2.03	2.13	2	2	1.73	1.92	1.96	1.98	1.66	1.51	2.3	1.7
	Thorium-230	pCi/g	1.31	1.68	1.45	1.89	1.79	1.93	1.42	2.05	1.62	1.91	2.66	2.1	1.79	1.92	1.95	1.55
	Thorium-232	pCi/g	1.44	1.66	1.32	1.92	1.69	1.53	1.65	1.42	1.59	1.65	1.45	1.48	1.52	1.22	1.54	1.58
	Uranium-234	pCi/g	1.6	1.39	1.28	1.23	1.85	1.62	1.6	1.41	1.47	1.39	2.29	2.5	1.76	1.26	1.35	1.73
	Uranium-235	pCi/g	0.078 J	0.0467 J	0.0489 J	0.047 J	0.0814 J	0.0235 U	0.0875 J	0.06 J	0.0353 U	0.0376 U	0.0759 J	0.116 J	0.0736 J	0.051 J	0.0564 J	0.0169 U
	Uranium-238	pCi/g	1.53	1.18	1.23	1.2	1.55	1.52	1.4	1.53	1.26	1.08	2.52	2.12	1.66	1.18	1.28	1.56

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-09						DBSA-10						DBSA-11			
			DBSA-9-Q-20	DBSA-9-Q-20-FD	DBSA-9-Q-30	DBSA-9-Q-40	DBSA-9-Q-50	DBSA-9-Q-50-FD	DBSA-10-Q-20	DBSA-10-Q-20-FD	DBSA-10-Q-30	DBSA-10-Q-40	DBSA-10-Q-50	DBSA-10-Q-50-FD	DBSA-11-Q-20	DBSA-11-Q-30	DBSA-11-Q-40	DBSA-11-Q-40-FD
Metals	Aluminum	mg/kg	**7,540 J**	**6,520 J**	**9,820 J**	**8,000 J**	**8,910 J**	**9,860 J**	**9,360 J**	**9,150 J**	**9,520 J**	**9,350 J**	**8,910 J**	**10,700 J**	**9,190**	**8,830**	**9,510**	**8,590**
	Antimony	mg/kg	**0.16 J-**	**0.16 J-**	**0.22 J-**	**0.19 J-**	**0.18 J-**	**0.18 J-**	**0.14 J-**	**0.12 J-**	**0.15 J-**	**0.17 J-**	**0.12 J-**	**0.16 J-**	**0.2 J-**	**0.18 J-**	**0.16 J-**	**0.19 J-**
	Arsenic	mg/kg	**3.7**	**3.7**	**5.2**	**4.4**	**4.1**	**4.5**	**2.8**	**2.4**	**4.5**	**4.9**	**6.3**	**7.8**	**5.8**	**7.4**	**9**	**5**
	Barium	mg/kg	**113 J+**	**112 J+**	**175 J+**	**114 J+**	**113 J+**	**137 J+**	**135 J+**	**134 J+**	**125 J+**	**158 J+**	**156 J+**	**208 J+**	**117**	**122**	**182**	**196**
	Beryllium	mg/kg	**0.57**	**0.48**	**0.63**	**0.55**	**0.56**	**0.6**	**0.54**	**0.53**	**0.53**	**0.59**	**0.53**	**0.63**	**0.59**	**0.61**	**0.61**	**0.6**
	Boron	mg/kg	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	2.82 UJ	2.82 UJ	2.82 UJ	2.82 UJ
	Cadmium	mg/kg	**0.075 J**	**0.08 J**	**0.097 J**	**0.081 J**	**0.075 J**	**0.087 J**	**0.075 J**	**0.071 J**	**0.074 J**	**0.088 J**	**0.072 J**	**0.087 J**	**0.084 J**	**0.08 J**	**0.083 J**	**0.092 J**
	Chromium (total)	mg/kg	**13.9**	**12.4**	**12.1**	**8.9**	**11.7**	**13.3**	**8.9**	**8.7**	**9.8**	**9.9**	**9.3**	**9.8**	**8.1**	**10.4**	**9.7**	**9.6**
	Chromium VI	mg/kg	<0.17	**0.22 J**	<0.17	**1.4**	<0.17	<0.17	**1.6 J**	0.17 UJ	<0.17	<0.17	<0.17	**0.18 J**	<0.17	<0.18	<0.17	**0.49 J**
	Cobalt	mg/kg	**6.6 J**	**6.4 J**	**7 J**	**6.6 J**	**7.8 J**	**8.6 J**	**7.3 J**	**7.9 J**	**8.2 J**	**7.4 J**	**7.3 J**	**7.7 J**	**5.6 J**	**8 J**	**8.7 J**	**6.7 J**
	Copper	mg/kg	**16.2 J-**	**14.1 J-**	**14.4 J-**	**13.9 J-**	**16.7 J-**	**16.6 J-**	**14.2**	**16.1**	**17.7**	**14.4**	**14.1**	**16.5**	**13.7**	**16.7**	**16.5**	**16.2**
	Iron	mg/kg	**13,800 J**	**12,800 J**	**14,100 J**	**12,700 J**	**17,000 J**	**18,000 J**	**14,900 J**	**14,600 J**	**14,600 J**	**15,300 J**	**15,300 J**	**16,000 J**	**12,800**	**14,400**	**17,200**	**13,700**
	Lead	mg/kg	**5.2**	**5.5**	**7.8**	**5.7**	**6.9**	**7.1**	**6.7**	**6.8**	**7.9**	**7.8**	**6.2**	**7.3**	**6.1**	**7.9**	**8.4**	**7.7**
	Lithium	mg/kg	**18.7**	**19.6**	**25.8**	**16.1**	**15.8**	**14**	**14.7**	**15.3**	**20.1**	**17.4**	**15.6**	**17.6**	**24**	**18.7**	**17.2**	**15.7**
	Magnesium	mg/kg	**9,720**	**9,170**	**12,500**	**10,300**	**9,010**	**9,040**	**9,530 J**	**10,100 J**	**10,800 J**	**10,400 J**	**9,720 J**	**9,780 J**	**12,000**	**12,300**	**10,200**	**8,360**
	Manganese	mg/kg	**263 J**	**272 J**	**344 J**	**246 J**	**335 J**	**368 J**	**276 J**	**341 J**	**377 J**	**335 J**	**287 J**	**315 J**	**218**	**321**	**460**	**297**
	Mercury	mg/kg	<0.00668	**0.0072 J**	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	<0.00668	**0.0088 J**	**0.0144 J**	**0.0235 J**	<0.00668	0.00668 UJ	0.00668 UJ	0.00668 UJ	0.00668 UJ
	Molybdenum	mg/kg	**1.5**	**1.3**	<0.105	<0.105	<0.105	<0.105	**0.32 J**	**0.35 J**	**0.5 J**	**0.4 J**	**0.36 J**	**0.45 J**	**0.53 J**	**0.56 J**	**0.67 J**	**0.67 J**
	Nickel	mg/kg	**13.8**	**13.6**	**14.8**	**14.5**	**15.5**	**15.8**	**12.8**	**15.6**	**14.8**	**14.3**	**13.5**	**15.5**	**13.3**	**15.1**	**15.3**	**14.6**
	Niobium	mg/kg	1.51 UJ	1.51 UJ	<1.51	<1.51	<1.51	<1.51	**3.4 J+**	<1.51	<1.51	<1.51	<1.51	<1.51	**1.7 J+**	<1.51	<1.51	<1.51
	Palladium	mg/kg	**0.56**	**0.5**	**0.73**	**0.62**	**0.69**	**0.78**	**0.77**	**0.64**	**0.75**	**0.88**	**0.68 J**	**1.3 J**	**1.2**	**0.67**	**0.67**	**0.58**
	Phosphorus (total)	mg/kg	**1,290 J**	**1,440 J**	**950 J**	**1,240 J**	**1,460 J**	**1,340 J**	**1,170 J**	**1,100 J**	**1,360 J**	**1,250 J**	**1,400 J**	**1,440 J**	**1,180 J**	**1,090 J**	**1,550 J**	**1,240 J**
	Platinum	mg/kg	<0.02	<0.02	<0.02	<0.02	**0.036 J**	**0.049 J**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	**0.025 J**	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	**0.32 J**	**0.16 J**	**0.2 J**	**0.17 J**	**0.16 J**	**0.16 J**	**0.12 J**	**0.11 J**	**0.13 J**	**0.14 J**	**0.13 J**	**0.15 J**	**0.096 J**	**0.15 J**	**0.11 J**	**0.15 J**
	Strontium	mg/kg	**236 J**	**207 J**	**291 J**	**247 J**	**279 J**	**311 J**	**287 J**	**258 J**	**288 J**	**367 J**	**279 J**	**494 J**	**476**	**257**	**258**	**218**
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	**0.22 J**	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	**0.62**	**0.54**	**0.63**	**0.52**	**0.53**	**0.62**	**0.55**	**0.48**	**0.5**	**0.52**	<0.0526	**0.55**	**0.56**	**0.66**	**0.56**	**0.65**
	Titanium	mg/kg	**701**	**691**	**728**	**595**	**788**	**861**	**547 J**	**550 J**	**658 J**	**611 J**	**547 J**	**573 J**	**522**	**579**	**671**	**611**
	Tungsten	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	<0.2	<0.2	<0.2	<0.2
	Uranium (total)	mg/kg	**1.3**	**1.4**	**1.8**	**1.6**	**1.4**	**1.5**	**1.1**	**1.1**	**1.8**	**1.8**	**2.2**	**2.6**	**2.3**	**2.8**	**1.8**	**1.8**
	Vanadium	mg/kg	**40.7**	**45.3**	**44.7**	**35.9**	**50.8**	**53.5**	**42.7**	**40.9**	**46.1**	**43.9**	**43.8**	**46.4**	**39.2 J**	**50.2 J**	**47.6 J**	**35.9 J**
	Zinc	mg/kg	**23.6**	**23.1**	**28.6**	**25.7**	**28.4**	**30.9**	**29.6 J-**	**28.9 J-**	**31.3 J-**	**33.1 J-**	**31.3 J-**	**31.7 J-**	**28.2**	**31.1**	**39.1**	**31.1**
	Zirconium	mg/kg	**24.2**	**20.5 J**	**29.6**	**24.1**	**22.7**	**25.5**	**19.8 J**	**20.1 J**	**24.6**	**24.6**	**21.3 J**	**23.6**	**21.5 J**	**26.4**	**21.9**	**29.1**
Radionuclides	Radium-226	pCi/g	**2.13**	**1.91**	**1.56**	**1.97**	**1.21**	**1.7**	**1.93**	**2.12**	**1.86**	**1.69**	**1.72**	**1.96**	**2.29 J-**	**2.03 J-**	**1.57 J-**	**1.29 J-**
	Radium-228	pCi/g	**1.45 J**	**1.15 J**	**1.68 J**	**1.42 J**	**1.76 J**	**1.55 J**	**1.34 J**	**0.855 J**	**1.54 J**	**1.24 J**	**1.74 J**	**1.42 J**	**1.18 J-**	**1.57 J-**	**1.18 J-**	**1.35 J-**
	Thorium-228	pCi/g	**1.8**	**1.43**	**1.72**	**2.14**	**2.22**	**1.83**	**1.95**	**1.83**	**1.93**	**1.84**	**1.71**	**1.62**	**1.5**	**1.78**	**1.6**	**1.62**
	Thorium-230	pCi/g	**2.04**	**2.15**	**1.85**	**1.97**	**1.35**	**1.27**	**2.27**	**1.89**	**1.77**	**1.72**	**1.61**	**1.43**	**2.6**	**2.25**	**1.51**	**1.38**
	Thorium-232	pCi/g	**1.45**	**1.74**	**1.46**	**1.47**	**1.97**	**1.59**	**1.62**	**1.4**	**1.86**	**1.77**	**1.49**	**1.33**	**1.37**	**2.01**	**1.58**	**1.62**
	Uranium-234	pCi/g	**2.34**	**2.34**	**1.62**	**1.86**	**1.35**	**1.24**	**2.13**	**1.98**	**1.77**	**1.48**	**1.61**	**1.61**	**2.61**	**2.17**	**1.53**	**1.66**
	Uranium-235	pCi/g	**0.0606 J**	**0.0752 J**	**0.0502 J**	**0.0764 J**	**0.0562 J**	**0.0584 J**	**0.0684 J**	**0.0585 J**	**0.0696 J**	**0.029 J**	**0.0657 J**	**0.0696 J**	**0.0809 J**	**0.0764 J**	**0.0624 J**	0.0353 U
	Uranium-238	pCi/g	**2.14**	**1.91**	**1.29**	**1.79**	**1.21**	**1.23**	**1.72**	**1.8**	**1.38**	**1.3**	**1.61**	**1.49**	**2.79**	**2.48**	**1.42**	**1.57**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-11			DBSA-13									DBSA-14			
			DBSA-11-Q-50	DBSA-11-Q-60	DBSA-11-Q-120	DBSA-13-Q-20	DBSA-13-Q-20-FD	DBSA-13-Q-30	DBSA-13-Q-40	DBSA-13-Q-50	DBSA-13-Q-50-FD	DBSA-13-Q-60	DBSA-13-Q-70	DBSA-13-Q-80	DBSA-14-Q-20	DBSA-14-Q-20-FD	DBSA-14-Q-30	DBSA-14-Q-40
Metals	Aluminum	mg/kg	**8,710**	**8,050**	**7,970 J**	**9,660 J**	**10,100 J**	**15,100 J**	**5,060 J**	**9,850 J**	**9,080 J**	**10,700 J**	**10,700 J**	**8,830 J**	**10,200**	**10,200**	**11,100**	**9,660**
	Antimony	mg/kg	**0.2 J-**	**0.17 J-**	**0.18 J-**	**0.12 J-**	**0.13 J-**	**0.18 J-**	**0.089 J-**	**0.16 J-**	**0.12 J-**	**0.16 J-**	**0.18 J-**	**0.12 J-**	**0.15 J-**	**0.12 J-**	**0.13 J-**	**0.14 J-**
	Arsenic	mg/kg	**5.1**	**4.4**	**7**	**2.3**	**2.4**	**4.5**	**3.7**	**5.1**	**4.2**	**3.9**	**3.6**	**2.7**	**3.1**	**2.6**	**4.4**	**5.7**
	Barium	mg/kg	**190**	**111**	**97.7**	**172**	**171**	**134**	**90.2**	**166**	**145**	**182**	**249**	**173**	**186 J-**	**177 J-**	**159 J-**	**191 J-**
	Beryllium	mg/kg	**0.64**	**0.57**	**0.6**	**0.49**	**0.55**	**0.67**	**0.29**	**0.55**	**0.46**	**0.55**	**0.59 J**	**0.51**	**0.59**	**0.54**	**0.6**	**0.59**
	Boron	mg/kg	2.82 UJ	2.82 UJ	**6.4 J**	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	2.82 UJ	<2.82	**5.9 J**	**5.2 J**	**5.8 J**	**5 J**
	Cadmium	mg/kg	**0.1 J**	**0.084 J**	**0.1 J**	**0.081 J**	**0.083 J**	**0.071 J**	**0.05 J**	**0.1 J**	**0.12**	**0.098 J**	**0.091 J**	**0.079 J**	**0.085 J**	**0.074 J**	**0.076 J**	**0.084 J**
	Chromium (total)	mg/kg	**10.3**	**9**	**9.1**	**12.1**	**11.6**	**11.2**	**7.6**	**13.1**	**9.2**	**13.4**	**14.2 J**	**9.5**	**10.9**	**13.4**	**9.4**	**10.1**
	Chromium VI	mg/kg	<0.17	<0.17	--	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	**0.2 J**	**0.4 J**	**0.25 J**	**0.19 J**	**0.18 J**
	Cobalt	mg/kg	**6.8 J**	**6.7 J**	**7.7 J**	**10.8 J**	**10 J**	**8.2 J**	**5.3 J**	**10.4 J**	**9.1 J**	**9.8 J**	**10.4 J**	**10.7 J**	**8.1 J**	**6.9 J**	**8.6 J**	**8.3 J**
	Copper	mg/kg	**16.7**	**15.9**	**15.8 J-**	**19.1 J+**	**17 J+**	**13.7 J+**	**8.8 J+**	**17.4 J+**	**14 J+**	**17.3 J+**	**17.4 J**	**18.5 J+**	**15.2 J-**	**14.8 J-**	**14.6 J-**	**15.6 J-**
	Iron	mg/kg	**14,100**	**13,800**	**13,400 J**	**19,800 J**	**22,200 J**	**17,800 J**	**21,900 J**	**20,900 J**	**18,200 J**	**22,100 J**	**22,500 J**	**19,700 J**	**16,100 J**	**15,100 J**	**15,500 J**	**16,400 J**
	Lead	mg/kg	**7.9**	**6.8**	**9.2 J+**	**8.6**	**8**	**8.4**	**5**	**8.6**	**7.7**	**8.6**	**10**	**8.2**	**9.1**	**6.8**	**7.7**	**9.4**
	Lithium	mg/kg	**15.1**	**16.9**	**19.1**	<3.66	<3.66	<3.66	<3.66	<3.66	<3.66	<3.66	<3.66	**13.9**	**18.8**	**17.8**	**24.9**	**17.4**
	Magnesium	mg/kg	**8,660**	**8,890**	**8,840 J**	**10,200 J**	**9,550 J**	**9,950 J**	**4,990 J**	**9,830 J**	**8,650 J**	**9,730 J**	**8,810 J**	**8,610 J**	**10,800 J**	**10,600 J**	**11,400 J**	**10,200 J**
	Manganese	mg/kg	**354**	**273**	**395 J**	**386 J**	**390 J**	**299 J**	**223 J**	**394 J**	**579 J**	**361 J**	**451 J**	**413 J**	**349 J**	**296 J**	**379 J**	**363 J**
	Mercury	mg/kg	0.00668 UJ	0.00668 UJ	**0.0132 J**	**0.0137 J**	<0.00668	**0.0083 J**	**0.0147 J**	**0.0129 J**	**0.0097 J**	**0.0178 J**	**0.0163 J**	**0.0124 J**	<0.00668	**0.0096 J**	**0.0086 J**	<0.00668
	Molybdenum	mg/kg	**0.78 J**	**0.45 J**	**0.86 J+**	**0.36 J**	**0.47 J**	**0.38 J**	**0.31 J**	**0.57 J**	**0.55 J**	**0.58 J**	**0.83 J**	**0.81 J**	**0.79 J**	**1 J**	**0.48 J**	**0.46 J**
	Nickel	mg/kg	**14.9**	**14.4**	**15.9**	**18**	**15.9**	**13.7**	**8.5**	**16.5**	**12.7**	**15.4**	**16.5 J**	**15.9**	**14.8 J-**	**14.1 J-**	**14 J-**	**15.2 J-**
	Niobium	mg/kg	<1.51	<1.51	**3 J+**	**3.5 J+**	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	**0.54**	**0.57**	**0.49**	**0.82**	**0.75**	**1.7**	**0.41**	**0.83**	**0.65**	**0.96**	**1.2**	**0.66**	**0.93**	**0.8**	**0.93**	**0.83**
	Phosphorus (total)	mg/kg	**1,260 J**	**1,220 J**	**1,230 J**	**1,370 J**	**1,310 J**	**1,430 J**	**649 J**	**1,290 J**	**1,530 J**	**1,410 J**	**1,270 J**	**1,480 J**	**1,380 J**	**1,080 J**	**1,240 J**	**1,340 J**
	Platinum	mg/kg	<0.02	<0.02	**0.022 J**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	**0.17 J**	**0.14 J**	**0.48**	**0.26 J**	**0.26 J**	**0.16 J**	**0.12 J**	**0.25 J**	**0.15 J**	**0.22 J**	**0.21 J**	**0.19 J**	**0.23 J**	**0.31 J**	**0.64**	**0.16 J**
	Strontium	mg/kg	**199**	**210**	**171 J**	**314 J**	**301 J**	**596 J**	**152 J**	**295 J**	**245 J**	**359 J**	**419 J**	**236 J**	**348 J**	**317 J**	**339 J**	**300 J**
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	**0.2 J**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	**0.65**	**0.56**	**0.66**	**0.53**	**0.59**	**0.48**	**0.33**	**0.62**	**0.48**	**0.64**	**0.67**	**0.64**	**0.57**	**0.54**	**0.52**	**0.53**
	Titanium	mg/kg	**655**	**600**	**557 J**	**767 J**	**813 J**	**667 J**	**445 J**	**855 J**	**726 J**	**860 J**	**912 J**	**762 J**	**740 J**	**650 J**	**578 J**	**675 J**
	Tungsten	mg/kg	<0.2	<0.2	0.2 UJ	**0.57 J**	**0.34 J**	**0.32 J**	**0.19 J**	**0.29 J**	**0.28 J**	**0.44 J**	**0.35 J**	**0.29 J**	**0.33 J-**	**0.26 J-**	**0.37 J-**	**0.26 J-**
	Uranium (total)	mg/kg	**1.9**	**1.4**	**1.3**	**1.4**	**1.4**	**1.6**	**1.2**	**2.3**	**1.8**	**2.2**	**1.9**	**1.4**	**1.6**	**1.5**	**1.4**	**1.9**
	Vanadium	mg/kg	**37.4 J**	**37.7 J**	**35.4 J**	**64.6 J**	**67.5 J**	**61.5 J**	**73.3 J**	**66.6 J**	**58.2 J**	**71.6 J**	**67.9 J**	**58.5 J**	**45.4 J**	**39.8 J**	**41.4 J**	**47.2 J**
	Zinc	mg/kg	**31.2**	**30.7**	**31.8 J-**	**33.8 J-**	**36.6 J-**	**32.5 J-**	**18.1 J-**	**35.7 J-**	**32.2 J-**	**35.5 J-**	**35.1 J**	**33.5 J-**	**32.1 J-**	**28.5 J-**	**35 J-**	**31.8 J-**
	Zirconium	mg/kg	**32.2**	**26**	**27.2**	**20.5 J-**	**24.7 J-**	**21.9 J-**	**15.9 J-**	**30.3 J-**	**21.8 J-**	**27.2 J-**	**33.9 J**	**28 J-**	**29.4**	**27.3**	**25**	**30**
Radionuclides	Radium-226	pCi/g	**1.29 J-**	**1.05 J-**	--	**1.74**	**1.57**	**1.37**	**1.41**	**1.64**	**1.51**	**1.38**	--	--	**1.77**	**2.24 J-**	**1.34**	**1.44**
	Radium-228	pCi/g	**0.939 J-**	**1.26 J-**	--	**1.28 J**	**1.11 J**	**1.59 J**	**1.48 J**	**1.29 J**	**1.38 J**	**1.19 J**	--	--	**1.23 J-**	**1.4 J**	**1.21 J**	**1.13 J**
	Thorium-228	pCi/g	**1.87**	**2.08**	**1.6**	**1.42**	**1.39**	**1.11**	**1.89**	**1.6**	**1.7**	**1.75**	**2.06**	**1.5**	**1.33**	**1.75**	**1.95**	**1.53**
	Thorium-230	pCi/g	**1.37**	**1.43**	**1.36**	**2.72**	**2.01**	**1.07**	**1.93**	**1.67**	**1.55**	**1.32**	**1.39**	**1.39**	**2.52**	**2.15**	**1.51**	**1.42**
	Thorium-232	pCi/g	**1.93**	**1.95**	**1.38**	**1.49**	**1.05**	**0.908**	**1.89**	**1.6**	**1.45**	**1.53**	**1.62**	**1.44**	**1.42**	**1.54**	**1.46**	**1.51**
	Uranium-234	pCi/g	**1.78**	**1.41**	**1.38**	**1.43**	**1.68**	**1.23**	**1.69**	**1.47**	**1.9**	**1.03**	**0.999 J**	**1.94**	**2.45**	**2.63**	**1.44**	**1.51**
	Uranium-235	pCi/g	**0.0693 J**	**0.0459 J**	**0.0431 J**	**0.0954 J**	**0.074 J**	**0.042 J**	**0.0478 J**	**0.095 J**	**0.0839 J**	**0.0529 J**	**0.0417 J**	**0.0749 J**	**0.0839 J**	**0.0756 J**	**0.0543 J**	**0.0374 J**
	Uranium-238	pCi/g	**1.53**	**1.39**	**1.33**	**1.41**	**1.74**	**0.993 J**	**1.57**	**1.48**	**1.73**	**1.08**	**1.07**	**1.64**	**2.43**	**2.15**	**1.36**	**1.38**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 3. BRC Deep McCullough Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-14						DBSA-15							
			DBSA-14-Q-50	DBSA-14-Q-50-FD	DBSA-14-Q-140	DBSA-14-Q-150	DBSA-14-Q-160	DBSA-14-Q-160-FD	DBSA-15-Q-20	DBSA-15-Q-20-FD	DBSA-15-Q-30	DBSA-15-Q-40	DBSA-15-Q-50	DBSA-15-Q-120	DBSA-15-Q-150	DBSA-15-Q-160
Metals	Aluminum	mg/kg	**10,800**	**10,000**	**12,500**	--	--	--	**12,200 J**	**9,920 J**	**9,920 J**	**11,400 J**	**11,800 J**	**10,600 J**	**9,640 J**	**10,600 J**
	Antimony	mg/kg	**0.15 J-**	**0.14 J-**	**0.13 J-**	--	--	--	**0.13 J-**	0.105 UJ	**0.12 J-**	**0.13 J-**	**0.12 J-**	**0.2 J-**	**0.16 J-**	**0.16 J-**
	Arsenic	mg/kg	**6.5**	**5.9**	**4.4**	--	--	--	**3.2**	**2.8**	**6.1**	**13.1**	**4.4**	**8.6**	**9.1**	**9.3**
	Barium	mg/kg	**231 J-**	**252 J-**	**273 J-**	--	--	--	**206 J+**	**162 J+**	**146 J+**	**188 J+**	**173 J+**	**539**	**115**	**113**
	Beryllium	mg/kg	**0.64**	**0.57**	**0.58**	--	--	--	**0.57**	**0.51**	**0.51**	**0.61**	**0.58**	**0.62 J-**	**0.64 J-**	**0.64 J-**
	Boron	mg/kg	**5.4 J**	**6.2 J**	**4.2 J**	--	--	--	**7.5 J**	**5.8 J**	**7.6 J**	**7.4 J**	**6.9 J**	<2.82	<2.82	<2.82
	Cadmium	mg/kg	**0.11**	**0.1 J**	**0.087 J**	--	--	--	**0.11 J**	**0.086 J**	**0.11**	**0.13**	**0.12**	**0.11**	**0.12**	**0.13**
	Chromium (total)	mg/kg	**9.1**	**8.1**	**7.1**	--	--	--	**11.5 J-**	**10.5 J-**	**10.3 J-**	**12.2 J-**	**12.3 J-**	**11.5 J-**	**10.4 J-**	**10.9 J-**
	Chromium VI	mg/kg	<0.17	**0.24 J**	<0.17	<0.17	**0.26 J**	**0.27 J**	**0.22 J-**	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	--	0.16 UJ	0.16 UJ
	Cobalt	mg/kg	**7.9 J**	**9 J**	**7.4 J**	--	--	--	**9.1 J**	**9.8 J**	**7.6 J**	**9.3 J**	**8.9 J**	**9.9 J**	**9.6 J**	**9.1 J**
	Copper	mg/kg	**15.8 J-**	**17.1 J-**	**16.5 J-**	--	--	--	**15.7**	**16.4**	**12.4**	**15.5**	**16**	**16.9 J-**	**17.1 J-**	**16.3 J-**
	Iron	mg/kg	**15,300 J**	**14,900 J**	**13,900 J**	--	--	--	**20,400 J**	**19,100 J**	**15,600 J**	**18,800 J**	**19,000 J**	**19,400 J**	**17,500 J**	**18,300 J**
	Lead	mg/kg	**8.2 J**	**15.8 J**	**6.1**	--	--	--	**9**	**8.1**	**7.5**	**9.6**	**9.2**	**8.8**	**9.5**	**9.7**
	Lithium	mg/kg	**17.6**	**19.9**	**15.4**	--	--	--	<3.66	<3.66	**23.2**	<3.66	**46**	**12.9 J**	**14.9 J**	**12.2 J**
	Magnesium	mg/kg	**10,300 J**	**11,000 J**	**10,700 J**	--	--	--	**8,950 J**	**9,160 J**	**11,700 J**	**10,800 J**	**10,100 J**	**11,600 J**	**11,100 J**	**11,800 J**
	Manganese	mg/kg	**382 J**	**530 J**	**275 J**	--	--	--	**459 J**	**459 J**	**375 J**	**468 J**	**441 J**	**556 J**	**461 J**	**483 J**
	Mercury	mg/kg	<0.00668	<0.00668	<0.00668	--	--	--	0.00668 UJ	0.00668 UJ	0.00668 UJ	0.00668 UJ	0.00668 UJ	**0.0133 J**	<0.00668	**0.0129 J**
	Molybdenum	mg/kg	**0.47 J**	**1.3**	**0.37 J**	--	--	--	**0.49 J**	**0.49 J**	**0.62 J**	**0.74 J**	**0.85 J**	**1.1**	**1 J**	**1 J**
	Nickel	mg/kg	**14.8 J-**	**17 J-**	**13 J-**	--	--	--	**16.3**	**17**	**15.4**	**16.4**	**16.7**	**16.2 J-**	**15.9 J-**	**15.9 J-**
	Niobium	mg/kg	<1.51	<1.51	<1.51	--	--	--	1.51 UJ	1.51 UJ	<1.51	<1.51	<1.51	**3.3 J+**	<1.51	<1.51
	Palladium	mg/kg	**1.1**	**1.2**	**2.2**	--	--	--	**1.4**	**0.9**	**1.1**	**1.2**	**1.4**	**1**	**0.48**	**0.58**
	Phosphorus (total)	mg/kg	**1,420 J**	**1,500 J**	**1,410 J**	--	--	--	**1,570 J**	**1,710 J**	**1,390 J**	**1,710 J**	**1,450 J**	**1,410 J**	**1,600 J**	**1,650 J**
	Platinum	mg/kg	<0.02	**0.046 J**	<0.02	--	--	--	<0.02	<0.02	<0.02	<0.02	**0.023 J**	**0.025 J**	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	--	--	--	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	**0.21 J**	**0.16 J**	**2.2**	--	--	--	**0.15 J**	**0.14 J**	**0.13 J**	**0.19 J**	**0.2 J**	**0.19 J**	**0.15 J**	**0.16 J**
	Strontium	mg/kg	**420 J**	**441 J**	**793 J**	--	--	--	**404 J**	**248 J**	**308 J**	**337 J**	**396 J**	**364 J**	**179 J**	**204 J**
	Thallium	mg/kg	<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	**0.51**	**0.55**	**0.62**	--	--	--	**0.33 J**	**0.27 J**	**0.25 J**	**0.36 J**	**0.38 J**	**0.72**	**0.66**	**0.65**
	Titanium	mg/kg	**604 J**	**617 J**	**552 J**	--	--	--	**734 J**	**589 J**	**545 J**	**691 J**	**803 J**	**895**	**606**	**680**
	Tungsten	mg/kg	**0.22 J-**	**0.45 J-**	0.2 UJ	--	--	--	<0.2	<0.2	<0.2	<0.2	<0.2	0.2 UJ	0.2 UJ	0.2 UJ
	Uranium (total)	mg/kg	**2.2**	**2.1**	**1.1**	--	--	--	**1.5**	**1.3**	**2.3**	**2.8**	**2.1**	**1.4**	**1.4**	**1.3**
	Vanadium	mg/kg	**39.9 J**	**38.5 J**	**32.6 J**	--	--	--	**57.6 J**	**48.3 J**	**37.9 J**	**55.8 J**	**46.9 J**	**54.5 J**	**46.2 J**	**48.7 J**
	Zinc	mg/kg	**33.1 J-**	**34 J-**	**30.3 J-**	--	--	--	**36.8 J-**	**33.7 J-**	**30.3 J-**	**34 J-**	**34.9 J-**	**37.1 J-**	**35.8 J-**	**39.4 J-**
	Zirconium	mg/kg	**30.3**	**25.5**	**24.7**	--	--	--	**25.9 J-**	**22.3 J-**	**22.9 J-**	**26.5 J-**	**31.2 J-**	**33.3**	**22.7**	**25.6**
Radionuclides	Radium-226	pCi/g	**1.53**	**1.07**	--	--	--	--	**1.39**	**1.51**	**2.09**	**1.88**	**1.18**	--	--	--
	Radium-228	pCi/g	**1.34 J**	**1.59 J**	--	--	--	--	**1.08 J-**	**1.17 J-**	**1.5 J-**	**1.19 J-**	**1.39 J-**	--	--	--
	Thorium-228	pCi/g	**2.3**	**1.79**	**1.47**	--	--	--	**2.02**	**1.76**	**1.5**	**1.74**	**1.48**	**1.63**	**1.47**	**1.95**
	Thorium-230	pCi/g	**1.58**	**1.57**	**1.17**	--	--	--	**1.71**	**1.47**	**1.96**	**1.62**	**1.42**	**1.08**	**1.05**	**1.27**
	Thorium-232	pCi/g	**1.66**	**1.45**	**1.42**	--	--	--	**1.34**	**1.6**	**1.18**	**1.27**	**1.73**	**1.38**	**1.47**	**1.73**
	Uranium-234	pCi/g	**1.74**	**1.4**	**0.868 J**	--	--	--	**1.6**	**1.44**	**1.91**	**1.79**	**1.22**	--	--	--
	Uranium-235	pCi/g	**0.0711 J**	**0.0464 J**	**0.0121 U**	--	--	--	**0.083 J**	**0.061 J**	**0.0941 J**	**0.0456 J**	**0.066 J**	--	--	--
	Uranium-238	pCi/g	**1.56**	**1.18**	**1**	--	--	--	**1.34**	**1.34**	**1.89**	**1.62**	**1.21**	--	--	--

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 4. BRC Deep UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects							DBSA-09	DBSA-11		DBSA-17
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range	Potential Outlier Threshold	DBSA-9-T-160	DBSA-11-T-150	DBSA-11-T-160	DBSA-17-T-130
Metals	Aluminum	mg/kg	24	24	100	--	--	3,190	19,700	9,300	9,800	4,200	5,500	21,000	**11,000 J**	**8,590 J**	**8,190 J**	**12,500**
	Antimony	mg/kg	24	23	95.8	0.105 UJ	0.105 UJ	0.066 J-	0.34 J-	0.16	0.18	0.06	0.045	0.26	**0.17 J-**	**0.19 J-**	**0.16 J-**	**0.18 J-**
	Arsenic	mg/kg	24	24	100	--	--	2.1	24.8	7.7	8.8	5.4	6.1	20	**13.1**	**7.4**	**7.4**	**11.7**
	Barium	mg/kg	24	24	100	--	--	64.5 J+	620	200	260	170	210	680	**185 J+**	**140**	**620**	**400**
	Beryllium	mg/kg	24	24	100	--	--	0.17	1.1	0.59	0.56	0.24	0.31	1.1	**0.76**	**0.67**	**0.63**	**0.66**
	Boron	mg/kg	24	7	29.2	<2.82	<3.53	4.4 J	22.9	22	16	8.1	12	40	<2.82	**6 J**	**4.4 J**	<2.82
	Cadmium	mg/kg	24	18	75	<0.01	<0.01	0.06	0.2	0.11	0.11	0.033	0.03	0.16	**0.098 J**	**0.12**	**0.11 J**	**0.15**
	Chromium (total)	mg/kg	24	24	100	--	--	2.9	27.9 J-	13	13	7.5	11	34	**12.7**	**10.2**	**9.9**	**16.6**
	Chromium VI	mg/kg	23	2	8.7	<0.16	<0.21	0.18 J	0.19 J	0.18	0.18	0.0071	--	--	<0.18	**0.18 J**	**0.19 J**	<0.18
	Cobalt	mg/kg	24	24	100	--	--	1.6	9.7	6.5	5.8	2.7	5.4	16	**8.7 J**	**6.2 J**	**6.4 J**	**8.5**
	Copper	mg/kg	24	24	100	--	--	4.1	21.3	14	12	5.4	9.9	31	**14.2 J-**	**14.9 J-**	**15.8 J-**	**15.8**
	Iron	mg/kg	24	24	100	--	--	3,620	20,100	13,000	13,000	5,300	10,000	33,000	**17,500 J**	**12,700 J**	**12,900 J**	**17,600**
	Lead	mg/kg	24	24	100	--	--	4.4 J-	16.1	11	11	3.5	4.4	20	**10.7**	**8.6 J+**	**6.8 J+**	**12.3**
	Lithium	mg/kg	24	24	100	--	--	18.3	189	32	53	52	23	80	**23.3**	**18.3**	**23.3**	**22.1**
	Magnesium	mg/kg	24	24	100	--	--	2,780 J+	31,000 J	10,000	11,000	6,200	6,200	23,000	**9,990**	**7,370 J**	**9,420 J**	**11,800 J-**
	Manganese	mg/kg	24	24	100	--	--	126	786 J	300	310	160	200	680	**371 J**	**321 J**	**301 J**	**498**
	Mercury	mg/kg	20	5	25	<0.00668	<0.00668	0.008 J	0.012 J	0.01	0.01	0.0017	0.0029	0.016	<0.00668	<0.00668	<0.00668	**0.012 J**
	Molybdenum	mg/kg	24	23	95.8	<0.105	<0.105	0.12 J	1.1 J+	0.51	0.52	0.26	0.3	1.1	<0.105	**1.1 J+**	**0.74 J+**	**0.96 J**
	Nickel	mg/kg	24	24	100	--	--	4.5	30.9	14	14	6.3	9	30	**30.9**	**14.1**	**14.4**	**16.2**
	Niobium	mg/kg	24	1	4.2	<1.51	1.89 UJ	4 J	4 J	4	4	--	--	--	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	24	24	100	--	--	0.16	1	0.61	0.55	0.24	0.43	1.4	**0.62**	**0.68**	**0.52**	**0.75**
	Phosphorus (total)	mg/kg	24	24	100	--	--	299 J	1,370 J	840	790	300	430	1,700	**1,370 J**	**1,020 J**	**1,130 J**	**1,090 J**
	Platinum	mg/kg	24	2	8.3	<0.02	<0.025	0.027 J	0.033 J	0.03	0.03	0.0042	--	--	<0.02	**0.027 J**	<0.02	<0.02
	Selenium	mg/kg	24	0	0	<0.32	<0.4	--	--	--	--	--	--	--	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	24	24	100	--	--	0.051 J+	0.82	0.14	0.21	0.18	0.18	0.53	**0.26 J**	**0.82**	**0.48**	**0.28 J**
	Strontium	mg/kg	24	24	100	--	--	68.5	324 J+	220	210	71	73	360	**239 J**	**234 J**	**188 J**	**280**
	Thallium	mg/kg	24	0	0	<0.2	<0.25	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	24	20	83.3	<0.0526	<0.0526	0.24	0.96	0.6	0.56	0.21	0.37	1.3	**0.65**	**0.76**	**0.65**	**0.6**
	Titanium	mg/kg	24	24	100	--	--	175 J+	1,000	560	500	200	340	1,100	**1,000**	**612 J**	**544 J**	**547**
	Tungsten	mg/kg	24	5	20.8	<0.2	0.25 UJ	0.26 J-	0.58 J-	0.33	0.38	0.14	0.19	0.75	<0.2	0.2 UJ	0.2 UJ	**0.33 J**
	Uranium (total)	mg/kg	24	24	100	--	--	0.31	4.4	1.1	1.3	0.85	0.73	2.6	**1.6**	**1.3**	**1.2**	**1.2**
	Vanadium	mg/kg	24	24	100	--	--	10 J+	45.8	33	31	13	27	82	**43.7**	**32.5 J**	**33.1 J**	**45.3**
	Zinc	mg/kg	24	24	100	--	--	16.1	61.3	34	34	12	16	64	**30.6**	**29.6 J-**	**29.2 J-**	**38.2 J-**
	Zirconium	mg/kg	24	24	100	--	--	6.2 J	36.7	18	20	8.5	9.8	40	**35.5**	**32.4**	**29**	**23.5**
Radionuclides	Radium-226	pCi/g	18	14	77.8	1 UJ	1 UJ	0.754 J-	1.63 J-	1	1.1	0.23	0.22	1.4	**1.06**	**1.39 J-**	--	**0.877 J-**
	Radium-228	pCi/g	18	18	100	--	--	0.989 J-	1.55 J-	1.3	1.2	0.17	0.26	1.7	**1.33 J-**	**1.55 J-**	--	**1.3 J-**
	Thorium-228	pCi/g	24	24	100	--	--	1.01	2.15	1.3	1.4	0.25	0.3	2	**1.65**	**2.15**	**1.68**	**1.33**
	Thorium-230	pCi/g	24	24	100	--	--	0.495	2.09	0.98	1	0.33	0.29	1.6	**1.47**	**1.19**	**1.1**	**0.841**
	Thorium-232	pCi/g	24	24	100	--	--	0.966	2.05	1.3	1.3	0.23	0.27	1.9	**1.56**	**2.05**	**1.47**	**1.27**
	Uranium-234	pCi/g	22	12	54.5	1 U	1 U	0.626 J	1.81	1.1	1.2	0.3	0.29	1.8	**1.18**	**1.34**	**1.23**	--
	Uranium-235	pCi/g	22	22	100	--	--	0.0112 U	0.101 J	0.039	0.042	0.023	0.029	0.096	**0.101 J**	**0.0455 J**	**0.0563 J**	--
	Uranium-238	pCi/g	22	11	50	1 U	1 U	0.839 J	1.75	1.1	1.2	0.27	0.31	1.8	**1.28**	**1.38**	**1.2**	--

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration
Non-bolded radionuclide results are censored values and are counted as non-detects

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 4. BRC Deep UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-17		DBSA-20			DBSA-21		DBSA-23		DBSA-27	DBSA-30				DBSA-32	
			DBSA-17-T-140	DBSA-17-T-150	DBSA-20-T-90	DBSA-20-T-90-FD	DBSA-20-T-100	DBSA-21-T-80	DBSA-21-T-90	DBSA-23-T-140	DBSA-23-T-150	DBSA-27-T-100	DBSA-30-Q-130	DBSA-30-Q-140	DBSA-30-T-150	DBSA-30-T-160	DBSA-32-Q-70	DBSA-32-T-80
Metals	Aluminum	mg/kg	**13,700 J**	**19,700**	**10,100**	**11,300**	**9,290**	**14,200**	**11,000**	**16,400 J**	**13,700 J**	**14,300 J**	**3,190**	**3,790**	**3,380**	**5,240**	**9,380 J**	**7,360 J**
	Antimony	mg/kg	**0.19 J-**	**0.27 J-**	**0.16 J-**	**0.18 J-**	**0.14 J-**	**0.22 J-**	**0.19 J-**	**0.34 J-**	**0.29 J-**	**0.18 J-**	**0.13 J-**	**0.15 J-**	**0.066 J-**	**0.1 J-**	0.105 UJ	**0.15 J-**
	Arsenic	mg/kg	**14.6**	**24.8**	**8**	**8**	**8.4**	**9.9**	**12**	**19.4**	**11**	**10.5**	**2.2**	**2.3**	**2.1**	**3.1**	**5.2**	**4.7**
	Barium	mg/kg	**343**	**228**	**439 J+**	**554 J+**	**327 J+**	**280**	**428**	**620**	**113**	**231**	**64.5 J+**	**115 J+**	**118 J+**	**188 J+**	**154**	**218**
	Beryllium	mg/kg	**0.7 J**	**1.1**	**0.55**	**0.64**	**0.49**	**0.76**	**0.66**	**0.93**	**0.67**	**0.86**	**0.17**	**0.21**	**0.19**	**0.3**	**0.44**	**0.39**
	Boron	mg/kg	2.82 UJ	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82	**21.5 J**	**13.9 J+**	<3.53	<2.82	<2.82	<2.82	<2.82	<2.82	<2.82
	Cadmium	mg/kg	**0.081 J**	**0.13**	**0.14**	**0.11 J**	**0.11 J**	**0.084 J**	**0.11 J**	**0.2**	**0.078 J**	**0.1 J**	<0.01	<0.01	<0.01	**0.06**	**0.11 J**	**0.064 J**
	Chromium (total)	mg/kg	**13.8 J**	**21.3**	**16.9 J+**	**17.9 J+**	**14.9 J+**	**27.9 J-**	**16.7 J-**	**22.6**	**27.7**	**22.7 J+**	**3.6**	**4.1**	**2.9**	**5.5**	**7.3 J-**	**10.2 J-**
	Chromium VI	mg/kg	<0.18	<0.2	<0.19	<0.19	<0.17	<0.2	<0.19	<0.21	<0.2	--	<0.18	<0.18	<0.18	<0.18	<0.16	<0.16
	Cobalt	mg/kg	**8.8 J**	**9.7**	**7.3**	**7.1**	**6.5**	**9**	**7.8**	**9.7 J**	**6.7 J**	**6.6**	**2.1**	**2.2**	**1.6**	**2.4**	**5**	**3.6**
	Copper	mg/kg	**17.1 J**	**20.4**	**16.8**	**14.5**	**13**	**18.5 J-**	**16 J-**	**21.3**	**14.9**	**13.3**	**4.4**	**5.2**	**4.1**	**5.8**	**10.5 J-**	**9.8 J-**
	Iron	mg/kg	**17,700 J**	**20,100**	**16,100**	**16,300**	**13,900**	**19,400**	**17,200**	**19,400 J**	**15,300 J**	**12,700 J**	**4,520**	**4,800**	**3,620**	**5,430**	**10,900**	**11,100**
	Lead	mg/kg	**11.5**	**15.7**	**10.7 J+**	**11.2 J+**	**8.7 J+**	**11.8**	**15.3**	**16.1**	**13**	**12.8**	**15.7 J-**	**9.1 J-**	**7.8 J-**	**9.3 J-**	**13.1**	**11.4**
	Lithium	mg/kg	**31.5**	**41.1**	**20**	**19.6**	**20.4**	**40.9**	**26.2**	**78.9**	**47.7**	**53.4**	**35.6**	**31.6**	**33**	**45.4**	**40.8**	**27**
	Magnesium	mg/kg	**13,500 J**	**17,600 J-**	**10,300**	**10,200**	**10,100**	**17,200 J**	**12,400 J**	**31,000 J**	**15,700 J**	**18,300 J**	**2,780 J+**	**3,130 J+**	**3,000 J+**	**5,610 J+**	**7,080 J**	**4,930 J**
	Manganese	mg/kg	**525 J**	**423**	**379**	**373**	**279**	**476**	**262**	**786 J**	**294 J**	**296 J**	**126**	**137**	**162**	**236**	**177**	**135**
	Mercury	mg/kg	**0.0085 J**	**0.0114 J**	0.00668 UJ	0.00668 UJ	0.00668 UJ	<0.00668	<0.00668	**0.0101 J**	<0.00668	--	**0.008 J**	<0.00668	<0.00668	<0.00668	--	--
	Molybdenum	mg/kg	**0.52 J**	**0.61 J**	**0.63 J**	**0.56 J**	**0.44 J**	**0.7 J**	**0.49 J**	**0.97 J**	**0.65 J**	**0.51 J**	**0.12 J**	**0.18 J**	**0.15 J**	**0.3 J**	**0.26 J**	**0.59 J**
	Nickel	mg/kg	**15.6 J**	**20.8**	**17.9**	**16.1**	**14.3**	**20.1 J-**	**15.7 J-**	**21.3**	**15.3**	**16**	**7**	**7**	**4.5**	**6.3**	**10.5**	**10.4**
	Niobium	mg/kg	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51	**4 J**	<1.51	1.89 UJ	<1.51	<1.51	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	**0.74**	**0.61**	**0.8**	**1**	**0.74**	**0.77**	**0.83**	**0.49**	**0.7**	**0.31**	**0.18**	**0.21**	**0.16**	**0.18**	**0.38**	**0.3**
	Phosphorus (total)	mg/kg	**927 J**	**1,010 J**	**937 J**	**1,030 J**	**778 J**	**1,040 J**	**945 J**	**761 J**	**703 J**	**608 J**	**546 J**	**479 J**	**657 J**	**474 J**	**1,120 J**	**908 J**
	Platinum	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	**0.033 J**	<0.02	<0.02	<0.025	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.4	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	**0.13 J**	**0.14 J**	**0.52**	**0.19 J**	**0.099 J**	**0.3 J+**	**0.21 J+**	**0.14 J**	**0.088 J**	**0.1 J+**	**0.055 J+**	**0.078 J+**	**0.07 J+**	**0.12 J+**	**0.06 J+**	**0.051 J+**
	Strontium	mg/kg	**256 J**	**211**	**250 J+**	**324 J+**	**238 J+**	**212**	**232**	**164 J**	**249 J**	**178 J**	**71.8**	**88.5**	**68.5**	**74.4**	**246 J+**	**195 J+**
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	**0.6**	**0.83**	**0.54**	**0.5**	<0.0526	**0.73**	**0.96**	**0.8**	**0.6**	**0.72**	<0.0526	<0.0526	<0.0526	**0.24**	**0.28 J**	**0.27 J**
	Titanium	mg/kg	**556 J**	**500**	**589 J+**	**611 J+**	**573 J+**	**610**	**670**	**616 J**	**579 J**	**619**	**228 J+**	**251 J+**	**175 J+**	**243 J+**	**672**	**556**
	Tungsten	mg/kg	<0.2	<0.2	**0.46 J**	**0.27 J**	<0.2	**0.58 J-**	**0.26 J-**	0.2 UJ	0.2 UJ	0.25 UJ	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Uranium (total)	mg/kg	**1.1**	**1.5**	**1.1**	**1.2**	**1**	**1.5**	**1.9**	**4.4**	**2.5**	**1.7 J+**	**0.31**	**0.35**	**0.32**	**0.51**	**0.97**	**0.7**
	Vanadium	mg/kg	**43.4 J**	**45**	**40.2**	**40.8**	**34.3**	**45.8**	**42.2**	**36.9**	**33.1**	**30**	**12.8 J+**	**13.8 J+**	**10 J+**	**13.1 J+**	**36.6 J**	**33.7 J**
	Zinc	mg/kg	**39.5 J**	**52.1 J-**	**35.9 J-**	**34.2 J-**	**29.5 J-**	**43.2 J-**	**35.5 J-**	**61.3**	**43.8**	**56.4**	**24.2**	**17.3**	**16.1**	**19.3**	**40.4 J-**	**37 J-**
	Zirconium	mg/kg	**25 J**	**27.9 J**	**16.5 J**	**17.1 J**	**15.4 J**	**20.2 J**	**36.7**	**25.1 J+**	**20.4 J+**	**21.5 J**	**7.3 J**	**7.3 J**	**6.2 J**	**10.5 J**	**16.9 J**	**14.6 J**
Radionuclides	Radium-226	pCi/g	**1.1 J-**	**1.19 J-**	**0.818 J-**	**1.1 J-**	**0.857 J-**	**0.892 J-**	1 UJ	**1.63 J-**	**1.01 J-**	--	--	--	--	**1.04 J-**	--	1 UJ
	Radium-228	pCi/g	**1.23 J-**	**1.39 J-**	**1.53 J-**	**1.3 J-**	**1.12 J-**	**1.48 J-**	**1.36 J-**	**1.08 J-**	**0.989 J-**	--	--	--	--	**1.19 J-**	--	**1.06 J-**
	Thorium-228	pCi/g	**1.42**	**1.25**	**1.48**	**1.46**	**1.27**	**1.36**	**1.63**	**1.01**	**1.16**	**1.58**	**1.34**	**1.51**	**1.12**	**1.51**	**1.16**	**1.08**
	Thorium-230	pCi/g	**0.85**	**0.878**	**1.11**	**1.13**	**0.827**	**1.3**	**1**	**2.09**	**1.12**	**1.2**	**0.634**	**0.868**	**0.957**	**0.845**	**0.495**	**0.53**
	Thorium-232	pCi/g	**1.4**	**0.966**	**1.46**	**1.27**	**1.43**	**1.58**	**1.19**	**1.37**	**1.09**	**1.38**	**1.18**	**1.53**	**1.2**	**1.23**	**1.02**	**1.23**
	Uranium-234	pCi/g	--	**0.909 J**	1 U	1 U	1 U	**1.04**	1 U	**1.81**	**1.51**	**1.32**	1 U	1 U	1 U	1 U	**0.626 J**	1 U
	Uranium-235	pCi/g	--	**0.0391 J**	**0.0125 U**	**0.0155 U**	**0.0285 J**	**0.0426 J**	**0.0539 J**	**0.0883 J**	**0.0669 J**	**0.048 J**	**0.0373 J**	**0.0388 J**	**0.022 U**	**0.0482 J**	**0.0286 U**	**0.0112 U**
	Uranium-238	pCi/g	--	**0.839 J**	1 U	1 U	1 U	1 U	**1.03**	**1.75**	**1.48**	**1.15**	1 U	**1.01**	1 U	1 U	**0.89 J**	1 U

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
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Non-bolded radionuclide results are censored values and are counted as non-detects

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 4. BRC Deep UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	DBSA-32	DBSA-33		
			DBSA-32-T-95	DBSA-33-20	DBSA-33-20-FD	DBSA-33-T-30
Metals	Aluminum	mg/kg	**8,820 J**	**7,010**	**6,660**	**7,520**
	Antimony	mg/kg	**0.15 J-**	**0.15 J-**	**0.14 J-**	**0.13 J-**
	Arsenic	mg/kg	**7.3**	**6.5**	**6.9**	**4.8**
	Barium	mg/kg	**155**	**145 J+**	**159 J+**	**110 J+**
	Beryllium	mg/kg	**0.52**	**0.35**	**0.35**	**0.37**
	Boron	mg/kg	<2.82	**22.9**	**22.5**	**21.5**
	Cadmium	mg/kg	**0.11 J**	<0.01	<0.01	<0.01
	Chromium (total)	mg/kg	**13.7 J-**	**5.6**	**5.4**	**6**
	Chromium VI	mg/kg	<0.16	<0.16	<0.16	<0.16
	Cobalt	mg/kg	**5.6**	**2.6**	**2.5**	**2.6**
	Copper	mg/kg	**10.6 J-**	**6**	**5.8**	**5**
	Iron	mg/kg	**11,300**	**7,010**	**6,820**	**6,910**
	Lead	mg/kg	**13.7**	**4.6 J-**	**4.4 J-**	**5 J-**
	Lithium	mg/kg	**31.5**	**189**	**185**	**176**
	Magnesium	mg/kg	**9,530 J**	**13,500 J+**	**13,100 J+**	**13,600 J+**
	Manganese	mg/kg	**307**	**165**	**159**	**174**
	Mercury	mg/kg	--	<0.00668	<0.00668	<0.00668
	Molybdenum	mg/kg	**0.46 J**	**0.4 J**	**0.37 J**	**0.32 J**
	Nickel	mg/kg	**14.3**	**6.2**	**6**	**7.2**
	Niobium	mg/kg	<1.51	<1.51	<1.51	<1.51
	Palladium	mg/kg	**0.27**	**0.73**	**0.68**	**0.55**
	Phosphorus (total)	mg/kg	**615 J**	**311 J**	**303 J**	**299 J**
	Platinum	mg/kg	<0.02	<0.02	<0.02	<0.02
	Selenium	mg/kg	<0.32	<0.32	<0.32	<0.32
	Silver	mg/kg	**0.061 J+**	**0.24 J+**	**0.17 J+**	**0.37 J+**
	Strontium	mg/kg	**170 J+**	**294**	**278**	**215**
	Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2
	Tin	mg/kg	**0.38 J**	**0.36**	**0.34**	**0.33**
	Titanium	mg/kg	**584**	**271 J+**	**259 J+**	**201 J+**
	Tungsten	mg/kg	<0.2	<0.2	<0.2	<0.2
	Uranium (total)	mg/kg	**1.7**	**0.79**	**0.81**	**0.8**
	Vanadium	mg/kg	**31.1 J**	**13.5 J+**	**13 J+**	**10.7 J+**
	Zinc	mg/kg	**33.2 J-**	**20.5**	**19.9**	**21.2**
	Zirconium	mg/kg	**18.8 J**	**16.4**	**16.4**	**12.6**
Radionuclides	Radium-226	pCi/g	1 UJ	**0.754 J-**	**1 J-**	1 UJ
	Radium-228	pCi/g	**1.05 J-**	**1.03 U**	**1.26 J-**	**1.25 J-**
	Thorium-228	pCi/g	**1.1**	**1.29**	**1.23**	**1.24**
	Thorium-230	pCi/g	**0.879**	**1.15**	**1.14**	**0.862**
	Thorium-232	pCi/g	**1.21**	**1.33**	**1.56**	**1.11**
	Uranium-234	pCi/g	**1.11**	**1.03**	**1.07**	1 U
	Uranium-235	pCi/g	**0.0635 J**	**0.036 J**	**0.0188 U**	**0.0188 U**
	Uranium-238	pCi/g	**1.04**	1 U	1 U	1 U

Notes:
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J qualifier indicates an estimated detected concentration
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J- qualifier indicates an estimated detected concentration with a nega
UJ qualifier indicates a non-detected concetration with an estimated c

TABLE 5. RI UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects							RIBK-7			
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range	Potential Outlier Threshold	RIBK-7-26.0-20180614	RIBK-7-29.0-20180614	RIBK-7-29.0-20180614-FD	RIBK-7-32.0-20180614
Metals	Aluminum	mg/kg	46	46	100	--	--	7,400	27,000	16,000	16,000	4,800	7,000	30,000	**23,000**	**18,000**	**23,000**	**16,000**
Metals	Antimony	mg/kg	46	0	0	0.48 UJ	0.67 UJ	--	--	--	--	--	--	--	0.66 UJ	0.60 UJ	0.58 UJ	0.49 UJ
Metals	Arsenic	mg/kg	46	46	100	--	--	10	45	26	26	9.5	16	56	**40**	**37**	**38**	**25**
Metals	Barium	mg/kg	46	46	100	--	--	24	690	90	180	180	100	330	**350 J**	**78**	**83**	**64**
Metals	Boron	mg/kg	46	45	97.8	<2.9	<2.9	3.0 J	33	9.9	11	7	9	28	**11**	**9.5**	**13**	**4.6 J**
Metals	Cadmium	mg/kg	46	0	0	<0.28	<1.5	--	--	--	--	--	--	--	<0.35	<0.32	<0.33	<0.28
Metals	Chromium (total)	mg/kg	46	46	100	--	--	13	56 J+	20	23	9.2	8	38	**22 J+**	**19**	**24**	**29**
Metals	Chromium VI	mg/kg	46	6	13	<0.16	<0.21	0.20 J	1.3	0.29	0.5	0.44	0.39	1.2	**0.27 J**	**0.72**	<0.20	<0.17
Metals	Cobalt	mg/kg	46	46	100	--	--	4.1	17	7.8	8	2.1	2.2	12	**9.3**	**8.7**	**9.9**	**9.1**
Metals	Copper	mg/kg	46	44	95.7	<6.5	<6.6	5.9	27	14	14	4.2	4	22	**19 J+**	**15**	**20**	**14**
Metals	Iron	mg/kg	46	46	100	--	--	9,600	26,000	18,000	18,000	3,400	5,000	28,000	**21,000**	**18,000**	**21,000**	**18,000**
Metals	Lead	mg/kg	46	45	97.8	<5.9	<5.9	4.4	15	8.5	8.7	2	2.4	14	**11**	**9.5**	**11**	**9.3**
Metals	Magnesium	mg/kg	46	46	100	--	--	6,500	20,000	12,000	13,000	3,800	5,600	23,000	**17,000**	**17,000**	**20,000**	**15,000**
Metals	Manganese	mg/kg	46	46	100	--	--	160 J-	1,200 J-	440	450	180	150	710	**440**	**420**	**460**	**590**
Metals	Mercury	mg/kg	46	6	13	<0.013	<0.017	0.015 J	0.12	0.021	0.038	0.041	0.012	0.048	<0.016	**0.016 J**	**0.015 J**	<0.014
Metals	Molybdenum	mg/kg	46	2	4.3	<1.1	<6.0	1.7 J	2.4 J	2	2	0.49	--	--	<1.4	<1.3	<1.3	<1.1
Metals	Nickel	mg/kg	46	46	100	--	--	8.8	33	18	18	4.4	5	28	**22**	**19**	**25**	**20**
Metals	Palladium	mg/kg	46	0	0	<0.097	<0.13	--	--	--	--	--	--	--	<0.13	<0.12	<0.12	<0.098
Metals	Phosphorus (total)	mg/kg	46	46	100	--	--	500	1,400	910	910	230	380	1,700	**810**	**830**	**1,000**	**1,100**
Metals	Selenium	mg/kg	46	45	97.8	<0.93	<0.93	0.91 J	3.0	1.9	1.9	0.5	0.7	3.3	**2.2**	**2.5**	**2.5**	**1.5**
Metals	Silver	mg/kg	46	0	0	<0.99	<5.3	--	--	--	--	--	--	--	<1.2	<1.1	<1.2	<1.0
Metals	Strontium	mg/kg	46	46	100	--	--	97 J-	580 J-	150	170	80	30	220	**160 J+**	**170**	**180**	**190**
Metals	Thallium	mg/kg	46	0	0	<0.48	<0.67	--	--	--	--	--	--	--	<0.66	<0.60	<0.58	<0.49
Metals	Tungsten	mg/kg	46	0	0	2.8 UJ	15 UJ	--	--	--	--	--	--	--	3.5 UJ	3.2 UJ	3.3 UJ	2.8 UJ
Metals	Uranium (total)	mg/kg	46	46	100	--	--	0.56	5.5	1.3	1.4	0.92	0.38	2	**1.4**	**1.3**	**1.2**	**0.92**
Metals	Vanadium	mg/kg	46	46	100	--	--	22	60 J+	40	39	11	16	70	**41 J+**	**34 J+**	**42 J+**	**46 J+**
Metals	Zirconium	mg/kg	46	44	95.7	<30	<30	15	48 J+	34	34	7.3	10	55	**40 J+**	**28 J+**	**38 J+**	**29 J+**
Radionuclides	Radium-226	pCi/g	46	46	100	--	--	0.426	1.42	0.82	0.81	0.18	0.25	1.3	**1.07**	**0.666**	**0.812**	**0.819**
Radionuclides	Radium-228	pCi/g	46	46	100	--	--	0.419 J	1.42	0.79	0.8	0.27	0.36	1.5	**0.740**	**0.611**	**0.648**	**0.719**
Radionuclides	Thorium-228	pCi/g	46	46	100	--	--	0.706	2.25	1.2	1.3	0.31	0.46	2.2	**0.977**	**1.27**	**1.15**	**1.14**
Radionuclides	Thorium-230	pCi/g	46	46	100	--	--	0.454	1.48	0.96	0.92	0.19	0.22	1.3	**1.04**	**0.743**	**0.892**	**0.617**
Radionuclides	Thorium-232	pCi/g	46	46	100	--	--	0.430	2.11	1.2	1.2	0.34	0.47	2.1	**1.11**	**1.14**	**1.31**	**1.07**
Radionuclides	Uranium-234	pCi/g	46	46	100	--	--	0.533	3.48	0.84	0.98	0.54	0.18	1.2	**0.793**	**0.896**	**0.763**	**0.860**
Radionuclides	Uranium-235	pCi/g	46	46	100	--	--	-0.00539 U	0.180	0.042	0.053	0.038	0.049	0.15	**0.0577**	**0.0253 U**	**0.0155 U**	**0.0421 U**
Radionuclides	Uranium-238	pCi/g	46	46	100	--	--	0.391	1.83	0.82	0.84	0.28	0.21	1.2	**0.784**	**0.679**	**0.780**	**0.646**

Notes:

mg/kg: milligrams per kilogram
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J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 5. RI UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	RIBK-7					RIBK-8										RIBK-10	
			RIBK-7-35.0-20180614	RIBK-7-38.0-20180614	RIBK-7-41.0-20180614	RIBK-7-44.0-20180614	RIBK-7-47.0-20180614	RIBK-8-16.0-20180614	RIBK-8-16.0-20180614-FD	RIBK-8-19.0-20180614	RIBK-8-22.0-20180614	RIBK-8-25.0-20180614	RIBK-8-28.0-20180614	RIBK-8-31.0-20180614	RIBK-8-34.0-20180614	RIBK-8-37.0-20180614	RIBK-10-12.0-20180613	RIBK-10-12.0-20180613-FD
Metals	Aluminum	mg/kg	**17,000**	**19,000**	**22,000**	**21,000**	**14,000**	**20,000**	**23,000**	**14,000**	**19,000**	**18,000**	**12,000**	**13,000**	**18,000**	**19,000**	**17,000**	**17,000**
	Antimony	mg/kg	0.51 UJ	0.54 UJ	0.58 UJ	0.67 UJ	0.55 UJ	0.60 UJ	0.61 UJ	0.57 UJ	0.63 UJ	0.60 UJ	0.51 UJ	0.55 UJ	0.59 UJ	0.59 UJ	0.58 UJ	0.60 UJ
	Arsenic	mg/kg	**27**	**33**	**45**	**41**	**39**	**32**	**40**	**27**	**25**	**38**	**31**	**21**	**30**	**32**	**11**	**12**
	Barium	mg/kg	**150**	**130**	**240**	**88**	**300**	**52**	**60**	**510**	**430**	**46**	**91**	**81**	**230**	**690**	**29 J**	**670 J**
	Boron	mg/kg	**5.7 J**	**4.5 J**	**15**	**13**	**9.9 J**	**17**	**21**	**7.6 J**	**6.8**	**14**	**4.6 J**	**3.1 J**	**9.2**	**8.2 J**	**12**	**13**
	Cadmium	mg/kg	<0.30	<0.32	<0.32	<0.36	<0.65	<0.34	<0.34	<0.60	<0.32	<0.68	<0.29	<0.29	<0.31	<0.62	<0.62	<0.31
	Chromium (total)	mg/kg	**19**	**23**	**20**	**20**	**15**	**24**	**26**	**13**	**23**	**17**	**26**	**25**	**20**	**18**	**43 J+**	**56 J+**
	Chromium VI	mg/kg	<0.18	<0.19	<0.19	<0.21	<0.19	<0.20	<0.21	<0.18	<0.19	<0.20	**0.21 J**	**0.20 J**	<0.19	<0.18	<0.18	<0.19
	Cobalt	mg/kg	**8.5**	**11**	**9.6**	**8.7**	**6.0**	**7.7**	**9.1**	**6.0**	**8.4**	**7.4**	**8.6**	**9.5**	**8.0**	**7.6**	**5.8**	**4.8**
	Copper	mg/kg	**14**	**17**	**19**	**16**	**9.6**	**16**	**20**	**9.5**	**15**	**15**	**13**	**16**	**15**	**15**	**8.4**	**9.3**
	Iron	mg/kg	**18,000**	**22,000**	**22,000**	**19,000**	**14,000**	**20,000**	**23,000**	**14,000**	**18,000**	**18,000**	**19,000**	**20,000**	**18,000**	**18,000**	**15,000**	**14,000**
	Lead	mg/kg	**8.0**	**11**	**11**	**10**	**8.0**	**8.5**	**9.8**	**8.5**	**10**	**9.5**	**8.7**	**8.4**	**9.0**	**9.7**	**6.2**	**6.8**
	Magnesium	mg/kg	**15,000**	**13,000**	**17,000**	**18,000**	**17,000**	**17,000**	**20,000**	**12,000**	**13,000**	**12,000**	**9,200**	**9,800**	**14,000**	**12,000**	**12,000**	**12,000**
	Manganese	mg/kg	**400**	**590**	**570**	**450**	**330**	**330**	**430**	**350**	**470**	**350**	**490**	**490**	**420**	**470**	**160 J-**	**190 J-**
	Mercury	mg/kg	<0.015	<0.015	**0.021 J**	<0.017	<0.016	<0.016	<0.016	<0.014	**0.12**	<0.016	<0.014	<0.014	<0.015	<0.015	<0.014	<0.015
	Molybdenum	mg/kg	<1.2	<1.3	<1.3	<1.4	<2.6	<1.3	<1.4	<2.4	<1.3	<2.7	<1.2	<1.2	<1.3	<2.5	<2.5	<1.3
	Nickel	mg/kg	**21**	**25**	**27**	**21**	**14**	**20**	**24**	**15**	**19**	**20**	**17**	**18**	**19**	**20**	**15**	**15**
	Palladium	mg/kg	<0.10	<0.11	<0.12	<0.13	<0.11	<0.12	<0.12	<0.11	<0.13	<0.12	<0.10	<0.11	<0.12	<0.12	<0.12	<0.12
	Phosphorus (total)	mg/kg	**990**	**1,200**	**1,000**	**890**	**600**	**960**	**1,100**	**710**	**880**	**880**	**1,100**	**1,400**	**900**	**990**	**570**	**540**
	Selenium	mg/kg	**2.0**	**3.0**	**1.7**	**2.2**	**1.8**	**1.8**	**2.3**	**1.7**	**2.2**	**2.1**	**2.6**	**2.6**	**2.1**	**2.5**	**1.0 J**	**1.4 J**
	Silver	mg/kg	<1.1	<1.1	<1.1	<1.3	<2.3	<1.2	<1.2	<2.1	<1.1	<2.4	<1.0	<1.0	<1.1	<2.2	<2.2	<1.1
	Strontium	mg/kg	**210**	**220**	**180**	**160**	**160**	**140**	**160**	**160**	**180**	**140**	**130**	**130**	**170**	**210**	**170 J-**	**150 J-**
	Thallium	mg/kg	<0.51	<0.54	<0.58	<0.67	<0.55	<0.60	<0.61	<0.57	<0.63	<0.60	<0.51	<0.55	<0.59	<0.59	<0.58	<0.60
	Tungsten	mg/kg	3.0 UJ	3.2 UJ	3.2 UJ	3.6 UJ	6.5 UJ	3.4 UJ	3.4 UJ	6.0 UJ	3.2 UJ	6.8 UJ	2.9 UJ	2.9 UJ	3.1 UJ	6.2 UJ	6.2 UJ	3.1 UJ
	Uranium (total)	mg/kg	**0.96**	**1.1**	**1.5**	**1.5**	**1.4**	**1.3**	**1.6**	**1.0**	**0.90**	**1.6**	**0.86**	**0.82**	**1.3**	**1.3**	**1.7**	**1.6**
	Vanadium	mg/kg	**38 J+**	**60 J+**	**40 J+**	**40 J+**	**23 J+**	**38 J+**	**43 J+**	**24 J+**	**43 J+**	**29 J+**	**49 J+**	**55 J+**	**37 J+**	**34 J+**	**22**	**24**
	Zirconium	mg/kg	**32 J+**	**38 J+**	**42 J+**	**34 J+**	**18 J+**	**37 J+**	**42 J+**	**22 J+**	**39 J+**	**34 J+**	**33 J+**	**26 J+**	**34 J+**	**31 J+**	**41 J+**	**39 J+**
Radionuclides	Radium-226	pCi/g	**0.961**	**0.892**	**1.42**	**0.627**	**0.601**	**0.554**	**0.726**	**0.636**	**0.764**	**0.768**	**0.733**	**0.878**	**0.941**	**0.851**	**0.918**	**0.493**
	Radium-228	pCi/g	**0.465**	**0.606**	**1.17**	**0.785**	**0.557**	**0.892**	**1.10**	**0.474**	**1.12**	**0.659**	**1.34**	**0.841**	**0.887**	**1.30**	**0.488 U**	**0.541 J**
	Thorium-228	pCi/g	**1.05**	**1.40**	**1.51**	**1.26**	**0.961**	**1.11**	**1.62**	**1.03**	**1.40**	**0.956**	**1.60**	**1.34**	**1.32**	**1.46**	**0.989**	**1.03**
	Thorium-230	pCi/g	**0.703**	**0.801**	**0.862**	**0.781**	**0.962**	**0.971**	**1.30**	**1.06**	**0.958**	**0.923**	**0.990**	**0.952**	**0.795**	**1.05**	**0.454**	**0.936**
	Thorium-232	pCi/g	**0.939**	**1.23**	**1.49**	**1.09**	**0.967**	**1.16**	**1.53**	**0.806**	**1.37**	**0.935**	**1.79**	**1.32**	**0.825**	**1.17**	**0.430**	**1.04**
	Uranium-234	pCi/g	**0.698**	**0.791**	**0.814**	**0.789**	**0.805**	**0.948**	**1.05**	**0.783**	**0.684**	**0.960**	**0.800**	**0.749**	**0.752**	**0.844**	**0.786**	**0.918**
	Uranium-235	pCi/g	**0.0548 U**	**0.0975**	**0.0397 U**	**0.0427**	**0.0139 U**	**0.0592**	**0.0789**	**0.0117 U**	**0.0366 U**	**0.0679**	**0.0589**	**0.0132 U**	**0.0408**	**0.000 U**	**0.0220 U**	**0.0285 U**
	Uranium-238	pCi/g	**0.606**	**0.686**	**0.747**	**0.873**	**0.658**	**0.864**	**0.866**	**0.456**	**0.696**	**0.756**	**0.873**	**0.749**	**0.729**	**0.640**	**0.723**	**0.879**

Notes:

mg/kg: milligrams per kilogram

pCi/g: picocuries per gram

bold value: detection

<: Not detected above laboratory reporting limits

U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration

J+ qualifier indicates an estimated detected concentration with a positive bias

J- qualifier indicates an estimated detected concentration with a negative bias

UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 5. RI UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	RIBK-10								RIBK-12							
			RIBK-10-15.0-20180613	RIBK-10-18.0-20180613	RIBK-10-21.0-20180613	RIBK-10-24.0-20180613	RIBK-10-27.0-20180613	RIBK-10-30.0-20180613	RIBK-10-33.0-20180613	RIBK-10-36.0-20180613	RIBK-12-8.0-20180613	RIBK-12-8.0-20180613-FD	RIBK-12-11.0-20180613	RIBK-12-14.0-20180613	RIBK-12-17.0-20180613	RIBK-12-20.0-20180613	RIBK-12-23.0-20180613	RIBK-12-26.0-20180613
Metals	Aluminum	mg/kg	14,000	19,000	13,000	11,000	13,000	8,900	8,500	7,400	11,000	13,000	17,000	12,000	13,000	12,000	9,200	12,000
	Antimony	mg/kg	0.56 UJ	0.59 UJ	0.58 UJ	0.54 UJ	0.51 UJ	0.49 UJ	0.52 UJ	0.55 UJ	0.55 UJ	0.56 UJ	0.59 UJ	0.53 UJ	0.56 UJ	0.50 UJ	0.49 UJ	0.54 UJ
	Arsenic	mg/kg	19	18	20	10	13	12	31	15	31	32	27	22	23	15	15	14
	Barium	mg/kg	580	130 J	64	63	160	120	77	94	81	80	72	24	76	590	80	86
	Boron	mg/kg	10	13	6.7	4.9 J	8.4	4.2 J	3.3 J	<2.9	28 J	33	28	16	19 J	6.2	6.0 J	4.2 J
	Cadmium	mg/kg	<0.32	<0.33	<0.31	<0.30	<0.29	<0.28	<0.28	<0.29	<1.5	<0.60	<0.33	<0.62	<1.5	<0.29	<0.55	<0.29
	Chromium (total)	mg/kg	36 J+	29	29 J+	26 J+	19 J+	16 J+	27 J+	23 J+	16 J+	22 J+	19 J+	18 J+	16 J+	22 J+	17 J+	19 J+
	Chromium VI	mg/kg	<0.19	<0.20	<0.19	<0.18	<0.17	<0.17	<0.17	<0.17	<0.18	<0.18	<0.20	<0.19	1.3	<0.18	<0.16	<0.18
	Cobalt	mg/kg	17	8.7	7.7	8.9	11	7.8	8.7	7.6	5.9 J	4.9	8.7	6.6	6.1	7.0	7.2	7.1
	Copper	mg/kg	14	19 J-	16	16	16	12	16	12	<6.6	7.0	14	9.3	<6.5	13	8.2	17
	Iron	mg/kg	18,000	21,000	17,000	17,000	21,000	15,000	21,000	16,000	12,000	13,000	17,000	14,000	14,000	18,000	13,000	21,000
	Lead	mg/kg	12	9.6	6.3	7.8	9.7	8.2	7.6	5.4	6.6 J	6.6	10	5.2	<5.9	6.6	6.1	7.9
	Magnesium	mg/kg	10,000	14,000	9,300	8,100	9,400	7,000	7,400	6,500	12,000	13,000	16,000	9,100	10,000	8,800	7,500	8,300
	Manganese	mg/kg	810 J-	460	440 J-	520 J-	490 J-	440 J-	730 J-	1,200 J-	560 J-	440 J-	480 J-	230 J-	780 J-	210 J-	340 J-	330 J-
	Mercury	mg/kg	<0.015	<0.016	<0.015	<0.015	<0.014	<0.014	<0.014	<0.013	<0.014	<0.014	<0.015	<0.015	<0.014	<0.014	<0.013	<0.014
	Molybdenum	mg/kg	<1.3	<1.3	<1.3	<1.2	<1.2	<1.1	<1.1	<1.1	<6.0	<2.4	2.4 J	<2.5	<5.9	<1.2	<2.2	<1.2
	Nickel	mg/kg	20	22	16	19	21	14	19	16	14	14	19	13	16	16	12	17
	Palladium	mg/kg	<0.11	<0.12	<0.12	<0.11	<0.10	<0.099	<0.10	<0.11	<0.11	<0.11	<0.12	<0.11	<0.11	<0.10	<0.098	<0.11
	Phosphorus (total)	mg/kg	500	1,000	1,100	1,200	1,100	940	1,400	1,300	680	720	920	670	790	1,100	830	1,100
	Selenium	mg/kg	1.7	1.7	2.7	1.9	2.4	2.0	2.7	1.4	1.3 J	0.91 J	1.6	1.9	1.2 J	1.9	1.4	1.9
	Silver	mg/kg	<1.1	<1.2	<1.1	<1.1	<1.0	<1.0	<0.99	<1.0	<5.3	<2.1	<1.2	<2.2	<5.3	<1.0	<2.0	<1.0
	Strontium	mg/kg	160 J-	170 J+	150 J-	130 J-	170 J-	130 J-	110 J-	97 J-	580 J-	410 J-	280 J-	140 J-	110 J-	150 J-	150 J-	150 J-
	Thallium	mg/kg	<0.56	<0.59	<0.58	<0.54	<0.51	<0.49	<0.52	<0.55	<0.55	<0.56	<0.59	<0.53	<0.56	<0.50	<0.49	<0.54
	Tungsten	mg/kg	3.2 UJ	<3.3	3.1 UJ	3.0 UJ	2.9 UJ	2.8 UJ	2.8 UJ	2.9 UJ	15 UJ	6.0 UJ	3.3 UJ	6.2 UJ	15 UJ	2.9 UJ	5.5 UJ	2.9 UJ
	Uranium (total)	mg/kg	1.7	1.3	1.3	1.1	1.1	1.1	1.3	0.99	5.3	5.5	2.7	1.3	1.4	1.0	1.1	1.2
	Vanadium	mg/kg	47	46	51	48	56	41	60	49	25	29	39	31	25	44	31	58
	Zirconium	mg/kg	38 J+	46	48 J+	34 J+	44 J+	31 J+	27 J+	23 J+	<30	28 J+	41 J+	36 J+	<30	40 J+	29 J+	42 J+
Radionuclides	Radium-226	pCi/g	0.833	0.915	0.881	0.807	0.988	0.659	0.908	0.805	0.991	0.736	0.897	0.736	0.665	0.903	0.591	0.824
	Radium-228	pCi/g	0.965 J	0.708 J	0.806 J	0.951 J	0.825 J	0.560 J	1.10	0.852 J	0.419 J	0.457 J	0.615 J	0.798 J	0.644 J	0.810 J	0.531 J	1.42
	Thorium-228	pCi/g	1.60	1.21	1.15	1.81	1.55	1.60	1.44	1.17	0.895	0.747	2.25	1.13	0.913	1.74	0.922	1.68
	Thorium-230	pCi/g	1.02	1.03	0.879	1.01	0.959	1.19	0.872	0.982	0.992	1.05	1.48	1.05	0.785	1.00	0.572	1.03
	Thorium-232	pCi/g	1.55	1.52	1.28	1.49	1.44	1.67	1.29	1.03	0.688	0.883	2.11	1.01	0.944	1.50	0.728	1.74
	Uranium-234	pCi/g	1.04	1.02	0.955	1.16	0.884	1.02	0.934	1.06	3.10	3.48	1.99	0.864	0.686	0.917	0.681	1.05
	Uranium-235	pCi/g	0.0324 U	0.0502	0.0773	0.0595	0.00943 U	0.0722	0.132	0.110	0.124	0.108	0.180	0.0240 U	0.0422 U	0.0955	0.0790	0.0267 U
	Uranium-238	pCi/g	1.12	0.827	1.03	0.795	0.855	0.909	1.03	0.901	1.78	1.83	1.47	0.727	0.511	0.825	0.515	1.00

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 5. RI UMCf Background Analytical Results
Nevada Environmental Response Trust Site
Henderson, Nevada

Chemical Group	Chemical	Unit	RIBK-12		RIBK-13							
			RIBK-12-29.0-20180613	RIBK-12-32.0-20180613	RIBK-13-14.0-20180614	RIBK-13-17.0-20180614	RIBK-13-20.0-20180614	RIBK-13-23.0-20180614	RIBK-13-26.0-20180614	RIBK-13-29.0-20180614	RIBK-13-32.0-20180614	RIBK-13-35.0-20180614
Metals	Aluminum	mg/kg	**12,000**	**11,000**	**27,000**	**21,000**	**17,000**	**17,000**	**27,000**	**18,000**	**13,000**	**9,100**
	Antimony	mg/kg	0.54 UJ	0.48 UJ	0.60 UJ	0.63 UJ	0.66 UJ	0.60 UJ	0.62 UJ	0.59 UJ	0.59 UJ	0.58 UJ
	Arsenic	mg/kg	**26**	**13**	**30**	**26**	**30**	**23**	**31**	**27**	**15**	**12**
	Barium	mg/kg	**410**	**110**	**120**	**57**	**110**	**69**	**52**	**180**	**86**	**110**
	Boron	mg/kg	**6.4**	**5.1 J**	**16**	**18**	**18**	**14**	**15**	**14**	**7.6 J**	**3.0 J**
	Cadmium	mg/kg	<0.31	<0.29	<0.35	<0.70	<0.71	<0.32	<0.35	<0.64	<0.62	<0.29
	Chromium (total)	mg/kg	**16 J+**	**17 J+**	**56**	**31**	**21**	**18**	**30**	**18**	**20**	**13**
	Chromium VI	mg/kg	<0.19	<0.17	<0.21	<0.21	<0.21	<0.20	**0.31 J**	<0.19	<0.18	<0.18
	Cobalt	mg/kg	**6.1**	**8.4**	**12**	**6.6**	**7.0**	**6.2**	**10**	**7.6**	**7.1**	**4.1**
	Copper	mg/kg	**12**	**14**	**27**	**14**	**13**	**13**	**24**	**14**	**9.5**	**5.9**
	Iron	mg/kg	**17,000**	**17,000**	**26,000**	**19,000**	**17,000**	**15,000**	**24,000**	**17,000**	**14,000**	**9,600**
	Lead	mg/kg	**8.3**	**8.5**	**15**	**10**	**10**	**7.3**	**11**	**11**	**8.5**	**4.4**
	Magnesium	mg/kg	**10,000**	**7,900**	**20,000**	**15,000**	**14,000**	**13,000**	**20,000**	**13,000**	**11,000**	**9,500**
	Manganese	mg/kg	**380 J-**	**380 J-**	**740**	**340**	**310**	**270**	**390**	**430**	**420**	**210**
	Mercury	mg/kg	<0.014	<0.014	<0.017	**0.032**	<0.017	<0.016	**0.022 J**	<0.015	<0.015	<0.014
	Molybdenum	mg/kg	<1.2	<1.2	**1.7 J**	<2.8	<2.8	<1.3	<1.4	<2.6	<2.5	<1.2
	Nickel	mg/kg	**15**	**14**	**33**	**18**	**16**	**16**	**24**	**18**	**15**	**8.8**
	Palladium	mg/kg	<0.11	<0.097	<0.12	<0.13	<0.13	<0.12	<0.12	<0.12	<0.12	<0.12
	Phosphorus (total)	mg/kg	**860**	**950**	**1,200**	**720**	**670**	**720**	**920**	**820**	**670**	**500**
	Selenium	mg/kg	**2.2**	**1.7**	**2.4**	**2.3**	**1.8**	**1.4 J**	**1.9**	**1.3 J**	**1.1 J**	<0.93
	Silver	mg/kg	<1.1	<1.0	<1.3	<2.5	<2.5	<1.2	<1.3	<2.3	<2.2	<1.0
	Strontium	mg/kg	**150 J-**	**100 J-**	**140**	**140**	**140**	**130**	**110**	**140**	**140**	**110**
	Thallium	mg/kg	<0.54	<0.48	<0.60	<0.63	<0.66	<0.60	<0.62	<0.59	<0.59	<0.58
	Tungsten	mg/kg	3.1 UJ	2.9 UJ	3.5 UJ	7.0 UJ	<7.1	<3.2	<3.5	<6.4	<6.2	<2.9
	Uranium (total)	mg/kg	**1.4**	**1.1**	**1.5**	**1.5**	**1.4**	**1.1**	**1.4**	**1.2**	**0.75**	**0.56**
	Vanadium	mg/kg	**41**	**46**	**53 J+**	**32 J+**	**31**	**29**	**47**	**31**	**29**	**23**
	Zirconium	mg/kg	**33 J+**	**29 J+**	**38 J+**	**35 J+**	**26**	**28**	**40**	**34**	**25**	**15**
Radionuclides	Radium-226	pCi/g	**0.920**	**1.14**	**0.887**	**0.668**	**0.654**	**0.426**	**0.962**	**0.992**	**0.623**	**0.498**
	Radium-228	pCi/g	**0.718 J**	**0.889 J**	**1.38**	**1.07**	**0.835**	**0.889**	**1.16**	**0.493**	**0.429**	**0.465**
	Thorium-228	pCi/g	**1.34**	**1.69**	**1.51**	**1.38**	**1.23**	**1.04**	**1.34**	**1.20**	**1.13**	**0.706**
	Thorium-230	pCi/g	**0.971**	**1.02**	**1.02**	**0.747**	**0.815**	**0.639**	**1.11**	**1.02**	**0.892**	**0.611**
	Thorium-232	pCi/g	**1.07**	**1.40**	**1.42**	**1.36**	**1.36**	**0.942**	**1.39**	**0.906**	**0.859**	**0.611**
	Uranium-234	pCi/g	**0.844**	**0.841**	**0.951**	**0.772**	**0.722**	**0.780**	**0.978**	**0.774**	**0.570**	**0.533**
	Uranium-235	pCi/g	**-0.00539 U**	**0.0141 U**	**0.0271 U**	**0.0571**	**0.0364 U**	**0.0533 U**	**0.0864**	**0.0760**	**0.0329 U**	**0.0137 U**
	Uranium-238	pCi/g	**0.618**	**0.830**	**0.938**	**0.891**	**0.818**	**0.904**	**0.917**	**0.833**	**0.578**	**0.391**

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
bold value: detection
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

TABLE 6. UMCf Secular Equilibrium Analysis[1]
Nevada Environmental Response Trust Site
Henderson, Nevada

Data Set	Decay Chain	p-value	Conclusion[2]	Delta	Sample Size[3]	Number Missing[4]	Analyte	Mean Proportions of Radioactivity	95% Confidence Intervals		Shifts[5]
									Lower	Upper	
BRC 2008 UMCf Background Data Set	Uranium (U-238)	<0.0001	in Secular Equilibrium	0.1	16	8	Radium-226	0.2409	0.2090	0.2729	0
							Thorium-230	0.2473	0.2073	0.2873	0
							Uranium-234	0.2574	0.2412	0.2737	0
							Uranium-238	0.2544	0.2371	0.2716	0
	Thorium (Th-232)	<0.0001	in Secular Equilibrium	0.1	18	6	Radium-228	0.3162	0.2963	0.3360	0
							Thorium-228	0.3435	0.3233	0.3636	0
							Thorium-232	0.3403	0.3151	0.3656	0
NERT RI UMCf Background Data Set	Uranium (U-238)	<0.0001	in Secular Equilibrium	0.1	46	0	Radium-226	0.2331	0.2085	0.2577	0
							Thorium-230	0.2662	0.2450	0.2875	0
							Uranium-234	0.2664	0.2413	0.2915	0
							Uranium-238	0.2343	0.2186	0.2500	0
	Thorium (Th-232)	0.5000	Not in Secular Equilibrium	0.1	46	0	Radium-228	0.2423	0.2235	0.2611	0
							Thorium-228	0.3948	0.3778	0.4117	0
							Thorium-232	0.3629	0.3465	0.3794	0
Full Combined UMCf Background Data Set	Uranium (U-238)	<0.0001	in Secular Equilibrium	0.1	62	8	Radium-226	0.2351	0.2160	0.2542	0
							Thorium-230	0.2613	0.2435	0.2792	0
							Uranium-234	0.2641	0.2455	0.2827	0
							Uranium-238	0.2395	0.2270	0.2519	0
	Thorium (Th-232)	0.1608	Not in Secular Equilibrium	0.1	64	6	Radium-228	0.2631	0.2447	0.2815	0
							Thorium-228	0.3803	0.3650	0.3957	0
							Thorium-232	0.3566	0.3429	0.3702	0
Final Combined UMCf Background Data Set	Uranium (U-238)	<0.0001	in Secular Equilibrium	0.1	46	0	Radium-226	0.2331	0.2085	0.2577	0
							Thorium-230	0.2662	0.2450	0.2875	0
							Uranium-234	0.2664	0.2413	0.2915	0
							Uranium-238	0.2343	0.2186	0.2500	0
	Thorium (Th-232)	<0.0001	in Secular Equilibrium	0.1	18	52	Radium-228	0.3162	0.2963	0.3360	0
							Thorium-228	0.3435	0.3233	0.3636	0
							Thorium-232	0.3403	0.3151	0.3656	0

Notes:

1. Analyzed using R code from Neptune and Company, Inc.
2. Decay chain is in secular equilibrium if the computed *p*-value is less than a standard significance level of 0.05.
3. Sample dataset includes field duplicates.
4. Count of sampling locations for which one or more results are unavailable.
   These sampling locations are not counted in the sample size and are not included in the secular equilibrium calculation.
5. Data Shift - Lists the values of the data shift utililzed by the R code in case of negative radioactivity measurements. All measurements values for that radioisotope are shifted upwards by the shift value so that all values are non-negative. A zero shift value indicates lack of negative measurements.

TABLE 7. Combined UMCf Background Statistical Summary
Nevada Environmental Response Trust Site
Henderson, Nevada

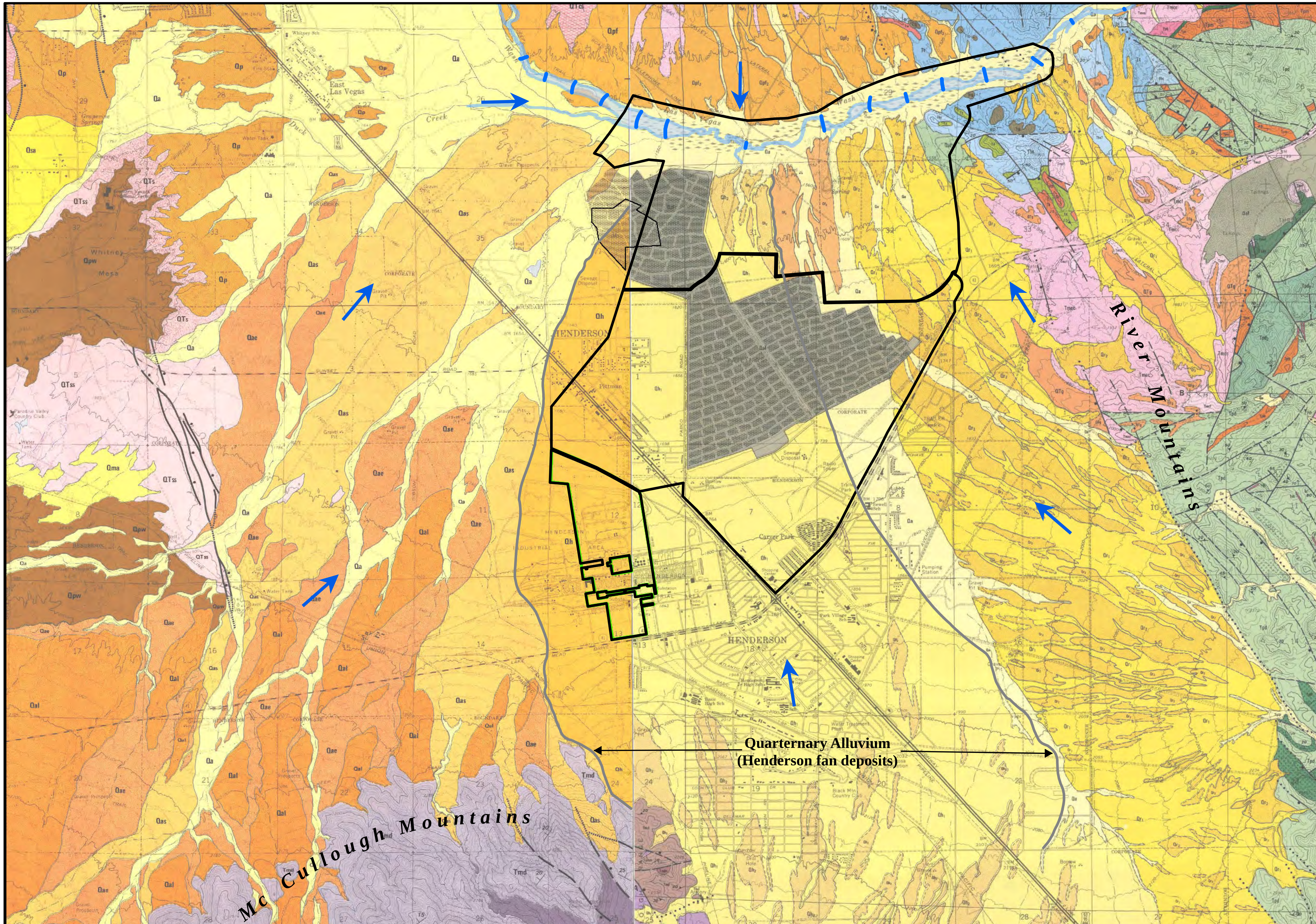
Chemical Group	Chemical	Unit	No. of Samples	No. of Detects	% Detects	Nondetects		Detects					
						Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Interquartile Range
	Aluminum	mg/kg	70	70	100	--	--	3,190	27,000	13,000	14,000	5,400	8,200
	Antimony	mg/kg	24	23	95.8	0.105 UJ	0.105 UJ	0.066 J-	0.34 J-	0.16	0.18	0.06	0.045
	Arsenic	mg/kg	70	70	100	--	--	2.1	45	18	20	12	19
	Barium	mg/kg	70	70	100	--	--	24	690	120	210	180	190
	Beryllium	mg/kg	24	24	100	--	--	0.17	1.1	0.59	0.56	0.24	0.31
	Boron	mg/kg	70	52	74.3	<2.82	<3.53	3.0 J	33	10	12	7.2	10
	Cadmium	mg/kg	24	18	75	<0.01	<0.01	0.06	0.2	0.11	0.11	0.033	0.03
	Chromium (total)	mg/kg	70	70	100	--	--	2.9	56 J+	19	20	9.9	8.5
	Chromium VI	mg/kg	69	8	11.6	<0.16	<0.21	0.18 J	1.3	0.24	0.42	0.4	0.21
	Cobalt	mg/kg	70	70	100	--	--	1.6	17	7.5	7.3	2.6	2.6
	Copper	mg/kg	70	68	97.1	<6.5	<6.6	4.1	27	14	14	4.7	5.7
	Iron	mg/kg	70	70	100	--	--	3,620	26,000	17,000	16,000	4,800	5,100
	Lead	mg/kg	70	69	98.6	<5.9	<5.9	4.4 J-	16.1	9.3	9.5	2.8	3.2
	Lithium	mg/kg	24	24	100	--	--	18.3	189	32	53	52	23
	Magnesium	mg/kg	70	70	100	--	--	2,780 J+	31,000 J	12,000	12,000	4,800	5,700
	Manganese	mg/kg	70	70	100	--	--	126	1,200 J-	380	400	190	180
Metals	Mercury	mg/kg	66	11	16.7	<0.00668	<0.017	0.008 J	0.12	0.015	0.025	0.032	0.011
	Molybdenum	mg/kg	70	25	35.7	<0.105	<6.0	0.12 J	2.4 J	0.52	0.65	0.5	0.33
	Nickel	mg/kg	70	70	100	--	--	4.5	33	16	17	5.5	5.9
	Niobium	mg/kg	24	1	4.2	<1.51	1.89 UJ	4 J	4 J	4	4	--	--
	Palladium	mg/kg	70	24	34.3	<0.097	<0.13	0.16	1	0.61	0.55	0.24	0.43
	Phosphorus (total)	mg/kg	70	70	100	--	--	299 J	1,400	900	870	260	350
	Platinum	mg/kg	24	2	8.3	<0.02	<0.025	0.027 J	0.033 J	0.03	0.03	0.0042	--
	Selenium	mg/kg	70	45	64.3	<0.32	<0.93	0.91 J	3.0	1.9	1.9	0.5	0.7
	Silver	mg/kg	24	24	100	--	--	0.051 J+	0.82	0.14	0.21	0.18	0.18
	Strontium	mg/kg	70	70	100	--	--	68.5	580 J-	160	180	79	72
	Thallium	mg/kg	24	0	0	<0.2	<0.25	--	--	--	--	--	--
	Tin	mg/kg	24	20	83.3	<0.0526	<0.0526	0.24	0.96	0.6	0.56	0.21	0.37
	Titanium	mg/kg	24	24	100	--	--	175 J+	1,000	560	500	200	340
	Tungsten	mg/kg	24	5	20.8	<0.2	0.25 UJ	0.26 J-	0.58 J-	0.33	0.38	0.14	0.19
	Uranium (total)	mg/kg	70	70	100	--	--	0.31	5.5	1.2	1.4	0.89	0.5
	Vanadium	mg/kg	70	70	100	--	--	10 J+	60 J+	38	36	12	16
	Zinc	mg/kg	24	24	100	--	--	16.1	61.3	34	34	12	16
	Zirconium	mg/kg	70	68	97.1	<30	<30	6.2 J	48 J+	29	29	10	16
	Radium-226	pCi/g	46	46	100	--	--	0.426	1.42	0.82	0.81	0.18	0.25
	Radium-228	pCi/g	18	18	100	--	--	0.989 J-	1.55 J-	1.3	1.2	0.17	0.26
	Thorium-228	pCi/g	70	70	100	--	--	0.706	2.25	1.3	1.3	0.29	0.39
Radionuclides	Thorium-230	pCi/g	46	46	100	--	--	0.454	1.48	0.96	0.92	0.19	0.22
	Thorium-232	pCi/g	70	70	100	--	--	0.430	2.11	1.2	1.2	0.31	0.41
	Uranium-234	pCi/g	46	46	100	--	--	0.533	3.48	0.84	0.98	0.54	0.18
	Uranium-235	pCi/g	68	68	100	--	--	-0.00539 U	0.180	0.042	0.049	0.034	0.039
	Uranium-238	pCi/g	46	46	100	--	--	0.391	1.83	0.82	0.84	0.28	0.21

Notes:

mg/kg: milligrams per kilogram
pCi/g: picocuries per gram
<: Not detected above laboratory reporting limits
U: For radionuclides, result shown is below the minimum detectable concentration

J qualifier indicates an estimated detected concentration
J+ qualifier indicates an estimated detected concentration with a positive bias
J- qualifier indicates an estimated detected concentration with a negative bias
UJ qualifier indicates a non-detected concetration with an estimated detection limit

FIGURES



LEGEND:

- NERT RI Study Area Operable Unit Boundaries
- Las Vegas Wash
- Weirs
- Direction of Groundwater Flow

Basemap sources:
Bell J.W. and Smith E.I. Geologic map of the Henderson Quadrangle, Nevada
Nevada Bureau of Mines and Geology, Map 67
1980

Bingler. E. C. Las Vegas SE Folio Geologic Map.
Nevada Bureau of Mines and Geology,
Environmental Series. 1977.

N

0 2,000 4,000 Feet

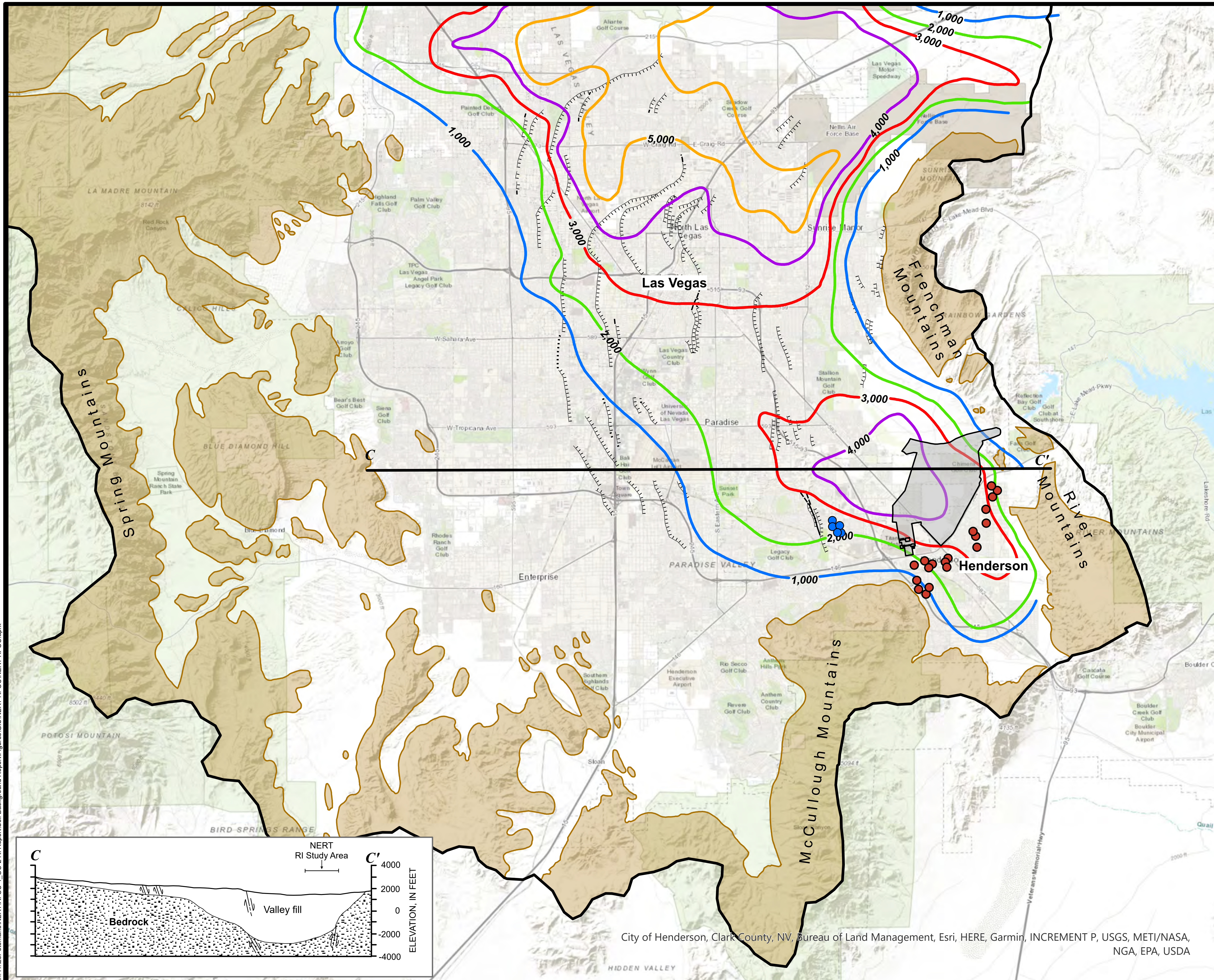
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Surficial_Geology.mxd

RAMBOLL

Surficial Geology
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **1a**

Drafter: RS | Date: 5/14/2019 | Contract Number: 169002 0169 | Approved by: | Revised:



LEGEND:

- RI UMCf Sample Location
- 2008 BRC Deep Soil Sample Location
- Las Vegas Valley Hydrologic Basin
- NERT RI Study Area
- 1,000 Line of Equal Thickness of Valley-Fill Deposits (feet)
- Fault scarp. Hachures on down thrown side. May not mark exact trace owing to erosion of scarp.

Note:
Adapted from Plume, R.W., 1989.
U.S. Geological Survey Water-Supply Paper 2320-A.

N

0 2.5 5 Miles

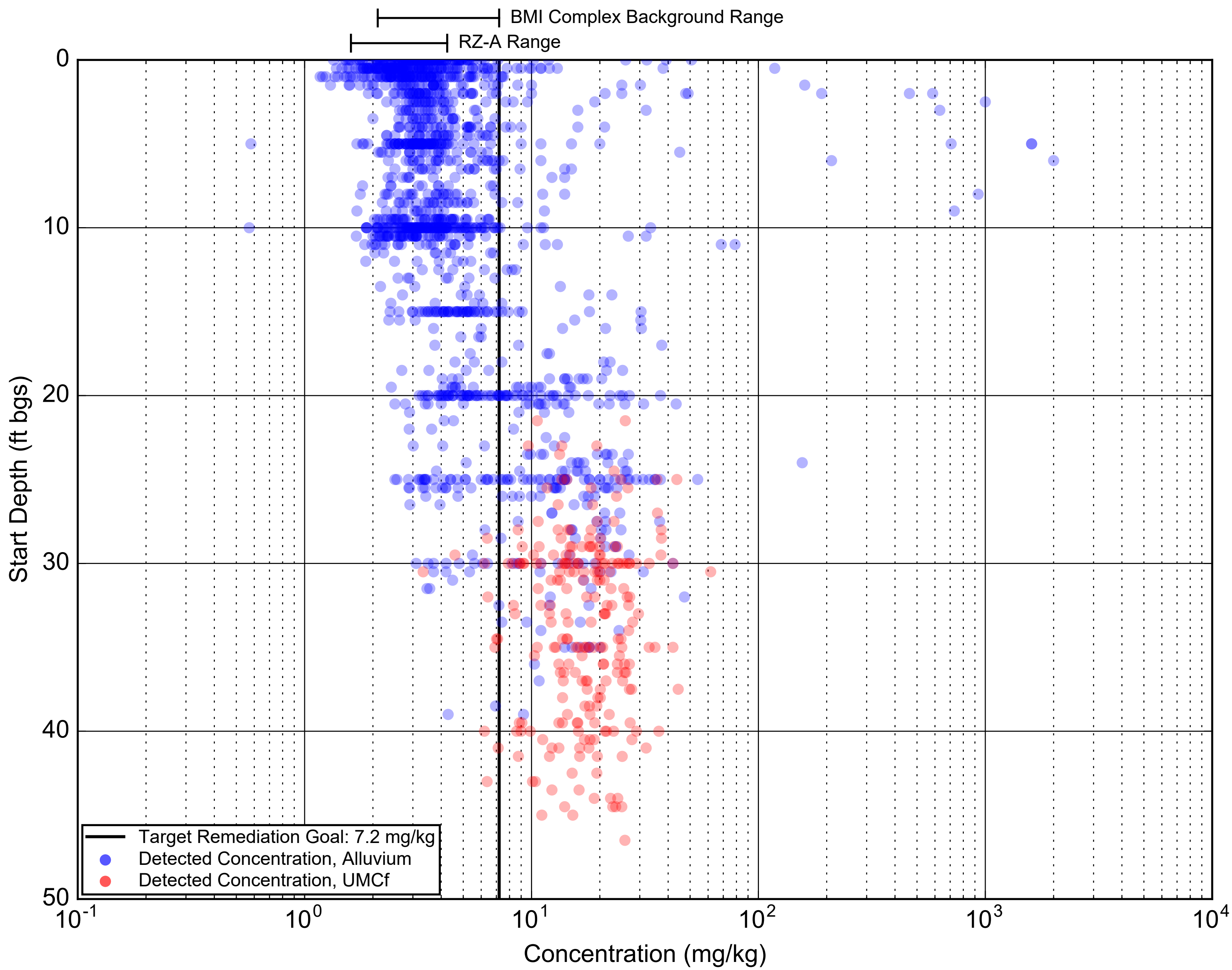
RAMBOLL

Las Vegas Valley Basin Fill Thickness
Nevada Environmental Response Trust Site
Henderson, Nevada

Date: 1/29/2021	Contract Number: 169002 0169		Figure
Drafter: RS	Approved:	Revised:	1b

Path: H:\LePetomane\NERT\RI OU-1_OU-2 RI Report\Soil Background Report\Figures\GIS\NERT RI-OU\NERT RI-OU.aprx

Path: ramboll\projects\NERT\RI_Evaluation\Soil_Evaluation\ConcvDepth.py



RAMBOLL

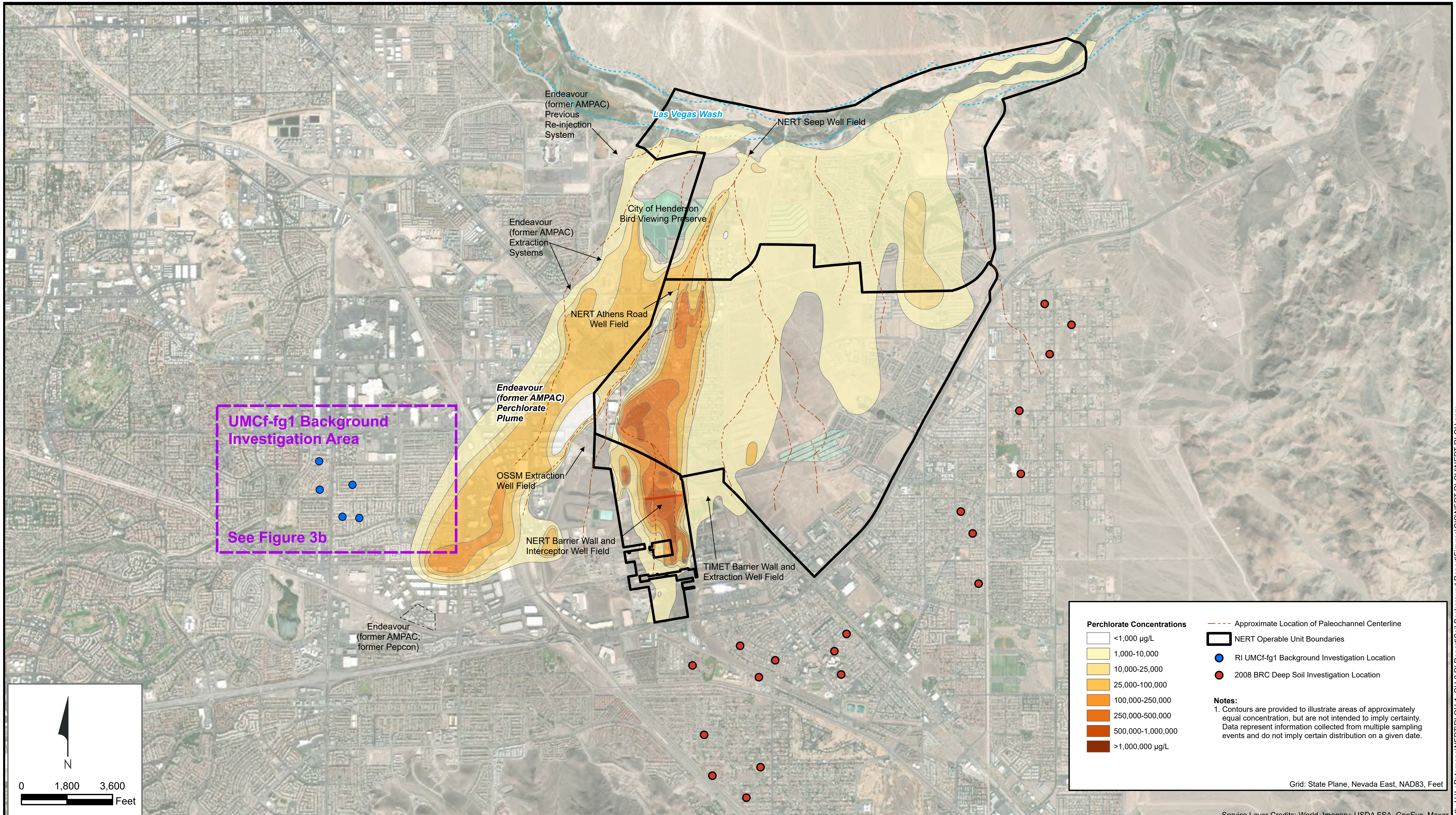
On-Site Arsenic Soil Concentrations vs. Sample Depth

Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson Nevada

Figure

2

Drafter: JH | Date: 04/28/2019 | Contract Number: 169002 0169 | Approved: | Revised:



RAMBOLL

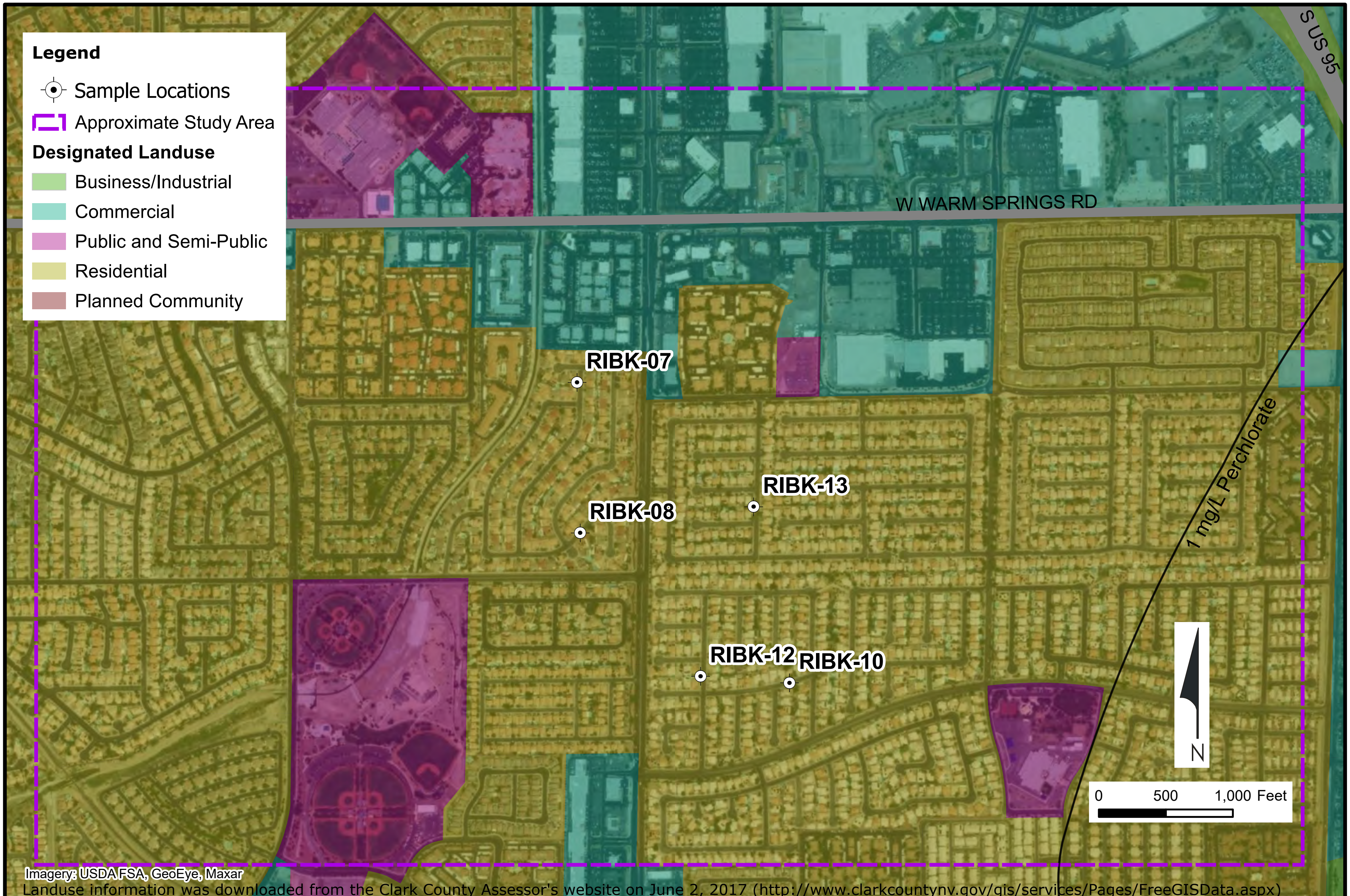
Area Overview

Soil Background Data Set Summary Report

Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **3a**

Drafter: RS | Date: 3/12/2021 | Contract Number: 169002 0169 | Approved by: | Revised:



RAMBOLL

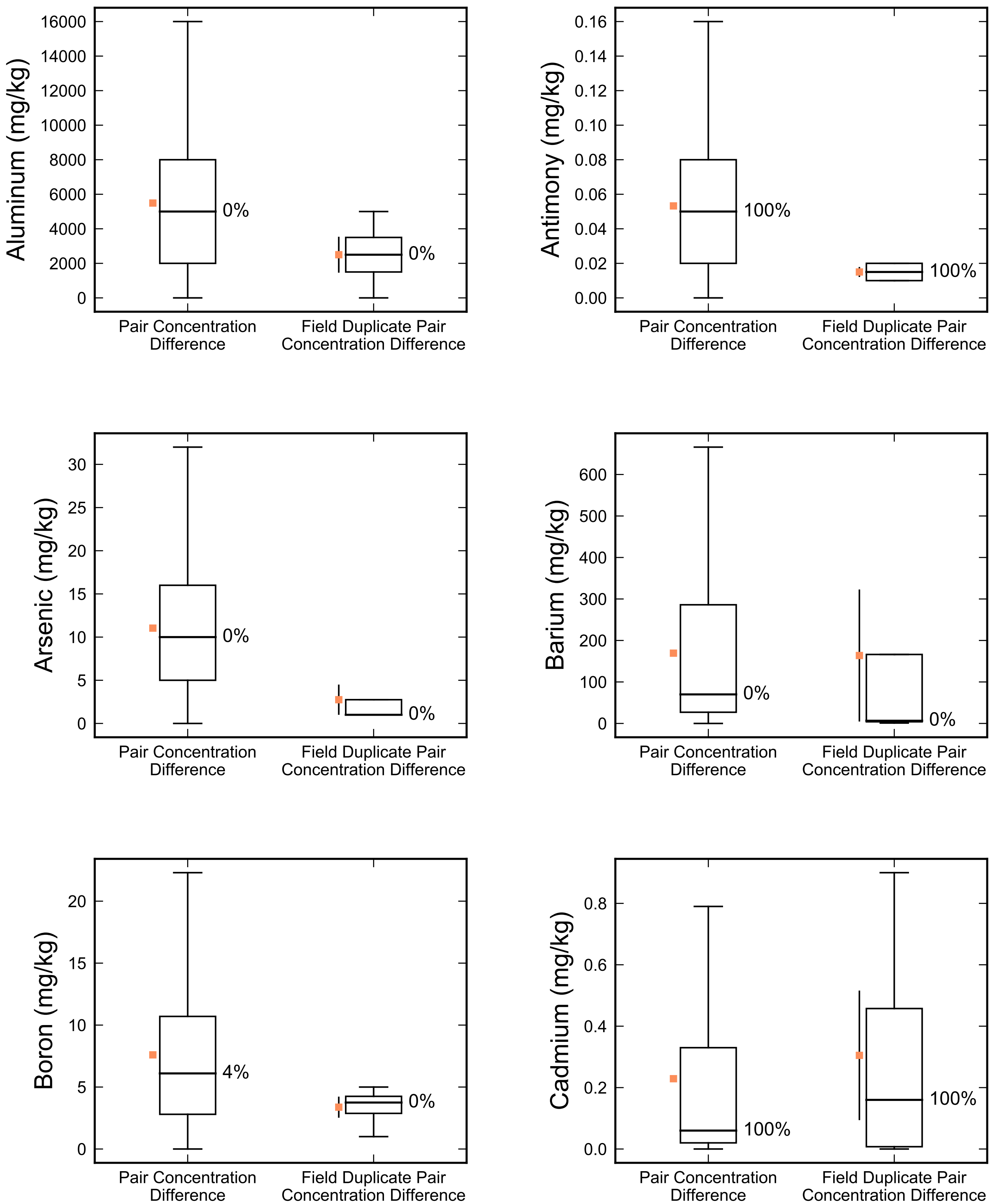
UMCf Background - Soil Boring Locations

Soil Background Data Set Summary Report
Nevada Environmental Response Trust
Henderson, Nevada

Figure **3b**

Drafter: RS | Date: 3/12/2021 | Contract Number: 169002 0169 | Approved: | Revised:

Path: H:\LePetomane\NERT\RI OU-1_OU-2 RI Report\Soil Background Report\Figures\GIS\NERT RI-OU\NERT RI-OU.aprx



Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

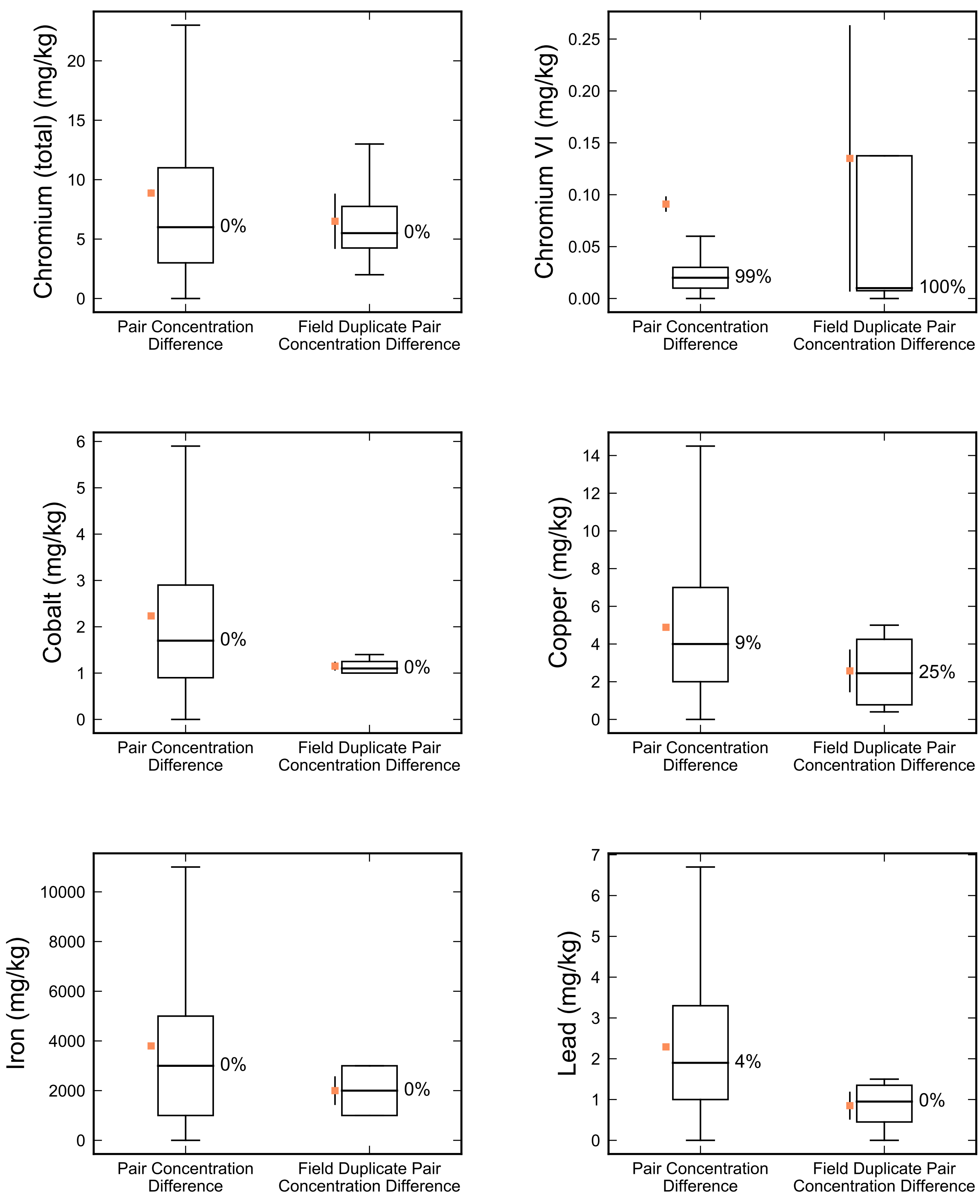
Mean (with standard error)

RAMBOLL

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
4a

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:



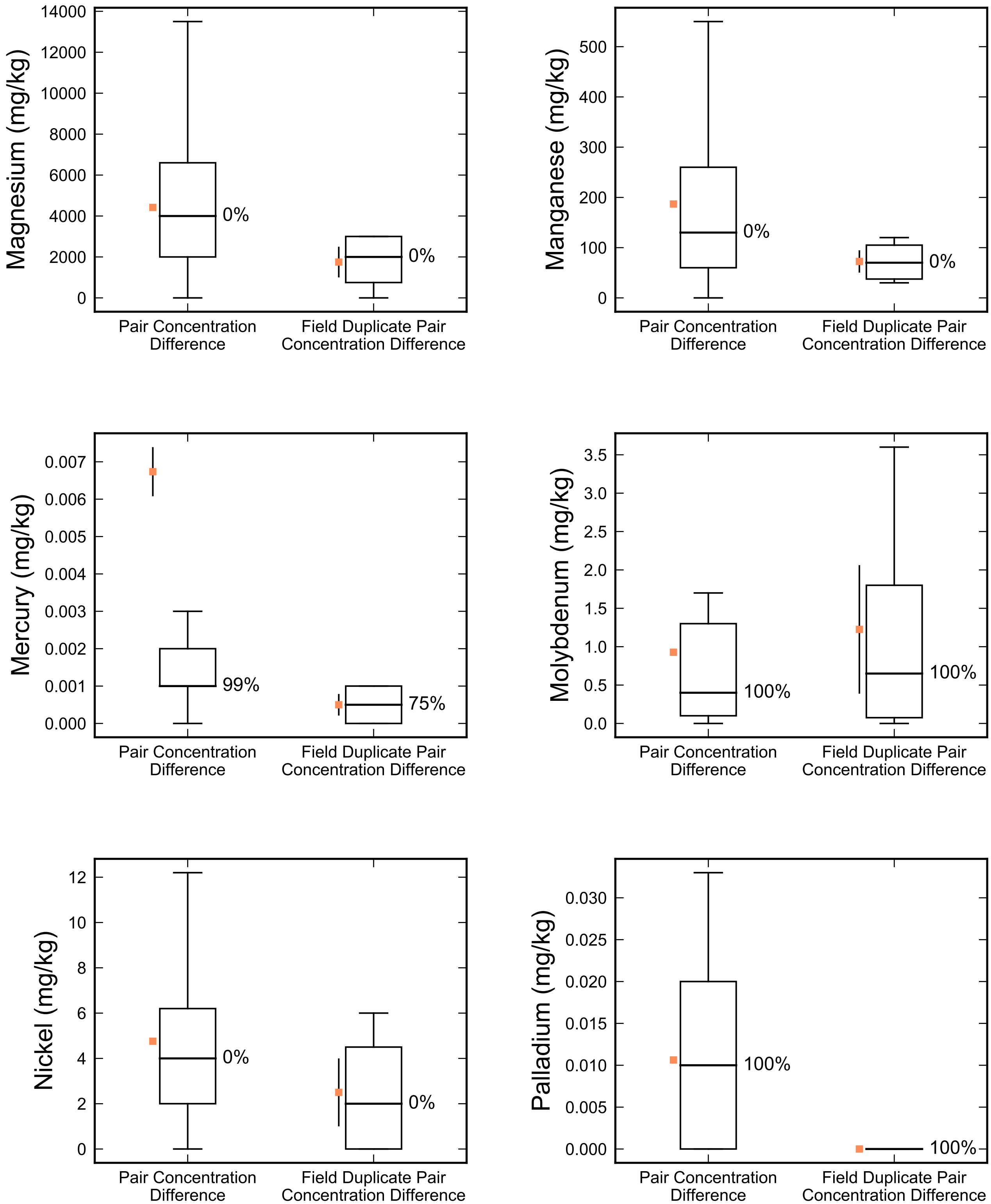
Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

Mean (with standard error)

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
4b

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:



Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

Mean (with standard error)

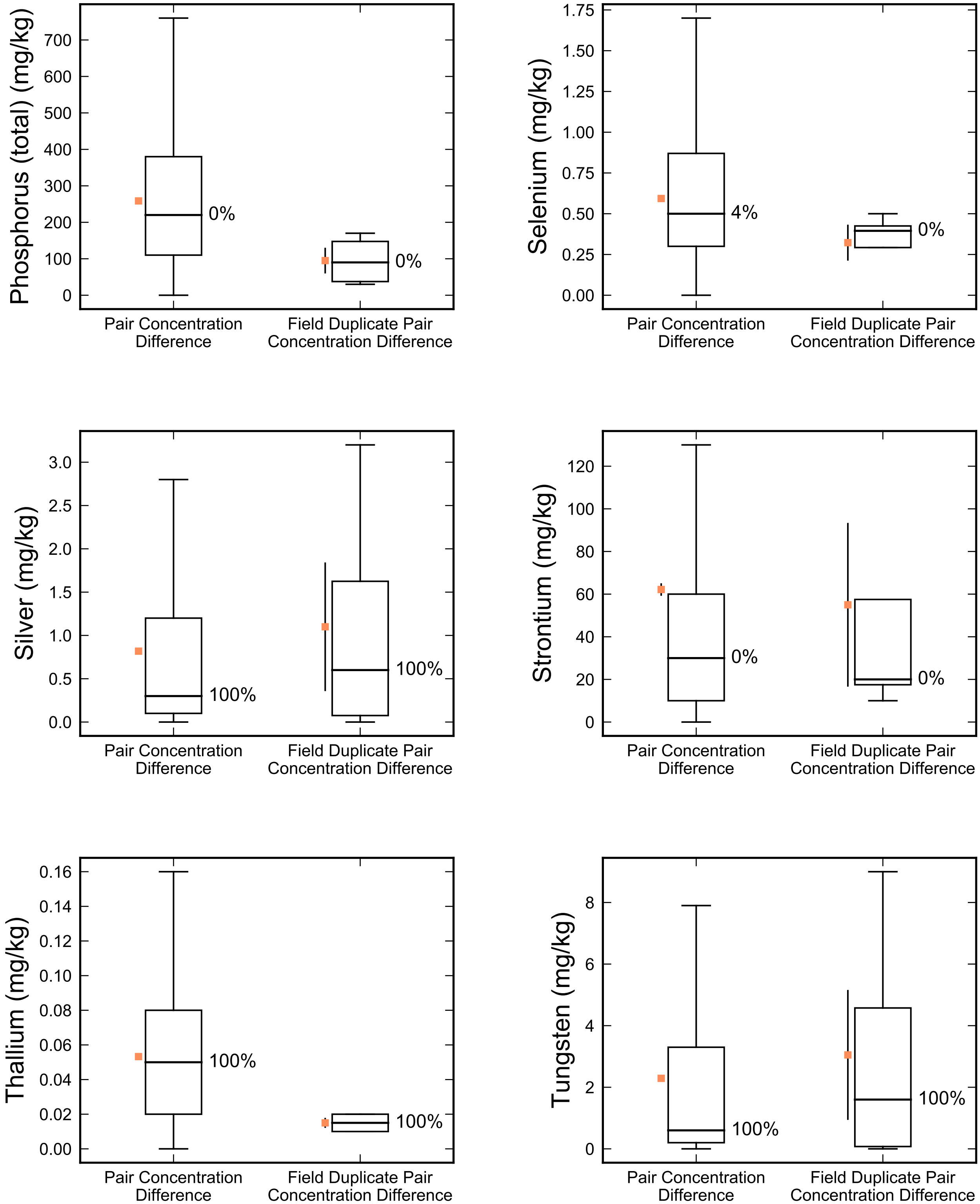
RAMBOLL

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
4c

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

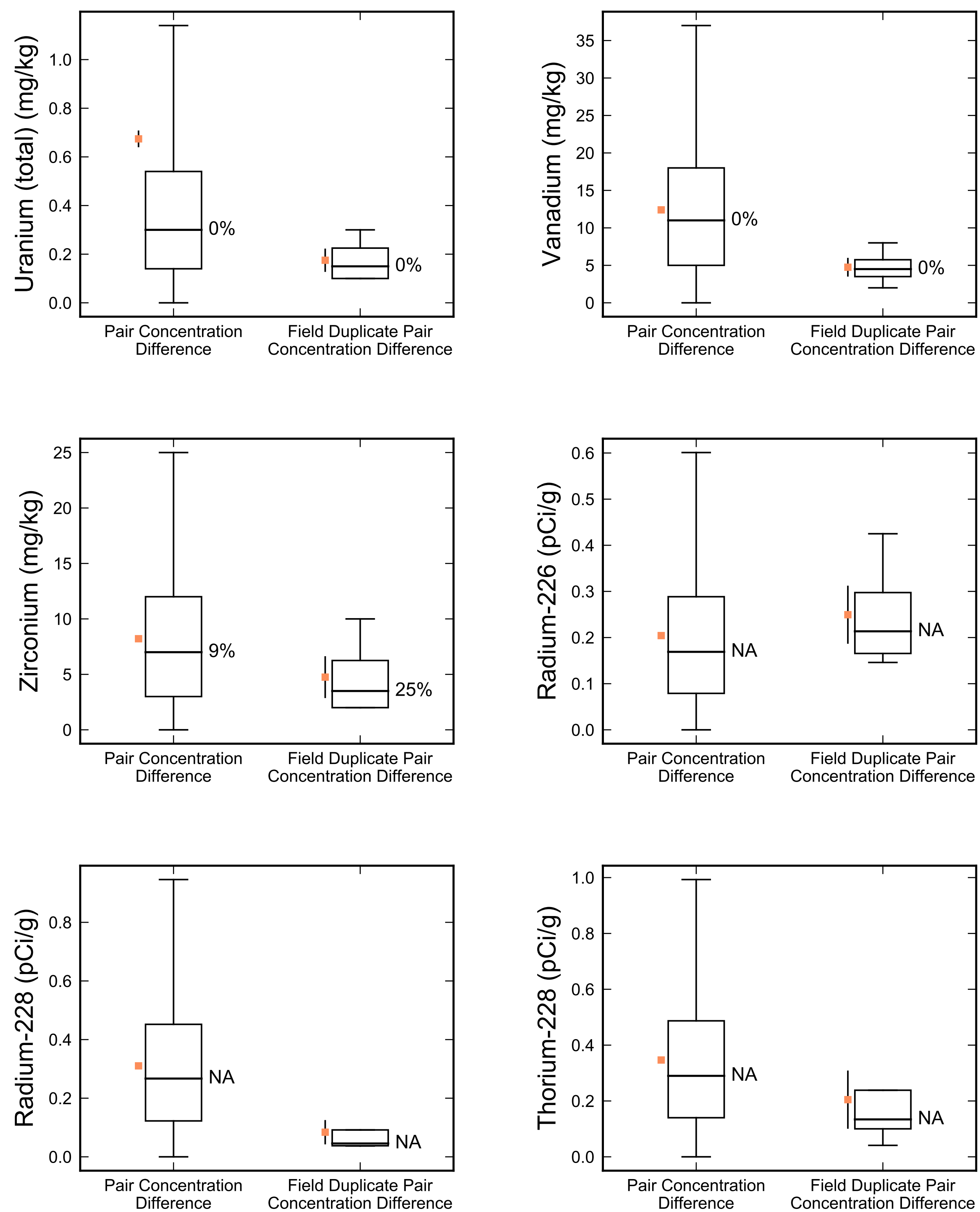
Mean (with standard error)

RAMBOLL

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
4d

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:



Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

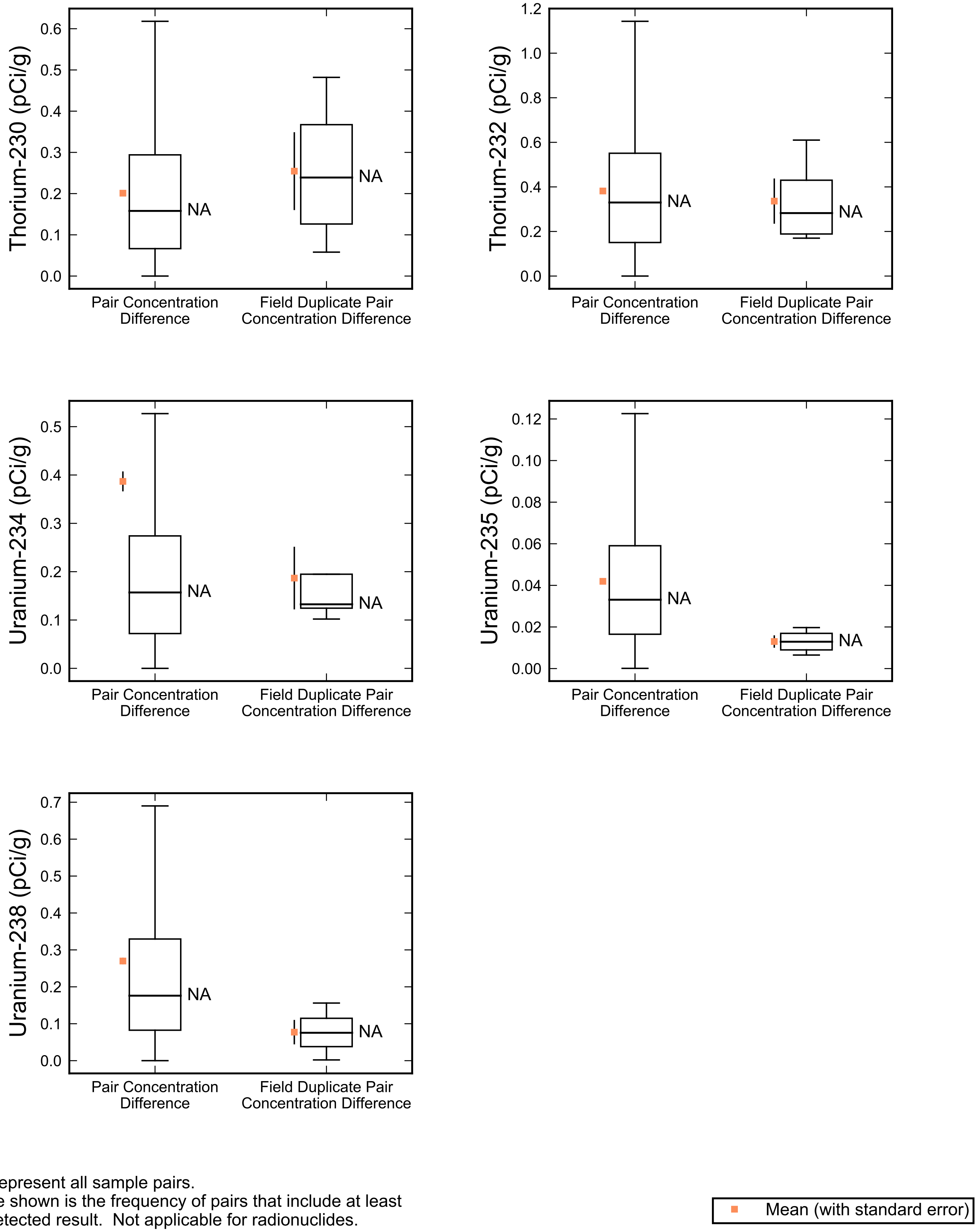
Mean (with standard error)

RAMBOLL

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **4e**

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:



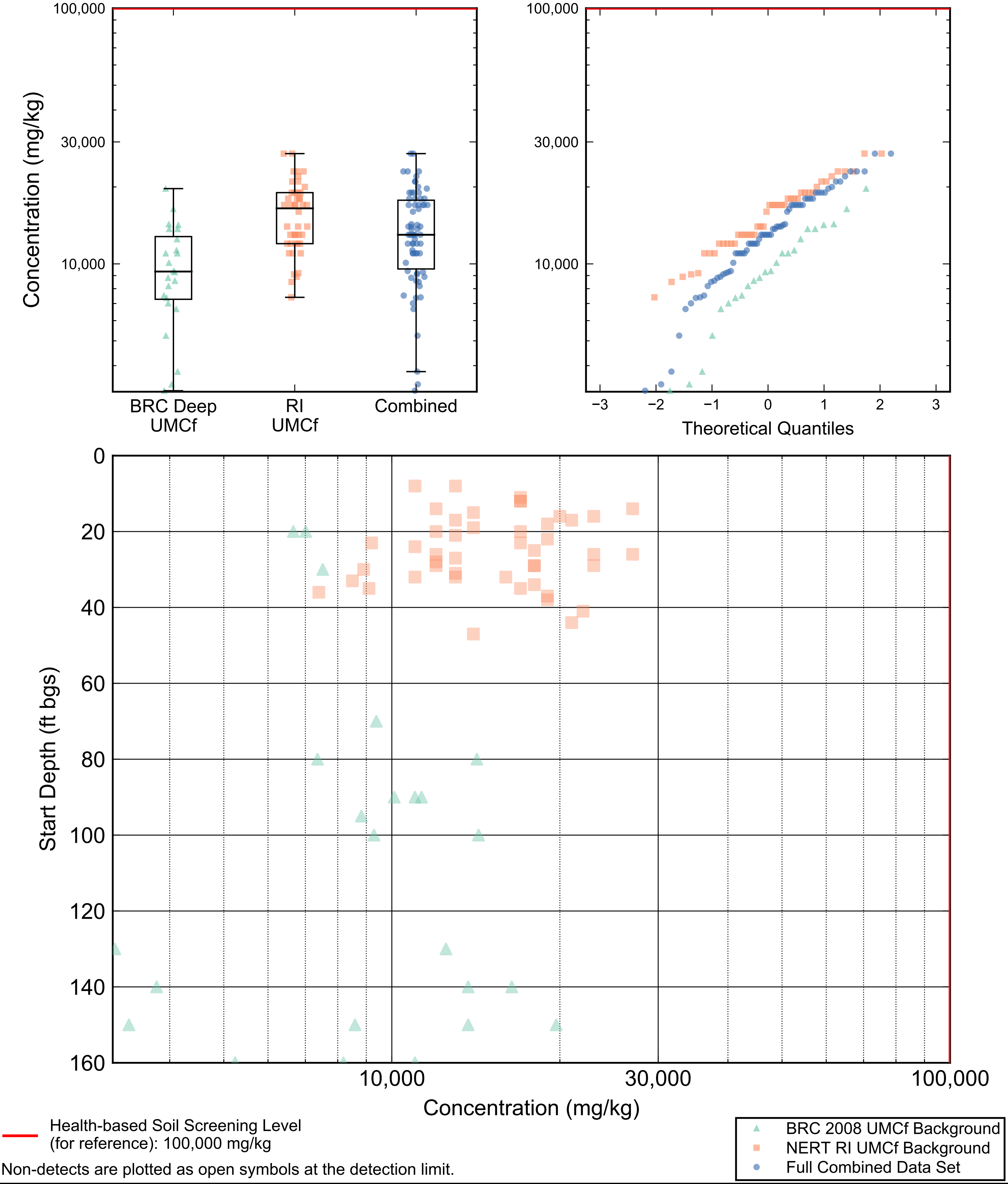
Box plots represent all sample pairs.
Percentage shown is the frequency of pairs that include at least one non-detected result. Not applicable for radionuclides.

RAMBOLL

RI UMCf Field Duplicate Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
4f

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised:

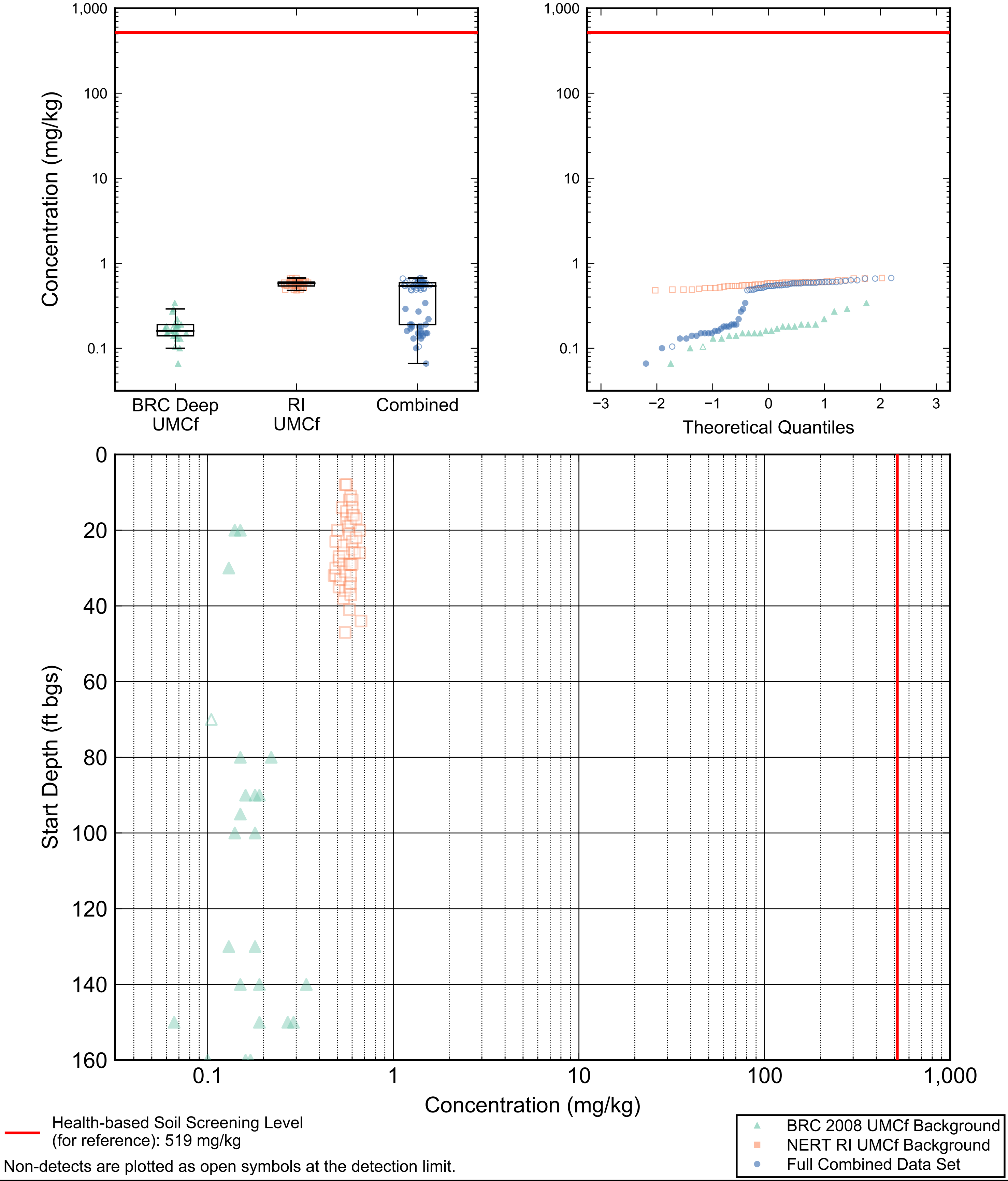


RAMBOLL

UMCf Background Soil Statistics: Aluminum
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5a**

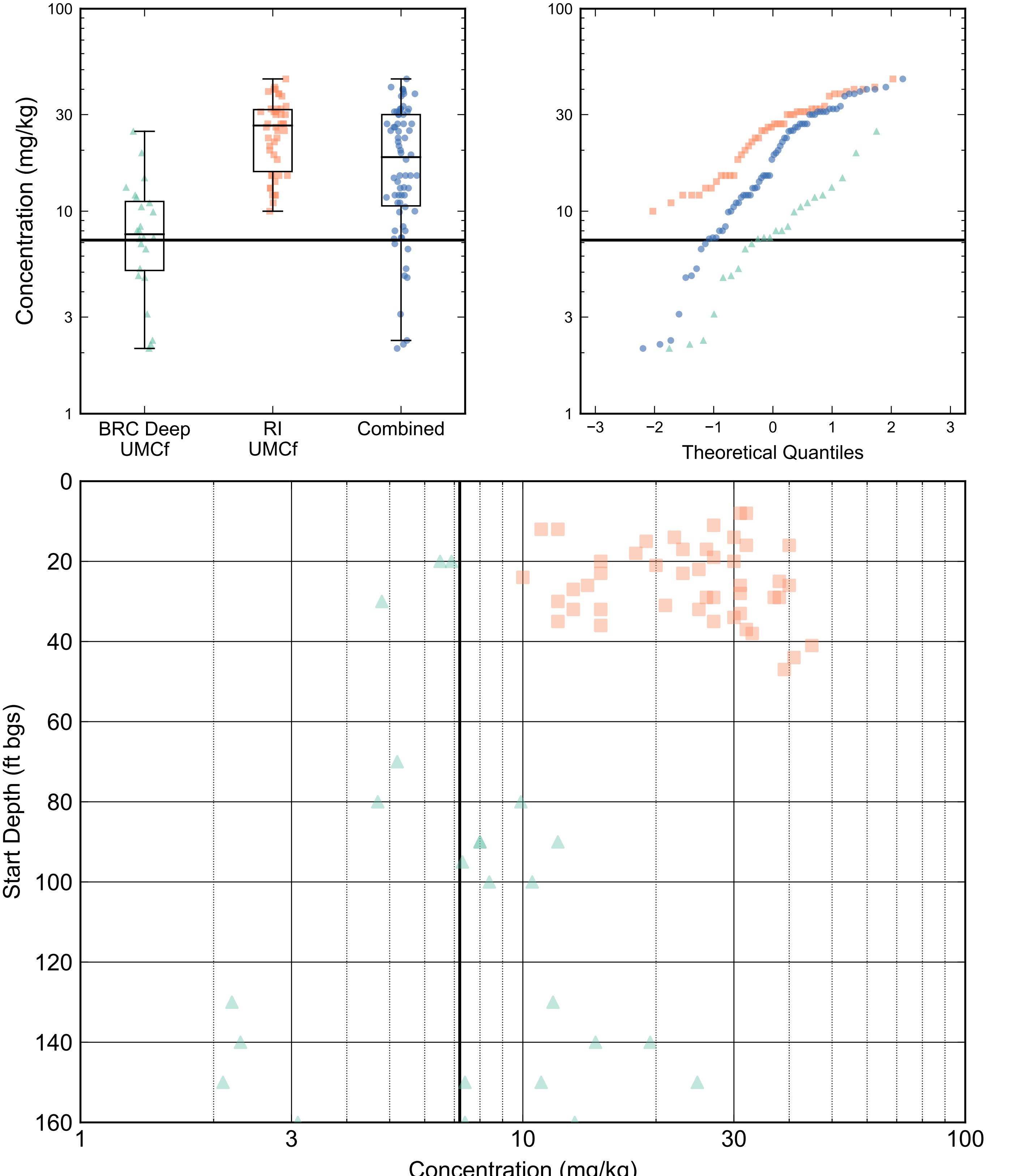
Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



UMCf Background Soil Statistics: Antimony
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5b**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Target Remediation Goal: 7.2 mg/kg

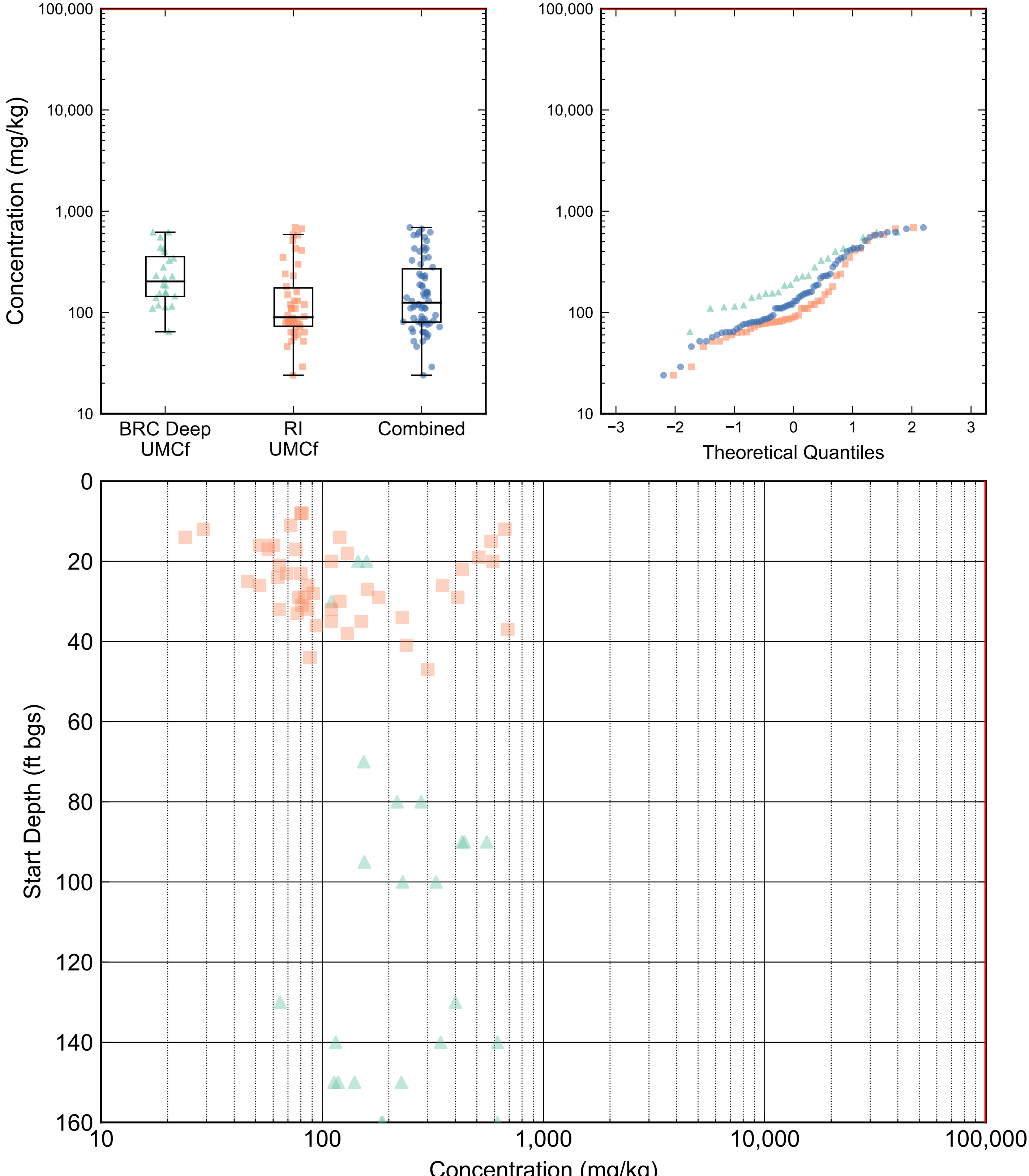
Non-detects are plotted as open symbols at the detection limit.

RAMBOLL

UMCf Background Soil Statistics: Arsenic
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5c**

Drafter: JH	Date: 03/14/21	Contract Number: 169002 0169	Approved:	Revised:



Health-based Soil Screening Level (for reference): 100,000 mg/kg

Non-detects are plotted as open symbols at the detection limit.

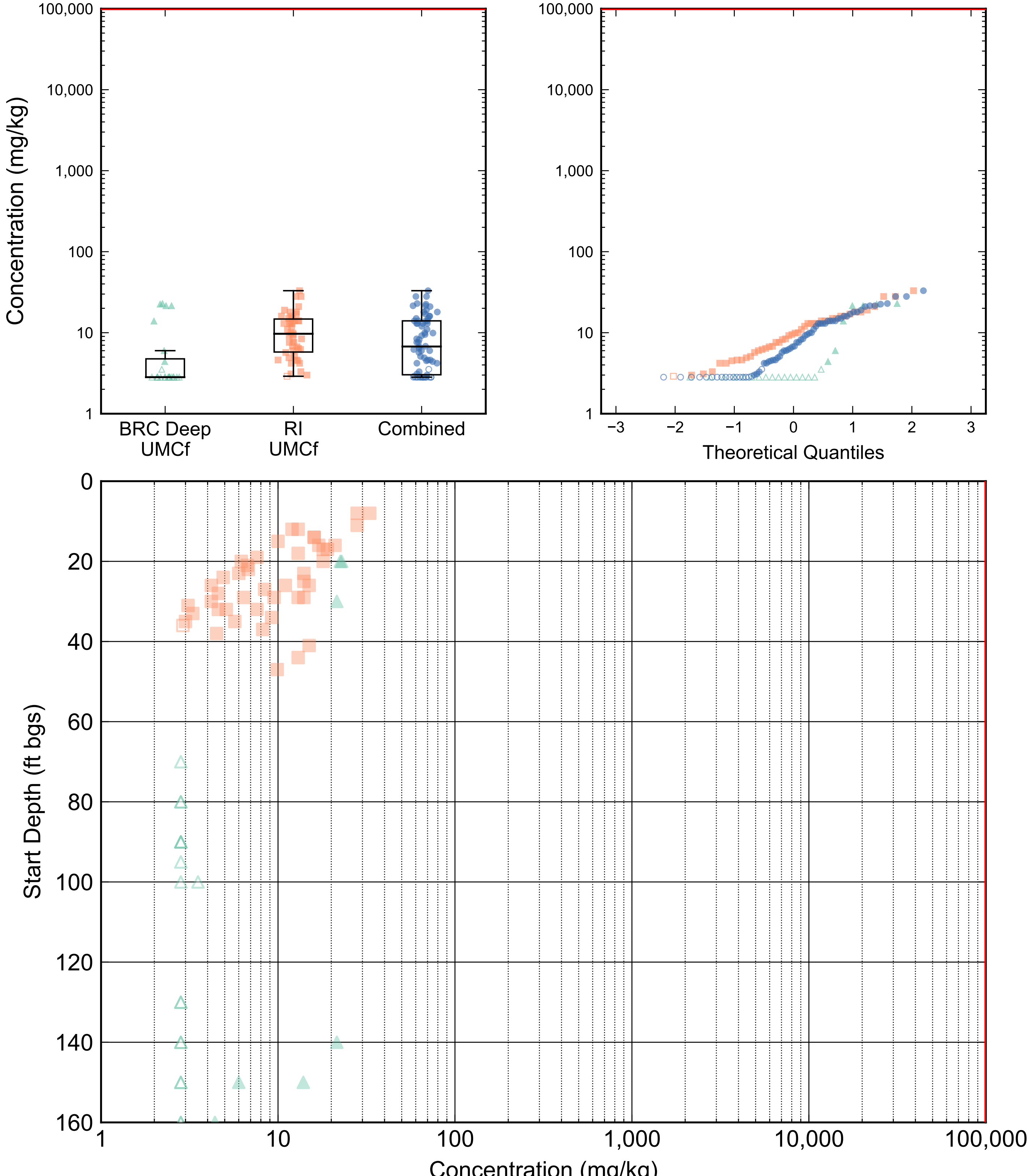
- BRC 2008 UMCf Background
- NERT RI UMCf Background
- Full Combined Data Set

UMCf Background Soil Statistics: Barium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5d**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 100,000 mg/kg

Non-detects are plotted as open symbols at the detection limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

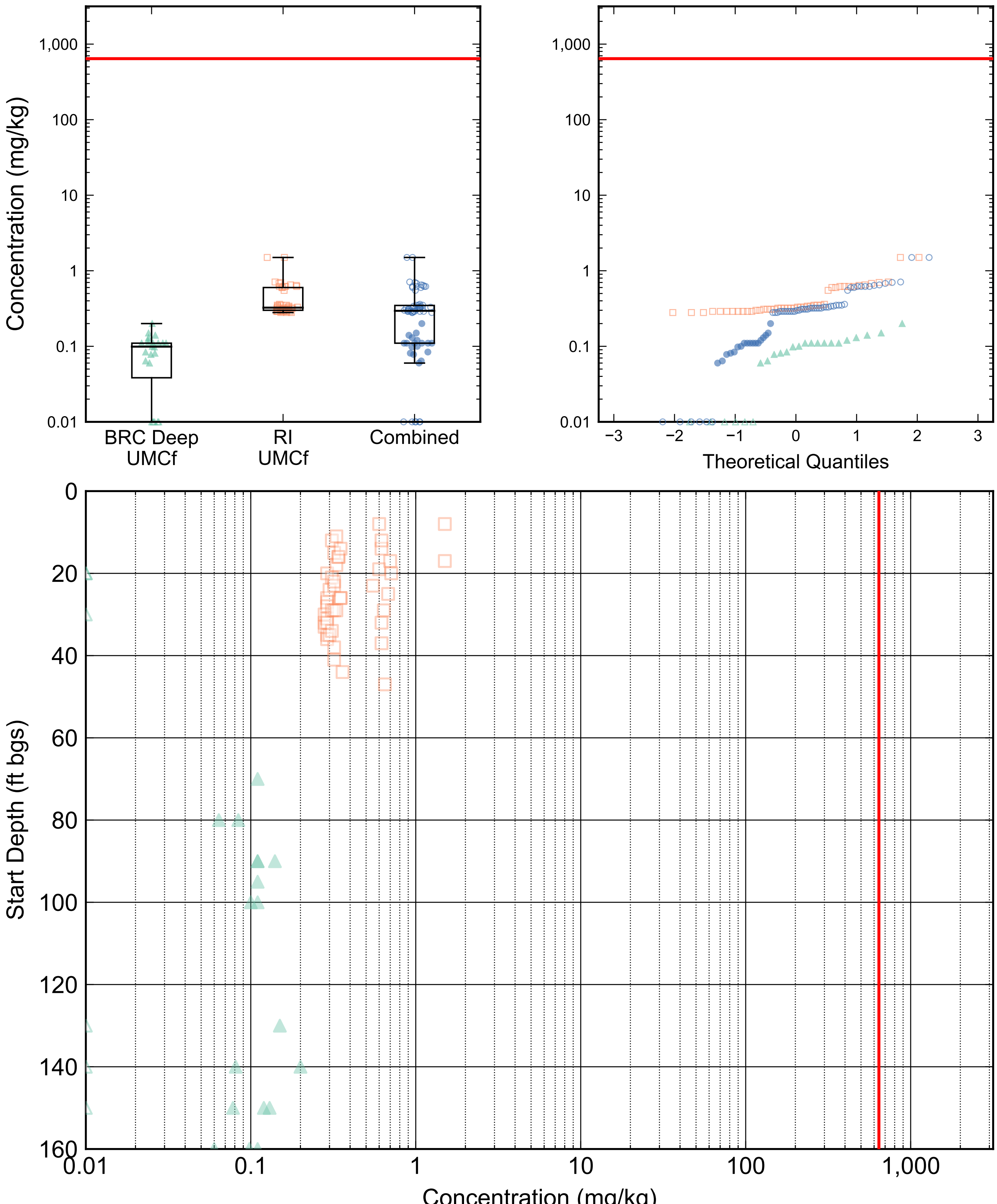
RAMBOLL

UMCf Background Soil Statistics: Boron
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5e**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 642 mg/kg

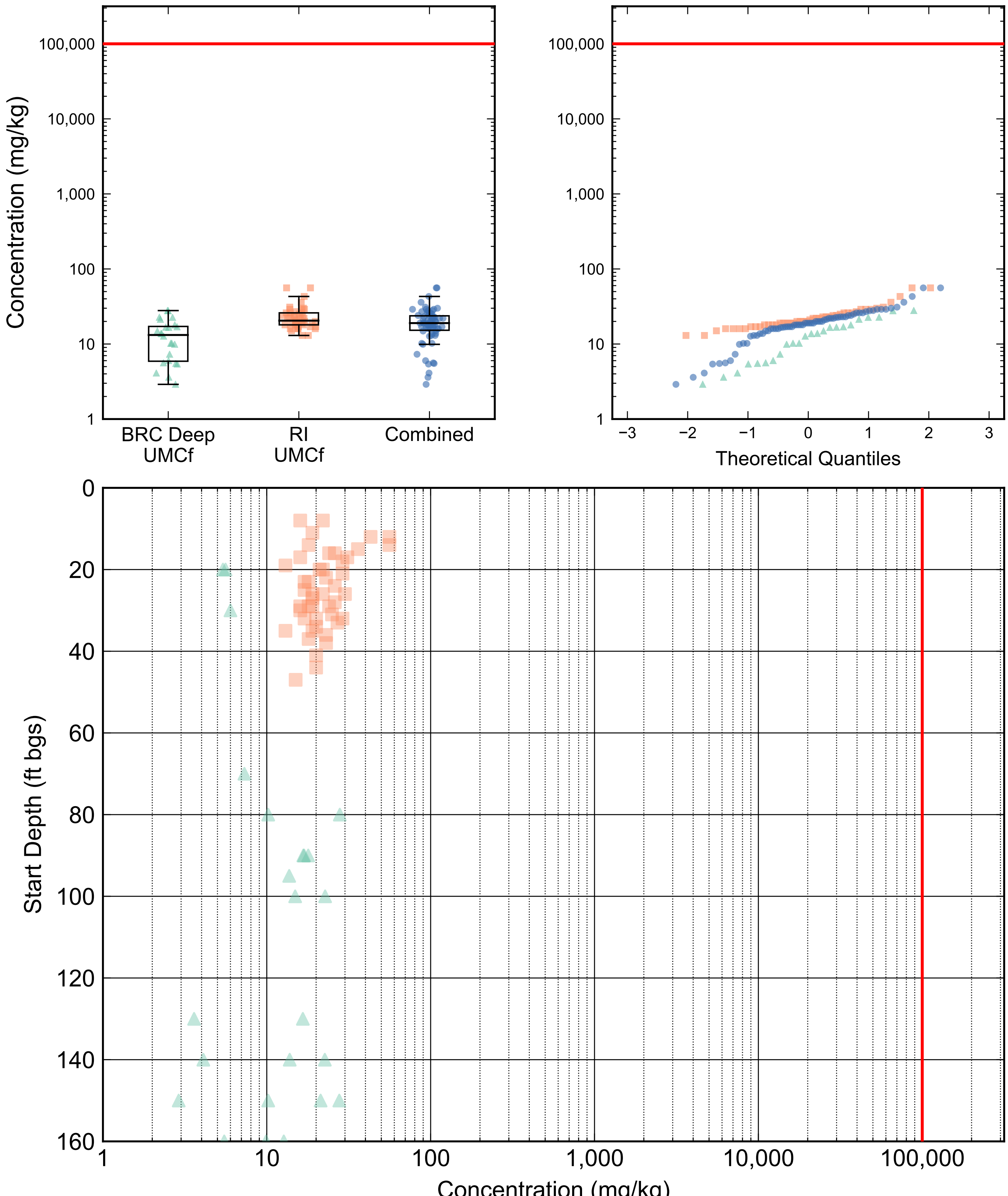
Non-detects are plotted as open symbols at the detection limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL	**UMCf Background Soil Statistics: Cadmium** Soil Background Data Set Summary Report Nevada Environmental Response Trust Site; Henderson, Nevada	Figure **5f**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 100,000 mg/kg

Non-detects are plotted as open symbols at the detection limit.

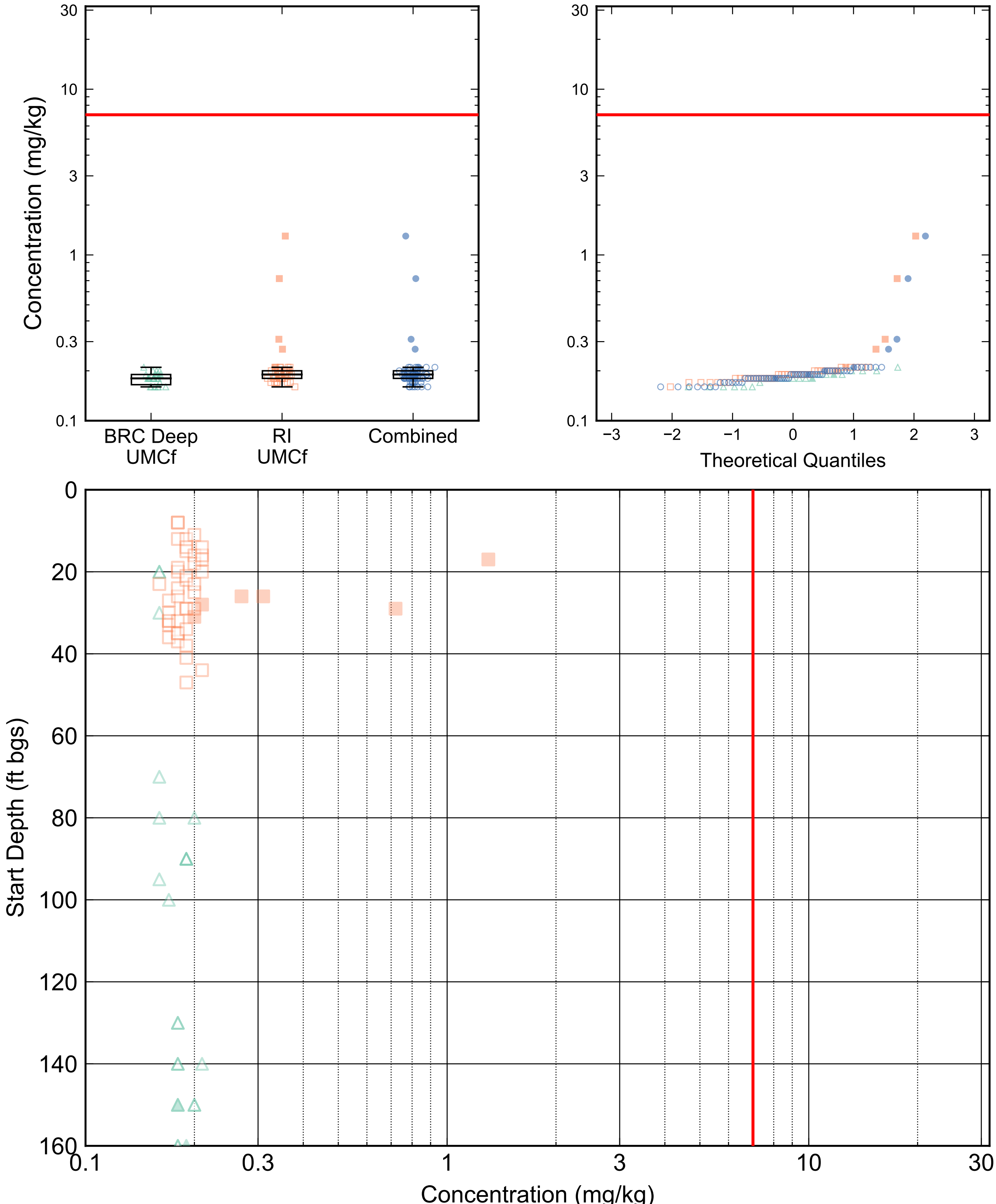
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Chromium (total)
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5g

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 7.01 mg/kg

Non-detects are plotted as open symbols at the detection limit.

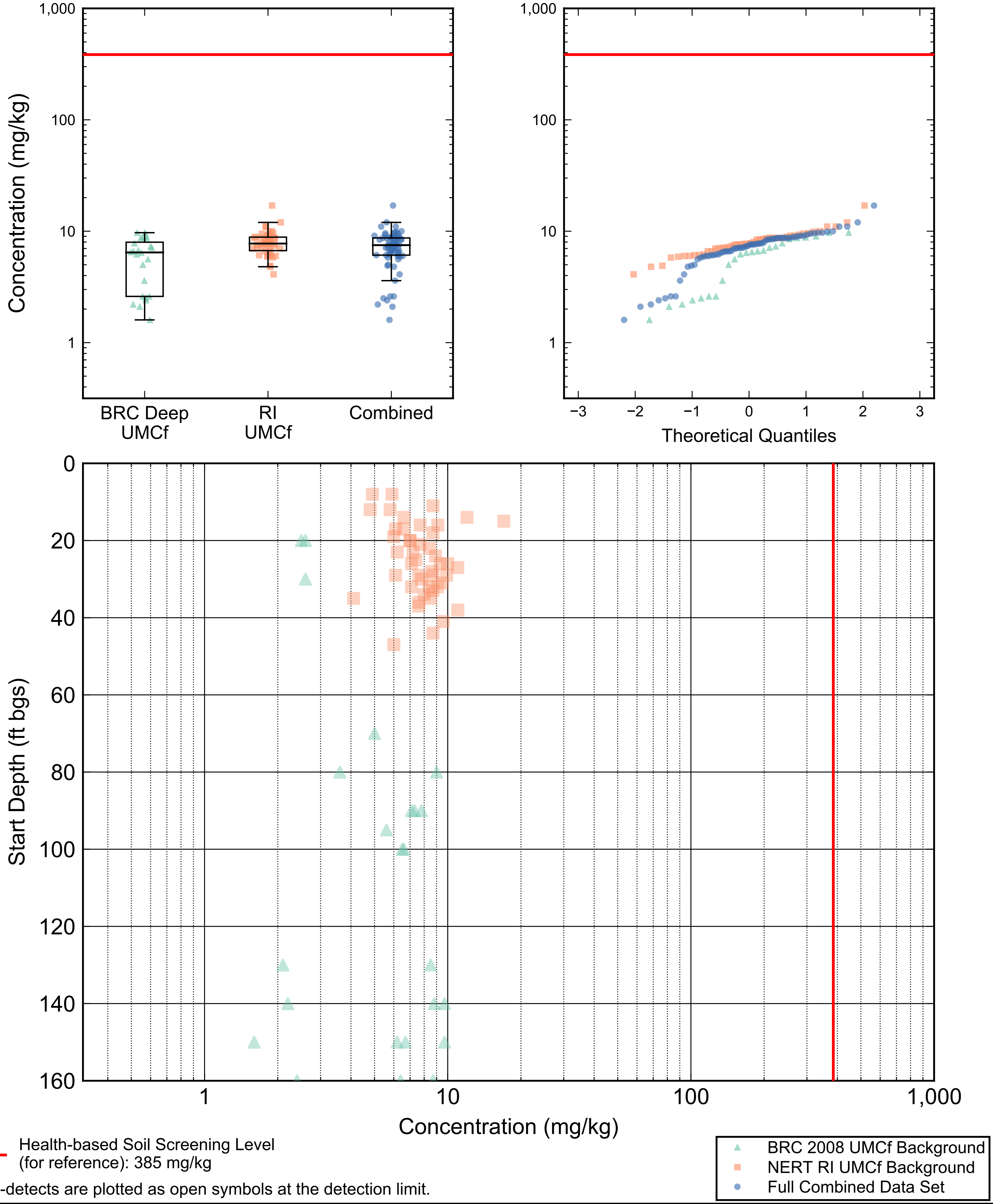
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Chromium VI
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5h**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 385 mg/kg

Non-detects are plotted as open symbols at the detection limit.

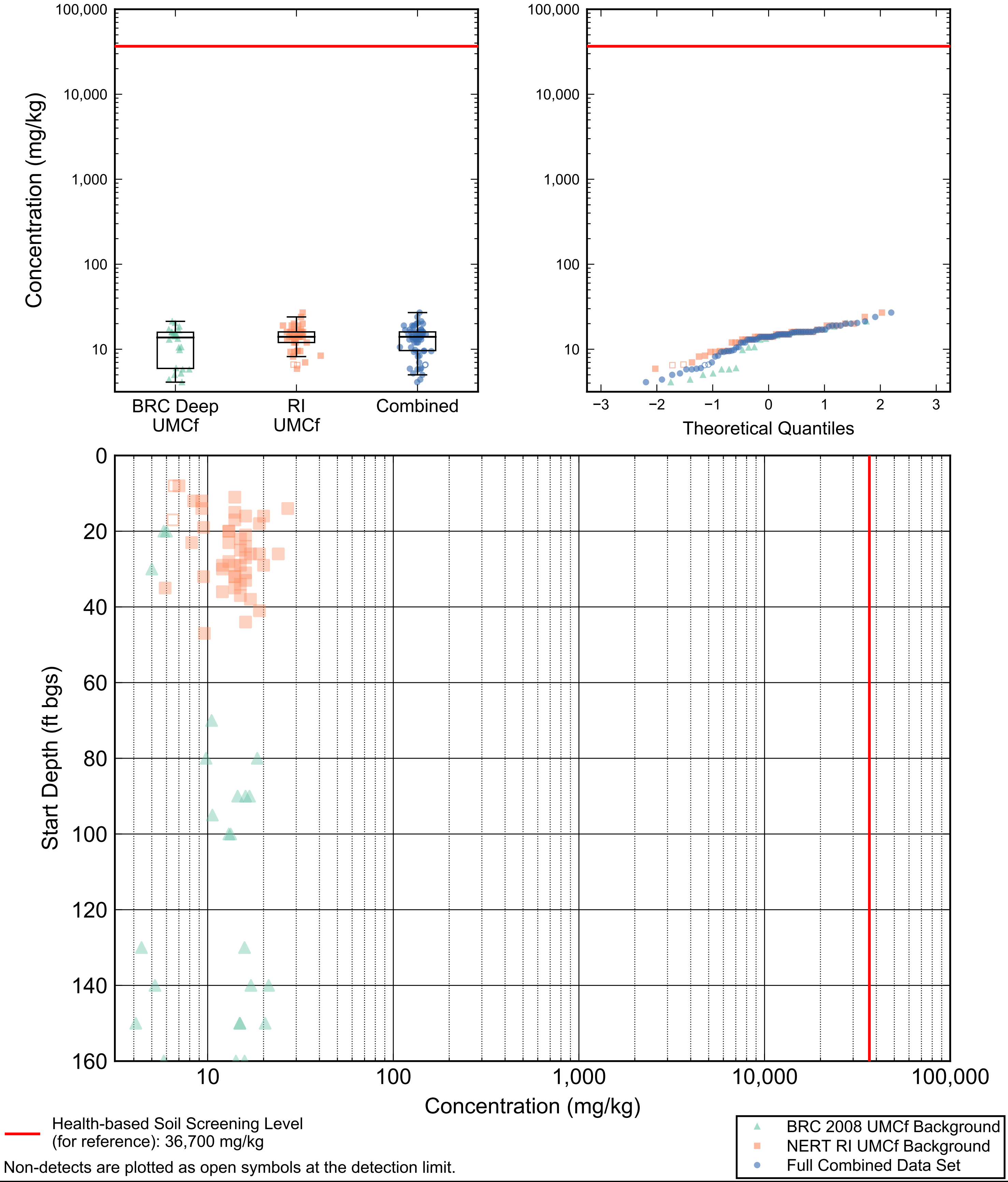
RAMBOLL

UMCf Background Soil Statistics: Cobalt
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5i**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

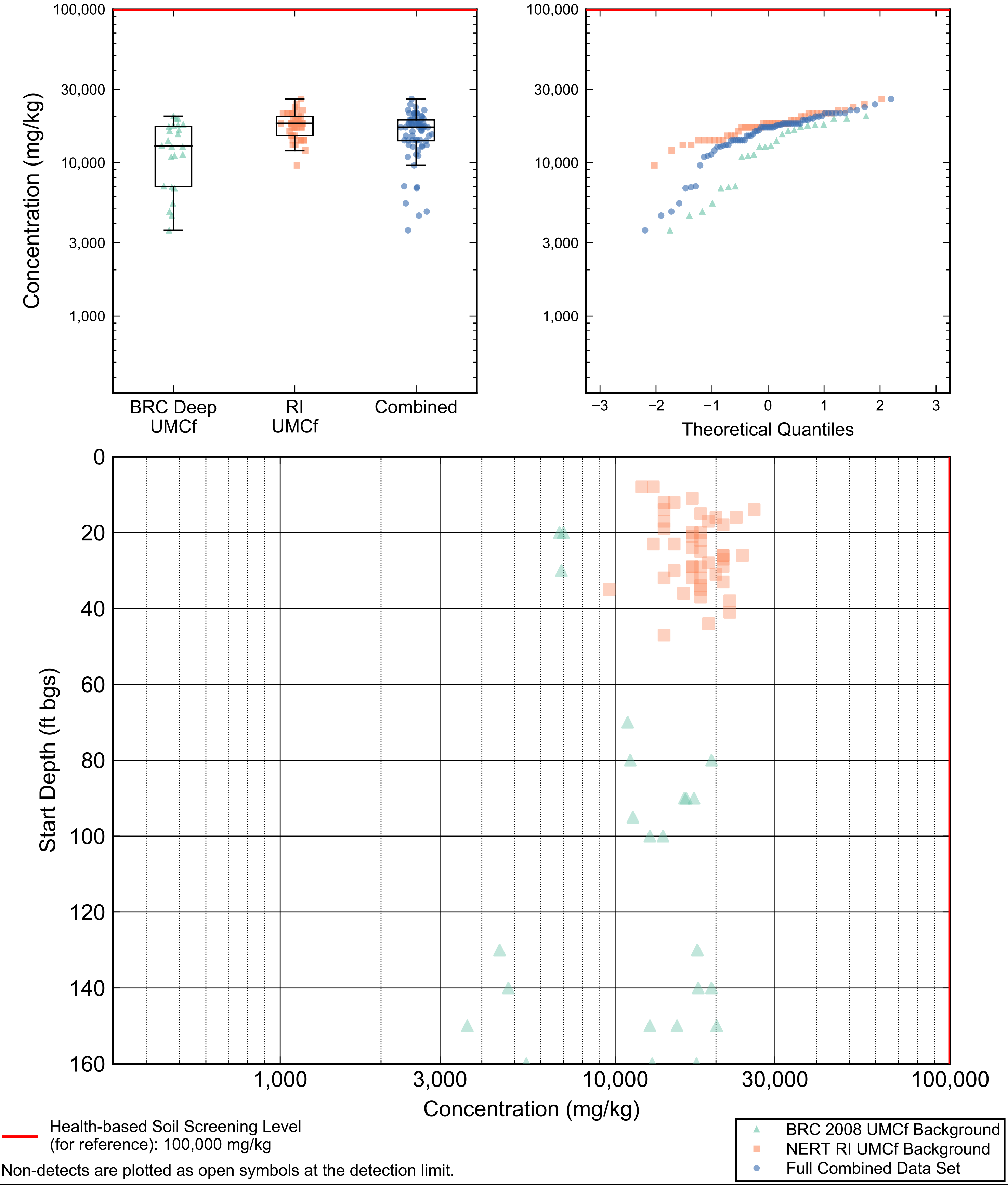
Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



RAMBOLL	**UMCf Background Soil Statistics: Copper** Soil Background Data Set Summary Report Nevada Environmental Response Trust Site; Henderson, Nevada	Figure **5j**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py

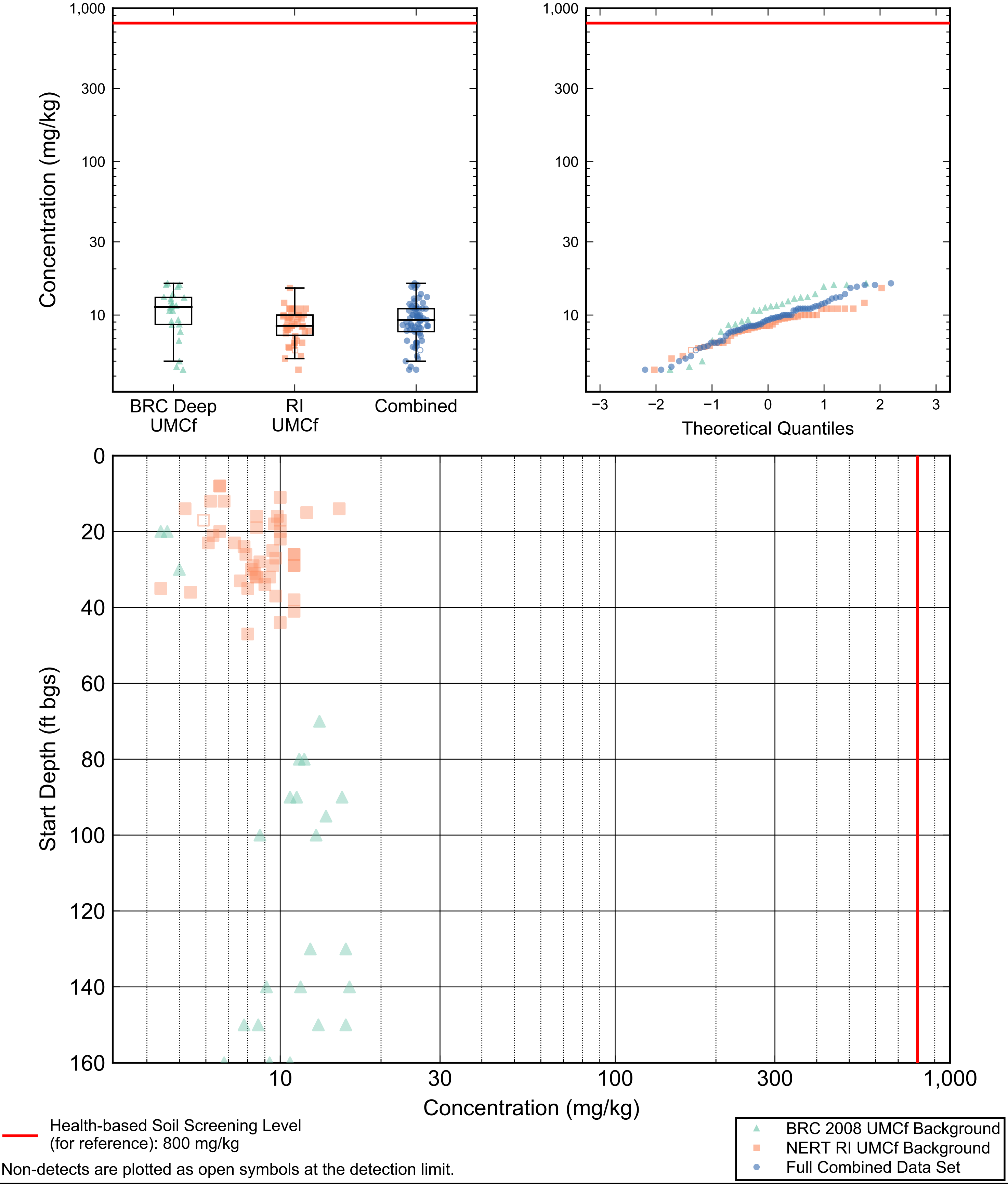


RAMBOLL

UMCf Background Soil Statistics: Iron
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5k

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



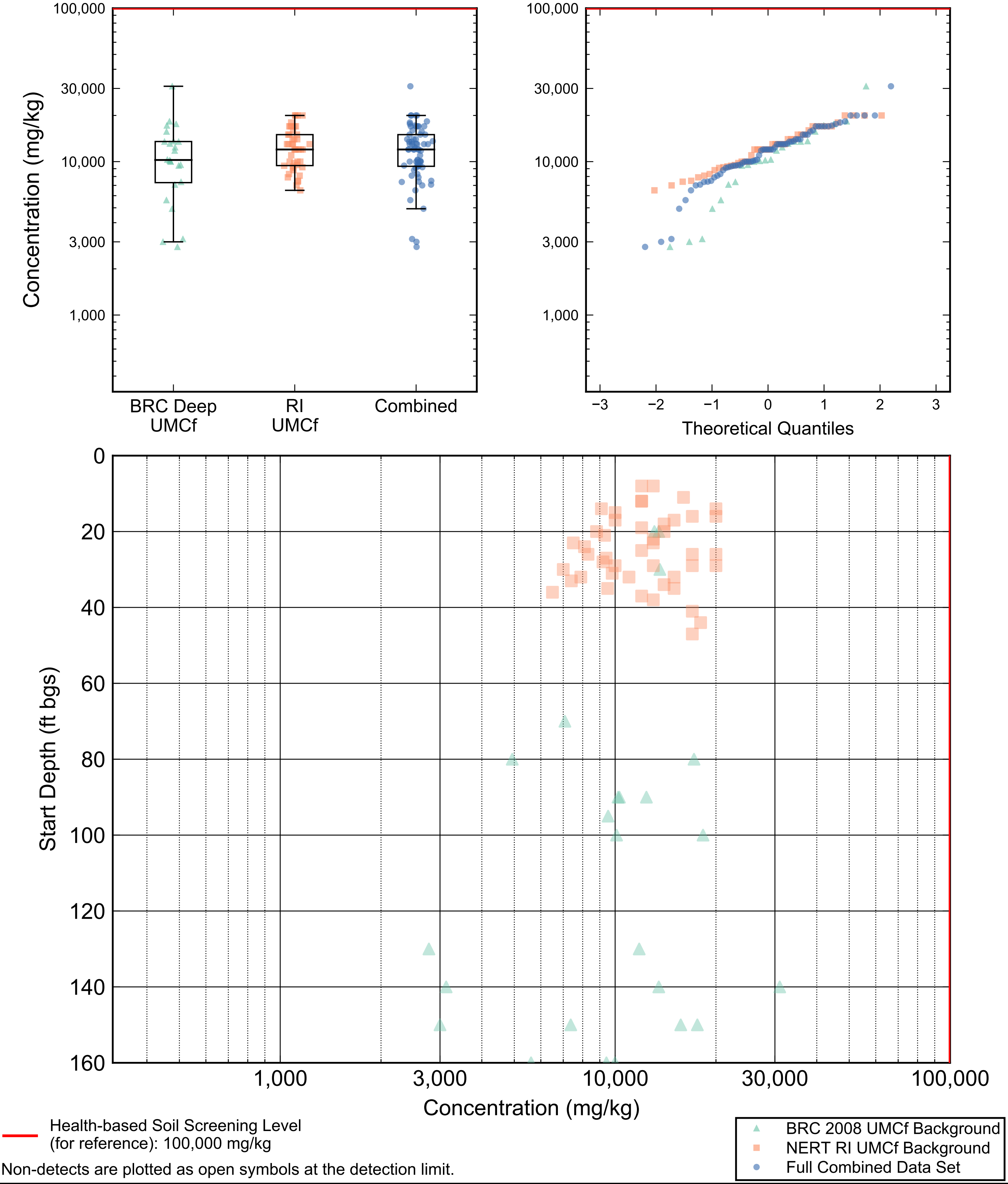
Non-detects are plotted as open symbols at the detection limit.

UMCf Background Soil Statistics: Lead
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure 5I

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

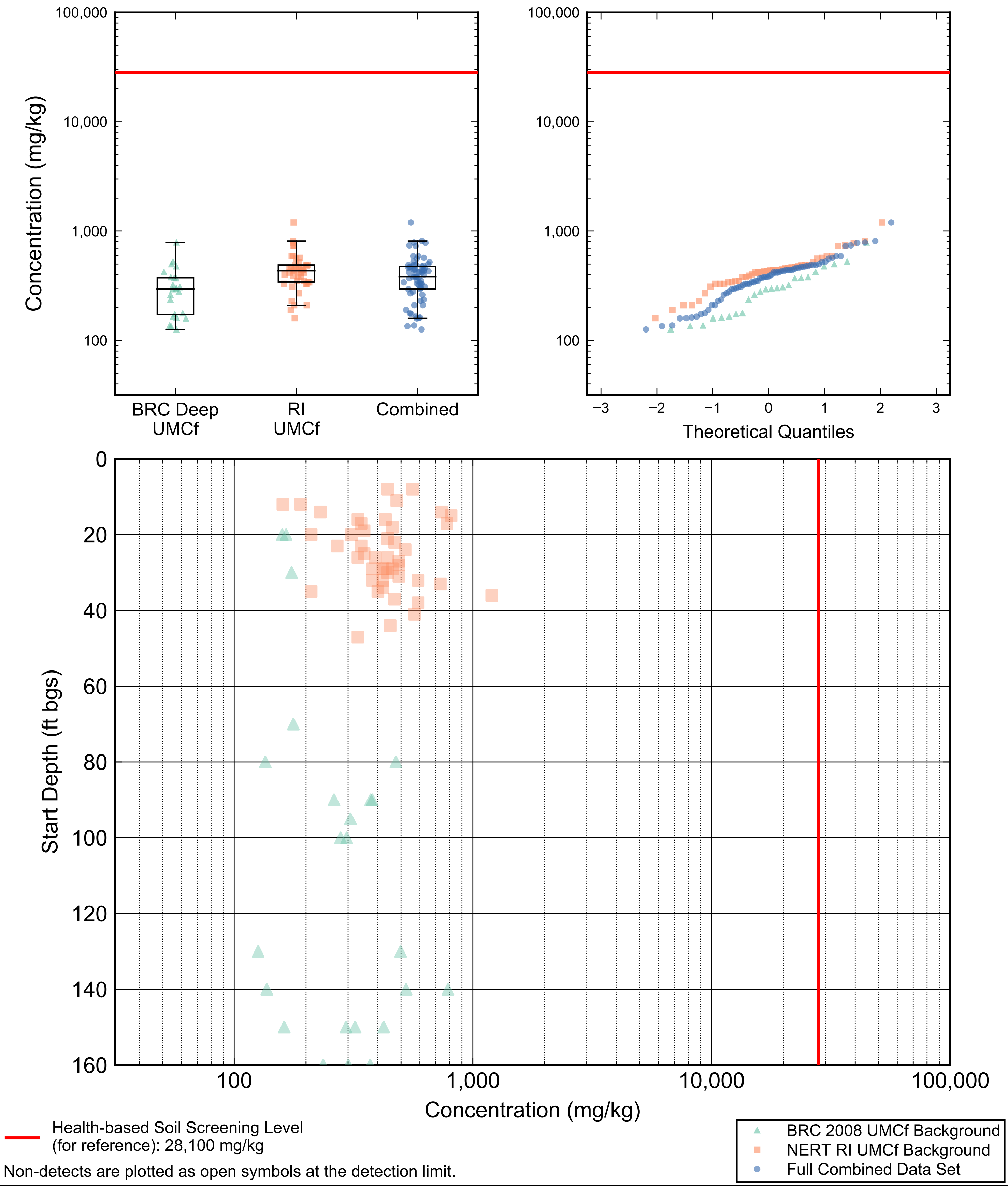
Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



UMCf Background Soil Statistics: Magnesium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5m**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

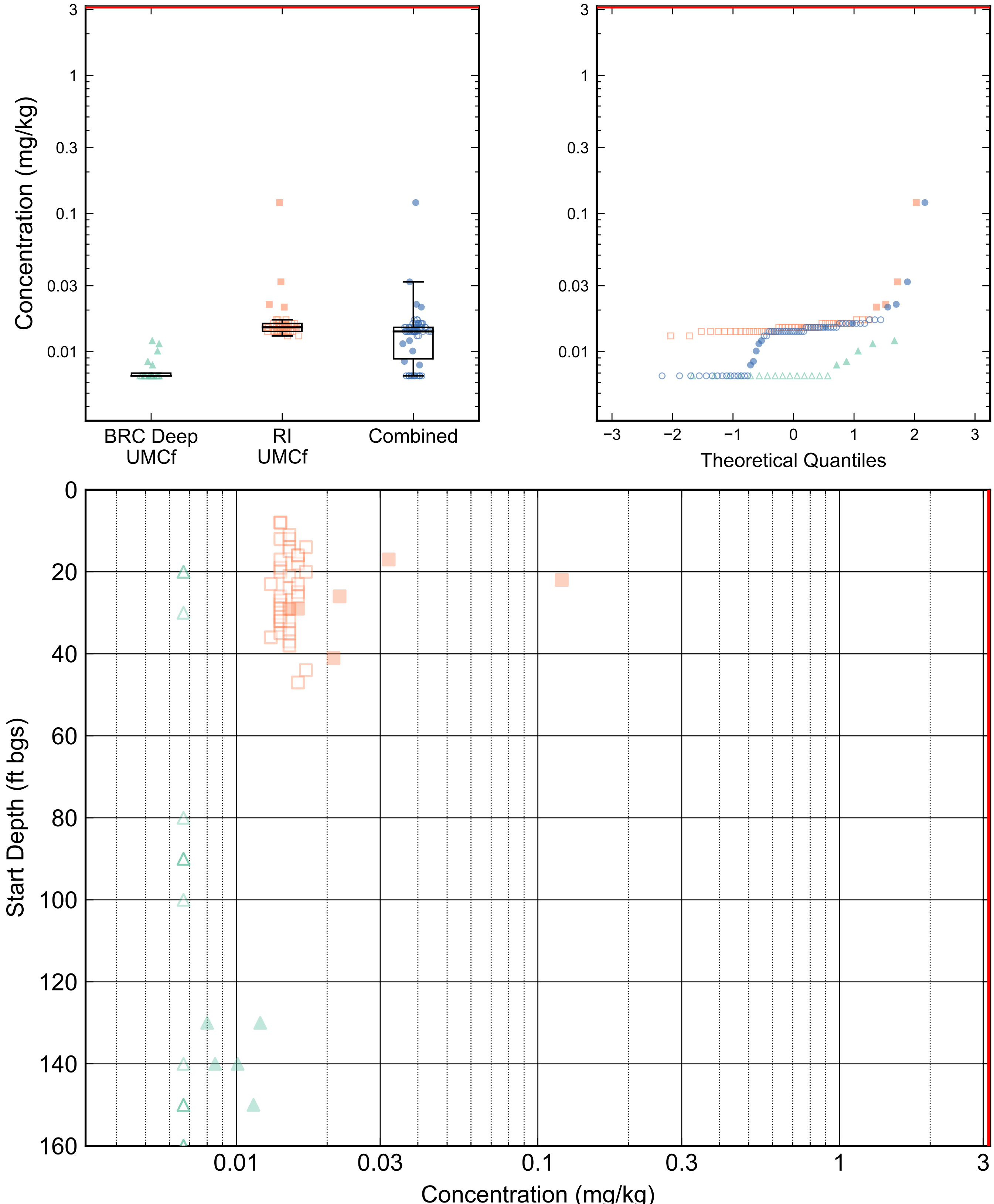


RAMBOLL

UMCf Background Soil Statistics: Manganese
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5n

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 3.13 mg/kg

Non-detects are plotted as open symbols at the detection limit.

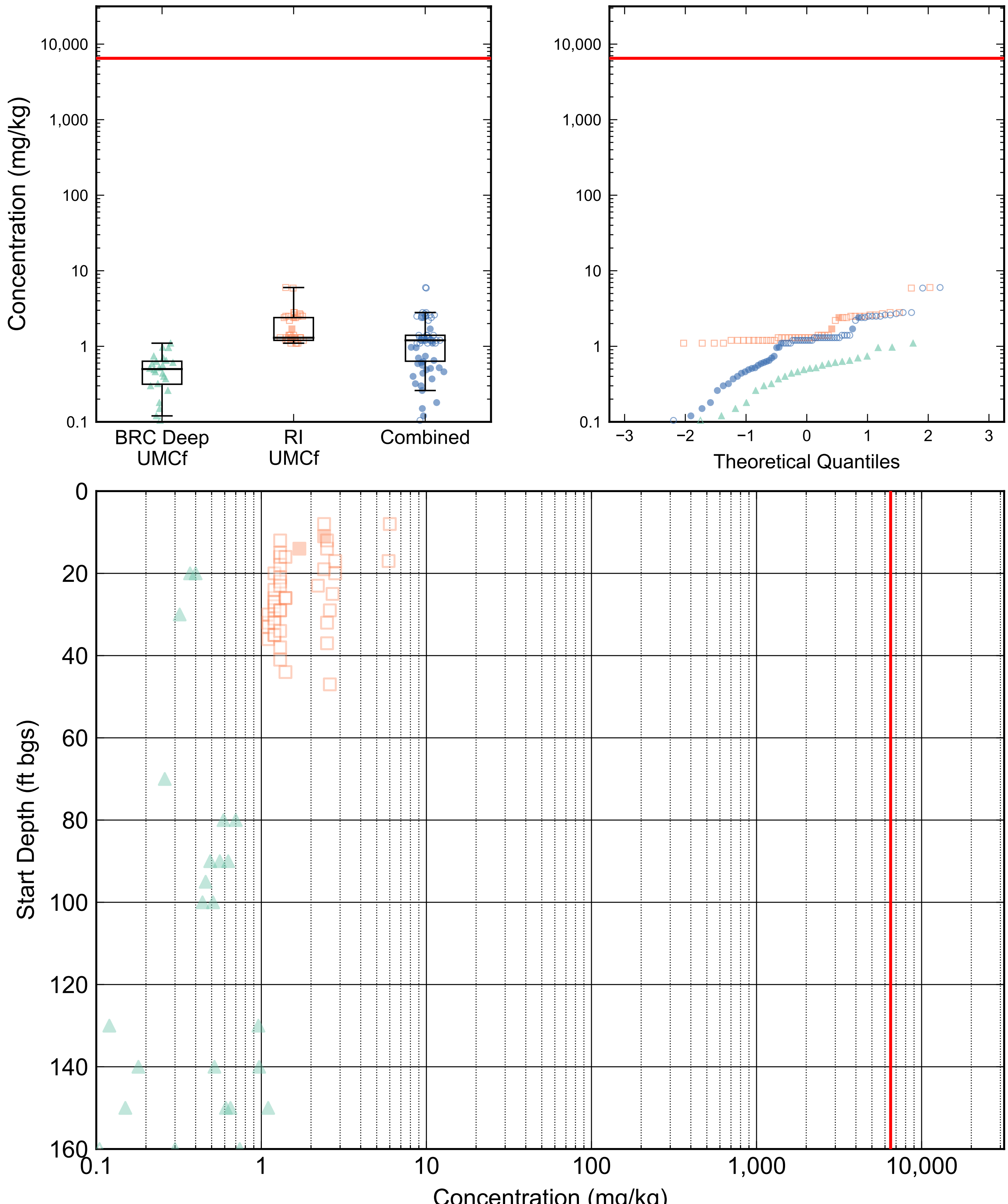
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

UMCf Background Soil Statistics: Mercury
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5o**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 6,490 mg/kg

Non-detects are plotted as open symbols at the detection limit.

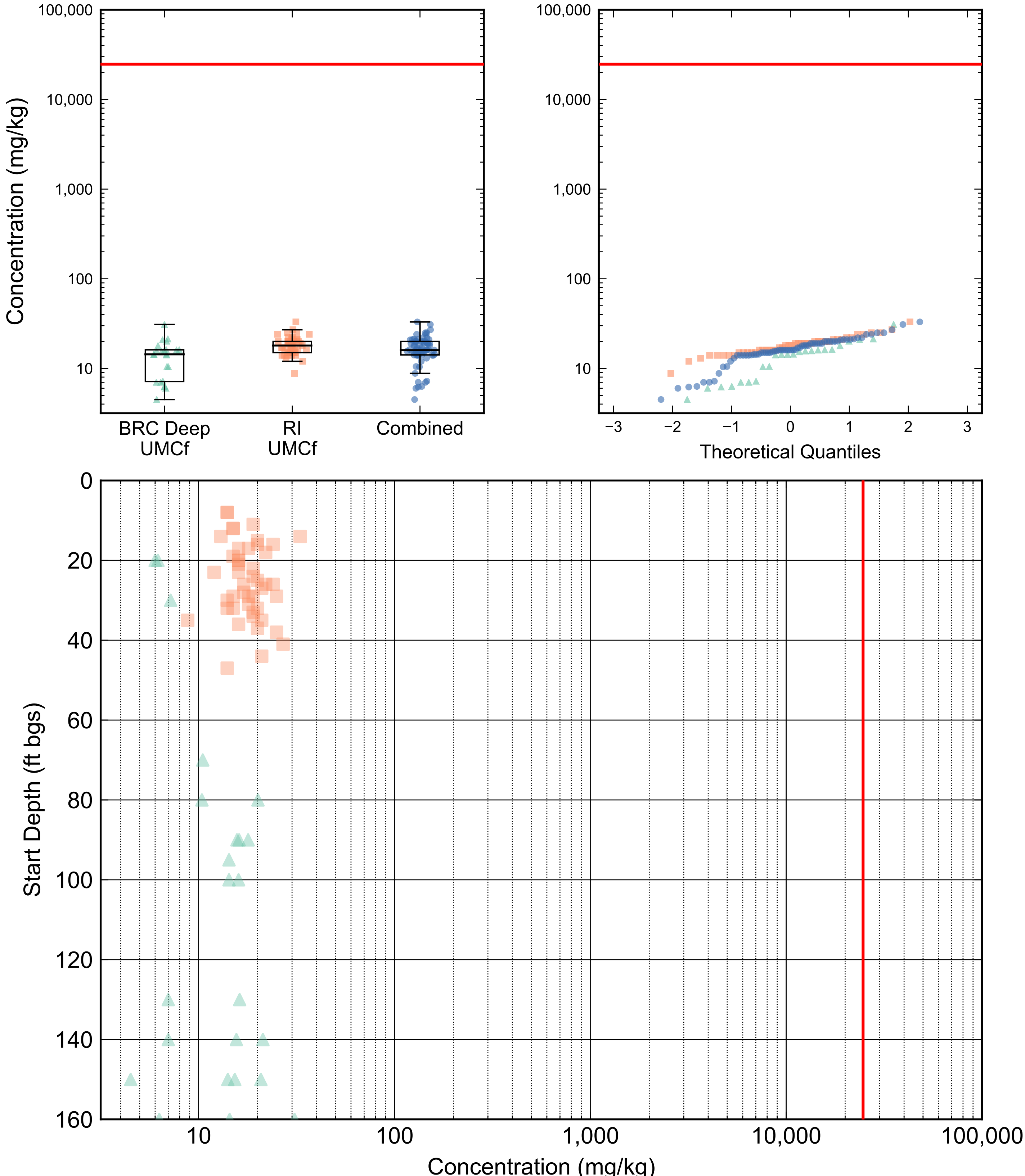
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

UMCf Background Soil Statistics: Molybdenum
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5p**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 24,700 mg/kg

Non-detects are plotted as open symbols at the detection limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

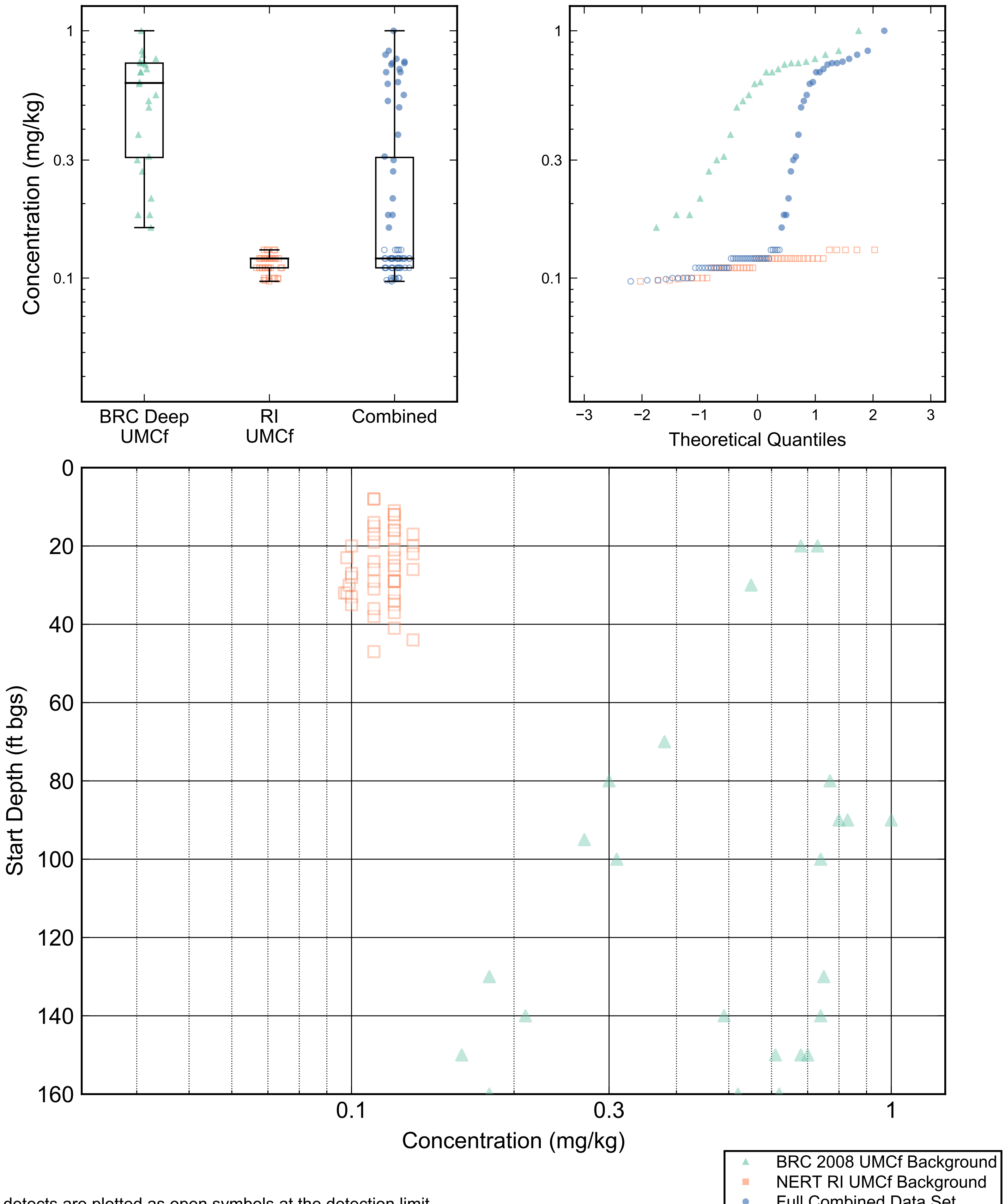
RAMBOLL

UMCf Background Soil Statistics: Nickel
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5q

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



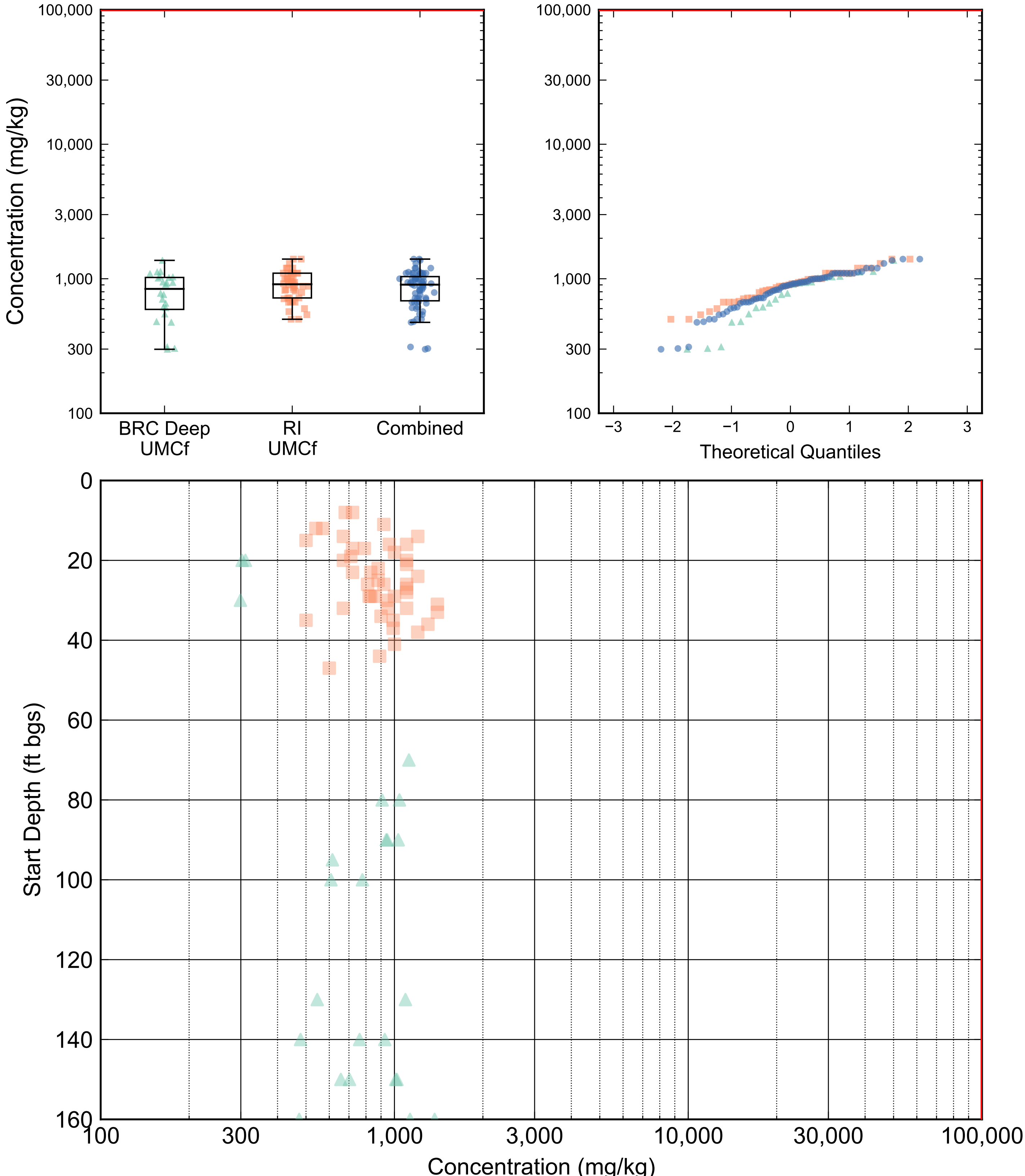
Non-detects are plotted as open symbols at the detection limit.

RAMBOLL

UMCf Background Soil Statistics: Palladium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5r

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



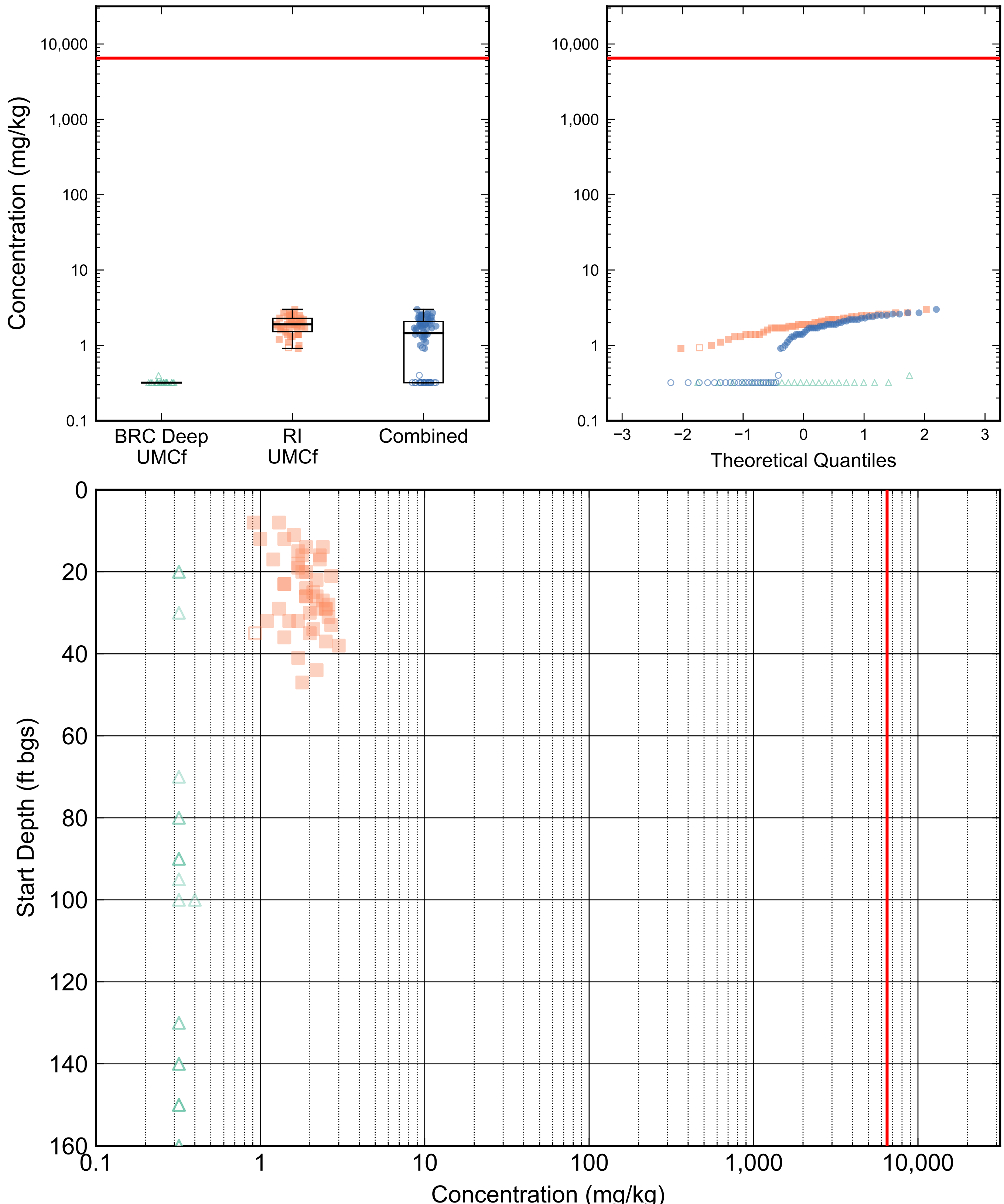
Health-based Soil Screening Level (for reference): 100,000 mg/kg

Non-detects are plotted as open symbols at the detection limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL	**UMCf Background Soil Statistics: Phosphorus** Soil Background Data Set Summary Report Nevada Environmental Response Trust Site; Henderson, Nevada	Figure **5s**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 6,490 mg/kg

Non-detects are plotted as open symbols at the detection limit.

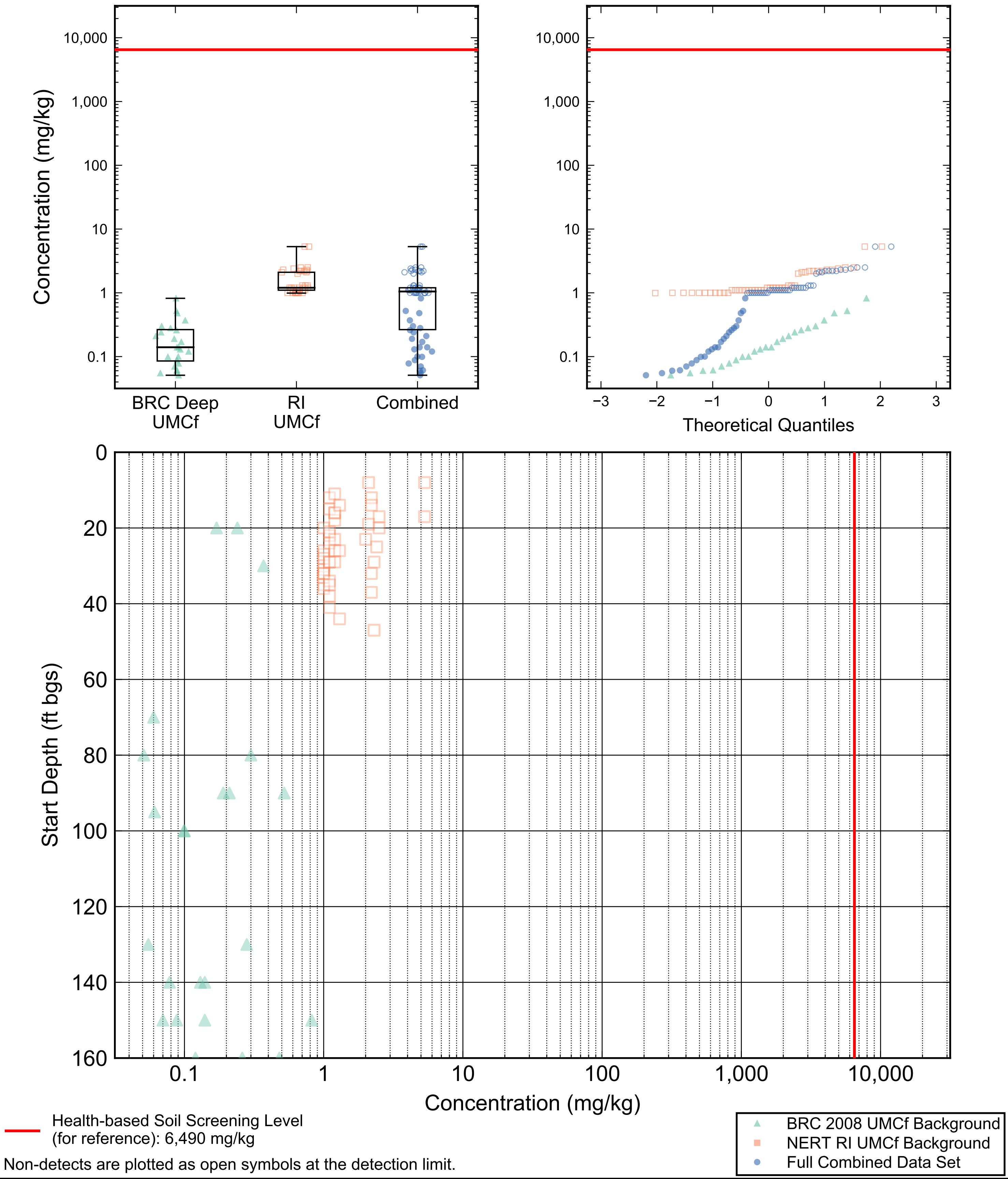
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Selenium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5t

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

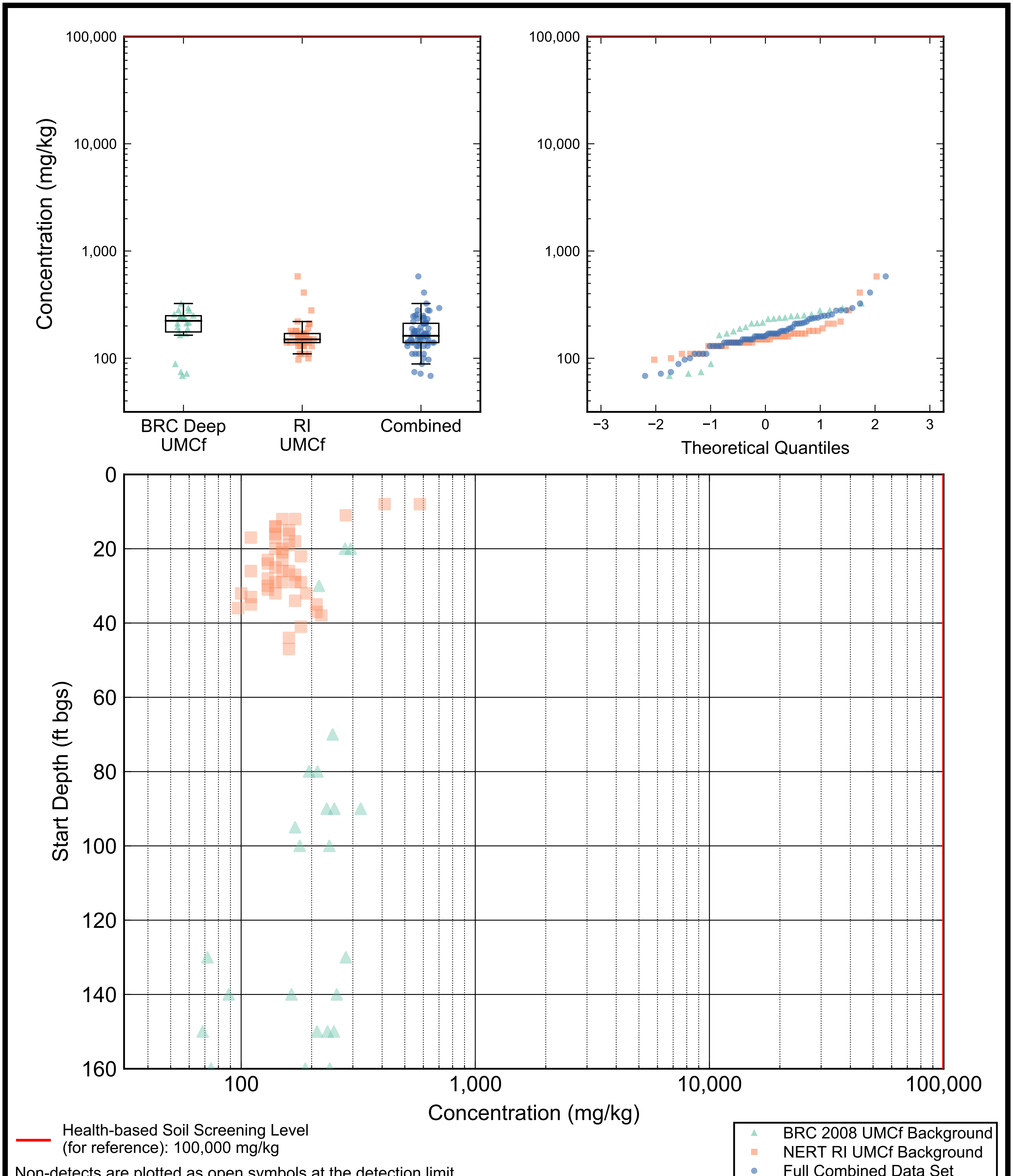


RAMBOLL

UMCf Background Soil Statistics: Silver
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5u

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



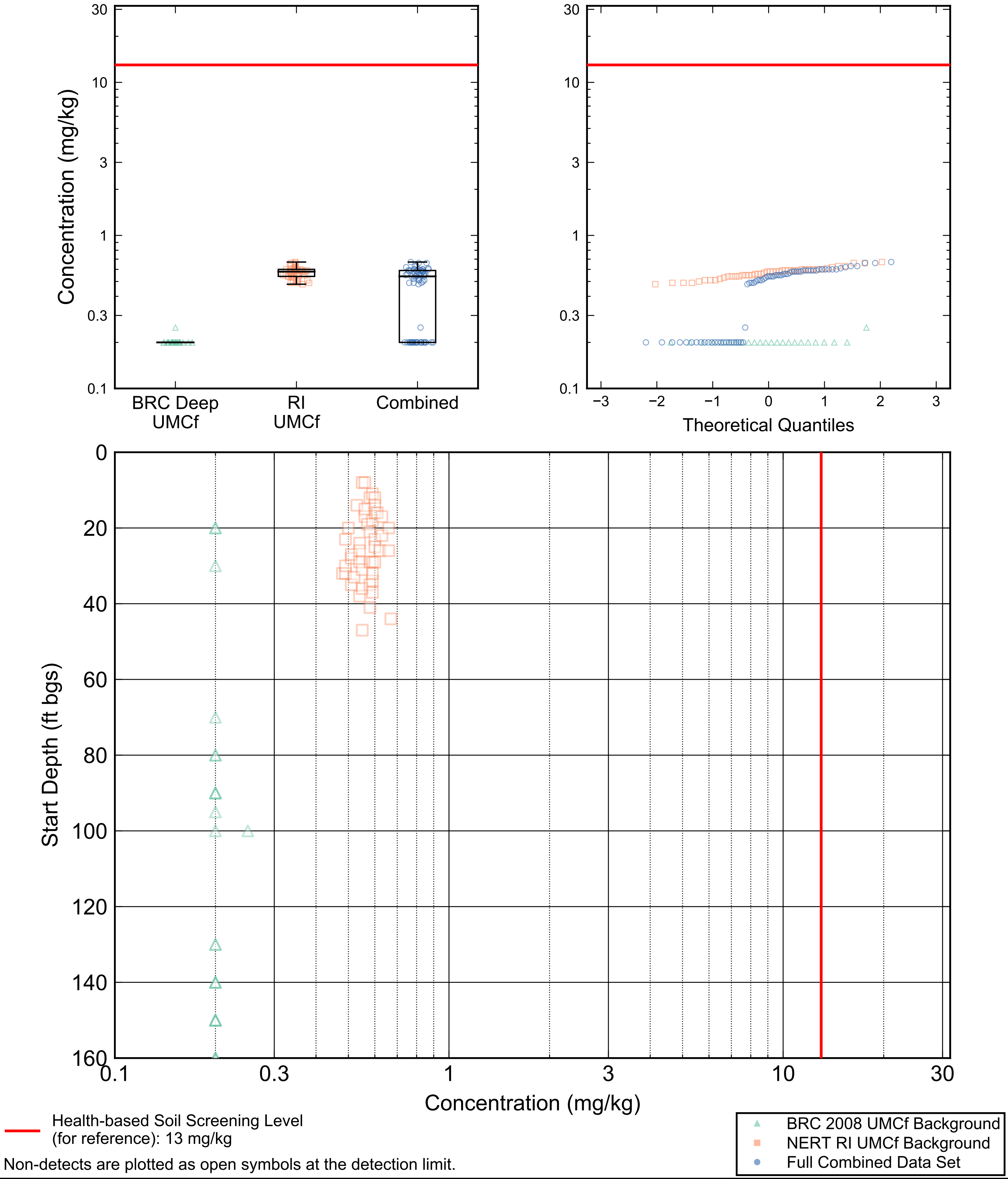
RAMBOLL

UMCf Background Soil Statistics: Strontium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5v

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py

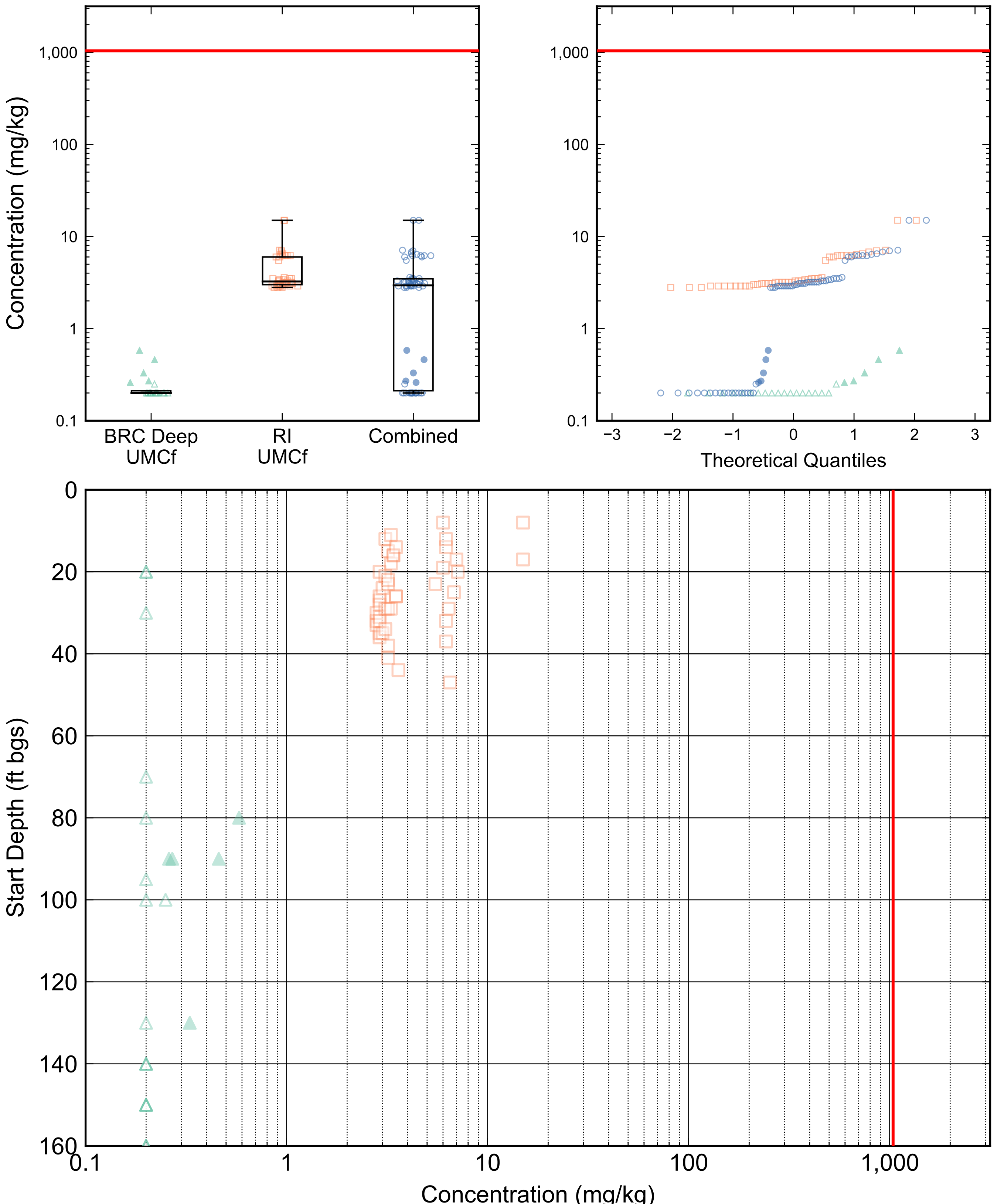


UMCf Background Soil Statistics: Thallium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure 5w

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 1,040 mg/kg

Non-detects are plotted as open symbols at the detection limit.

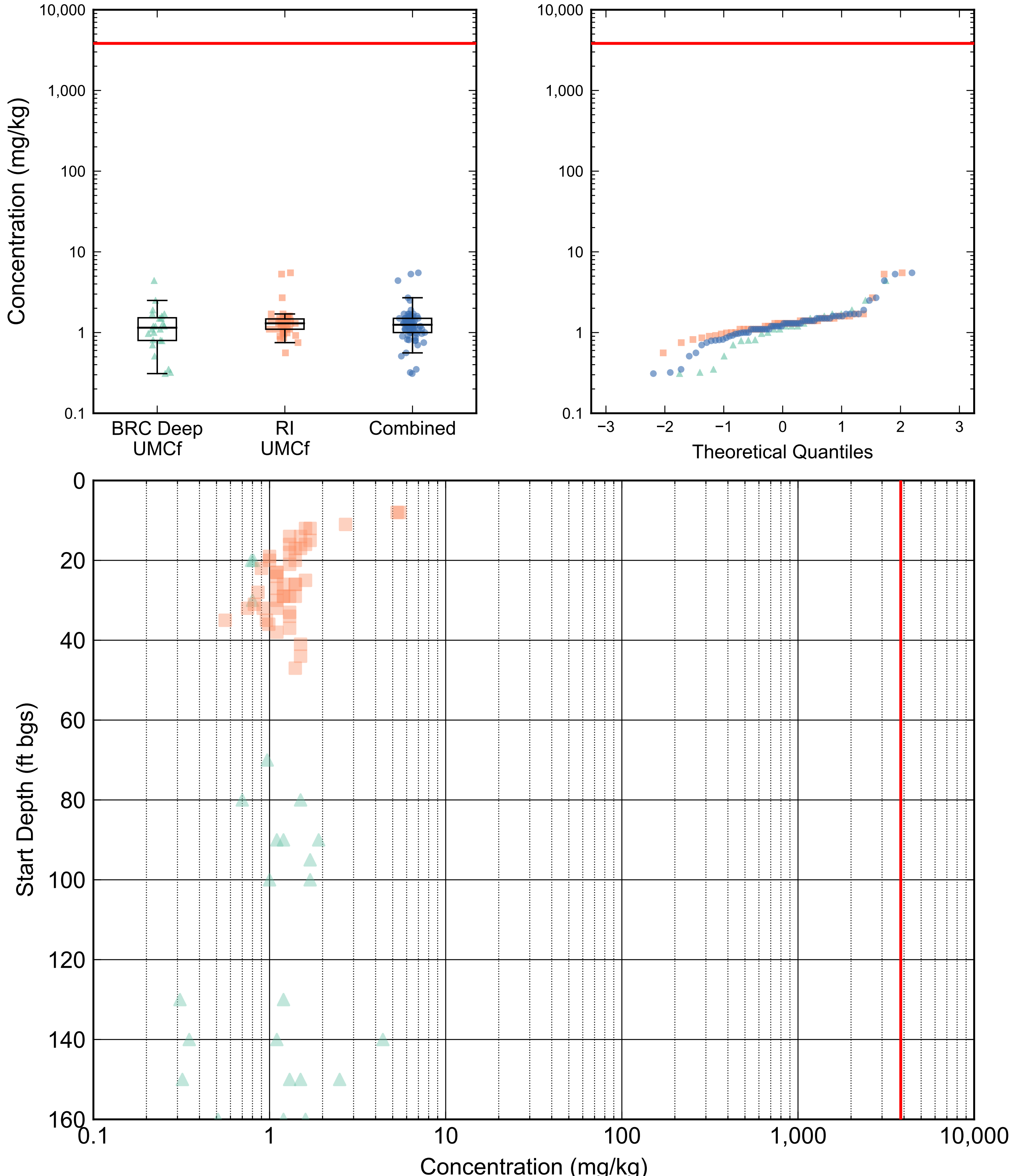
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Tungsten
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5x

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 3,830 mg/kg

Non-detects are plotted as open symbols at the detection limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

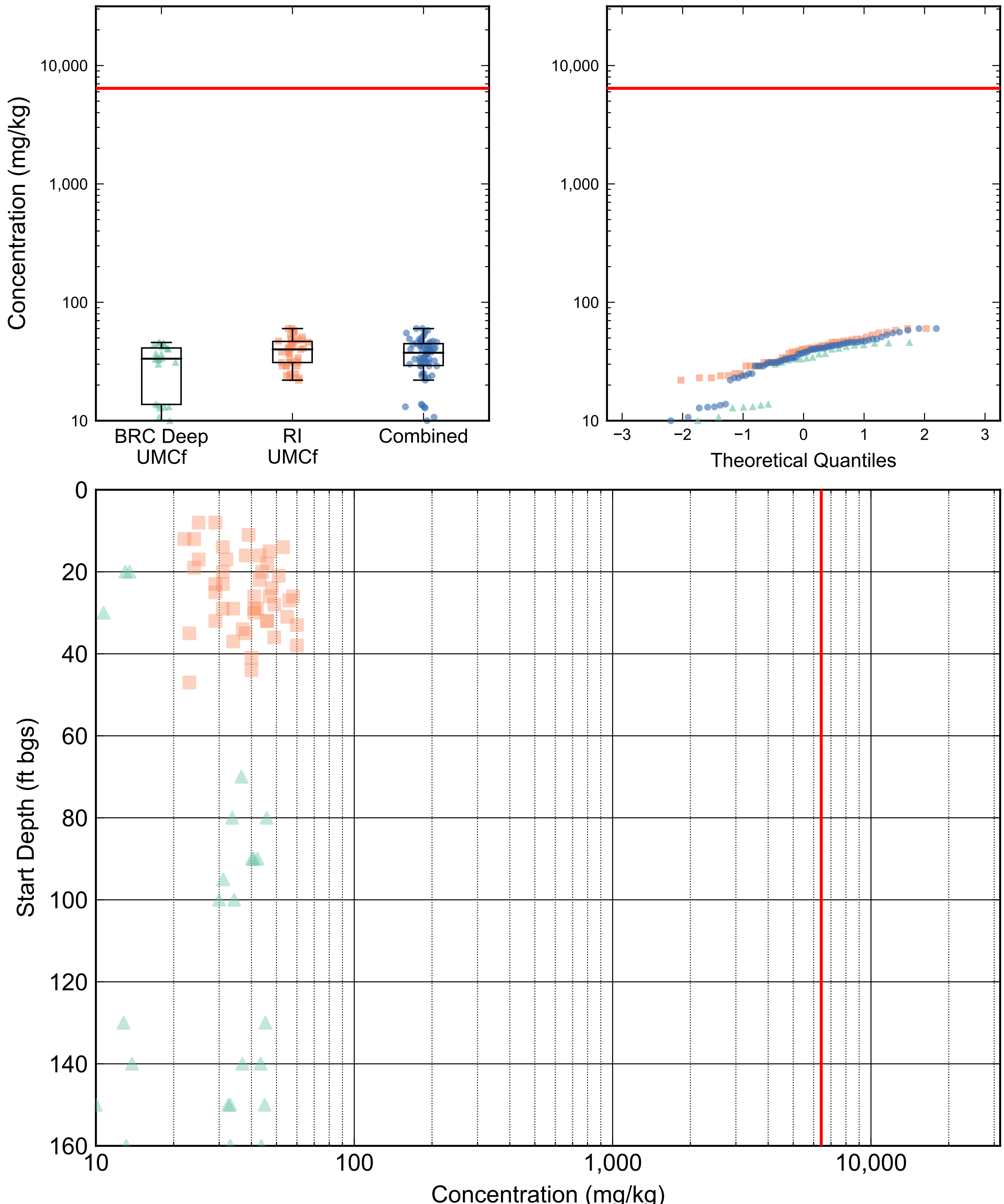
RAMBOLL

UMCf Background Soil Statistics: Uranium (total)
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5y

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 6,420 mg/kg

Non-detects are plotted as open symbols at the detection limit.

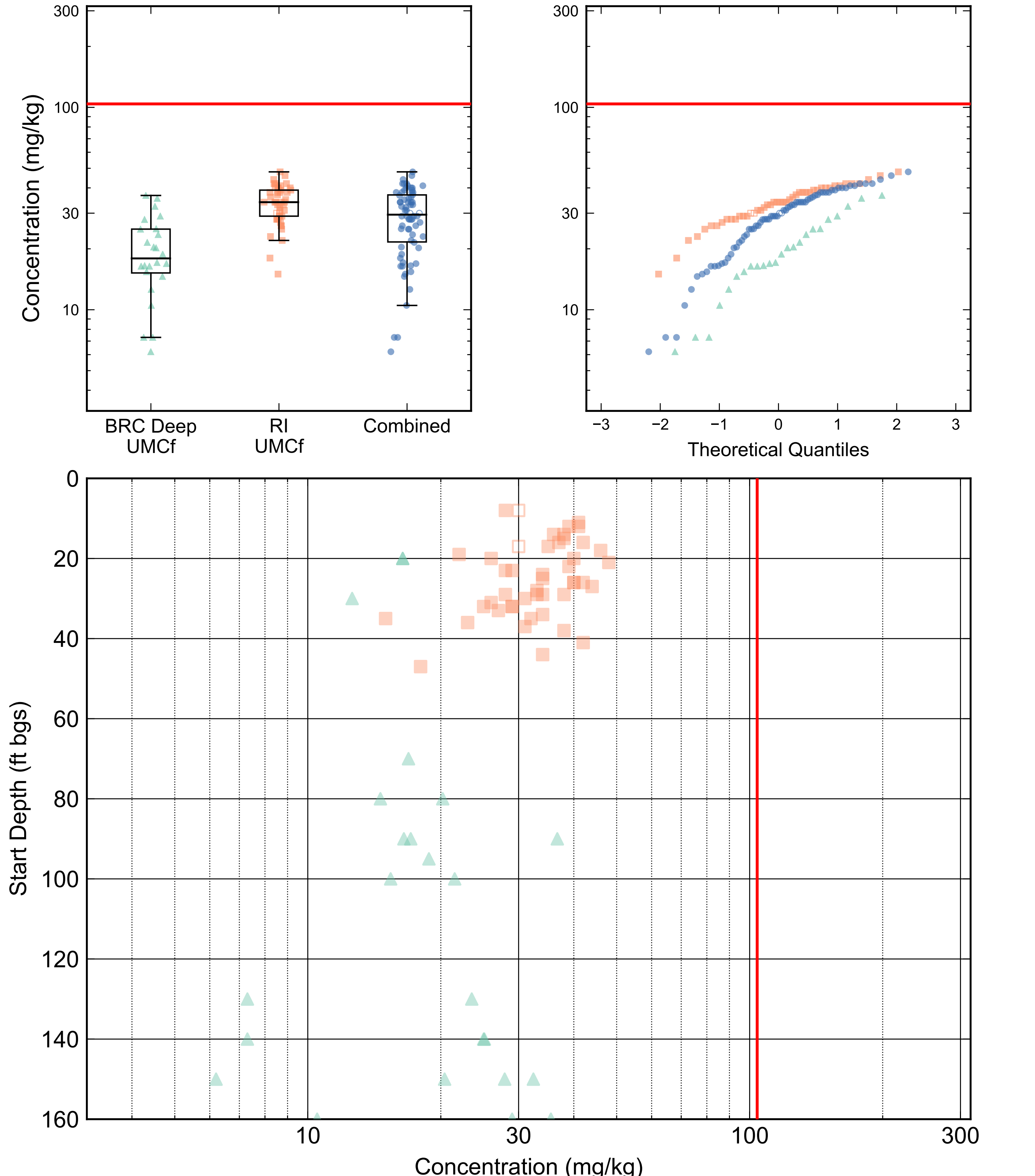
BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Vanadium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5z**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 104 mg/kg

Non-detects are plotted as open symbols at the detection limit.

- BRC 2008 UMCf Background
- NERT RI UMCf Background
- Full Combined Data Set

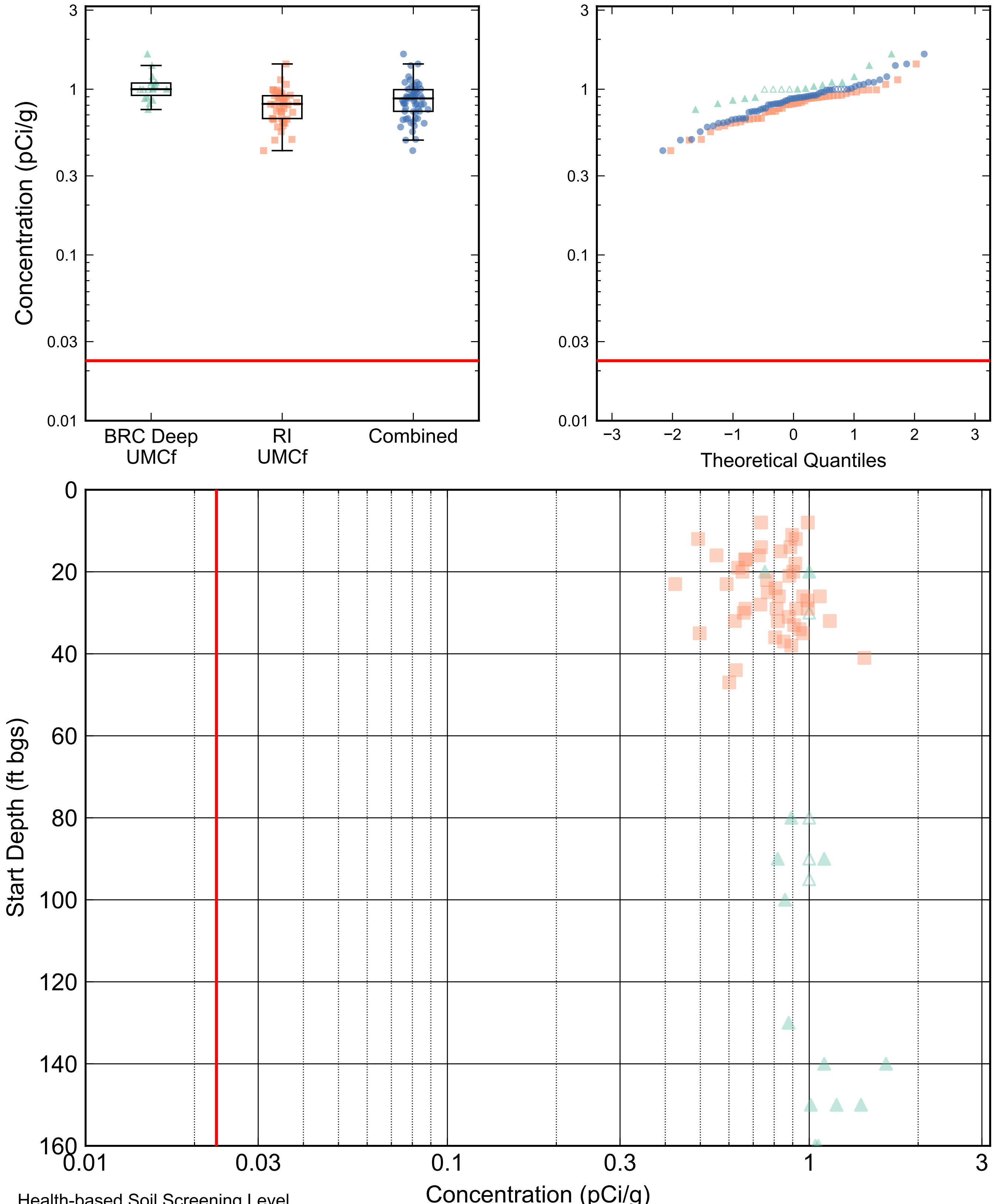
RAMBOLL

UMCf Background Soil Statistics: Zirconium
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5aa

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 0.023 pCi/g

Results below the minimum detectable concentration are plotted as open symbols at the result value.
Open symbols at 1 pCi/g from BRC are censored at the reporting limit.

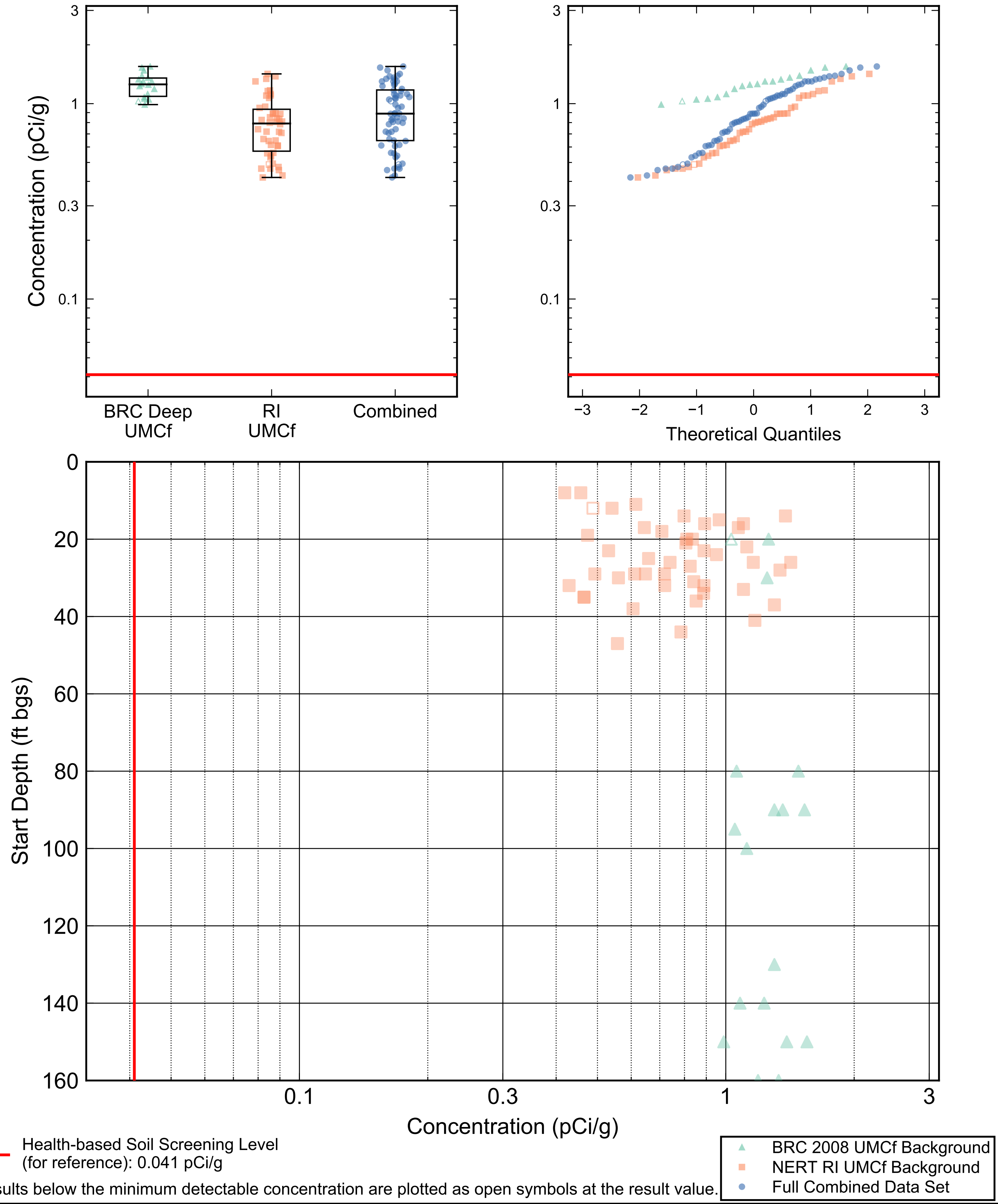
- BRC 2008 UMCf Background
- NERT RI UMCf Background
- Full Combined Data Set

RAMBOLL

UMCf Background Soil Statistics: Radium-226
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5ab

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level
(for reference): 0.041 pCi/g

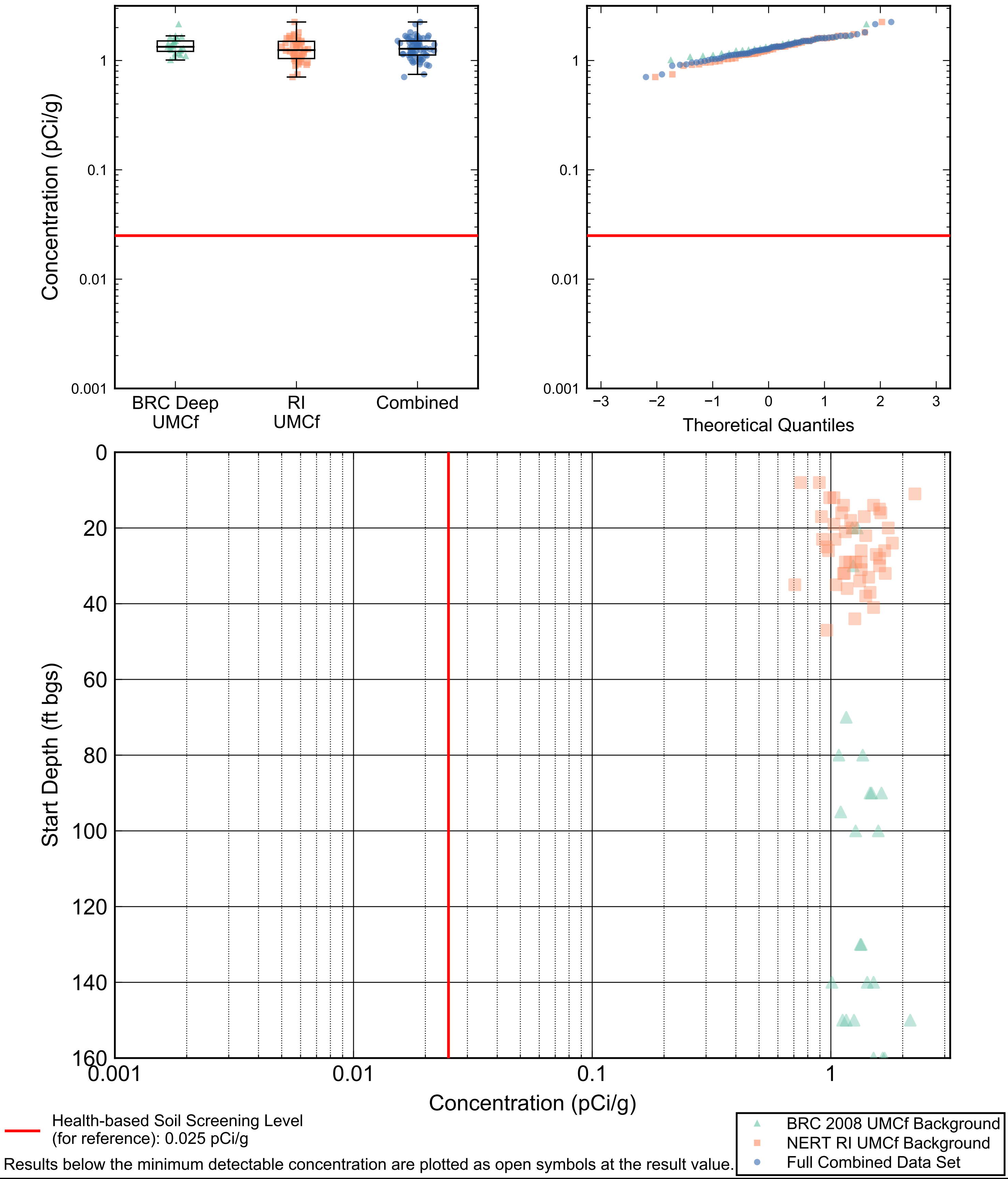
Results below the minimum detectable concentration are plotted as open symbols at the result value.

RAMBOLL

UMCf Background Soil Statistics: Radium-228
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5ac

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



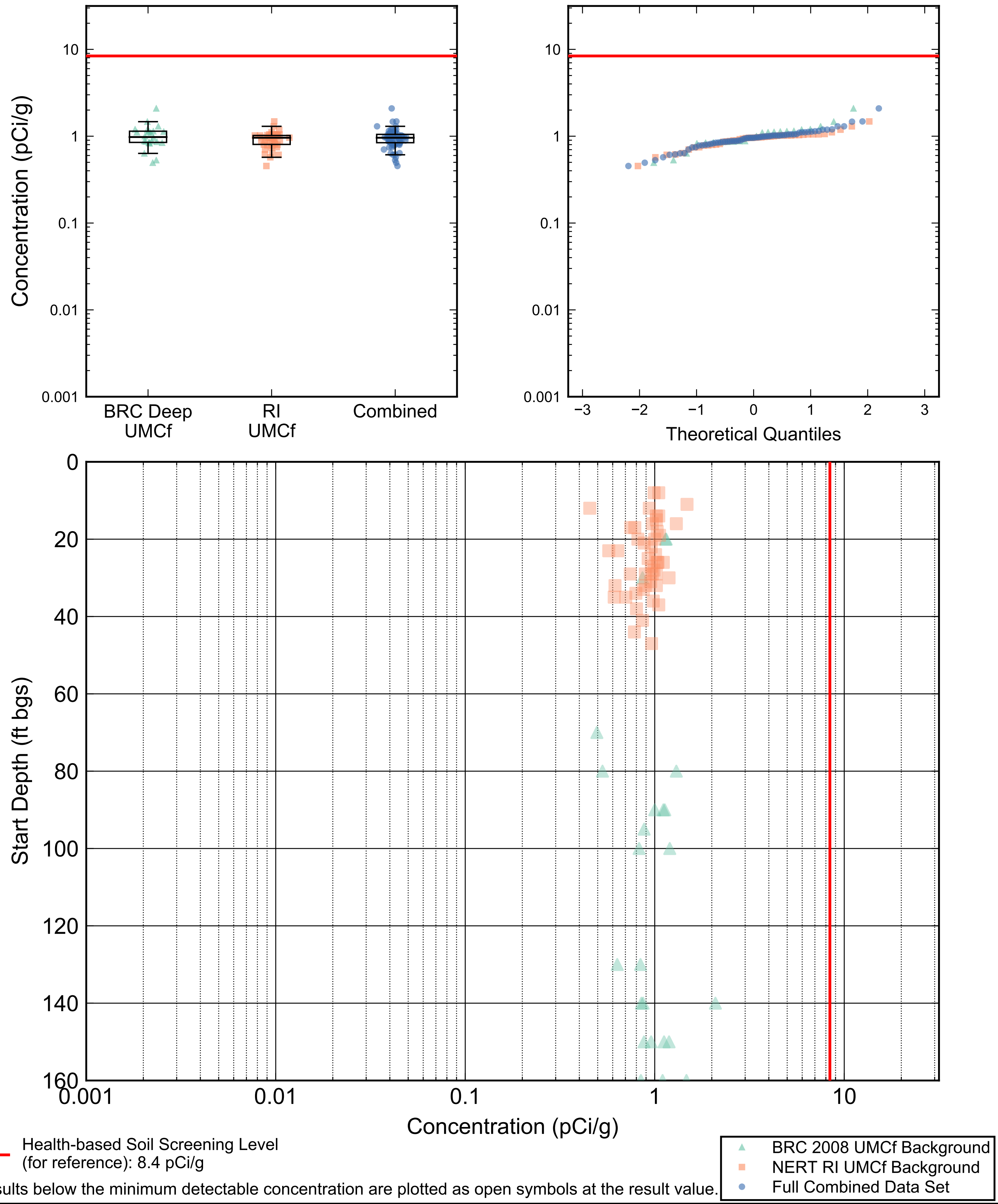
RAMBOLL

UMCf Background Soil Statistics: Thorium-228
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5ad**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

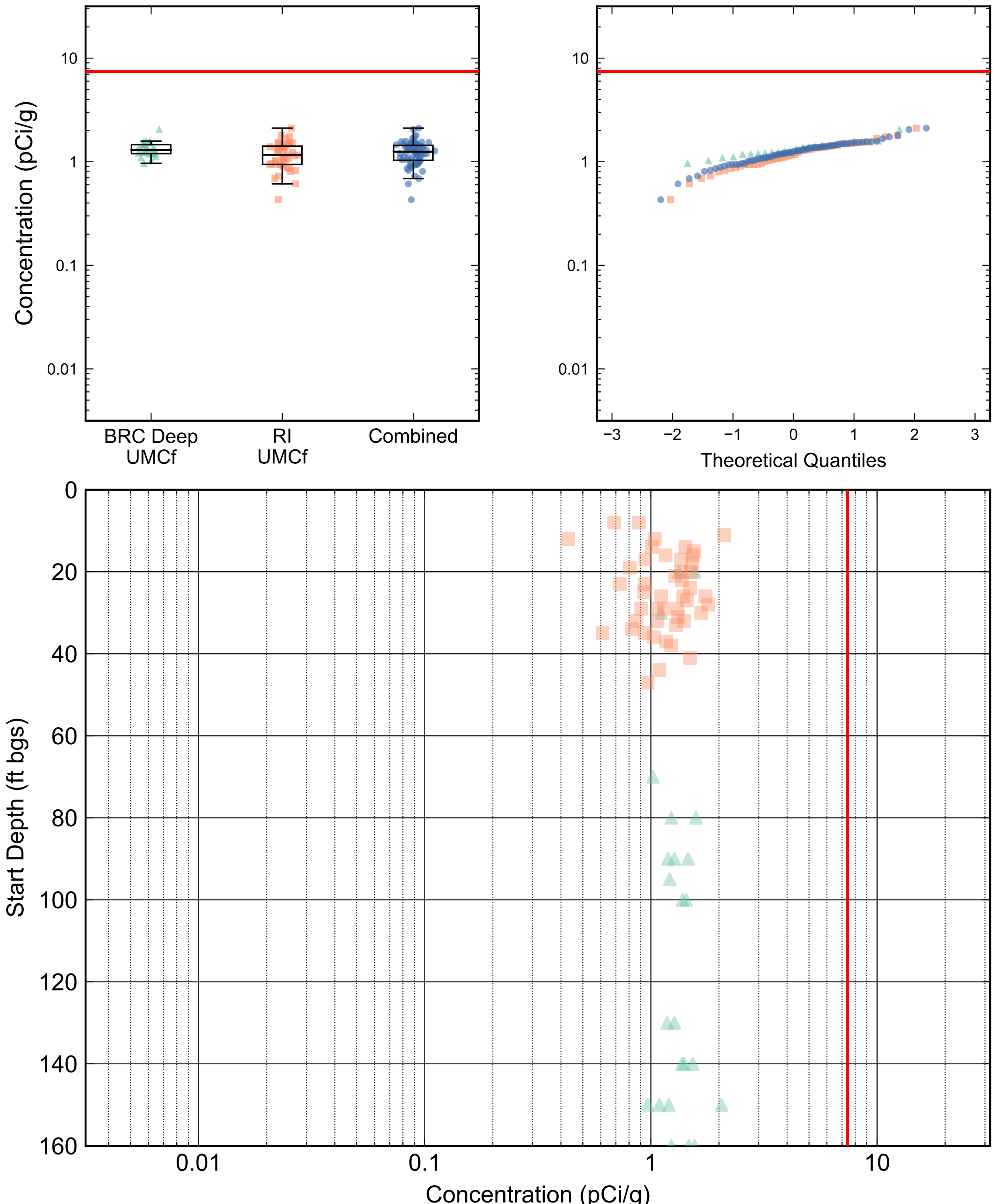
Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



RAMBOLL	**UMCf Background Soil Statistics: Thorium-230** Soil Background Data Set Summary Report Nevada Environmental Response Trust Site; Henderson, Nevada	Figure **5ae**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



Health-based Soil Screening Level (for reference): 7.4 pCi/g

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

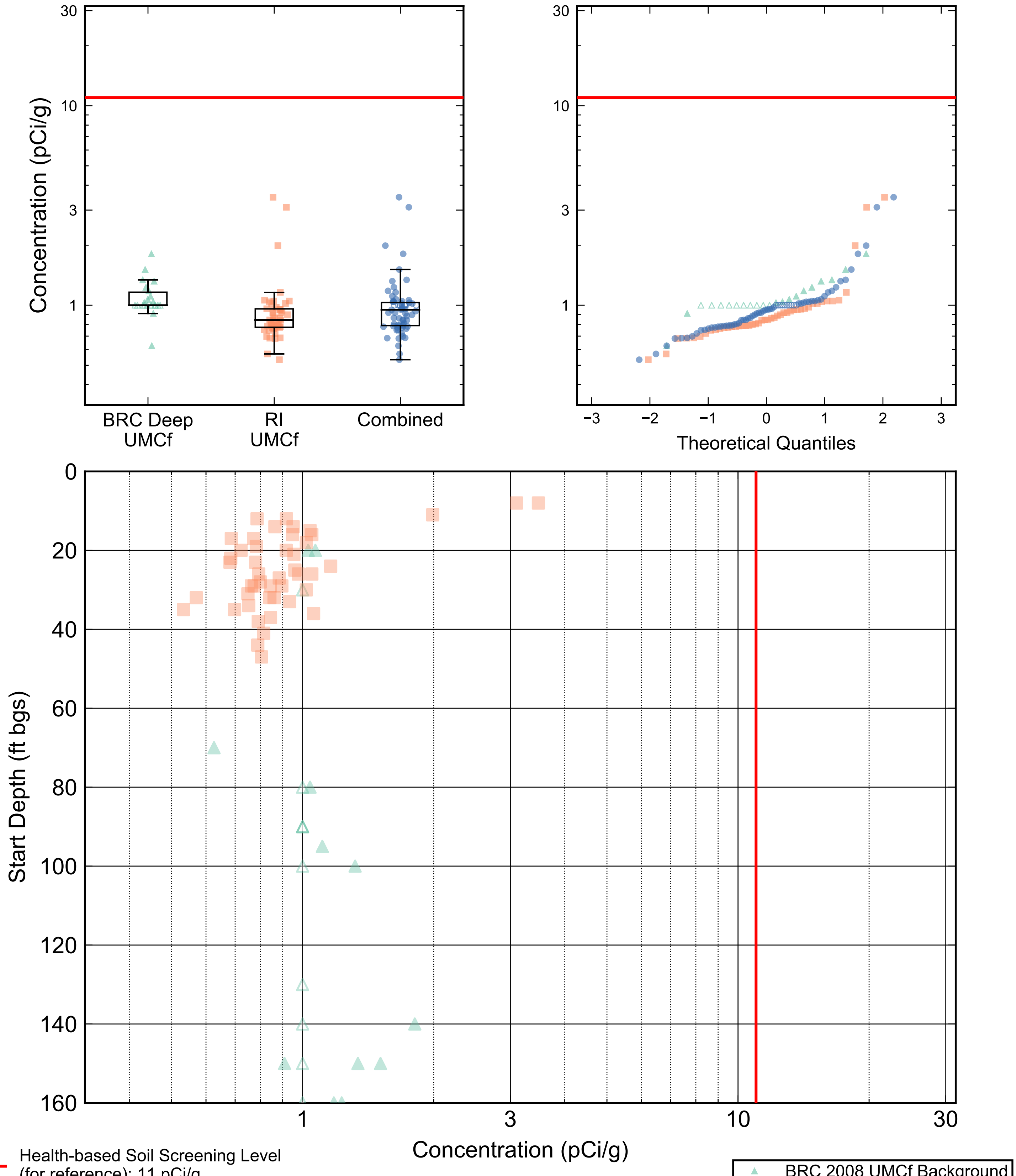
Results below the minimum detectable concentration are plotted as open symbols at the result value.

RAMBOLL

UMCf Background Soil Statistics: Thorium-232
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5af**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



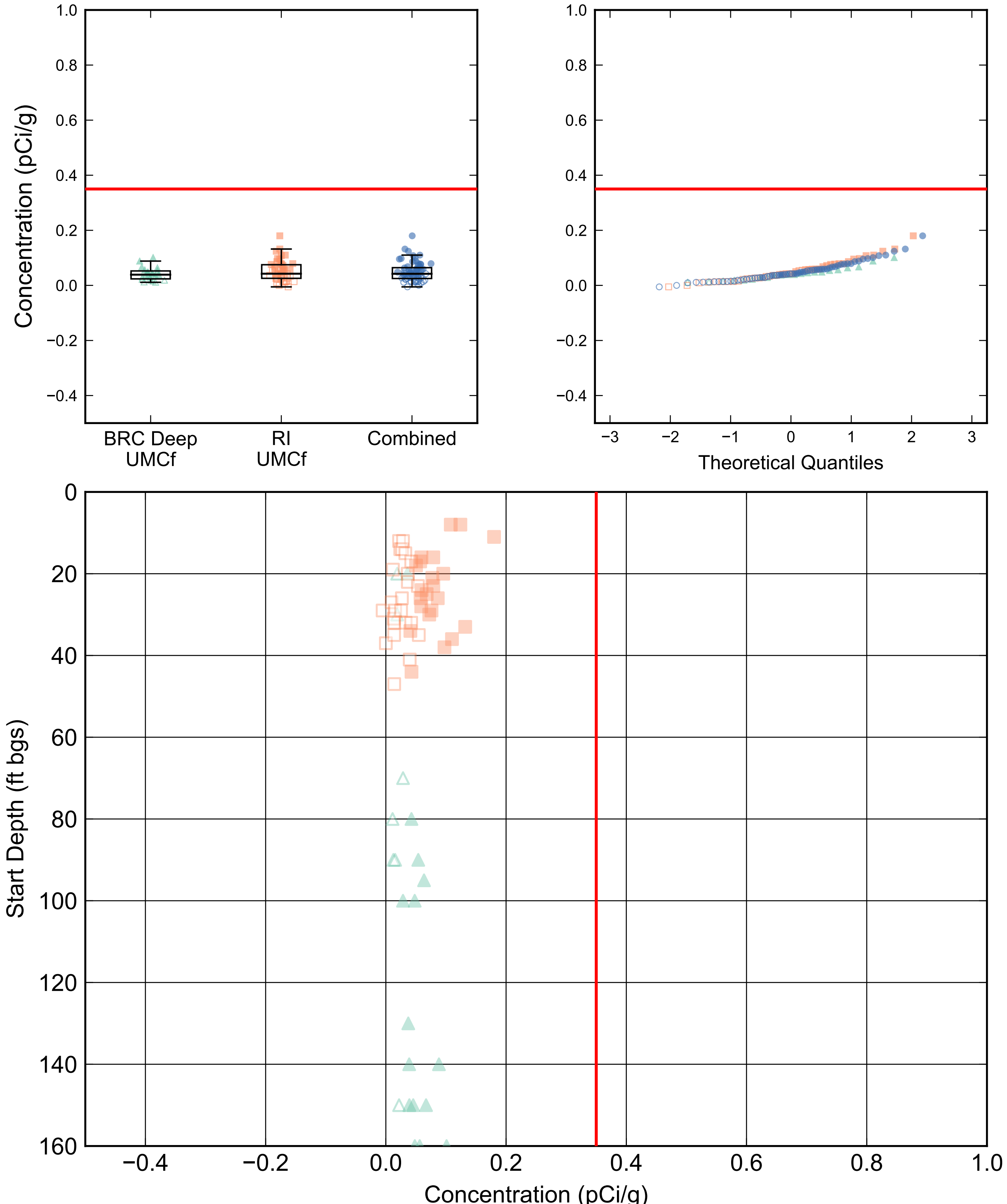
Results below the minimum detectable concentration are plotted as open symbols at the result value.
Open symbols at 1 pCi/g from BRC are censored at the reporting limit.

RAMBOLL

UMCf Background Soil Statistics: Uranium-234
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5ag

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 0.35 pCi/g

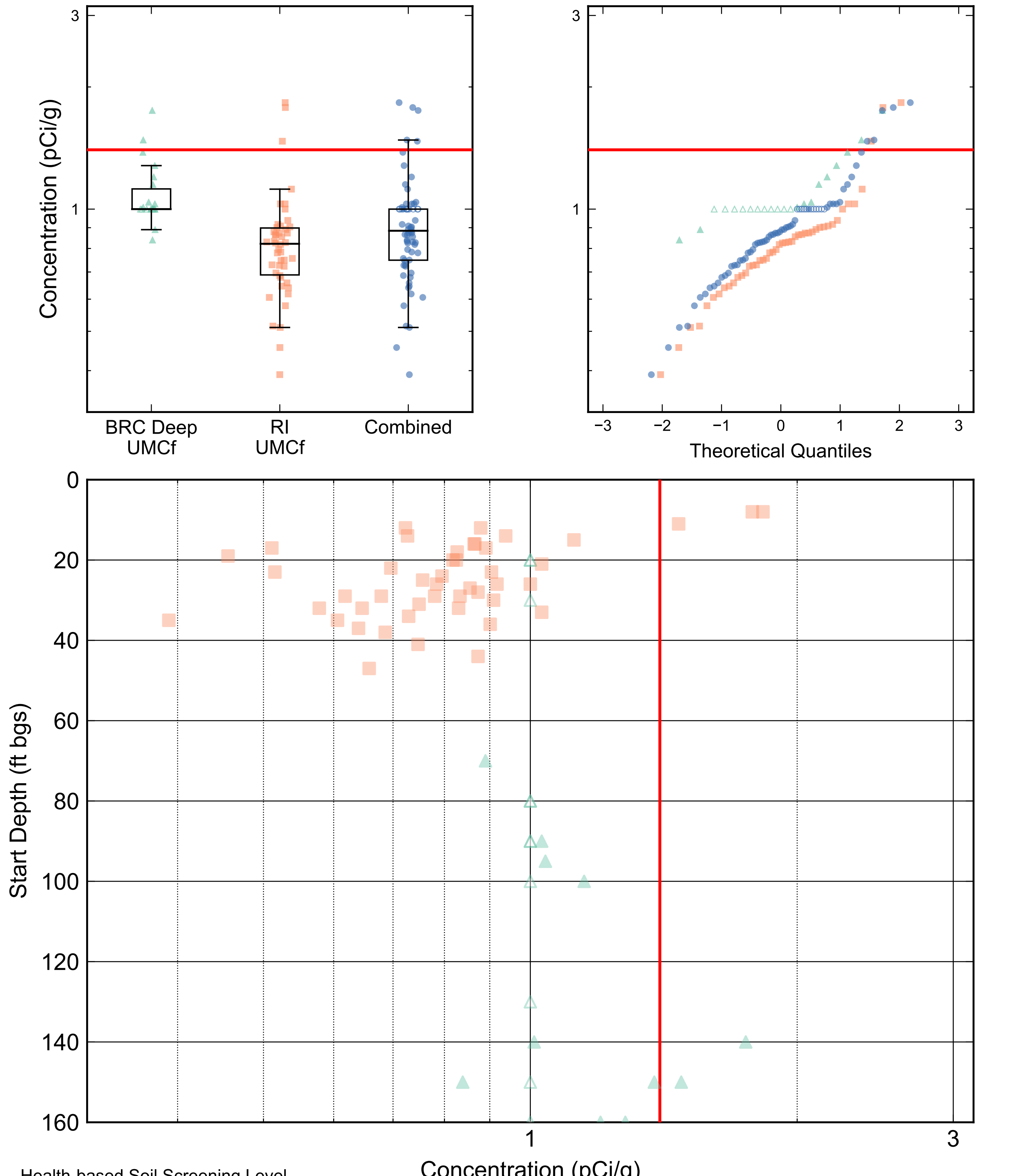
Results below the minimum detectable concentration are plotted as open symbols at the result value.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

UMCf Background Soil Statistics: Uranium-235
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5ah**

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:



Health-based Soil Screening Level (for reference): 1.4 pCi/g

Results below the minimum detectable concentration are plotted as open symbols at the result value.
Open symbols at 1 pCi/g from BRC are censored at the reporting limit.

BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set

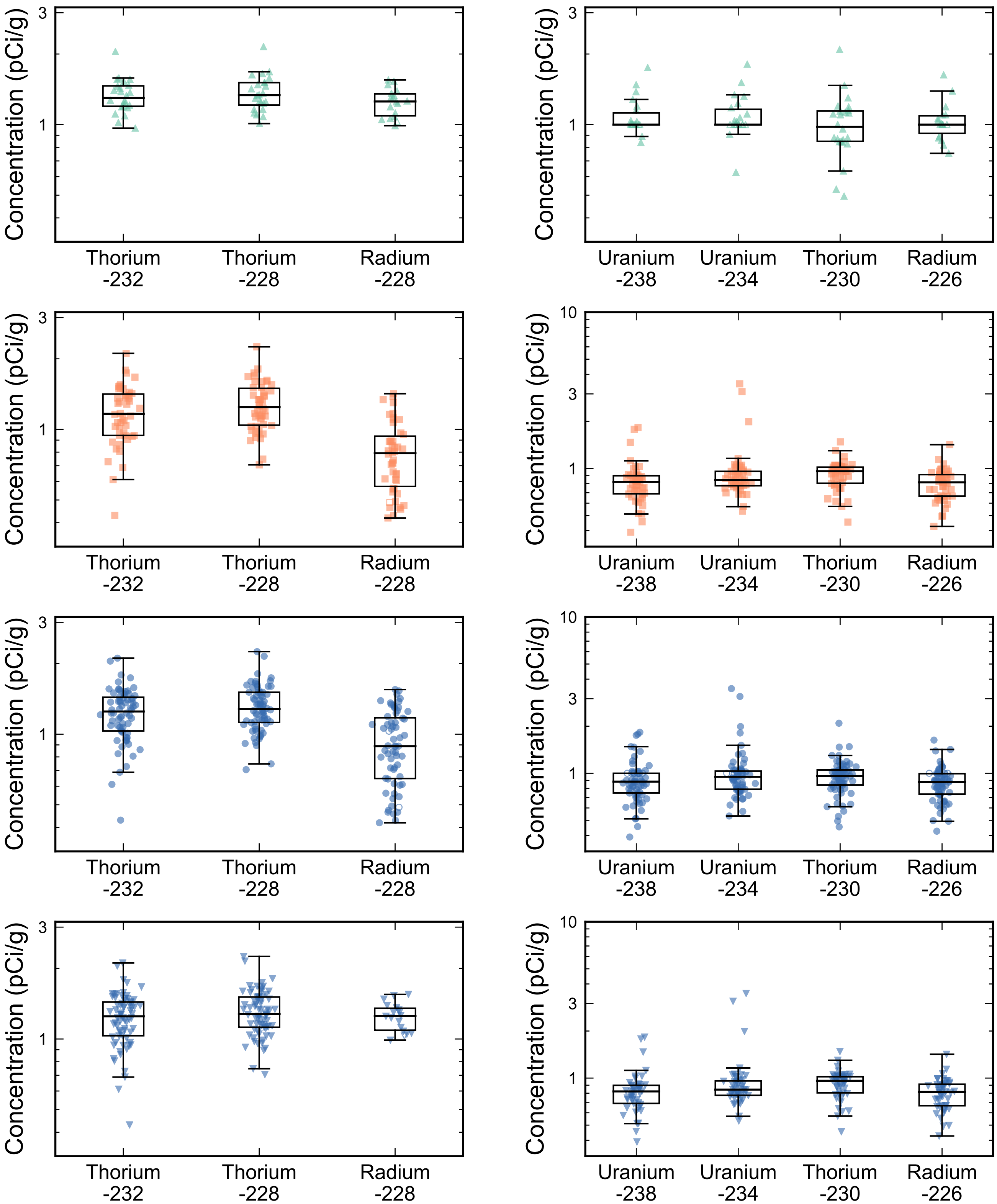
RAMBOLL

UMCf Background Soil Statistics: Uranium-238
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
5ai

Drafter: JH | Date: 03/14/21 | Contract Number: 169002 0169 | Approved: | Revised:

Path: rehemy\projects\NERT\RI_Evaluation\RI_OU1_OU2\OU1BackgroundComparisonFigures.py



BRC 2008 UMCf Background
NERT RI UMCf Background
Full Combined Data Set
Final Combined Data Set

Results below the minimum detectable concentration are plotted as open symbols at the result value.
Open symbols at 1 pCi/g from BRC are censored at the reporting limit.

RAMBOLL

UMCf Background Secular Equilibrium Exploratory Data Analysis
Soil Background Data Set Summary Report
Nevada Environmental Response Trust Site; Henderson, Nevada

Figure
6

Drafter: JH | Date: 03/12/21 | Contract Number: 169002 0169 | Approved: | Revised: