



# UES<sup>TM</sup>

**DRAFT  
Remedial Action Plan**

**SIERRA REFLECTIONS SUBDIVISION  
Washoe County, NV**

**Prepared for:**  
World Properties Inc.  
Joy Lake Road  
Reno, NV 89511

and

Northern Nevada Public Health  
Environmental Health  
Attn: Wesley Rubio  
1001 E Ninth Street, Bldg. B  
Reno, NV 89512

**Prepared By:**  
**UES**  
6995 Sierra Center Parkway  
Reno, Nevada 89511

July 3, 2025  
Project No. A23173.00128

---

## Table of Contents

1.0	Introduction.....	1
2.0	Background.....	1
2.1	Site Description.....	1
2.2	Site History.....	1
2.3	Previous Investigations/Regulatory Involvement .....	1
2.3.1	Carson River Mercury Superfund Site (CRMS) .....	1
2.3.2	1993 Steamboat Creek Erosion Study.....	2
2.3.3	2023 Phase I ESA.....	3
2.3.4	2023 Screening Level Soil Sampling .....	3
2.3.5	2024 Site Characterization Soil Sampling.....	3
3.0	2025 Site Charectorization Activites.....	4
3.1	Characterization Activities .....	4
3.2	Analytical Testing and Results.....	5
4.0	Conceptual Site Model .....	5
5.0	Remedial Action Levels.....	5
6.0	Remedial Action Plan.....	6
6.1	Clearing and Grubbing.....	6
6.2	Impacted Soil Excavation .....	6
6.3	Fill Placement and Site Grading.....	7
7.0	Confirmation Sampling.....	8
7.1	Roadway Sampling.....	8
7.2	Residential Area and Beneficial Reuse Area Sampling.....	8
7.3	Sample Analysis .....	9
7.4	Evaluation of Results.....	9
8.0	NNPH Notification .....	9
9.0	Report Preparation .....	10
10.0	Additional General Requirements .....	10
10.1	Environmental Remediation Bond.....	10
10.2	Irrevocable Easements for Beneficial Reuse Areas .....	10
11.0	Limitations .....	11
12.0	Closing .....	12

**TABLES**

Table 1	Summary of Analytical Results – Screening Level Sampling
Table 2	Summary of Zone 1 Analytical Results – March 2024
Table 3	Summary of Zone 2 Analytical Results – March 2024
Table 4	Summary of Zone 3 Analytical Results – March 2024
Table 5	Summary of Zone 1 Analytical Results – March 2025

**FIGURES**

Figure 1	Project Location Map
Figure 2	Site Map Showing CRMS Boundaries
Figure 3	Site Map showing Screening Level Sample Locations and Results
Figure 4	Site Map Showing Sampling Zones
Figure 5A	Site Map Showing Zone 1 Boring Locations at Depth 0-4'
Figure 5B	Site Map Showing Zone 1 Boring Locations at Depth 4-8'

**APPENDICIES**

Appendix A	Remedial Action Grading Plans
Appendix B	Materials Handling Plan
Appendix C	Chain-of-Custody Records and Laboratory Reports for Soil Samples



**DRAFT**

**Remedial Action Plan for:**

Sierra Reflections Subdivision

Washoe County, Nevada

July 2025

UES Project Manager

A handwritten signature in black ink that reads "Caitlin Jelle". It is written in a cursive, flowing script.

Caitlin Jelle, P.E., C.E.M.

NNPH Environmental  
Health Supervisor:

Wesley Rubio, MPH, REHS

NDEP CRMS Coordinator:  
(Optional)

David Friedman

## 1.0 INTRODUCTION

On behalf of World Properties Inc., UES Professional Solutions 30, LLC dba UES (UES) has prepared this Draft Remedial Action Plan (RAP) for the Sierra Reflections Subdivision (Site) located in Washoe County, to address a portion of the project which contains elevated concentrations of mercury within the soil above residential and commercial action levels. The RAP will be finalized during the Final Map submission process to include the final grading plans. The location of the Site is indicated in [Figure 1](#). Note that while concentrations of arsenic exceeding regulatory action levels were found on the Site, they are within background ranges for the region and therefore not considered in this RAP. A summary of recent mercury characterization activities conducted at the Site in March 2025 is also provided herein.

## 2.0 BACKGROUND

### 2.1 SITE DESCRIPTION

The Site is comprised of approximately 760 acres of agricultural land, grazing pastures, and vacant, vegetated land traversed by Steamboat Creek, Browns Creek, and unimproved roadways. The Site is identified as Washoe County Assessor Parcel Numbers (APNs) 046-080-40, 046-090-09, 046-090-01, 046-060-45, 046-090-10, 046-090-04, 046-060-47, 046-090-11, 046-090-05, 046-060-55 046-090-12, 046-090-06, 046-100-02, 046-090-13, 046-090-07, 046-100-03, 046-090-14, 046-090-08, 046-100-04, 046-090-15, 046-090-18, 046-100-07, 046-090-16, 046-090-23, 046-100-10, 046-090-17, 046-090-24, 046-090-25, and 046-090-26. The Site is planned for development as a common open space residential subdivision called Sierra Reflections.

### 2.2 SITE HISTORY

Prior to the 1900s, historical gold milling activities occurred on the Site and the Virginia and Truckee Railroad traversed along Steamboat Creek. The Site appeared to be utilized for agricultural and ranching operations since at least the 1930s with various ranching and rural residential structures previously located on the Site. By 2017, all structures appeared to be removed from the Site with the exception of an existing trailer and well house located in the northeastern portion. UES understands that the majority of the low-lying land in the meadow area has been flood irrigated utilizing water from Steamboat Creek which is known to be impacted with mercury from historical mining and milling activities. Additionally, portions of the site including Steamboat Creek and the former mill location are located within the Carson River Mercury Superfund Site (CRMS). The boundaries of the CRMS in relation to the Site are depicted in [Figure 2](#).

### 2.3 PREVIOUS INVESTIGATIONS/REGULATORY INVOLVEMENT

#### 2.3.1 [Carson River Mercury Superfund Site \(CRMS\)](#)

During the late 1800s, Comstock Lode gold and silver mills in the Carson River and Steamboat Creek watersheds resulted in contamination to nearby soils and drainages. An estimated 14 million pounds of elemental mercury, which was used to extract precious metals from ore through operations utilizing the Washoe amalgamation process, were released to the environment. The Washoe amalgamation process was developed in the 1860s. Large, circular iron tanks or "pans" with mechanical agitators held crushed

---

ore, which was mixed with water, mercury, salt, and copper sulfate, then heated and agitated. The valuable part of the ore (precious metals) would then amalgamate in the mercury and subsequently be removed. The mercury would then be boiled away leaving the precious metals. The Washoe process resulted in mercury contamination proximal to and hydrologically downgradient from the mill sites. After around 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe City, near Washoe Lake and on Steamboat Creek downstream of Washoe Lake. Fluvial transport of the mercury and arsenic is the primary means by which the metals were mobilized in Steamboat Creek. Based on previous studies in Washoe County, mercury and arsenic impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but long-term flood-irrigation with water from Steamboat Creek and flood events in the areas surrounding Steamboat Creek are known to have deposited mercury and arsenic impacted sediment outside of the stream channel.

With EPA oversight, several local agencies have conducted studies to determine the extent of contamination and evaluate the human health and ecological risks from the mercury contamination associated with the CRMS. These investigations have found that historic releases of mercury have impacted: sediments and adjacent floodplains of the Carson River from New Empire downstream through Lahontan Reservoir and extending to the Stillwater National Wildlife Refuge; soils and sediments in Virginia City, Gold Hill, and Gold, Sixmile, Sevenmile, and Daney Canyons; soils and sediments associated with mill sites in and around Washoe and Little Washoe Lakes and Steamboat Creek; and aquatic and semi-aquatic species living in or near the impacted water bodies. The EPA listed the CRMS on the Superfund National Priorities List in August 1990.

The EPA draft Carson River Mercury Superfund Site map dated March 6, 2018, and the NDEP Carson River Mercury Superfund Site Risk Area Boundaries map dated January 19, 2012, both depict the Site as located within Operable Unit 1 (OU-1) of the CRMS. The CRMS Locations of Risk Area Boundaries map dated April 20, 2011, identifies the Site as potentially containing high level risk zones associated with Steamboat Creek and the Temelic Mill Site which is mapped on the northeastern portion of the Site as indicated in [Figure 2](#). In addition to the areas shown to be in the CRMS, areas that were historically flood-irrigated and/or within the 100-year flood plain could reasonably be expected to be impacted. Based on aerial photographs reviewed during a Phase I Environmental Site Assessment (ESA) conducted by UES (formerly McGinley and Associates, Inc.) in January 2023, the northeast portion of the Site appears to have been flood-irrigated with water from Steamboat Creek since at least 1939.

### **2.3.2 1993 Steamboat Creek Erosion Study**

Based on a review of the EPA CRMS Map Explorer sampling data, limited soil sampling occurred on the Site in June 1993 as part of a Steamboat Creek bank erosion study. At least twelve soil samples were collected from the Site during this sampling event and detectable concentrations of mercury were reported in four of the collected samples ranging from 9.68 milligrams per kilograms (mg/kg) to 117.49 mg/kg. Soil samples appeared to be collected between six inches and three feet below ground surface (bgs) from the banks of Steamboat Creek.

### **2.3.3 2023 Phase I ESA**

In January 2023, UES conducted a Phase I ESA for the Site. The Phase I ESA was conducted to identify any recognized environmental conditions (REC), controlled recognized environmental conditions, or historical recognized environmental conditions associated with the Site. The following REC was identified:

- *The Site is located within the boundaries of the CRMS which includes mercury contamination associated with the legacy gold mining and milling era of the late 1800s. Mercury contamination is known to exist in soils at mill sites, such as the former Temelic Mill Site which is located on the Site, and in nearby waterways and drainages, including the Steamboat Creek and land irrigated with Steamboat Creek water, which are present on the Site. Concentrations of mercury exceeding the CRMS action level of 80 mg/kg have been reported in the Site soils up to 117 mg/kg during a limited soil investigation conducted in 1993. Additional contamination of the Site related to the CRMS cannot be ruled out.*

### **2.3.4 2023 Screening Level Soil Sampling**

In April and May 2023, UES conducted a screening level soil sampling event at the Site to provide baseline knowledge of existing site conditions to evaluate decisions for future development and/or sampling activities. During the screening level sampling, 43 soil samples were collected from locations of suspected mercury impacts including Steamboat Creek, flood irrigated land, and the former mill site. Additionally, two background soil samples were collected from locations topographically upgradient of Steamboat Creek where mercury impacts were not anticipated. Detectable mercury concentrations were reported in all of the collected samples ranging from 0.079 mg/kg to 116 mg/kg. Thirty of the 43 samples were reported above the EPA Regional Screening Level (RSL) of 7.1 mg/kg for residential soil and six samples were reported above the EPA RSL of 30 mg/kg for industrial soils. A summary of the sample results is provided in Table 1. These samples were located in the flood irrigated areas in the northeastern portion of the Site and in the vicinity of Steamboat Creek as depicted in [Figure 3](#).

### **2.3.5 2024 Site Characterization Soil Sampling**

Between January and March 2024, soil sampling activities were conducted by UES to characterize and delineate mercury, lead, and arsenic impacts at the Site prior to approval of development plans in compliance with Northern Nevada Public Health (NNPH) policy.

The Site was divided into three zones as differing levels of impacts were expected based on location, historical use, and potential for flooding and/or flood irrigation. The zones are depicted in [Figure 4](#). Zone 1 was located within the northeastern portion of the Site and is characterized by low-lying meadows and agricultural grazing land along Steamboat Creek which are subject to flood events and flood irrigation which is known to deposit impacted sediments outside the creek bed. Additionally, the former Temelic Mill site is located within this zone. Zone 2 encompassed the banks of Steamboat Creek which traverses the central portion of the Site from the southwest to the northeast. Zone 3 is located along the western and eastern portions of the Site and is characterized by areas located topographically upgradient of Steamboat Creek, outside the 100-year floodplain, and with no known flood irrigation.

Characterization activities included advancing 210 borings/test pits and collecting composite soil samples from two soil horizons (0-4' and 4-8') in Zone 1, collecting 46 discrete soil samples from Zone 2 along Steamboat Creek, and collecting 23 discrete soil samples from Zone 3. A total of 449 samples were

collected from across the Site. Of those 449 samples, 81 exceeded the residential action level for mercury (7.1 mg/kg) and 16 exceeded the commercial action level (30 mg/kg).

Mercury analytical results for samples collected in the 0-4' horizon within the meadow (Zone 1) ranged from 0.09 mg/kg to 181 mg/kg. Of the 210 grid cells sampled in this horizon, 61 cells exceeded the residential action level (7.1 mg/kg) and only 12 grid cells exceeded the commercial action level (30 mg/kg), as indicated in Figure 5A. Mercury analytical results for samples collected in the 4-8' horizon within the meadow (Zone 1) ranged from 0.0225 mg/kg to 79.7 mg/kg. Of the 170 samples collected for this horizon, only six cells exceeded the residential action level (7.1 mg/kg) and only two samples exceeded the commercial action level (30 mg/kg) as indicated in Figure 5B. A summary of the sample results is provided in Table 2.

Mercury analytical results for samples collected from the Steamboat Creek bank (Zone 2) ranged from 0.0392 mg/kg to 311 mg/kg. This is consistent with known mercury impacts from the CRMS. While the entirety of this portion of Steamboat Creek is included in the CRMS boundaries, impacts above action levels appear limited as they are located sporadically and are not consistently present along Steamboat Creek due to the mechanisms of sedimental transport of mercury and dilution over the last 120 years. Mercury analytical results for samples collected from areas above the flood zone which were not irrigated with Steamboat Creek water (Zone 3) ranged from 0.0269 mg/kg to 1.4 mg/kg, well below the residential action level of 7.1 mg/kg. A summary of the sample results for Zone 2 and Zone 3 are provided in Tables 3 and 4 respectively. As such, Zone 2 and Zone 3 were cleared and are not included in this RAP.

A total of 82 samples were collected and analyzed for arsenic and lead. With the exception of one sample collected from the former mill site (B49), concentrations of arsenic ranged between 0.625 mg/kg and 21.5 mg/kg with an average concentration of 4.94 mg/kg, and concentrations of lead ranged between 3.89 mg/kg and 76.1 mg/kg with an average concentration of 13.0 mg/kg. These results are consistent with naturally occurring background concentrations within the region. The sample collected from the former mill site (B49) had elevated concentrations of arsenic (308 mg/kg) and lead (556 mg/kg) well above the Site average and EPA residential RSLs within the 0-4' soil horizon. Lead and arsenic are known byproducts of milling techniques. The affected area appears to be limited and will be mitigated with the same methodology as mercury impacted soils. Complete details of this investigation are provided in *Results of Mercury Characterization and Corrective Action Plan (CAP)* dated June 14, 2025.

### 3.0 2025 SITE CHARACTERIZATION ACTIVITIES

Based on the elevated mercury concentrations observed during the 2024 mercury characterization activities, additional sampling activities were conducted to further delineate of mercury, arsenic, and lead impacts in Zone 1 at the Site prior to preparing tentative maps and this RAP. The additional sampling activities were conducted in general accordance with the SAP prepared by UES, dated November 22, 2023.

#### 3.1 CHARACTERIZATION ACTIVITIES

The additional characterization activities conducted at the Site consisted of advancing 29 borings in Zone 1, collecting composite soil samples from one soil horizon (0-4') in each boring, analytical testing of the collected soil samples, and preparing this summary of findings. Characterization activities were conducted in March 2025. Methods for drilling and sampling were consistent with the SAP and the subsequent report. Soil boring locations are indicated in Figure 5A.

### 3.2 ANALYTICAL TESTING AND RESULTS

Soil samples were shipped to Pace Analytical National (Pace) of Mount Juliet, Tennessee for analytical testing. All soil samples were analyzed for mercury using EPA Method SW7471 with the exception of samples collected from borings B238 and B239, which were analyzed for lead and arsenic by EPA Method 6010D. Copies of the chain of custody records and analytical laboratory reports for the soil samples are included as Appendix C.

Analytical results for the collected soil samples are included in Table 5. Detectable concentrations of mercury were reported in 25 of the 29 samples collected, with concentrations ranging from 0.109 mg/kg (B234) to 56.0 mg/kg (B225). Of the 29 samples collected, 11 exceed the residential action level for mercury (7.1 mg/kg) and two exceed the commercial action level for mercury (30 mg/kg). The two samples analyzed for arsenic and lead reported concentrations of arsenic above the industrial action level of 3.0 mg/kg but within background ranges and concentrations of lead below the residential action level of 200 mg/kg. The additional site characterization sampling event achieved complete delineation of the impacted areas.

### 4.0 CONCEPTUAL SITE MODEL

The mercury, arsenic, and lead impacted soil at the Site is related to legacy gold milling activities from the historic Comstock Lode mining era. Processing of the ore at Comstock's gold mills generally involved comminution of the ore with stamp mills, creating a slurry, and adding mercury to form an amalgam with the gold and silver. The gold and silver were later separated from the mercury using a distillation process and the mercury was reused. After about 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic and lead in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe City, near Washoe Lake. The Temelic Mill site is also located on the Site. Fluvial transport of the metals is the primary means by which the metals were mobilized in Steamboat Creek. The mercury, arsenic, and lead impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but decades of flood-irrigation at the Site with water from Steamboat Creek and flood events in the area allowed mercury sediment to be deposited on the Site. As such, mercury-impacted soil or soil with elevated concentrations of arsenic and lead are not expected to exist outside of the flood-irrigated lands and/or the 100-year floodplain.

### 5.0 REMEDIAL ACTION LEVELS

Pursuant to direction and discussion with the Nevada Division of Environmental Protection (NDEP) and the NNPH, action levels at the Site will follow the EPA Regional Screening Levels (RSLs). The EPA RSLs for mercury, lead, and arsenic are summarized in the table below.

COCs	EPA RSL – Residential	EPA RSL – Commercial
Mercury	7.1 mg/kg	30 mg/kg
Lead	200 mg/kg	800 mg/kg

Arsenic	0.68 mg/kg	3.0 mg/kg
---------	------------	-----------

As indicated in UES's (formerly McGinley) September 27, 2021, *South Truckee Meadows Regional Arsenic Background Levels* report, regional background arsenic concentrations in soils appear to range from 1.8 mg/kg to 320 mg/kg. While arsenic concentrations in soil samples collected for the Sierra Reflections Subdivision appear to be elevated when compared to the EPA action level of 0.68 mg/kg for residential scenarios, these soil sample concentrations are within the known background range for arsenic within this region. In general, soil with elevated concentrations of arsenic are known to be collocated with elevated mercury concentrations in this region. Therefore, the proposed RAP for mercury impacted soils would inherently address elevated arsenic concentrations in the low-lying areas.

## 6.0 REMEDIAL ACTION PLAN

Remedial action will focus on protecting public health by removing and/or capping mercury impacted soils such that shallow soils do not contain mercury above the residential action level of 7.1 mg/kg and roadways do not contain mercury above the industrial/construction action level of 30 mg/kg.

In general, the RAP for this Site includes moving impacted soil from an area where cutting is proposed to an area requiring fill as part of site grading activities. Impacted soil used as beneficial fill in other parts of the Site will be capped with a minimum of eight feet of clean material. Additionally, as a conservative measure, areas where soil was removed in Zone 1 will be capped with eight feet of clean material. This cap will prevent contact with potentially impacted soil following Site development. The remedial action site grading plans are provided in **Appendix A**. These plans outline the anticipated cut and fill locations. Exhibit EX1 outlines the anticipated extent of cut and locations for beneficial reuse (fill), exhibit EX2 indicates where the eight-foot clean cap will be applied, and exhibit EX3 provides cross sections for select areas of interest. As indicated in the Exhibits in Appendix A and in **Figures 5A and 5B**, impacted areas within the meadows will be excavated and capped with clean material. Additional details of the remedial action are provided in the following sections.

### 6.1 CLEARING AND GRUBBING

Prior to soil excavation, the impacted areas will be cleared and grubbed. Soil associated with the grubbed material in this area is assumed to be impacted. Vegetation and surface debris that is cleared and grubbed will be placed in the designated beneficial reuse areas. All grubbed material will be placed as soon as possible in order to avoid double handling and stockpiling is not planned. Any material that must be stored for a length of time will follow the Materials Handling Plan provided in Appendix B.

### 6.2 IMPACTED SOIL EXCAVATION

Prior to mass grading on the property, the areas known to be impacted will be excavated to approximately eight feet below the planned final grade to account for eight feet of clean cap as indicated in Appendix A. Excavation boundaries will be dictated by sample results and conservative lateral estimates provided in **Figure 5A and Figure 5B**. Development plans dictate that utilities will be no deeper than eight feet bgs. As such, no additional excavation and/or sampling activities will be conducted in roadways. Additionally, no excavation of impacted material is planned for the Steamboat Creek exclusion area. Excavated soil will be transported to the beneficial reuse area concurrently with excavation to prevent double handling,

migration via wind, stormwater, and/or confusion regarding what soil can be placed where. All contaminated soil excavation will take place prior to beginning other grading efforts for the Site (with the exception of preparing the beneficial reuse areas), in order to keep mercury laden soil segregated from non-impacted soils.

### 6.3 FILL PLACEMENT AND SITE GRADING

Impacted soil removed from Zone 1 of the Site will be placed in one of the beneficial reuse areas identified in **Appendix A, EX1**. As indicated in the exhibits, these areas are proposed to be open space in the development and will not contain residential housing or roadways.

Impacted soil will be placed in beneficial reuse areas as soon as reasonable following excavation to prevent migration via wind, stormwater, and/or confusion regarding what soil can be placed where. The eight-foot cap will be placed as soon as possible following the placement of impacted soil. The eight-foot cap will be placed in the Zone 1 areas where impacted soil was removed and in the beneficial reuse areas. The cap will be placed consistent with engineering and geotechnical requirements. It should be noted that the open space area that makes up the exclusion area around Steamboat Creek will not receive a clean cap. Fill material will be sourced primarily from the southeastern portion of the Site which is located topographically upgradient, outside of impacts from flood and irrigation events (Zone 3).

Some of the beneficial reuse areas will be located on slopes. Prior to placement of the cap, impacted soil will be graded to a 3:1 (or less steep) incline in areas with slopes. Specific attention will be paid to erosion control measures in these areas to ensure the cap stays in place and impacted soil is not exposed. At a minimum, a final cap of 12" to 18" of rock rip rap will be placed on slopes 3:1 or greater which represents a more conservative approach than required for county code. More specific erosion control measures such as revegetation (if appropriate) will be determined later in the planning process and will be presented in a RAP addendum if the measures change the overall approach to the beneficial reuse areas. Final erosion control plans will be approved by Washoe County Planning & Engineering through typical map review iterative processes.

Fill material in beneficial reuse areas and any capping material that has been placed will be demarcated such that it is not moved once placed.

Temporary stockpiling of impacted soil during the grading process is not anticipated; however, the minimum requirements for materials handling are provided in and will follow the Materials Handling Plan in Appendix B. **Prior to mass grading, a site-specific materials handling plan will be developed by the grading contractor and provided to the NNPH and Washoe County for review. The site-specific plan will include temporary soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in Appendix B.**

After the impacted soil is removed, placed in a beneficial re-use area, and the clean cap is placed and demarcated, mass site grading can proceed as normal. It should be noted that the grading plans used for exhibits in Appendix A are consistent with the submittals being provided to Washoe County for development.

## 7.0 CONFIRMATION SAMPLING

Confirmation sampling will be conducted within the roadways and areas receiving the eight-foot clean cap to ensure that remedial action measures were successful. Confirmation samples collected from the areas receiving the eight-foot clean cap will provide confirmation that soil above the action level does not exist within the top eight feet of finished grade. The following sections outline the general approach to confirmation sampling. No other confirmation or fill material sampling is proposed as initial sampling efforts did not identify any other areas of concern. Should the design location of the roadways and utility depths differ significantly from plans submitted in this RAP, a standalone confirmation sampling plan will be submitted to the NNPH for approval.

### 7.1 ROADWAY SAMPLING

Confirmation sampling will be conducted in the roadways to confirm that any material that may be encountered during future maintenance activities is below commercial action levels (30 mg/kg) for mercury. There are approximately 13,000 linear feet of roadways within Zone 1 at this time.

First, in a computer mapping program, potential sampling locations will be laid out for all public roadways within Zone 1 which were previously identified as impacted. Sample locations will be placed 1,000 feet on center and then labeled with a unique identification. Once these points are placed, a random number generator will be used to select 50% of the potential sampling locations identified. In instances where roadways are located within areas that previously exceeded commercial action levels, samples will be collected 200 feet on center with no randomized selection process.

Soil borings will be advanced utilizing a direct push drill rig to facilitate sampling efforts. Soil borings will be advanced to approximately eight feet bgs which is consistent with the deepest proposed utility. Samples will be collected as composite samples from two soil horizons: 0-4 feet bgs and 4-8 feet bgs. Samples will be collected from the drill cores from the desired interval and placed in one-gallon ziplock bags. A new bag will be utilized for each sample location. The bag will be thoroughly homogenized and then a sample aliquot will be collected in a laboratory provided sample jar. The sample jar shall be sealed with a Teflon lined lid, labeled, and stored in a chilled cooler pending shipment to the laboratory. Sample locations will be recorded with GPS coordinates for inclusion in the final report.

### 7.2 RESIDENTIAL AREA AND BENEFICIAL REUSE AREA SAMPLING

Following final grading and cap placement, confirmation samples will be collected from the areas receiving the eight-foot clean cap, to provide confirmation that soil above the residential action level (7.1 mg/kg) does not exist within the top eight feet of finished grade. A ½ acre grid system will be applied to the fill areas and the beneficial reuse areas using a computer mapping program. Each cell of the grid system will be given a unique identifier. A random number generator will be used to select 20% of the grid cells for sampling with at least two samples collected in each beneficial reuse area.

Soil borings will be advanced utilizing a direct push drill rig to facilitate sampling efforts. Soil borings will be advanced to four feet bgs. One boring will be advanced per cell and a sample will be collected from two soil horizons: 0-4 feet bgs and 4-8 feet bgs. Samples will be collected from the drill cores from the desired interval and placed in one-gallon ziplock bags. A new bag will be utilized for each sample location. The bag will be thoroughly homogenized and then a sample aliquot will be collected in a laboratory provided

---

sample jar. The sample jar shall be sealed with a Teflon lined lid, labeled, and stored in a chilled cooler pending shipment to the laboratory. Sample locations will be recorded with GPS coordinates for inclusion in the final report.

### 7.3 SAMPLE ANALYSIS

Soil samples will be shipped under chain-of-custody protocol to Pace Analytical in Mount Juliet, Tennessee for analytical testing. The samples will be analyzed for mercury using EPA Method SW7471.

### 7.4 EVALUATION OF RESULTS

Analytical data collected will be compared to the appropriate action level. Should impacts above the applicable action level be encountered, NNPH and Washoe County will be notified and a path forward for additional sampling and remedial action will be discussed.

The 95% UCL will be calculated using the data from Zone 1. The 95% UCL will be calculated using the Student's-t methodology and equation.

$$UCL = \bar{X} + t_n x \left( \frac{S_{\bar{x}}}{\sqrt{n}} \right)$$

Where:

$\bar{X}$  = arithmetic mean of all samples

$t_n$  = Student's - t distribution number for 95% based on sample quantity n

n = number of samples

$S_{\bar{x}}$  = standard deviation of all samples

In the event of a "non-detect" result, for calculation purposes, the result will be considered one half of the reporting limit. The values including a "J" flag (i.e., estimated value above the method detection limit but below the reporting limit) will be used within calculations as-is. The 95% UCL will be calculated for each sampling group (i.e., roadways, capped areas, etc.) The final calculated 95% UCL (mercury concentration) shall be representative of conditions in Zone 1.

## 8.0 NNPH NOTIFICATION AND ADDITIONAL PLAN SUBMITTAL

At least one month prior to beginning grading activities, a Site-Specific Materials Handling Plan will be provided to NNPH for review. The site-specific plan will include temporary soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in Appendix B. The intent of this plan is to provide specific details on soil movement and management that are not yet planned.

In addition to the site-specific plan, the NNPH shall be notified at the following times during soil remedial activities:

1. 48 hours prior to commencing excavation activities
2. During placement and construction of beneficial re-use areas

- a. Following placement of impacted soils
  - b. Following placement of drainage/channel bank rip rap
  - c. Following placement of erosion control
3. Following placement of the eight-foot clean material cap
  4. 48 hours prior to confirmation sample collection
  5. Following receipt of analytical data if results exceed applicable action levels.

Notifications shall be made in writing via email to Wesley Rubio at [wrubio@nnph.gov](mailto:wrubio@nnph.gov) or as requested by NNPH.

## 9.0 REPORT PREPARATION

Following completion of the remedial and soil sampling activities, UES will prepare a Remedial Action Report for submittal to the NNPH. The report will include a description of remedial activities, final disposition locations of contaminated soil, confirmation soil sampling protocols and results, analytical laboratory reports and chain-of-custody documentation, and any other relevant information/documents.

Additionally, a request for No Further Action will also be submitted with the report. UES anticipates this report will be submitted to NNPH within 45 days following completion of grading, remedial, and sampling activities.

## 10.0 ADDITIONAL GENERAL REQUIREMENTS

### 10.1 ENVIRONMENTAL REMEDIATION BOND

A bond shall be provided by the project developer to Washoe County. The intent of this bond is to provide assurance to Washoe County that remediation activities shall be completed in full. The bond amount shall be based on a cost estimate for the excavation and transport of mercury impacted soils, placement of said materials, slope stabilization and capping of said soil. This bond shall be submitted to Washoe County in accordance with standard procedures. The bond shall be released in full following review and approval of soil placement, capping, and slope stabilization of the beneficial reuse fill areas and once NNPH has confirmed the requirements of the approved RAP have been satisfied.

### 10.2 IRREVOCABLE EASEMENTS FOR BENEFICIAL REUSE AREAS

Irrevocable non-build easements shall be established for the areas used for beneficial reuse. The format for said easements will be approved by Washoe County. The easements shall be recorded by the Washoe County Recorders office and will be accompanied by a Record of Survey depicting the non-build easements. The final recording of the easements shall be completed prior to the issuance of the building permit.

## 11.0 LIMITATIONS

The conclusions presented herein are partially based on information provided by UES. UES makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. The results reported herein are applicable to the time the sampling occurred. Changes in site hydrogeology may occur as a result of rainfall, snowmelt, water usage, or other factors.

It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact science. Judgments and opinions leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. Additional information not found or available to UES at the time of writing this report may result in a modification to the conclusions and recommendations contained herein.

The presentation of data presented herein is intended for the purpose of the visualization of environmental conditions. A greater degree of spatial and temporal data density may result in a more accurate representation of environmental conditions. Although such data visualization techniques may aid in providing a conceptual understanding of environmental conditions, such presentations are not intended to completely depict environmental conditions.

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

This report is not a legal opinion. The services performed by UES have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, express or implied, is made.

## 12.0 CLOSING

UES and World Properties Inc. trust the information provided herein satisfies the requirements of the NNPH at this time. Should you have any questions regarding this report, please contact the undersigned at (775) 829-2245.

Respectfully submitted,  
**UES**

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.

A handwritten signature in black ink that reads "Caitlin Jelle". The signature is fluid and cursive, with "Caitlin" on top and "Jelle" below it, both starting with a capital letter.

Caitlin Jelle, P.E., C.E.M #2454, (Exp. 3/26)  
Director, Due Diligence and Remediation



Sierra Reflections, Remedial Action Plan

Project No. A23173.00128

July 2025

---

## TABLES

<b>Table 1. Summary of Analytical Results - Screening Level Sampling</b>			
<b>Sample Location</b>	<b>Sample ID</b>	<b>Date</b>	<b>Mercury (mg/kg)</b>
S1	KKC012-S1@6"	4/7/2023	0.255
S2	KKC012-S2@6"	4/7/2023	<b>115</b>
S3	KKC012-S3@6"	4/7/2023	<b>13.0</b>
S4	KKC012-S4@6"	4/7/2023	0.466
S5	KKC012-S5@6"	4/7/2023	<b>11.6</b>
S6	KKC012-S6@6"	4/7/2023	<b>9.4</b>
S7	KKC012-S7@6"	4/7/2023	<b>19.6</b>
S8	KKC012-S8@6"	4/7/2023	<b>35.5</b>
S9	KKC012-S9@6"	4/7/2023	<b>7.7</b>
S10	KKC012-S10@6"	4/7/2023	<b>9.7</b>
S11	KKC012-S11@6"	4/7/2023	<b>20.6</b>
S12	KKC012-S12@6"	4/7/2023	<b>116</b>
S13	KKC012-S13@6"	4/7/2023	<b>12.1</b>
S14	KKC012-S14@6"	4/7/2023	<b>25.5</b>
S15	KKC012-S15@6"	4/7/2023	<b>20.1</b>
S16	KKC012-S16@6"	4/7/2023	<b>71.9</b>
S17	KKC012-S17@6"	4/7/2023	<b>99.2</b>
S18	KKC012-S18@6"	4/7/2023	6.49
S19	KKC012-S19@6"	4/7/2023	6.77
S20	KKC012-S20@6"	4/7/2023	1.62
S21	KKC012-S21@6"	4/7/2023	<b>33.4</b>
S22	KKC012-S22@6"	4/7/2023	<b>8.6</b>
S23	KKC012-S23@6"	4/7/2023	<b>10.6</b>
S24	KKC012-S24@6"	4/7/2023	<b>11.1</b>
S25	KKC012-S25@6"	4/7/2023	6.83
S26	KKC012-S26@6"	4/7/2023	2.06
S27	KKC012-S27@6"	4/7/2023	2.53
S28	KKC012-S28@6"	4/7/2023	4.67
S29	KKC012-S29@6"	4/7/2023	5.3
S30	KKC012-S30@6"	4/7/2023	<b>13.9</b>
BG1	KKC012-BG1@6"	4/7/2023	3.0
BG2	KKC012-BG2@6"	4/7/2023	0.0790
<b>EPA RSL (Commercial)</b>			<b>30</b>
<b>EPA RSL (Residential)</b>			<b>7.1</b>

mg/kg

milligrams per kilogram

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B2	KKC012-Z1-B2@0-4'	1-Feb-24	0-4'	0.377	21.5	69
	KKC012-Z1-B2@4-8'	1-Feb-24	4-8'	<0.0186	1.01 J	5.28
B3	KKC012-Z1-B3@0-4'	1-Feb-24	0-4'	0.132	NA	NA
	KKC012-Z1-B3@4-8'	1-Feb-24	4-8'	<0.0183	NA	NA
B4	KKC012-Z1-B4@0-4'	1-Feb-24	0-4'	0.794	NA	NA
	KKC012-Z1-B4@4-8'	1-Feb-24	4-8'	0.0232 J	NA	NA
B5	KKC012-Z1-B5@0-4'	1-Feb-24	0-4'	11.00	NA	NA
	KKC012-Z1-B5@4-8'	1-Feb-24	4-8'	0.900	NA	NA
B6	KKC012-Z1-B6@0-4'	1-Feb-24	0-4'	3.77	2.99	13
	KKC012-Z1-B6@4-8'	1-Feb-24	4-8'	0.0862	<0.211	4.54
B7	KKC012-Z1-B7@0-4'	1-Feb-24	0-4'	1.98	NA	NA
	KKC012-Z1-B7@4-8'	1-Feb-24	4-8'	0.178	NA	NA
B8	KKC012-Z1-B8@0-4'	1-Feb-24	0-4'	1.85	8.62	9.77
	KKC012-Z1-B8@4-8'	1-Feb-24	4-8'	0.541	6.29	6.59
B9	KKC012-Z1-B9@0-4'	1-Feb-24	0-4'	1.10	NA	NA
	KKC012-Z1-B9@4-8'	1-Feb-24	4-8'	0.176	NA	NA
B10	KKC012-Z1-B10@0-4'	1-Feb-24	0-4'	0.556	NA	NA
	KKC012-Z1-B10@4-8'	1-Feb-24	4-8'	0.182	NA	NA
B11	KKC012-Z1-B11@0-4'	1-Feb-24	0-4'	1.02	9.53	18.4
	KKC012-Z1-B11@4-8'	1-Feb-24	4-8'	0.0732	6.03	5.78
B12	KKC012-Z1-B12@0-4'	1-Feb-24	0-4'	2.38	NA	NA
	KKC012-Z1-B12@4-8'	1-Feb-24	4-8'	0.218	NA	NA
B13	KKC012-Z1-B13@0-4'	1-Feb-24	0-4'	2.99	NA	NA
	KKC012-Z1-B13@4-8'	1-Feb-24	4-8'	0.154	NA	NA
B15	KKC012-Z1-B15@0-4'	22-Jan-24	0-4'	2.45	NA	NA
	KKC012-Z1-B15@4-8'	22-Jan-24	4-8'	0.241	NA	NA
B16	KKC012-Z1-B16@0-4'	22-Jan-24	0-4'	1.17	NA	NA
	KKC012-Z1-B16@4-8'	22-Jan-24	4-8'	0.0542	NA	NA
B17	KKC012-Z1-B17@0-4'	22-Jan-24	0-4'	3.73	NA	NA
	KKC012-Z1-B17@4-8'	22-Jan-24	4-8'	0.238	NA	NA
B18	KKC012-Z1-B18@0-4'	22-Jan-24	0-4'	1.18	NA	NA
	KKC012-Z1-B18@4-8'	22-Jan-24	4-8'	<0.0216	NA	NA
B19	KKC012-Z1-B19@0-4'	22-Jan-24	0-4'	3.86	NA	NA
	KKC012-Z1-B19@4-8'	22-Jan-24	4-8'	0.495	NA	NA
B20	KKC012-Z1-B20@0-4'	22-Jan-24	0-4'	1.14	NA	NA
	KKC012-Z1-B20@4-8'	22-Jan-24	4-8'	0.129	NA	NA
B21	KKC012-Z1-B21@0-4'	22-Jan-24	0-4'	4.11	NA	NA
	KKC012-Z1-B21@4-8'	22-Jan-24	4-8'	6.64	NA	NA
B24	KKC012-Z1-B24@0-4'	1-Feb-24	0-4'	6.96	NA	NA
	KKC012-Z1-B24@4-8'	1-Feb-24	4-8'	0.35	NA	NA
B25	KKC012-Z1-B25@0-4'	1-Feb-24	0-4'	0.927	NA	NA
	KKC012-Z1-B25@4-8'	1-Feb-24	4-8'	4.81	NA	NA
B26	KKC012-Z1-B26@0-4'	1-Feb-24	0-4'	3.0	NA	NA
	KKC012-Z1-B26@4-8'	1-Feb-24	4-8'	0.148	NA	NA

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B27	KKC012-Z1-B27@0-4'	1-Feb-24	0-4'	1.83	9.45	13.6
	KKC012-Z1-B27@4-8'	1-Feb-24	4-8'	0.176	5.4	5.73
B28	KKC012-Z1-B28@0-4'	1-Feb-24	0-4'	2.55	NA	NA
	KKC012-Z1-B28@4-8'	1-Feb-24	4-8'	0.353	NA	NA
B29	KKC012-Z1-B29@0-4'	1-Feb-24	0-4'	11.4	NA	NA
	KKC012-Z1-B29@4-8'	1-Feb-24	4-8'	0.115	NA	NA
B30	KKC012-Z1-B30@0-4'	29-Jan-24	0-4'	64.3	NA	NA
	KKC012-Z1-B30@4-8'	29-Jan-24	4-8'	4.17	NA	NA
B31	KKC012-Z1-B31@0-4'	29-Jan-24	0-4'	3.51	NA	NA
	KKC012-Z1-B31@4-8'	29-Jan-24	4-8'	0.178	NA	NA
B32	KKC012-Z1-B32@0-4'	29-Jan-24	0-4'	0.638	3.48	15.7
	KKC012-Z1-B32@4-8'	29-Jan-24	4-8'	0.101	2.37	6.16
B33	KKC012-Z1-B33@0-4'	29-Jan-24	0-4'	0.969	NA	NA
	KKC012-Z1-B33@4-8'	29-Jan-24	4-8'	0.294	NA	NA
B34	KKC012-Z1-B34@0-4'	1-Feb-24	0-4'	0.246	NA	NA
	KKC012-Z1-B34@4-8'	1-Feb-24	4-8'	0.199	NA	NA
B35	KKC012-Z1-B35@0-4'	1-Feb-24	0-4'	0.040 J	NA	NA
	KKC012-Z1-B35@4-8'	1-Feb-24	4-8'	<0.0186	NA	NA
B36	KKC012-Z1-B36@0-4'	1-Feb-24	0-4'	0.157	5.27	6.61
	KKC012-Z1-B36@4-8'	1-Feb-24	4-8'	0.0995	3.83	5.5
B37	KKC012-Z1-B37@0-4'	29-Jan-24	0-4'	4.62	NA	NA
	KKC012-Z1-B37@4-8'	29-Jan-24	4-8'	0.0261 J	NA	NA
B38	KKC012-Z1-B38@0-4'	29-Jan-24	0-4'	12.9	4.54	28.4
	KKC012-Z1-B38@4-8'	29-Jan-24	4-8'	0.386 J6	2.49	4.86
B39	KKC012-Z1-B39@0-4'	29-Jan-24	0-4'	7.32	NA	NA
	KKC012-Z1-B39@4-8'	29-Jan-24	4-8'	1.51	NA	NA
B40	KKC012-Z1-B40@0-4'	29-Jan-24	0-4'	39.1	NA	NA
	KKC012-Z1-B40@4-8'	29-Jan-24	4-8'	7.93	NA	NA
B41	KKC012-Z1-B41@0-4'	29-Jan-24	0-4'	13.6	5.61	31
	KKC012-Z1-B41@4-8'	29-Jan-24	4-8'	0.969	2.04 J	5.05
B42	KKC012-Z1-B42@0-4'	29-Jan-24	0-4'	32.6	NA	NA
	KKC012-Z1-B42@4-8'	29-Jan-24	4-8'	3.64	NA	NA
B43	KKC012-Z1-B43@0-4'	29-Jan-24	0-4'	53.9	NA	NA
	KKC012-Z1-B43@4-8'	29-Jan-24	4-8'	1.81	NA	NA
B44	KKC012-Z1-B44@0-4'	29-Jan-24	0-4'	16.2	NA	NA
	KKC012-Z1-B44@4-8'	29-Jan-24	4-8'	0.134	NA	NA
B45	KKC012-Z1-B45@0-4'	29-Jan-24	0-4'	17	NA	NA
	KKC012-Z1-B45@4-8'	29-Jan-24	4-8'	0.482	NA	NA
B46	KKC012-Z1-B46@0-4'	1-Feb-24	0-4'	1.54	NA	NA
	KKC012-Z1-B46@4-8'	1-Feb-24	4-8'	7.63	NA	NA
B47	KKC012-Z1-B47@0-4'	22-Jan-24	0-4'	20.1	NA	NA
	KKC012-Z1-B47@4-8'	22-Jan-24	4-8'	1.17	NA	NA
B48	KKC012-Z1-B48@0-4'	22-Jan-24	0-4'	0.15	NA	NA
	KKC012-Z1-B48@4-8'	22-Jan-24	4-8'	0.192	NA	NA

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B49	KKC012-Z1-B49@0-4'	22-Jan-24	0-4'	0.979	308 J3 J5	556 J3 V
	KKC012-Z1-B49@4-8'	22-Jan-24	4-8'	0.0292 J	2.85	7.59
B50	KKC012-Z1-B50@0-4'	22-Jan-24	0-4'	8.45	NA	NA
	KKC012-Z1-B50@4-8'	22-Jan-24	4-8'	0.51	NA	NA
B51	KKC012-Z1-B51@0-4'	22-Jan-24	0-4'	12.5	NA	NA
	KKC012-Z1-B51@4-8'	22-Jan-24	4-8'	0.283	NA	NA
B52	KKC012-Z1-B52@0-4'	22-Jan-24	0-4'	10	4.86	26.4
	KKC012-Z1-B52@4-8'	22-Jan-24	4-8'	0.111 B	1.26 J	5.68
B53	KKC012-Z1-B52@0-4'	22-Jan-24	0-4'	10.7	NA	NA
	KKC012-Z1-B52@4-8'	22-Jan-24	4-8'	0.108 B	NA	NA
B54	KKC012-Z1-B54@0-4'	22-Jan-24	0-4'	6.29	NA	NA
	KKC012-Z1-B54@4-8'	22-Jan-24	4-8'	0.274	NA	NA
B55	KKC012-Z1-B55@0-4'	22-Jan-24	0-4'	11.2	NA	NA
	KKC012-Z1-B55@4-8'	22-Jan-24	4-8'	0.526	NA	NA
B56	KKC012-Z1-B56@0-4'	22-Jan-24	0-4'	6	NA	NA
	KKC012-Z1-B56@4-8'	22-Jan-24	4-8'	0.766	NA	NA
B57	KKC012-Z1-B57@0-4'	29-Jan-24	0-4'	10.1	NA	NA
	KKC012-Z1-B57@4-8'	29-Jan-24	4-8'	0.17	NA	NA
B58	KKC012-Z1-B58@0-4'	29-Jan-24	0-4'	2.03	NA	NA
	KKC012-Z1-B58@4-8'	29-Jan-24	4-8'	1.41	NA	NA
B59	KKC012-Z1-B59@0-4'	29-Jan-24	0-4'	2.91	NA	NA
	KKC012-Z1-B59@4-8'	29-Jan-24	4-8'	0.129	NA	NA
B60	KKC012-Z1-B60@0-4'	29-Jan-24	0-4'	37.6	4.98	76.1
	KKC012-Z1-B60@4-8'	29-Jan-24	4-8'	0.636	1.34 J	3.96
B61	KKC012-Z1-B61@0-4'	29-Jan-24	0-4'	45.4	NA	NA
	KKC012-Z1-B61@4-8'	29-Jan-24	4-8'	55.9	NA	NA
B62	KKC012-Z1-B62@0-4'	29-Jan-24	0-4'	181	3.87	59.9
	KKC012-Z1-B62@4-8'	29-Jan-24	4-8'	0.342	1.42 J	3.89
B63	KKC012-Z1-B63@0-4'	1-Feb-24	0-4'	12.3	NA	NA
	KKC012-Z1-B63@4-8'	NS	4-8'	Refusal - No Sample		
B64	KKC012-Z1-B64@0-4'	29-Jan-24	0-4'	6.26	NA	NA
	KKC012-Z1-B64@4-8'	NS	4-8'	Refusal - No Sample		
B65	KKC012-Z1-B65@0-4'	1-Feb-24	0-4'	5.27	NA	NA
	KKC012-Z1-B65@4-8'	1-Feb-24	4-8'	0.114	NA	NA
B66	KKC012-Z1-B66@0-4'	1-Feb-24	0-4'	2.3	<0.546	10.8
	KKC012-Z1-B66@4-8'	1-Feb-24	4-8'	0.158	3.26	5.63
B67	KKC012-Z1-B67@0-4'	22-Mar-24	0-4'	13.6	NA	NA
	KKC012-Z1-B67@4-8'	NS	4-8'	Refusal - No Sample		
B68	KKC012-Z1-B68@0-4'	22-Mar-24	0-4'	5.27	NA	NA
	KKC012-Z1-B68@4-8'	NS	4-8'	Refusal - No Sample		
B69	KKC012-Z1-B69@0-4'	1-Feb-24	0-4'	0.491	NA	NA
	KKC012-Z1-B69@4-8'	1-Feb-24	4-8'	0.12	NA	NA
B70	KKC012-Z1-B70@0-4'	1-Feb-24	0-4'	<0.0187	NA	NA
	KKC012-Z1-B70@4-8'	1-Feb-24	4-8'	0.115	NA	NA

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B71	KKC012-Z1-B71@0-4'	22-Mar-24	0-4'	7.47	NA	NA
	KKC012-Z1-B71@4-8'	NS	4-8'	Refusal - No Sample		
B72	KKC012-Z1-B72@0-4'	22-Mar-24	0-4'	10	2.34	24.1
	KKC012-Z1-B72@4-8'	NS	4-8'	Refusal - No Sample		
B73	KKC012-Z1-B73@0-4'	22-Mar-24	0-4'	1.79	NA	NA
	KKC012-Z1-B73@4-8'	NS	4-8'	Refusal - No Sample		
B74	KKC012-Z1-B74@0-4'	1-Feb-24	0-4'	4	NA	NA
	KKC012-Z1-B74@4-8'	1-Feb-24	4-8'	0.487	NA	NA
B75	KKC012-Z1-B75@0-4'	1-Feb-24	0-4'	1.59	NA	NA
	KKC012-Z1-B75@4-8'	1-Feb-24	4-8'	1.3	NA	NA
B76	KKC012-Z1-B76@0-4'	1-Feb-24	0-4'	11.2	6.86	18.7
	KKC012-Z1-B76@4-8'	1-Feb-24	4-8'	0.131	0.732	4.91
B77	KKC012-Z1-B77@0-4'	1-Feb-24	0-4'	11.8	NA	NA
	KKC012-Z1-B77@4-8'	1-Feb-24	4-8'	0.169	NA	NA
B78	KKC012-Z1-B78@0-4'	29-Jan-24	0-4'	4.35	NA	NA
	KKC012-Z1-B78@4-8'	29-Jan-24	4-8'	22.3	NA	NA
B79	KKC012-Z1-B79@0-4'	29-Jan-24	0-4'	17.3	NA	NA
	KKC012-Z1-B79@4-8'	29-Jan-24	4-8'	1.64	NA	NA
B80	KKC012-Z1-B80@0-4'	29-Jan-24	0-4'	43.7	NA	NA
	KKC012-Z1-B80@4-8'	29-Jan-24	4-8'	0.104	NA	NA
B81	KKC012-Z1-B81@0-4'	29-Jan-24	0-4'	4.61	NA	NA
	KKC012-Z1-B81@4-8'	29-Jan-24	4-8'	1.64	NA	NA
B82	KKC012-Z1-B82@0-4'	29-Jan-24	0-4'	0.76	3.32	7.91
	KKC012-Z1-B82@4-8'	29-Jan-24	4-8'	<0.0199	3.59	4.29
B83	KKC012-Z1-B83@0-4'	29-Jan-24	0-4'	<0.0221	NA	NA
	KKC012-Z1-B83@4-8'	29-Jan-24	4-8'	0.974	NA	NA
B84	KKC012-Z1-B84@0-4'	29-Jan-24	0-4'	6.59	2.98	12.2
	KKC012-Z1-B84@4-8'	29-Jan-24	4-8'	0.0936 J	1.27	5.25
B85	KKC012-Z1-B85@0-4'	29-Jan-24	0-4'	2.72	NA	NA
	KKC012-Z1-B85@4-8'	29-Jan-24	4-8'	0.0497	NA	NA
B86	KKC012-Z1-B86@0-4'	29-Jan-24	0-4'	11.8	NA	NA
	KKC012-Z1-B86@4-8'	29-Jan-24	4-8'	2.6	NA	NA
B87	KKC012-Z1-B87@0-4'	30-Jan-24	0-4'	1.07	NA	NA
	KKC012-Z1-B87@4-8'	30-Jan-24	4-8'	0.446	NA	NA
B88	KKC012-Z1-B88@0-4'	30-Jan-24	0-4'	4.73	4.53	12.8
	KKC012-Z1-B88@4-8'	30-Jan-24	4-8'	0.654	3.87	8.02
B89	KKC012-Z1-B89@0-4'	30-Jan-24	0-4'	<0.0217	NA	NA
	KKC012-Z1-B89@4-8'	30-Jan-24	4-8'	0.0722	NA	NA
B90	KKC012-Z1-B90@0-4'	30-Jan-24	0-4'	0.0236 J	NA	NA
	KKC012-Z1-B90@4-8'	30-Jan-24	4-8'	<0.0223	NA	NA
B91	KKC012-Z1-B91@0-4'	30-Jan-24	0-4'	0.105	NA	NA
	KKC012-Z1-B91@4-8'	30-Jan-24	4-8'	0.0357 J	NA	NA
B92	KKC012-Z1-B92@0-4'	30-Jan-24	0-4'	4.29	NA	NA
	KKC012-Z1-B92@4-8'	30-Jan-24	4-8'	0.0339 J	NA	NA

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B93	KKC012-Z1-B93@0-4'	30-Jan-24	0-4'	0.193	NA	NA
	KKC012-Z1-B93@4-8'	30-Jan-24	4-8'	0.522	NA	NA
B94	KKC012-Z1-B94@0-4'	29-Jan-24	0-4'	<b>27.8</b>	NA	NA
	KKC012-Z1-B94@4-8'	29-Jan-24	4-8'	0.671	NA	NA
B95	KKC012-Z1-B95@0-4'	29-Jan-24	0-4'	<b>9.41</b>	NA	NA
	KKC012-Z1-B95@4-8'	29-Jan-24	4-8'	<b>14.7</b>	NA	NA
B96	KKC012-Z1-B96@0-4'	29-Jan-24	0-4'	6.62	NA	NA
	KKC012-Z1-B96@4-8'	29-Jan-24	4-8'	3.5	NA	NA
B97	KKC012-Z1-B97@0-4'	29-Jan-24	0-4'	<b>26.5</b>	NA	NA
	KKC012-Z1-B97@4-8'	29-Jan-24	4-8'	0.428	NA	NA
B98	KKC012-Z1-B98@0-4'	29-Jan-24	0-4'	1.35	3.7	12.6
	KKC012-Z1-B98@4-8'	29-Jan-24	4-8'	0.231	2.77	6.15
B99	KKC012-Z1-B99@0-4'	29-Jan-24	0-4'	<b>13.4</b>	NA	NA
	KKC012-Z1-B99@4-8'	29-Jan-24	4-8'	0.289	NA	NA
B100	KKC012-Z1-B100@0-4'	29-Jan-24	0-4'	<b>16</b>	3.27	10.6
	KKC012-Z1-B100@4-8'	29-Jan-24	4-8'	5.42	2.68	8.73
B101	KKC012-Z1-B101@0-4'	22-Mar-24	0-4'	<b>15.6</b>	NA	NA
	KKC012-Z1-B101@4-8'	NS	4-8'	Refusal - No Sample		
B102	KKC012-Z1-B102@0-4'	22-Mar-24	0-4'	2.01	NA	NA
	KKC012-Z1-B102@4-8'	NS	4-8'	Refusal - No Sample		
B103	KKC012-Z1-B103@0-4'	22-Mar-24	0-4'	1.14	NA	NA
	KKC012-Z1-B103@4-8'	NS	4-8'	Refusal - No Sample		
B104	KKC012-Z1-B104@0-4'	1-Feb-24	0-4'	0.286	NA	NA
	KKC012-Z1-B104@4-8'	1-Feb-24	4-8'	0.0582	NA	NA
B105	KKC012-Z1-B105@0-4'	22-Mar-24	0-4'	<b>11.5</b>	NA	NA
	KKC012-Z1-B105@4-8'	NS	4-8'	Refusal - No Sample		
B106	KKC012-Z1-B106@0-4'	22-Mar-24	0-4'	<b>74.3</b>	NA	NA
	KKC012-Z1-B106@4-8'	NS	4-8'	Refusal - No Sample		
B107	KKC012-Z1-B107@0-4'	22-Mar-24	0-4'	0.539	NA	NA
	KKC012-Z1-B107@4-8'	NS	4-8'	Refusal - No Sample		
B108	KKC012-Z1-B108@0-4'	22-Mar-24	0-4'	0.505	NA	NA
	KKC012-Z1-B108@4-8'	NS	4-8'	Refusal - No Sample		
B109	KKC012-Z1-B109@0-4'	22-Mar-24	0-4'	1.51	NA	NA
	KKC012-Z1-B109@4-8'	NS	4-8'	Refusal - No Sample		
B110	KKC012-Z1-B110@0-4'	22-Mar-24	0-4'	5.93	NA	NA
	KKC012-Z1-B110@4-8'	NS	4-8'	Refusal - No Sample		
B111	KKC012-Z1-B111@0-4'	31-Jan-24	0-4'	<b>25.8</b>	2.84	23.3
	KKC012-Z1-B111@4-8'	31-Jan-24	4-8'	3.46	2.6	7.71
B112	KKC012-Z1-B112@0-4'	31-Jan-24	0-4'	3.88	NA	NA
	KKC012-Z1-B112@4-8'	31-Jan-24	4-8'	0.104	NA	NA
B113	KKC012-Z1-B113@0-4'	31-Jan-24	0-4'	0.187	NA	NA
	KKC012-Z1-B113@4-8'	31-Jan-24	4-8'	0.0298 J	NA	NA
B114	KKC012-Z1-B114@0-4'	29-Jan-24	0-4'	1.85	NA	NA
	KKC012-Z1-B114@4-8'	29-Jan-24	4-8'	0.318	NA	NA

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B115	KKC012-Z1-B115@0-4'	29-Jan-24	0-4'	1.89	NA	NA
	KKC012-Z1-B115@4-8'	29-Jan-24	4-8'	0.0718	NA	NA
B116	KKC012-Z1-B116@0-4'	29-Jan-24	0-4'	2.45	NA	NA
	KKC012-Z1-B116@4-8'	29-Jan-24	4-8'	0.163	NA	NA
B117	KKC012-Z1-B117@0-4'	31-Jan-24	0-4'	0.385	NA	NA
	KKC012-Z1-B117@4-8'	31-Jan-24	4-8'	0.0601	NA	NA
B118	KKC012-Z1-B118@0-4'	30-Jan-24	0-4'	3.85	NA	NA
	KKC012-Z1-B118@4-8'	30-Jan-24	4-8'	0.112	NA	NA
B119	KKC012-Z1-B119@0-4'	30-Jan-24	0-4'	1.93	4.62	9.78
	KKC012-Z1-B119@4-8'	30-Jan-24	4-8'	0.0755	4.29	7.09
B120	KKC012-Z1-B120@0-4'	30-Jan-24	0-4'	1.88	NA	NA
	KKC012-Z1-B120@4-8'	30-Jan-24	4-8'	0.0253 J	NA	NA
B121	KKC012-Z1-B121@0-4'	30-Jan-24	0-4'	2.1	NA	NA
	KKC012-Z1-B121@4-8'	30-Jan-24	4-8'	0.0305 J	NA	NA
B122	KKC012-Z1-B122@0-4'	30-Jan-24	0-4'	2.45	4.84	8.97
	KKC012-Z1-B122@4-8'	30-Jan-24	4-8'	<0.0218	4.93	7.47
B123	KKC012-Z1-B123@0-4'	30-Jan-24	0-4'	0.736	NA	NA
	KKC012-Z1-B123@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B124	KKC012-Z1-B124@0-4'	30-Jan-24	0-4'	2.76	NA	NA
	KKC012-Z1-B124@4-8'	30-Jan-24	4-8'	0.0228 J	NA	NA
B125	KKC012-Z1-B125@0-4'	30-Jan-24	0-4'	2.49	NA	NA
	KKC012-Z1-B125@4-8'	30-Jan-24	4-8'	0.0302 J	NA	NA
B126	KKC012-Z1-B126@0-4'	31-Jan-24	0-4'	0.166	NA	NA
	KKC012-Z1-B126@4-8'	31-Jan-24	4-8'	<0.0220	NA	NA
B127	KKC012-Z1-B127@0-4'	31-Jan-24	0-4'	0.112	2.97	10.4
	KKC012-Z1-B127@4-8'	31-Jan-24	4-8'	<0.0219	0.625 J	5.68
B128	KKC012-Z1-B128@0-4'	31-Jan-24	0-4'	0.436 J3 J5	NA	NA
	KKC012-Z1-B128@4-8'	31-Jan-24	4-8'	<0.0216	NA	NA
B129	KKC012-Z1-B129@0-4'	31-Jan-24	0-4'	0.794	NA	NA
	KKC012-Z1-B129@4-8'	31-Jan-24	4-8'	0.358	NA	NA
B130	KKC012-Z1-B130@0-4'	31-Jan-24	0-4'	5.81	NA	NA
	KKC012-Z1-B130@4-8'	31-Jan-24	4-8'	0.457	NA	NA
B131	KKC012-Z1-B131@0-4'	31-Jan-24	0-4'	11.3	2.79	15.2
	KKC012-Z1-B131@4-8'	31-Jan-24	4-8'	0.247	4.51	8.4
B132	KKC012-Z1-B132@0-4'	31-Jan-24	0-4'	17.1	NA	NA
	KKC012-Z1-B132@4-8'	31-Jan-24	4-8'	0.829	NA	NA
B133	KKC012-Z1-B133@0-4'	22-Mar-24	0-4'	2.58	NA	NA
	KKC012-Z1-B133@4-8'	NS	4-8'	Refusal - No Sample		
B134	KKC012-Z1-B134@0-4'	22-Mar-24	0-4'	0.279	NA	NA
	KKC012-Z1-B134@4-8'	NS	4-8'	Refusal - No Sample		
B135	KKC012-Z1-B135@0-4'	22-Mar-24	0-4'	0.263	NA	NA
	KKC012-Z1-B135@4-8'	NS	4-8'	Refusal - No Sample		
B136	KKC012-Z1-B136@0-4'	22-Mar-24	0-4'	0.561	NA	NA
	KKC012-Z1-B136@4-8'	NS	4-8'	Refusal - No Sample		

Table 2. Summary of Analytical Results - Zone 1

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B137	KKC012-Z1-B137@0-4'	22-Mar-24	0-4'	4.92	NA	NA
	KKC012-Z1-B137@4-8'	NS	4-8'	Refusal - No Sample		
B138	KKC012-Z1-B138@0-4'	22-Mar-24	0-4'	17.20	NA	NA
	KKC012-Z1-B138@4-8'	NS	4-8'	Refusal - No Sample		
B139	KKC012-Z1-B139@0-4'	22-Mar-24	0-4'	36.3	NA	NA
	KKC012-Z1-B139@4-8'	NS	4-8'	Refusal - No Sample		
B140	KKC012-Z1-B140@0-4'	22-Mar-24	0-4'	1.51	NA	NA
	KKC012-Z1-B140@4-8'	NS	4-8'	Refusal - No Sample		
B141	KKC012-Z1-B141@0-4'	21-Mar-24	0-4'	3.77	NA	NA
	KKC012-Z1-B141@4-8'	NS	4-8'	Refusal - No Sample		
B142	KKC012-Z1-B142@0-4'	21-Mar-24	0-4'	2	NA	NA
	KKC012-Z1-B142@4-8'	NS	4-8'	Refusal - No Sample		
B143	KKC012-Z1-B143@0-4'	21-Mar-24	0-4'	7.24	NA	NA
	KKC012-Z1-B143@4-8'	NS	4-8'	Refusal - No Sample		
B144	KKC012-Z1-B144@0-4'	21-Mar-24	0-4'	8.55	NA	NA
	KKC012-Z1-B144@4-8'	NS	4-8'	Refusal - No Sample		
B145	KKC012-Z1-B145@0-4'	22-Mar-24	0-4'	1.2	NA	NA
	KKC012-Z1-B145@4-8'	NS	4-8'	Refusal - No Sample		
B146	KKC012-Z1-B146@0-4'	22-Mar-24	0-4'	1.1	NA	NA
	KKC012-Z1-B146@4-8'	NS	4-8'	Refusal - No Sample		
B147	KKC012-Z1-B147@0-4'	22-Mar-24	0-4'	1.09	NA	NA
	KKC012-Z1-B147@4-8'	NS	4-8'	Refusal - No Sample		
B148	KKC012-Z1-B148@0-4'	31-Jan-24	0-4'	1.13	NA	NA
	KKC012-Z1-B148@4-8'	31-Jan-24	4-8'	0.739	NA	NA
B149	KKC012-Z1-B149@0-4'	31-Jan-24	0-4'	9.73	NA	NA
	KKC012-Z1-B149@4-8'	31-Jan-24	4-8'	0.186	NA	NA
B150	KKC012-Z1-B150@0-4'	31-Jan-24	0-4'	5.18	NA	NA
	KKC012-Z1-B150@4-8'	31-Jan-24	4-8'	0.354	NA	NA
B151	KKC012-Z1-B151@0-4'	31-Jan-24	0-4'	0.146	NA	NA
	KKC012-Z1-B151@4-8'	31-Jan-24	4-8'	0.0522	NA	NA
B152	KKC012-Z1-B152@0-4'	31-Jan-24	0-4'	0.338	NA	NA
	KKC012-Z1-B152@4-8'	31-Jan-24	4-8'	<0.0207	NA	NA
B153	KKC012-Z1-B153@0-4'	31-Jan-24	0-4'	0.908	3.65	8.24
	KKC012-Z1-B153@4-8'	31-Jan-24	4-8'	<0.215	2.09 J	8.8
B154	KKC012-Z1-B154@0-4'	31-Jan-24	0-4'	0.102	NA	NA
	KKC012-Z1-B154@4-8'	31-Jan-24	4-8'	<0.0215	NA	NA
B155	KKC012-Z1-B155@0-4'	30-Jan-24	0-4'	0.28	NA	NA
	KKC012-Z1-B155@4-8'	30-Jan-24	4-8'	<0.0213	NA	NA
B156	KKC012-Z1-B156@0-4'	30-Jan-24	0-4'	0.247	5.45	9.18
	KKC012-Z1-B156@4-8'	30-Jan-24	4-8'	0.0448 J	9.71	7.98
B157	KKC012-Z1-B157@0-4'	30-Jan-24	0-4'	1.02	NA	NA
	KKC012-Z1-B157@4-8'	30-Jan-24	4-8'	0.0412 J	NA	NA
B158	KKC012-Z1-B158@0-4'	30-Jan-24	0-4'	0.303	NA	NA
	KKC012-Z1-B158@4-8'	30-Jan-24	4-8'	<0.0223	NA	NA

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B159	KKC012-Z1-B159@0-4'	30-Jan-24	0-4'	0.999	NA	NA
	KKC012-Z1-B159@4-8'	30-Jan-24	4-8'	0.0255 J	NA	NA
B160	KKC012-Z1-B160@0-4'	30-Jan-24	0-4'	3.45	NA	NA
	KKC012-Z1-B160@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B161	KKC012-Z1-B161@0-4'	30-Jan-24	0-4'	0.995	6.7	11
	KKC012-Z1-B161@4-8'	30-Jan-24	4-8'	0.102	3.93	8.17
B162	KKC012-Z1-B162@0-4'	30-Jan-24	0-4'	0.65	NA	NA
	KKC012-Z1-B162@4-8'	30-Jan-24	4-8'	<0.0218	NA	NA
B163	KKC012-Z1-B163@0-4'	30-Jan-24	0-4'	5.11	NA	NA
	KKC012-Z1-B163@4-8'	30-Jan-24	4-8'	0.0226 J	NA	NA
B164	KKC012-Z1-B164@0-4'	30-Jan-24	0-4'	6.57	NA	NA
	KKC012-Z1-B164@4-8'	30-Jan-24	4-8'	0.0501	NA	NA
B165	KKC012-Z1-B165@0-4'	30-Jan-24	0-4'	2.72	9.5	11.3
	KKC012-Z1-B165@4-8'	30-Jan-24	4-8'	0.102	5.47	6.12
B166	KKC012-Z1-B166@0-4'	31-Jan-24	0-4'	2.33	NA	NA
	KKC012-Z1-B166@4-8'	31-Jan-24	4-8'	<0.0212	NA	NA
B167	KKC012-Z1-B167@0-4'	31-Jan-24	0-4'	1.39	NA	NA
	KKC012-Z1-B167@4-8'	31-Jan-24	4-8'	0.0249 J	NA	NA
B168	KKC012-Z1-B168@0-4'	31-Jan-24	0-4'	0.759	NA	NA
	KKC012-Z1-B168@4-8'	31-Jan-24	4-8'	0.747	NA	NA
B169	KKC012-Z1-B169@0-4'	31-Jan-24	0-4'	41.1	NA	NA
	KKC012-Z1-B169@4-8'	31-Jan-24	4-8'	0.42	NA	NA
B170	KKC012-Z1-B170@0-4'	31-Jan-24	0-4'	3.64	3.16	13.6
	KKC012-Z1-B170@4-8'	31-Jan-24	4-8'	79.7	3.53	32.7
B171	KKC012-Z1-B171@0-4'	21-Mar-24	0-4'	0.09	NA	NA
	KKC012-Z1-B171@4-8'	NS	4-8'	Refusal - No Sample		
B172	KKC012-Z1-B172@0-4'	21-Mar-24	0-4'	0.10	3.94	6.51
	KKC012-Z1-B172@4-8'	NS	4-8'	Refusal - No Sample		
B173	KKC012-Z1-B173@0-4'	21-Mar-24	0-4'	0.27	NA	NA
	KKC012-Z1-B173@4-8'	NS	4-8'	Refusal - No Sample		
B174	KKC012-Z1-B174@0-4'	21-Mar-24	0-4'	0.73	NA	NA
	KKC012-Z1-B174@4-8'	NS	4-8'	Refusal - No Sample		
B175	KKC012-Z1-B175@0-4'	21-Mar-24	0-4'	4.24	4.82	18.3
	KKC012-Z1-B175@4-8'	NS	4-8'	Refusal - No Sample		
B176	KKC012-Z1-B176@0-4'	21-Mar-24	0-4'	26.30	NA	NA
	KKC012-Z1-B176@4-8'	NS	4-8'	Refusal - No Sample		
B177	KKC012-Z1-B177@0-4'	21-Mar-24	0-4'	7.28	NA	NA
	KKC012-Z1-B177@4-8'	NS	4-8'	Refusal - No Sample		
B178	KKC012-Z1-B178@0-4'	31-Jan-24	0-4'	0.14	NA	NA
	KKC012-Z1-B178@4-8'	31-Jan-24	4-8'	0.08	NA	NA
B179	KKC012-Z1-B179@0-4'	31-Jan-24	0-4'	6.08	NA	NA
	KKC012-Z1-B179@4-8'	31-Jan-24	4-8'	2.72	NA	NA
B180	KKC012-Z1-B180@0-4'	31-Jan-24	0-4'	8.51	2.43	14.9
	KKC012-Z1-B180@4-8'	31-Jan-24	4-8'	0.20	1.60 J	5.29

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B181	KKC012-Z1-B181@0-4'	21-Mar-24	0-4'	1.00	NA	NA
	KKC012-Z1-B181@4-8'	NS	4-8'	Refusal - No Sample		
B182	KKC012-Z1-B182@0-4'	31-Jan-24	0-4'	1.93	NA	NA
	KKC012-Z1-B182@4-8'	31-Jan-24	4-8'	0.16	NA	NA
B183	KKC012-Z1-B183@0-4'	31-Jan-24	0-4'	<b>7.68</b>	NA	NA
	KKC012-Z1-B183@4-8'	31-Jan-24	4-8'	0.45	NA	NA
B184	KKC012-Z1-B184@0-4'	31-Jan-24	0-4'	3.70	NA	NA
	KKC012-Z1-B184@4-8'	31-Jan-24	4-8'	1.69	NA	NA
B185	KKC012-Z1-B185@0-4'	31-Jan-24	0-4'	<b>21.70</b>	NA	NA
	KKC012-Z1-B185@4-8'	31-Jan-24	4-8'	0.05	NA	NA
B186	KKC012-Z1-B186@0-4'	30-Jan-24	0-4'	<b>23.30</b>	2.84	16.7
	KKC012-Z1-B186@4-8'	30-Jan-24	4-8'	0.60	2.22 J	7.36
B187	KKC012-Z1-B187@0-4'	30-Jan-24	0-4'	0.28	NA	NA
	KKC012-Z1-B187@4-8'	30-Jan-24	4-8'	0.050 J	NA	NA
B188	KKC012-Z1-B188@0-4'	30-Jan-24	0-4'	0.81	NA	NA
	KKC012-Z1-B188@4-8'	30-Jan-24	4-8'	<0.210	NA	NA
B189	KKC012-Z1-B189@0-4'	30-Jan-24	0-4'	6.86	NA	NA
	KKC012-Z1-B189@4-8'	30-Jan-24	4-8'	0.12	NA	NA
B190	KKC012-Z1-B190@0-4'	30-Jan-24	0-4'	2.67	7.11	13.2
	KKC012-Z1-B190@4-8'	30-Jan-24	4-8'	0.13	11.3	9.11
B191	KKC012-Z1-B191@0-4'	30-Jan-24	0-4'	2.29	NA	NA
	KKC012-Z1-B191@4-8'	30-Jan-24	4-8'	0.18	NA	NA
B192	KKC012-Z1-B192@0-4'	30-Jan-24	0-4'	4.29	NA	NA
	KKC012-Z1-B192@4-8'	30-Jan-24	4-8'	0.23	NA	NA
B193	KKC012-Z1-B193@0-4'	30-Jan-24	0-4'	1.54	7.15	12.2
	KKC012-Z1-B193@4-8'	30-Jan-24	4-8'	0.82	7.26	7.93
B194	KKC012-Z1-B194@0-4'	30-Jan-24	0-4'	4.48	NA	NA
	KKC012-Z1-B194@4-8'	30-Jan-24	4-8'	2.27	NA	NA
B195	KKC012-Z1-B195@0-4'	30-Jan-24	0-4'	<b>7.83 J3 V</b>	9.27	18.6
	KKC012-Z1-B195@4-8'	30-Jan-24	4-8'	0.35	18.4	9.54
B196	KKC012-Z1-B196@0-4'	30-Jan-24	0-4'	0.74	NA	NA
	KKC012-Z1-B196@4-8'	30-Jan-24	4-8'	0.25	NA	NA
B197	KKC012-Z1-B197@0-4'	30-Jan-24	0-4'	3.84	NA	NA
	KKC012-Z1-B197@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B198	KKC012-Z1-B198@0-4'	30-Jan-24	0-4'	3.01 J3 V	6.03	9.54
	KKC012-Z1-B198@4-8'	30-Jan-24	4-8'	0.323 J	9.86	6.7
B199	KKC012-Z1-B199@0-4'	30-Jan-24	0-4'	3.54	NA	NA
	KKC012-Z1-B199@4-8'	30-Jan-24	4-8'	0.07	NA	NA
B200	KKC012-Z1-B200@0-4'	30-Jan-24	0-4'	<b>13.20</b>	NA	NA
	KKC012-Z1-B200@4-8'	30-Jan-24	4-8'	0.21	NA	NA
B201	KKC012-Z1-B201@0-4'	31-Jan-24	0-4'	<b>8.05</b>	NA	NA
	KKC012-Z1-B201@4-8'	31-Jan-24	4-8'	0.10	NA	NA
B202	KKC012-Z1-B202@0-4'	31-Jan-24	0-4'	6.39	2.39	12.8
	KKC012-Z1-B202@4-8'	31-Jan-24	4-8'	0.56	1.52	6.19

Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B203	KKC012-Z1-B203@0-4'	31-Jan-24	0-4'	7.46	NA	NA
	KKC012-Z1-B203@4-8'	31-Jan-24	4-8'	0.0811 J5 O1	NA	NA
B204	KKC012-Z1-B204@0-4'	31-Jan-24	0-4'	4.17	2.06	9.27
	KKC012-Z1-B204@4-8'	31-Jan-24	4-8'	<0.0193	1.27	5.62
B205	KKC012-Z1-B205@0-4'	31-Jan-24	0-4'	169	NA	NA
	KKC012-Z1-B205@4-8'	31-Jan-24	4-8'	0.94	NA	NA
B206	KKC012-Z1-B206@0-4'	31-Jan-24	0-4'	22.10	3.93	40.7
	KKC012-Z1-B206@4-8'	NS	4-8'	Refusal - No Sample		
B207	KKC012-Z1-B207@0-4'	31-Jan-24	0-4'	0.54	NA	NA
	KKC012-Z1-B207@4-8'	31-Jan-24	4-8'	0.0225 J	NA	NA
B208	KKC012-Z1-B208@0-4'	31-Jan-24	0-4'	0.89	NA	NA
	KKC012-Z1-B208@4-8'	31-Jan-24	4-8'	0.0394 J	NA	NA
B209	KKC012-Z1-B209@0-4'	31-Jan-24	0-4'	0.37	NA	NA
	KKC012-Z1-B209@4-8'	31-Jan-24	4-8'	0.05	NA	NA
B210	KKC012-Z1-B210@0-4'	30-Jan-24	0-4'	7.20	3.65	7.88
	KKC012-Z1-B210@4-8'	30-Jan-24	4-8'	1.34	2.46	5.6
B211	KKC012-Z1-B211@0-4'	30-Jan-24	0-4'	26.5	NA	NA
	KKC012-Z1-B211@4-8'	30-Jan-24	4-8'	0.459	NA	NA
B212	KKC012-Z1-B212@0-4'	30-Jan-24	0-4'	2.36	NA	NA
	KKC012-Z1-B212@4-8'	30-Jan-24	4-8'	0.195	NA	NA
B213	KKC012-Z1-B213@0-4'	30-Jan-24	0-4'	6.14	NA	NA
	KKC012-Z1-B213@4-8'	30-Jan-24	4-8'	0.303	NA	NA
B214	KKC012-Z1-B214@0-4'	30-Jan-24	0-4'	2.18	NA	NA
	KKC012-Z1-B214@4-8'	30-Jan-24	4-8'	0.0634	NA	NA
<b>EPA RSL (Commercial Soils)</b>				<b>30</b>	<b>3.0</b>	<b>800</b>
<b>EPA RSL (Residential)</b>				<b>7.1</b>	<b>0.69</b>	<b>200</b>

mg/kg milligram per kilogram

RSL Environmental Protection Agency Regional Screening Level

J The identification of the analyte is acceptable; the reported value is an estimate.

J3 The associated batch QC was outside the established quality control range for precision.

J5 The sample matrix interfered with the ability to make any accurate determination; spike value is high.

J6 The sample matrix interfered with the ability to make any accurate determination; spike value is low

O1 The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures

V The sample concentration is too high to evaluate accurate spike recoveries.

NA Not Analyzed

NS Not sampled

\* Exceedance of the arsenic RSLs are not called out within the table as regional background concentrations are known to be well above RSLs

**Table 3. Summary of Analytical Results - Zone 2**

Sample Location	Sample ID	Date	Mercury (mg/kg)
S1	KKC012-Z2-S1-L	26-Jan-24	0.455 J6
	KKC012-Z2-S1-U	26-Jan-24	1.46
S2	KKC012-Z2-S2-L	26-Jan-24	0.492
	KKC012-Z2-S2-U	26-Jan-24	<0.0201
S3	KKC012-Z2-S3-L	26-Jan-24	0.264
	KKC012-Z2-S3-U	26-Jan-24	1.53
S4	KKC012-Z2-S4-L	26-Jan-24	<b>9.98</b>
	KKC012-Z2-S4-U	26-Jan-24	0.823
S5	KKC012-Z2-S5-L	26-Jan-24	<b>14.3</b>
	KKC012-Z2-S5-U	26-Jan-24	<b>52.2</b>
S6	KKC012-Z2-S6-L	26-Jan-24	0.866
	KKC012-Z2-S6-U	26-Jan-24	0.455
S7	KKC012-Z2-S7-L	26-Jan-24	0.168
	KKC012-Z2-S7-U	26-Jan-24	2.17
S8	KKC012-Z2-S8-L	26-Jan-24	2.03
	KKC012-Z2-S8-U	26-Jan-24	0.336
S9	KKC012-Z2-S9-L	26-Jan-24	4.97
	KKC012-Z2-S9-U	26-Jan-24	0.255
S10	KKC012-Z2-S10-L	26-Jan-24	0.284
	KKC012-Z2-S10-U	26-Jan-24	0.173
S11	KKC012-Z2-S11-L	26-Jan-24	0.479
	KKC012-Z2-S11-U	26-Jan-24	4.42
S12	KKC012-Z2-S12-L	2-Feb-24	3.53
	KKC012-Z2-S12-U	2-Feb-24	0.818
S13	KKC012-Z2-S13-L	2-Feb-24	<b>11.5</b>
	KKC012-Z2-S13-U	2-Feb-24	<b>9.34</b>
S14	KKC012-Z2-S14-L	2-Feb-24	2.55
	KKC012-Z2-S14-U	2-Feb-24	2.7
S15	KKC012-Z2-S15-L	2-Feb-24	4.01
	KKC012-Z2-S15-U	2-Feb-24	0.191
S16	KKC012-Z2-S16-L	2-Feb-24	2.73
	KKC012-Z2-S16-U	2-Feb-24	0.575
S17	KKC012-Z2-S17-L	2-Feb-24	<b>10.5</b>
	KKC012-Z2-S17-U	2-Feb-24	<b>13.9</b>
S18	KKC012-Z2-S18-L	2-Feb-24	<b>7.2</b>
	KKC012-Z2-S18-U	2-Feb-24	<b>10.1</b>
S19	KKC012-Z2-S19-L	2-Feb-24	<b>19.1</b>
	KKC012-Z2-S19-U	2-Feb-24	80.4
S20	KKC012-Z2-S20-L	2-Feb-24	<b>15.6</b>
	KKC012-Z2-S20-U	2-Feb-24	<b>130</b>
S21	KKC012-Z2-S21-L	2-Feb-24	2.58
	KKC012-Z2-S21-U	2-Feb-24	<b>311</b>
S22	KKC012-Z2-S22-L	2-Feb-24	0.181
	KKC012-Z2-S22-U	2-Feb-24	1.59
S23	KKC012-Z2-S23-L	2-Feb-24	0.0392 J
	KKC012-Z2-S23-U	2-Feb-24	0.0508
<b>EPA RSL (Commercial)</b>			<b>30</b>
<b>EPA RSL (Residential)</b>			<b>7.1</b>

mg/kg

miligram per kilogram

RSL

Environmental Protection Agency Regional Screening Level

J

The identification of the analyte is acceptable; the reported value is an estimate.

The sample matrix interfered with the ability to make any accurate determination; spike value is low

J6

**Table 4. Summary of Analytical Results - Zone 3**

<b>Sample Location</b>	<b>Sample ID</b>	<b>Date</b>	<b>Mercury (mg/kg)</b>
S1	KKC012-Z3-S1	19-Jan-24	0.424
S2	KKC012-Z3-S2	19-Jan-24	0.558
S3	KKC012-Z3-S3	19-Jan-24	0.483
S4	KKC012-Z3-S4	19-Jan-24	0.981
S5	KKC012-Z3-S5	19-Jan-24	0.154
S6	KKC012-Z3-S6	25-Jan-24	0.0269
S7	KKC012-Z3-S7	25-Jan-24	0.068
S8	KKC012-Z3-S8	25-Jan-24	0.0543
S9	KKC012-Z3-S9	25-Jan-24	0.994
S10	KKC012-Z3-S10	25-Jan-24	0.359
S11	KKC012-Z3-S11	25-Jan-24	0.239
S12	KKC012-Z3-S12	25-Jan-24	0.0549
S13	KKC012-Z3-S13	25-Jan-24	0.0504
S14	KKC012-Z3-S14	25-Jan-24	0.183
S15	KKC012-Z3-S15	25-Jan-24	0.14 B
S16	KKC012-Z3-S16	25-Jan-24	0.212 B
S17	KKC012-Z3-S17	25-Jan-24	0.434
S18	KKC012-Z3-S18	25-Jan-24	0.491
S19	KKC012-Z3-S19	25-Jan-24	0.0463 B
S20	KKC012-Z3-S20	25-Jan-24	1.4
S21	KKC012-Z3-S21	25-Jan-24	0.374 O1
S22	KKC012-Z3-S22	25-Jan-24	0.778
S23	KKC012-Z3-S23	25-Jan-24	1.19
<b>EPA RSL (Commercial)</b>			<b>30</b>
<b>EPA RSL (Residential)</b>			<b>7.1</b>

mg/kg                    miligram per kilogram

RSL                    Environmental Protection Agency Regional Screening Level

B                    The same analyte is found in the associated blank.

O1                    The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

**Table 5. Summary of Analytical Results**

Sample Location	Sample ID	Date	Mercury (mg/kg)	Arsenic (mg/kg)	Lead (mg/kg)
B215	KKC012-B215@4FT	3/4/2025	9.39	NA	NA
B216	KKC012-B216@4FT	3/4/2025	4.90	NA	NA
B217	KKC012-B217@4FT	3/4/2025	0.238	NA	NA
B218	KKC012-B218@4FT	3/13/2025	7.62	NA	NA
B219	KKC012-B219@4FT	3/13/2025	3.89	NA	NA
B220	KKC012-B220@4FT	3/4/2025	7.33	NA	NA
B221	KKC012-B221@4FT	3/4/2025	11.5	NA	NA
B222	KKC012-B222@4FT	3/4/2025	4.97	NA	NA
B223	KKC012-B223@4FT	3/4/2025	48.5	NA	NA
B224	KKC012-B224@4FT	3/4/2025	19.4	NA	NA
B225	KKC012-B225@4FT	3/4/2025	56.0	NA	NA
B226	KKC012-B226@4FT	3/4/2025	12.8	NA	NA
B227	KKC012-B227@4FT	3/4/2025	27.3	NA	NA
B228	KKC012-B228@4FT	3/4/2025	9.20	NA	NA
B229	KKC012-B229@4FT	3/4/2025	1.63	NA	NA
B230	KKC012-B230@4FT	3/4/2025	3.43	NA	NA
B231	KKC012-B231@4FT	3/5/2025	0.84	NA	NA
B232	KKC012-B232@4FT	3/5/2025	<0.0415	NA	NA
B233	KKC012-B233@4FT	3/5/2025	<0.0431	NA	NA
B234	KKC012-B234@4FT	3/5/2025	0.109	NA	NA
B235	KKC012-B235@4FT	3/5/2025	1.01	NA	NA
B236	KKC012-B236@4FT	3/5/2025	0.545	NA	NA
B237	KKC012-B237@4FT	3/5/2025	0.607	NA	NA
B238	KKC012-B238@4FT	3/5/2025	NA	22.2	48.5
B239	KKC012-B239@4FT	3/5/2025	NA	11.4	68.6
B241	KKC012-B241@3FT	3/13/2025	8.60	NA	NA
B242	KKC012-B242@4FT	3/13/2025	3.17	NA	NA
B243	KKC012-B243@4FT	3/13/2025	2.89	NA	NA
B244	KKC012-B244@4FT	3/13/2025	0.704	NA	NA
<b>EPA RSL (Commercial)</b>			<b>30</b>	<b>3.0</b>	<b>800</b>
<b>EPA RSL (Residential)</b>			<b>7.1</b>	<b>0.68</b>	<b>200</b>

mg/kg                                 milligrams per kilogram

NA   not analyzed

EPA RSL                                 Environmental Protection Agency Regional Screening Level



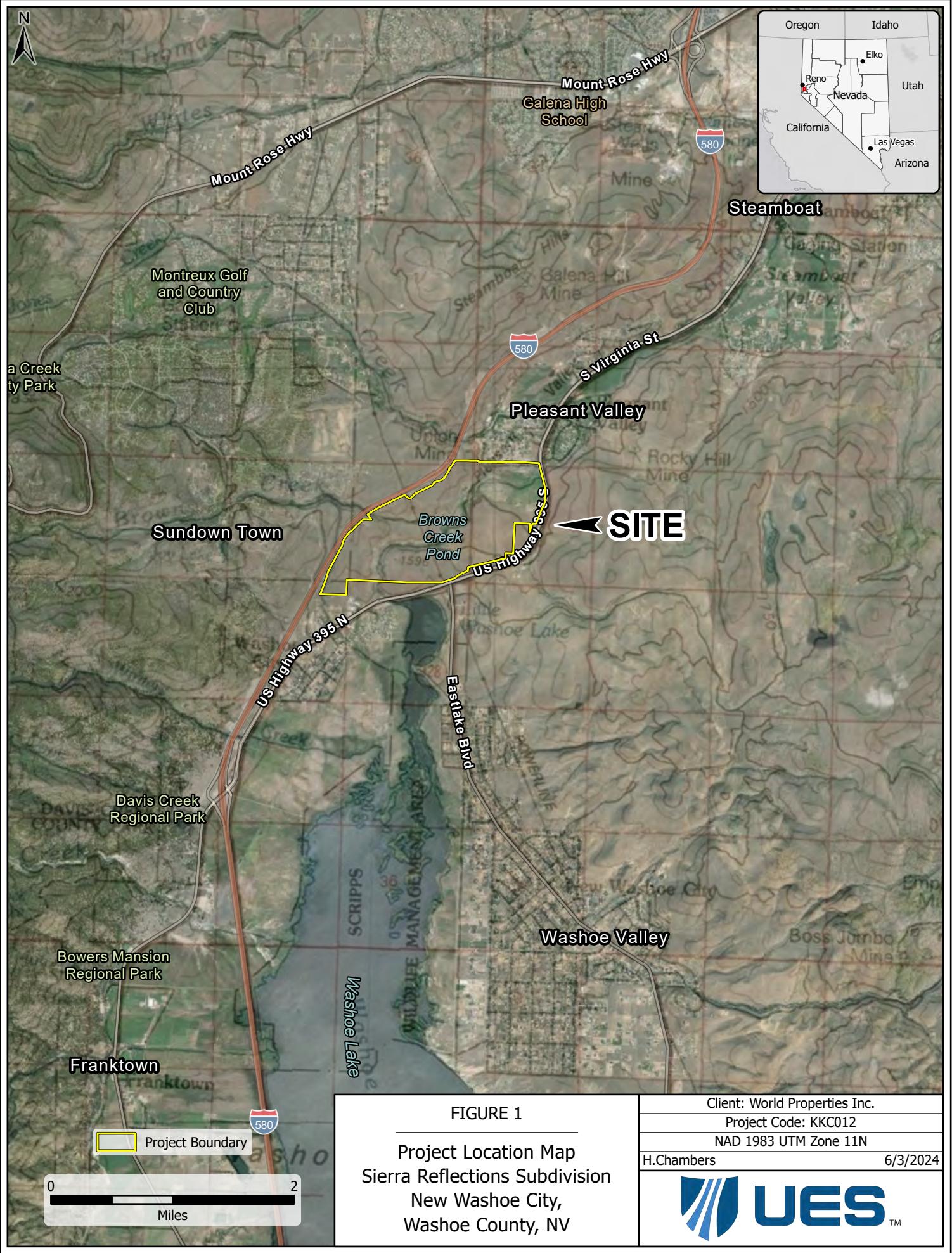
Sierra Reflections, Remedial Action Plan

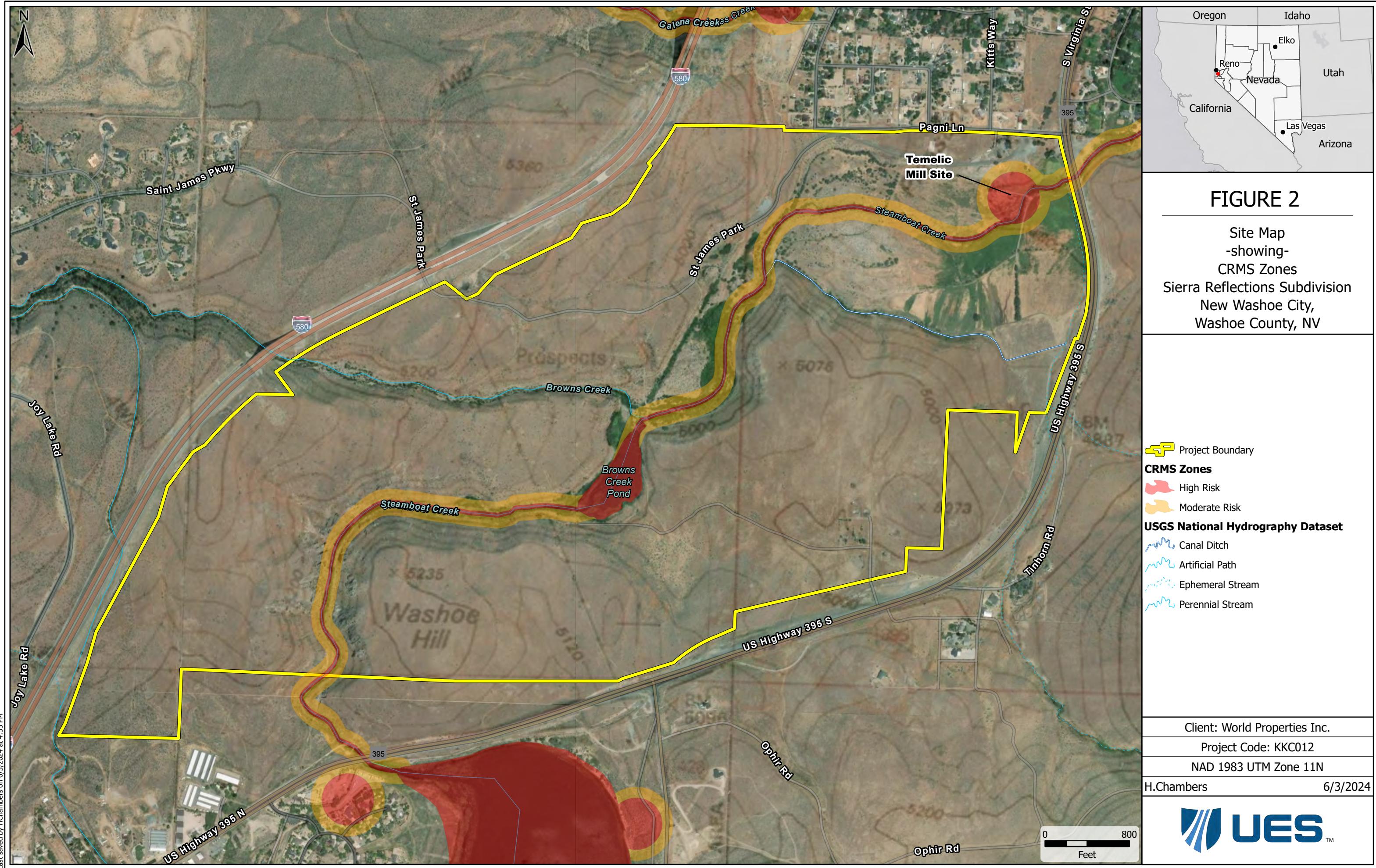
Project No. A23173.00128

July 2025

---

## FIGURES

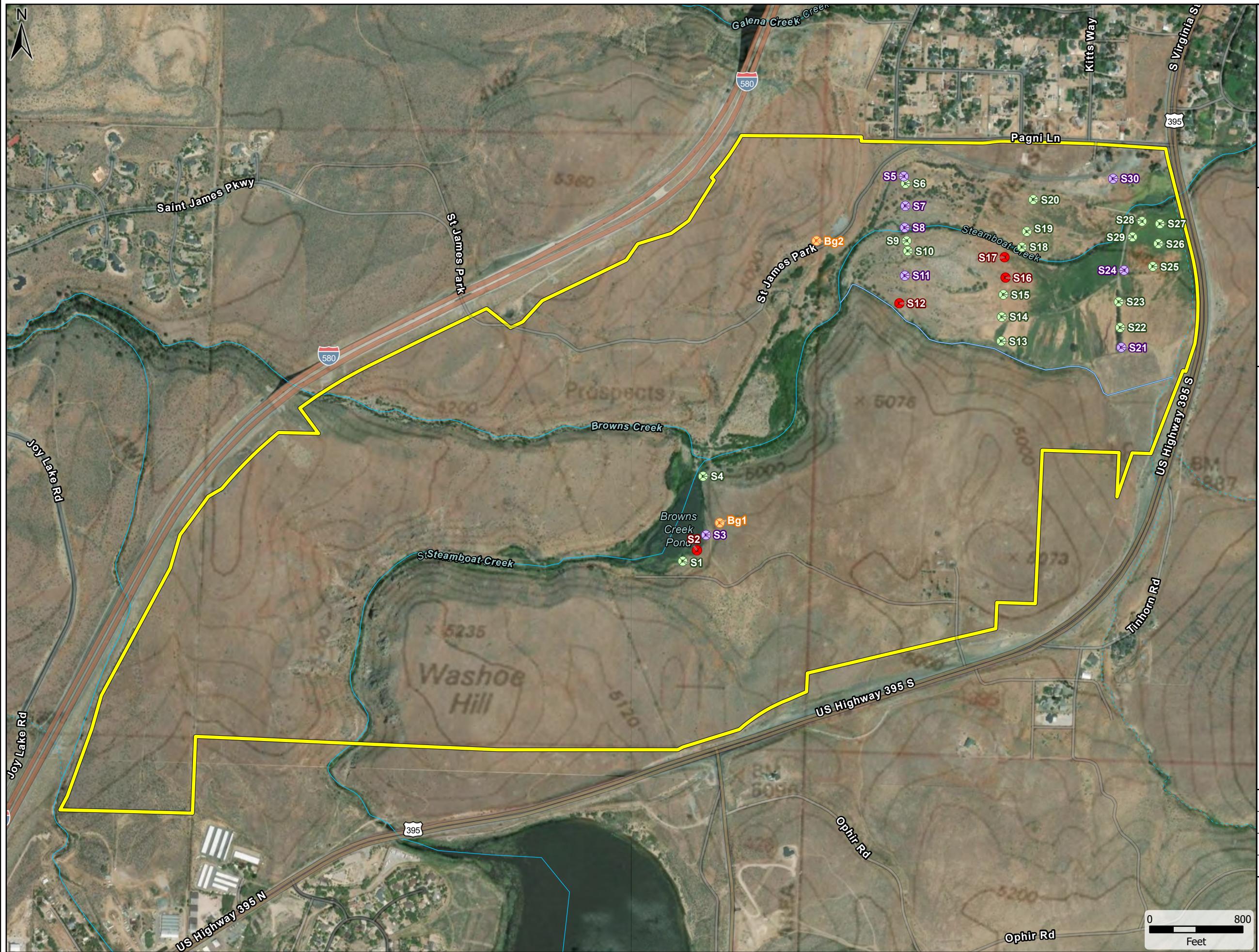


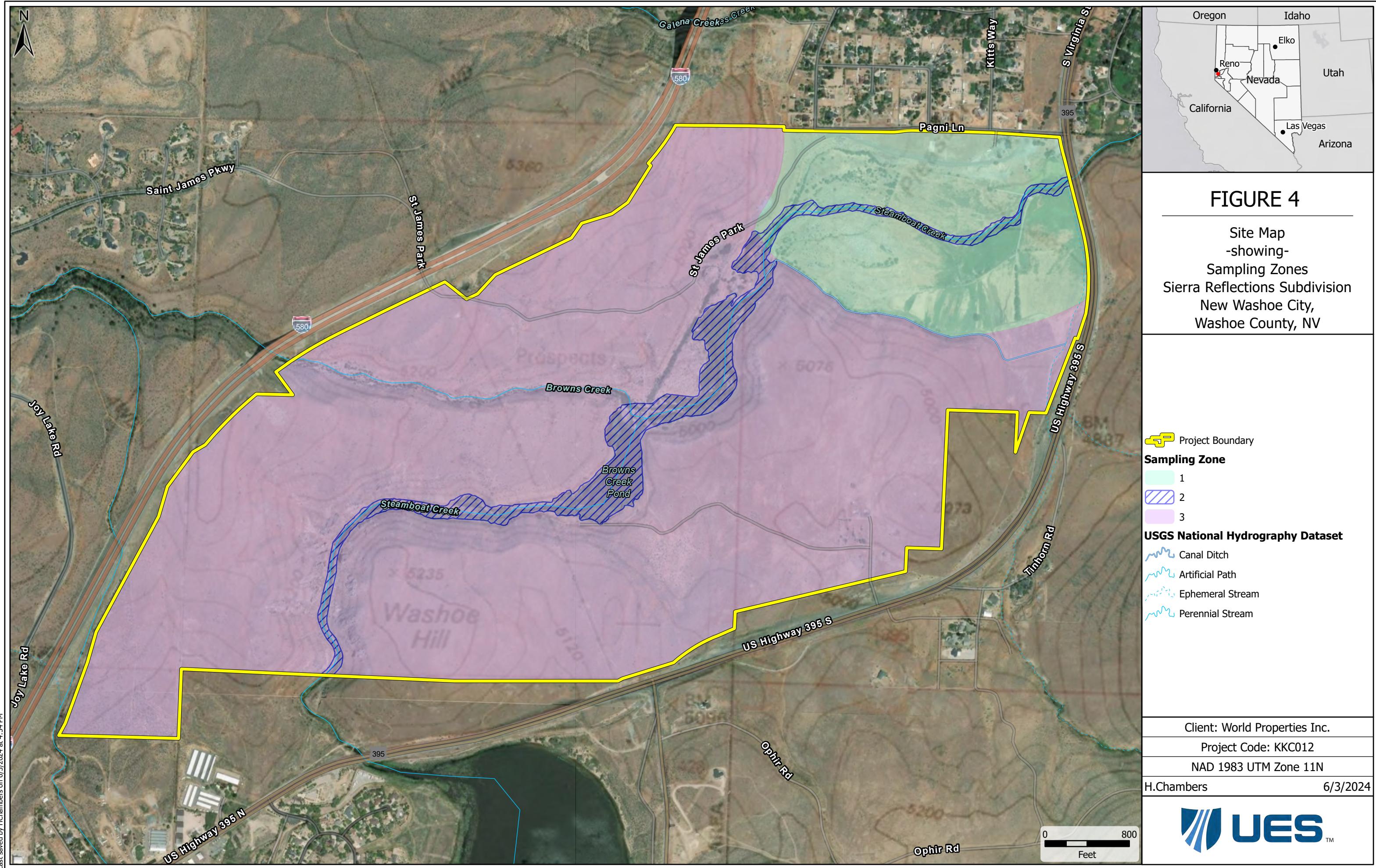




**FIGURE 3**

Site Map  
-showing-  
Screening Samples  
Sierra Reflections Subdivision  
New Washoe City,  
Washoe County, NV

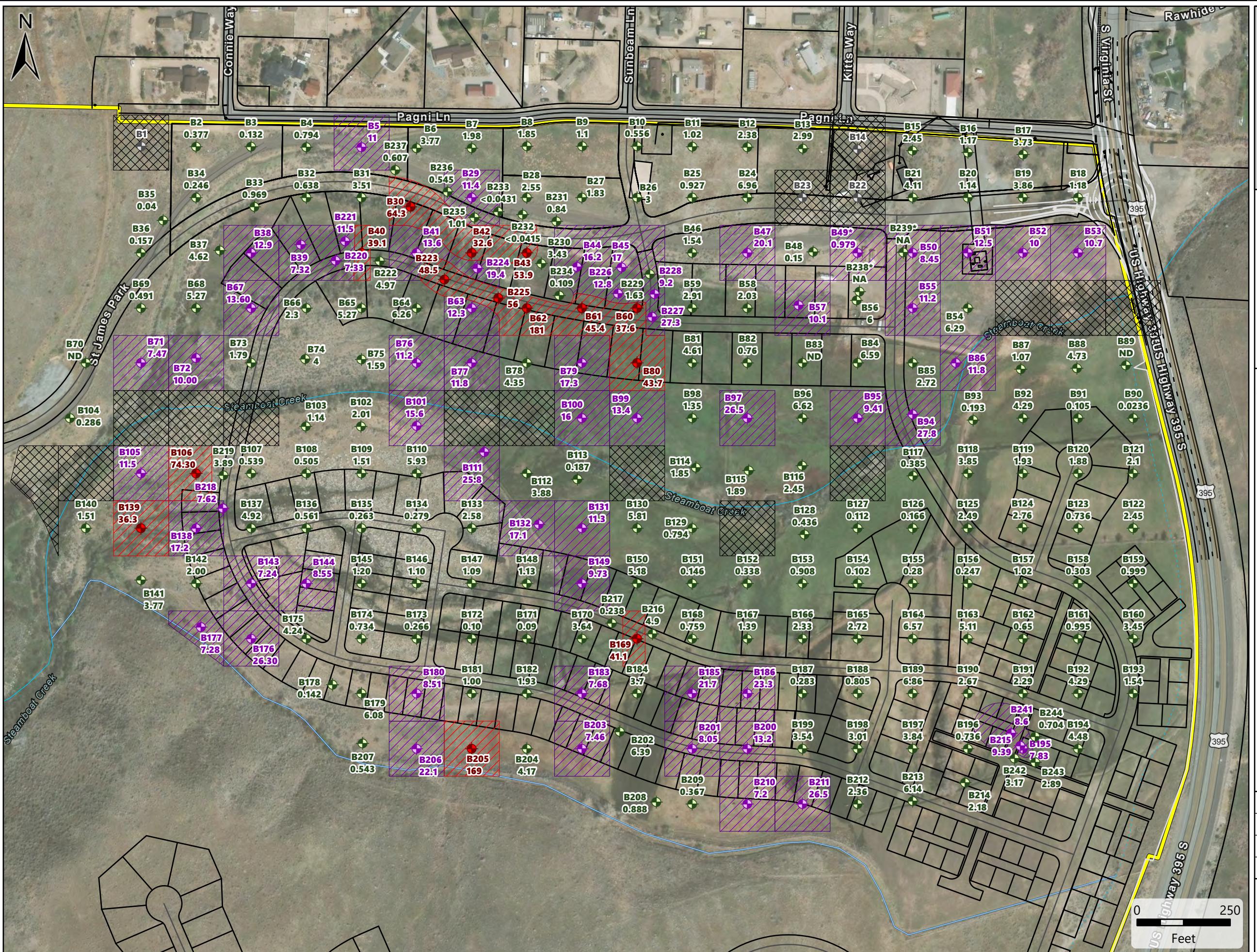


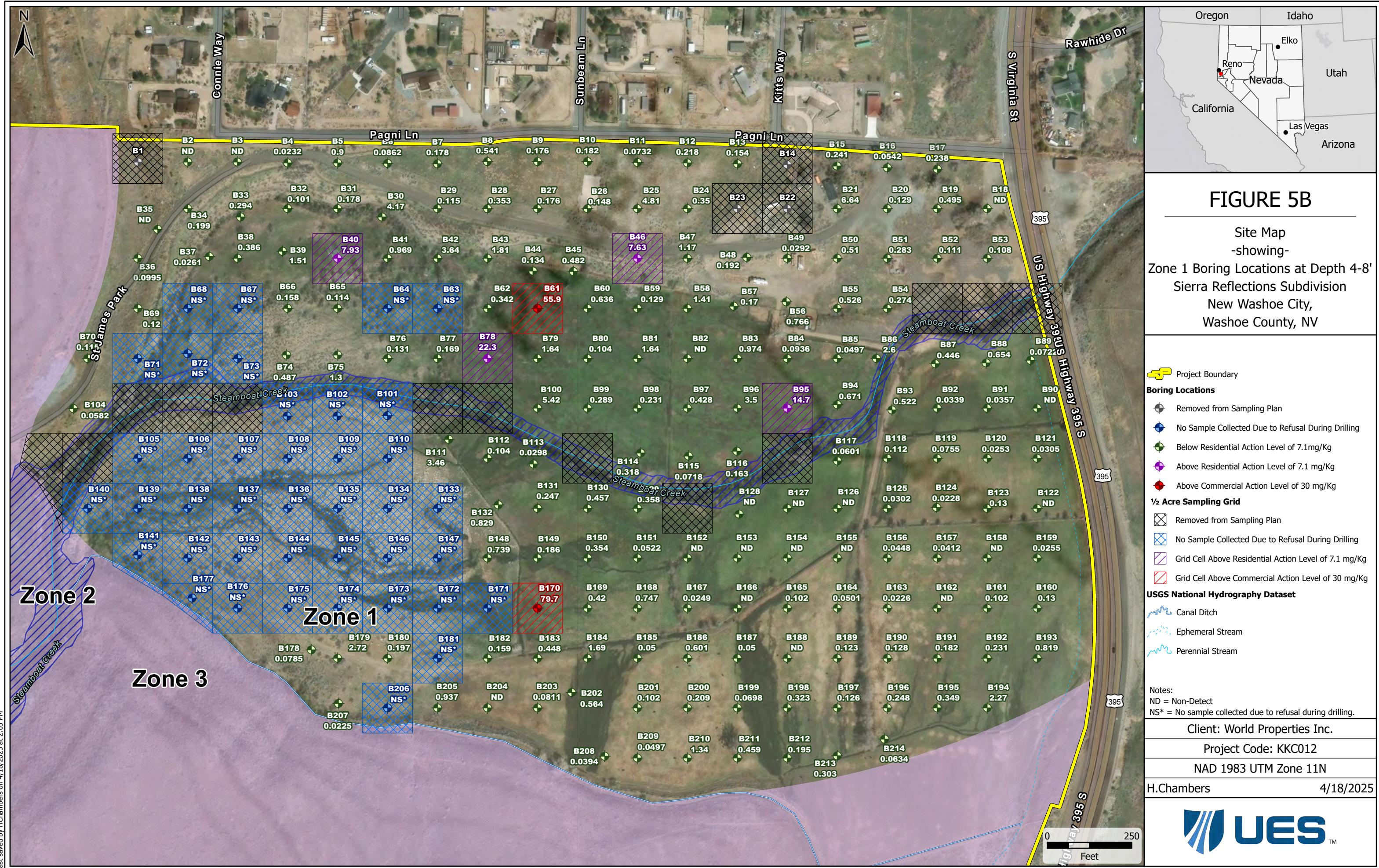




**FIGURE 5A**

Zone 1 Boring Locations at Depth  
0-4'  
and Roadway Exhibit  
Sierra Reflections Subdivision  
New Washoe City, Washoe County,  
NV







Sierra Reflections, Remedial Action Plan

Project No. A23173.00128

April 2025

---

## APPENDIX A

### Remedial Action Grading Plans



**Bowman**  
1150 CORPORATE BLVD | RENO, NV 89502  
775-856-1150 MAIN | BOWMAN.COM

SIERRA REFLECTIONS  
COMMON OPEN SPACE TENTATIVE MAP  
ST. JAMES PARKWAY  
NEVADA  
WASHOE COUNTY

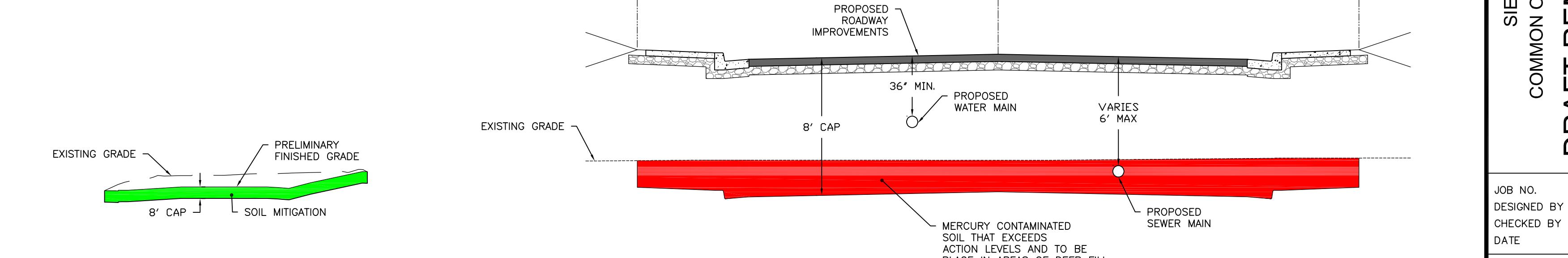
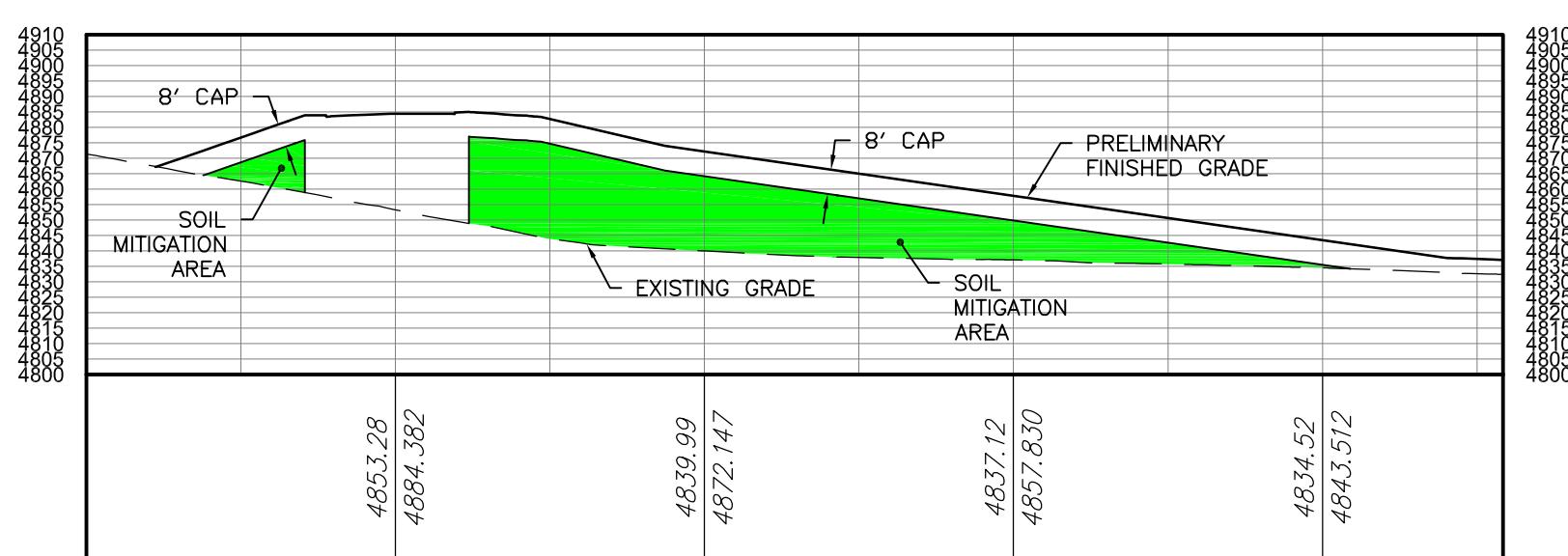
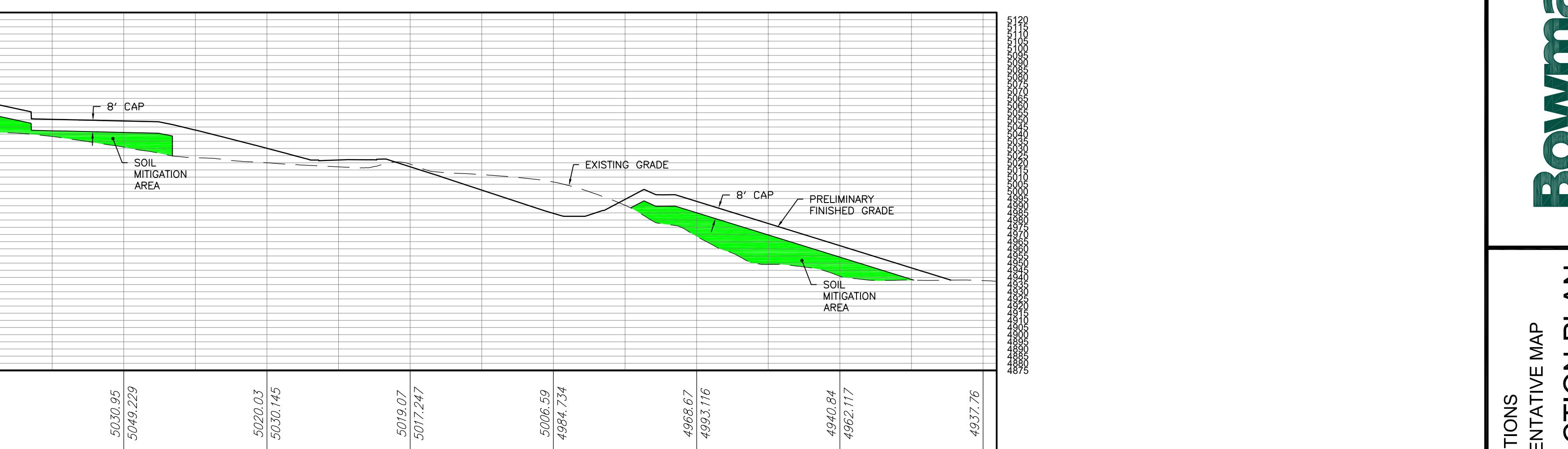
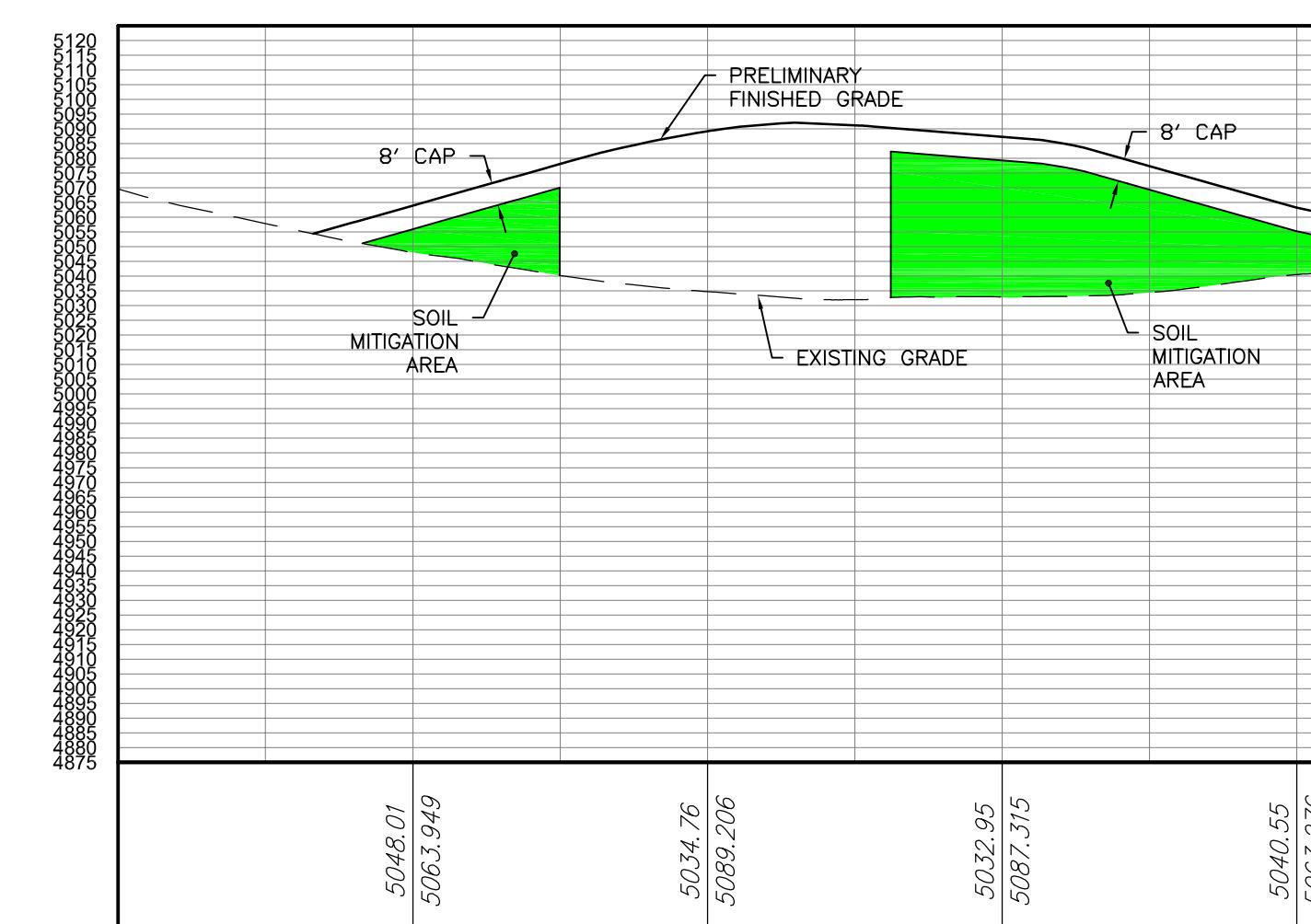
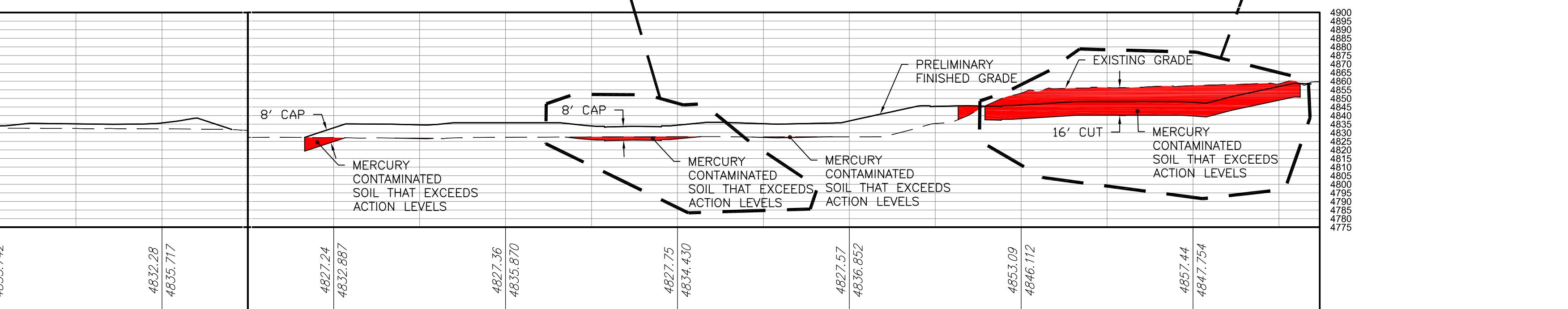
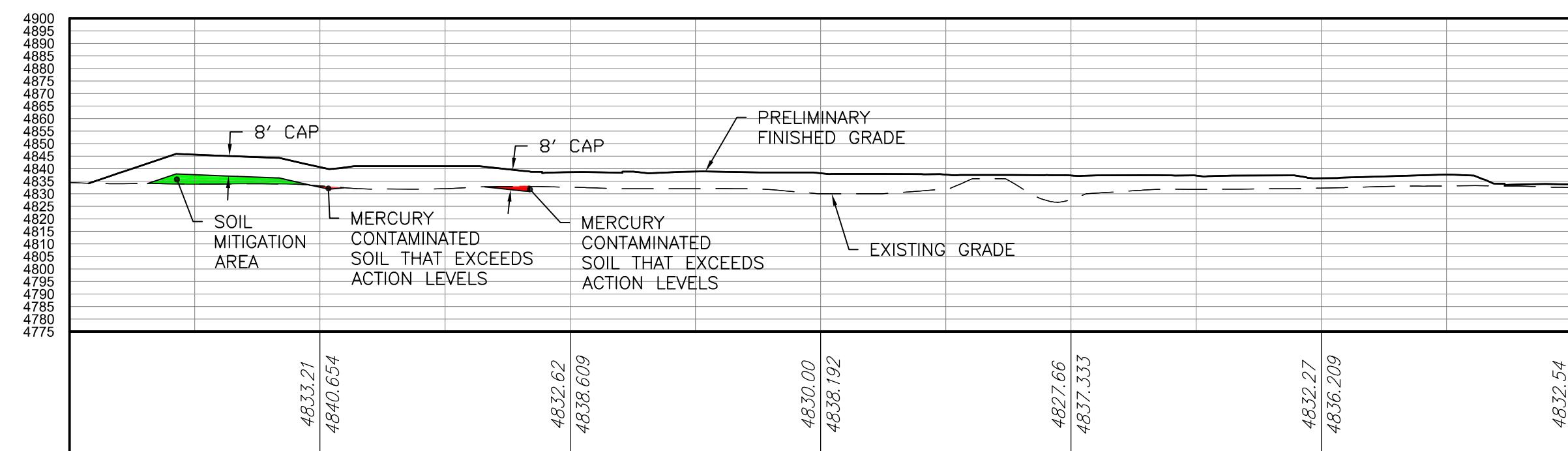
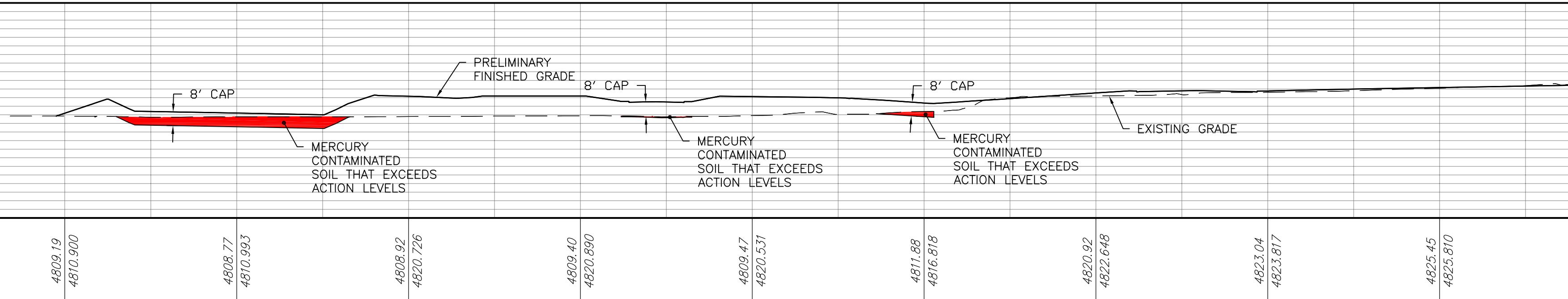
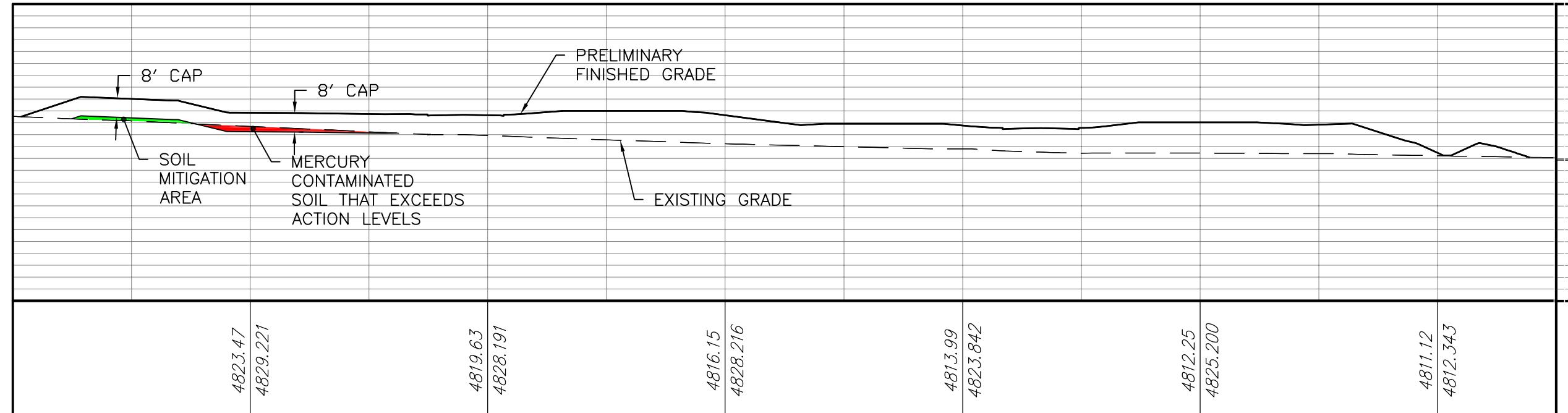
JOB NO. 21126.02  
DESIGNED BY NDJ  
CHECKED BY KM  
DATE 7/8/25

SHEET

EX1

3





DETAIL 1

DETAIL 2

**Bowman**  
1150 CORPORATE BLVD | RENO, NV 89502  
775-856-1150 MAIN | BOWMAN.COM

SIERRA REFLECTIONS  
COMMON OPEN SPACE TENTATIVE MAP  
ST. JAMES PARKWAY  
WASOUE COUNTY  
NEVADA

JOB NO. 21126.02  
DESIGNED BY NDJ  
CHECKED BY KM  
DATE 7/8/25  
SHEET

EX3

3



Sierra Reflections, Remedial Action Plan

Project No. A23173.00128

April 2025

---

## APPENDIX B

### Materials Handling Plan



## **Material Handling Plan**

### **SIERRA REFLECTIONS SUBDIVISION Washoe County, NV**

**Prepared for:**  
World Properties Inc.  
Joy Lake Road  
Reno, NV 89511

and

Northern Nevada Public Health  
Environmental Health  
Attn: Wesley Rubio  
1001 E Ninth Street, Bldg. B  
Reno, NV 89512

**Prepared By:**  
**UES**  
6995 Sierra Center Parkway  
Reno, Nevada 89511

April 25, 2025  
Project No. A23173.00128

---

## Table of Contents

1.0	Introduction .....	1
2.0	Background .....	1
2.1	Development Information .....	1
2.2	Previous ESA Activities.....	1
2.3	Conceptual Site Model .....	2
3.0	Remedial Action Levels .....	3
4.0	Scope of Work .....	3
5.0	Soil Management.....	4
6.0	Stockpile Management.....	4
7.0	Transportation Activities .....	4
8.0	Final CAP .....	4

## FIGURES

Figure 1        Project Location Map

## APPENDICES

Appendix A     Remedial Action Grading Plans

---

## 1.0 INTRODUCTION

On behalf of World Properties Inc., UES Professional Solutions 30, LLC (UES) has prepared this Material Handling Plan (MHP) to support the Sierra Reflections Subdivision (Site) located in Washoe County, Nevada. The Site is identified as Washoe County Assessor Parcel Numbers (APNs) 046-080-40, 046-090-09, 046-090-01, 046-060-45, 046-090-10, 046-090-04, 046-060-47, 046-090-11, 046-090-05, 046-060-55, 046-090-12, 046-090-06, 046-100-02, 046-090-13, 046-090-07, 046-100-03, 046-090-14, 046-090-08, 046-100-04, 046-090-15, 046-090-18, 046-100-07, 046-090-16, 046-090-23, 046-100-10, 046-090-17, 046-090-24, 046-090-25, and 046-090-26. The location of the Site is indicated in [Figure 1](#).

UES has prepared this MHP to provide the minimum requirements for proper management of soil containing mercury above the residential and commercial action levels which is associated with legacy gold milling activities from the historic Comstock Lode mining era and naturally occurring sources in the area. It should be noted that while concentrations of arsenic exceeding regulatory action levels were found across the Site, they are within background ranges for the region and therefore not considered in this MHP except for sample location B49 discussed further in Section 2.2.

## 2.0 BACKGROUND

### 2.1 DEVELOPMENT INFORMATION

The Site is planned for development as a residential community by World Properties Inc. named Sierra Reflections Subdivision. Mercury-impacted soil associated with the Carson River Mercury Superfund Site (CRMS) is known to exist in the area of the Site. The EPA draft Carson River Mercury Superfund Site map dated March 6, 2018, and the NDEP Carson River Mercury Superfund Site Risk Area Boundaries map dated January 19, 2012, both depict the Site as located within Operable Unit 1 (OU-1) of the CRMS. The CRMS Locations of Risk Area Boundaries map dated April 20, 2011, identifies the Site as potentially containing high level risk zones associated with Steamboat Creek and the Temelic Mill Site which is mapped on the northeastern portion of the Site. In addition to the areas shown to be in the CRMS, areas that were historically flood-irrigated and/or within the 100-year flood plain could reasonably be expected to be impacted. Based on aerial photographs reviewed during a Phase I Environmental Site Assessment (ESA) conducted by UES (formerly McGinley and Associates, Inc.) in January 2023, the northeast portion of the Site appears to have been flood-irrigated with water from Steamboat Creek since at least 1939. As such, a recognized environmental conditions (REC) was identified and multiple ESAs were conducted to assess for mercury within the soil at the Site.

### 2.2 PREVIOUS ESA ACTIVITIES

In April and May 2023, UES conducted a screening level soil sampling event at the Site to provide baseline knowledge of existing site conditions to evaluate decisions for future development and/or sampling activities. Detectable mercury concentrations were reported in all 43 of the collected soil samples ranging from 0.079 mg/kg to 116 mg/kg. In general, samples with elevated concentrations of mercury were located in the flood irrigated areas in the northeastern portion of the Site and in the vicinity of Steamboat Creek.

---

Between January and March 2024, soil sampling activities were conducted by UES to characterize and delineate mercury, lead, and arsenic impacts at the Site prior to approval of development plans. The Site was divided into three zones as differing levels of impacts were expected based on location, historical use, and potential for flooding and/or flood irrigation. Mercury analytical results for samples collected in the 0-4' horizon within the meadow (Zone 1) ranged from 0.09 mg/kg to 181 mg/kg. Mercury analytical results for samples collected in the 4-8' horizon within the meadow (Zone 1) ranged from 0.0225 mg/kg to 79.7 mg/kg. Mercury analytical results for samples collected from the Steamboat Creek bank (Zone 2) ranged from 0.0392 mg/kg to 311 mg/kg. This is consistent with known mercury impacts from the CRMS. Mercury analytical results for samples collected from areas above the flood zone which were not irrigated with Steamboat Creek water (Zone 3) ranged from 0.0269 mg/kg to 1.4 mg/kg, well below the residential action level of 7.1 mg/kg. All samples analyzed for arsenic and lead were consistent with naturally occurring background concentrations within the region with the exception of one sample.

The sample collected from 0-4' bgs at B49, collected from the former mill site, had elevated concentrations of arsenic (308 mg/kg) and lead (556 mg/kg) well above the Site average and EPA residential RSLs. Lead and arsenic are known by products of milling techniques. Based on additional sampling in 2025, the affected area is limited and will be mitigated with the same methodology as mercury impacted soils.

In March 2025, additional soil sampling activities were conducted to further characterize and delineate mercury, lead, and arsenic impacts within Zone 1 at the Site. Detectable concentrations of mercury were reported in 25 of the 29 samples collected, with concentrations ranging from 0.109 mg/kg (B234) to 56.0 mg/kg (B225). Of the 29 samples collected, 11 exceeded the residential action level for mercury (7.1 mg/kg) and two exceeded the industrial action level for mercury (30 mg/kg). The two samples analyzed for arsenic and lead reported concentrations of arsenic with the background range for the Site and concentrations of lead below the residential action level of 200 mg/kg. The additional site characterization sampling event achieved complete delineation of the impacted areas. Based on the characterization activities, arsenic and lead are not considered contaminants of concern under the Remedial Action Plan (RAP) prepared for the development or this MHP (see Section 3).

## 2.3 CONCEPTUAL SITE MODEL

The mercury, arsenic, and lead impacted soil at the Site is related to legacy gold milling activities from the historic Comstock Lode mining era. Processing of the ore at Comstock's gold mills generally involved comminution of the ore with stamp mills, creating a slurry, and adding mercury to form an amalgam with the gold and silver. The gold and silver were later separated from the mercury using a distillation process and the mercury was reused. After about 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic and lead in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe City, near Washoe Lake. The Temelic Mill site is also located on the Site. Fluvial transport of the metals is the primary means by which the metals were mobilized in Steamboat Creek. The mercury, arsenic, and lead impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but decades of flood-irrigation at the Site with water from Steamboat Creek and flood events in the area allowed mercury sediment to be deposited on the Site. As such, mercury-impacted soil or soil with elevated concentrations of arsenic and lead are not expected to exist outside of the flood-irrigated lands and/or the 100-year floodplain.

### 3.0 REMEDIAL ACTION LEVELS

Pursuant to direction and discussion with the Nevada Division of Environmental Protection (NDEP) and the NNPH, action levels at the Site will follow the EPA Regional Screening Levels (RSLs). The EPA RSLs for mercury, lead, and arsenic are summarized in the table below.

COCs	EPA RSL – Residential	EPA RSL – Commercial
Mercury	7.1 mg/kg	30 mg/kg
Lead	200 mg/kg	800 mg/kg
Arsenic	0.68 mg/kg	3.0 mg/kg

As indicated in UES's September 27, 2021, *South Truckee Meadows Regional Arsenic Background Levels* report, regional background arsenic concentrations in soils appear to range from 1.8 mg/kg to 320 mg/kg. While arsenic concentrations in soil samples collected for the Sierra Reflections Subdivision appear to be elevated when compared to the EPA action level of 0.69 mg/kg for residential scenarios, these soil sample concentrations are within the known background range for arsenic within this region. In general, soil with elevated concentrations of arsenic are known to be collocated with elevated mercury concentrations in this region. Therefore, the proposed RAP for mercury impacted soils would inherently address elevated arsenic concentrations in the low-lying areas.

### 4.0 SCOPE OF WORK

A RAP has been written for this development project which will be executed under the regulatory oversight of the Northern Nevada Public Health (NNPH).

Remedial action will focus on protecting public health by removing and/or capping mercury impacted soils such that shallow soils do not contain mercury above the residential action level of 7.1 mg/kg and roadways do not contain mercury above the industrial/construction action level of 30 mg/kg.

In general, the RAP for this Site includes moving impacted soil from an area where cutting is proposed to an area requiring fill as part of site grading activities. Impacted soil used as beneficial fill in other parts of the Site will be capped with a minimum of eight feet of clean material. Additionally, as a conservative measure, areas where soil was removed in Zone 1 will be capped with eight feet of clean material. This cap will prevent contact with potentially impacted soil following Site development. The remedial action site grading plans are provided in Appendix A. These plans outline the anticipated cut and fill locations. Exhibit EX1 outlines the anticipated extent of cut and locations for beneficial reuse (fill), exhibit EX2 indicates where the eight-foot clean cap will be applied, and exhibit EX3 provides cross sections for select areas of interest. As indicated in the Exhibits in Appendix A and in Figures 2A and 2B, impacted areas within the meadows will be excavated and capped with clean material.

---

## 5.0 SOIL MANAGEMENT

All soil excavated from the impacted soil noted in Zone 1, estimated to include approximately 160,000 cubic yards, shall be used as fill materials in areas requiring deeper fills at the Site. These areas are indicated in Appendix A.

## 6.0 STOCKPILE MANAGEMENT

If the excavated soil is not immediately placed in the beneficial fill areas, it will be stockpiled on visqueen away from areas with surface drainage. Stockpiles will be limited in size. If stockpiles are to be left in place for more than 12 hours (i.e., overnight or during a precipitation/wind event), the stockpile shall be covered with an impermeable material (i.e., visqueen or plastic) and secured such that wind will not remove the covering, to prevent erosion from precipitation and wind events. Work which includes handling of impacted soil will cease should a major wind event take place and stockpiles will be covered as described above. Stockpiles shall be bermed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) to prevent runoff during storm events. If stockpiles are to remain in place for more than 60-days, best management practices (BMPs) shall include, at minimum, wire backed silt fence, orange construction fencing and signage indicating that soils are only suitable for fill material in specified areas.

Prior to mass grading, a site-specific materials handling plan will be developed by the grading contractor and provided to the NNPH and Washoe County for review. The site-specific plan will include soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in this plan.

## 7.0 TRANSPORTATION ACTIVITIES

Trucks shall not enter the excavation area or track through soils known to be impacted with mercury. During transportation activities, mercury containing material shall be wetted thoroughly to prevent airborne exposure. Haul truck beds shall be covered with suitable cover during transport from the excavation location to the fill area. Haul trucks will comply with applicable traffic laws when transport is taking place on public roadways (not anticipated). All used BMP-derived waste (wattles, silt fence, etc.) shall be placed in appropriate waste containers, labeled, and treated as non-hazardous waste.

## 8.0 FINAL CAP

Following placement of the impacted fill materials, the fill areas and excavated areas in Zone 1 shall be capped with at least eight feet of clean fill material. The cap is intended prevent direct human contact with impacted soil. Capping, confirmation sampling, and reporting are outlined in the Remedial Action Plan (RAP) prepared for this Site.



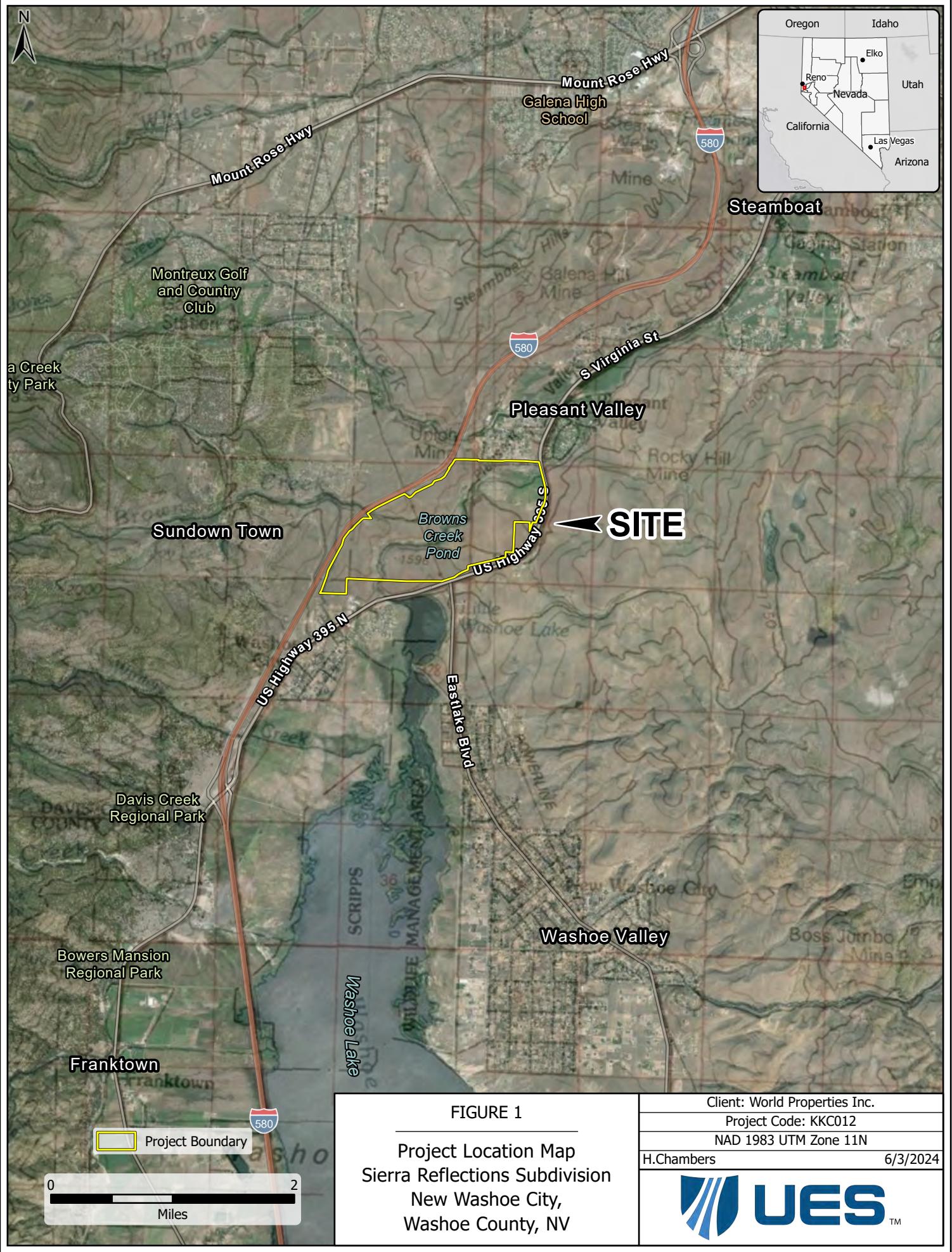
Sierra Reflections, Material Handling Plan

Project No. KKC012

April 2025

---

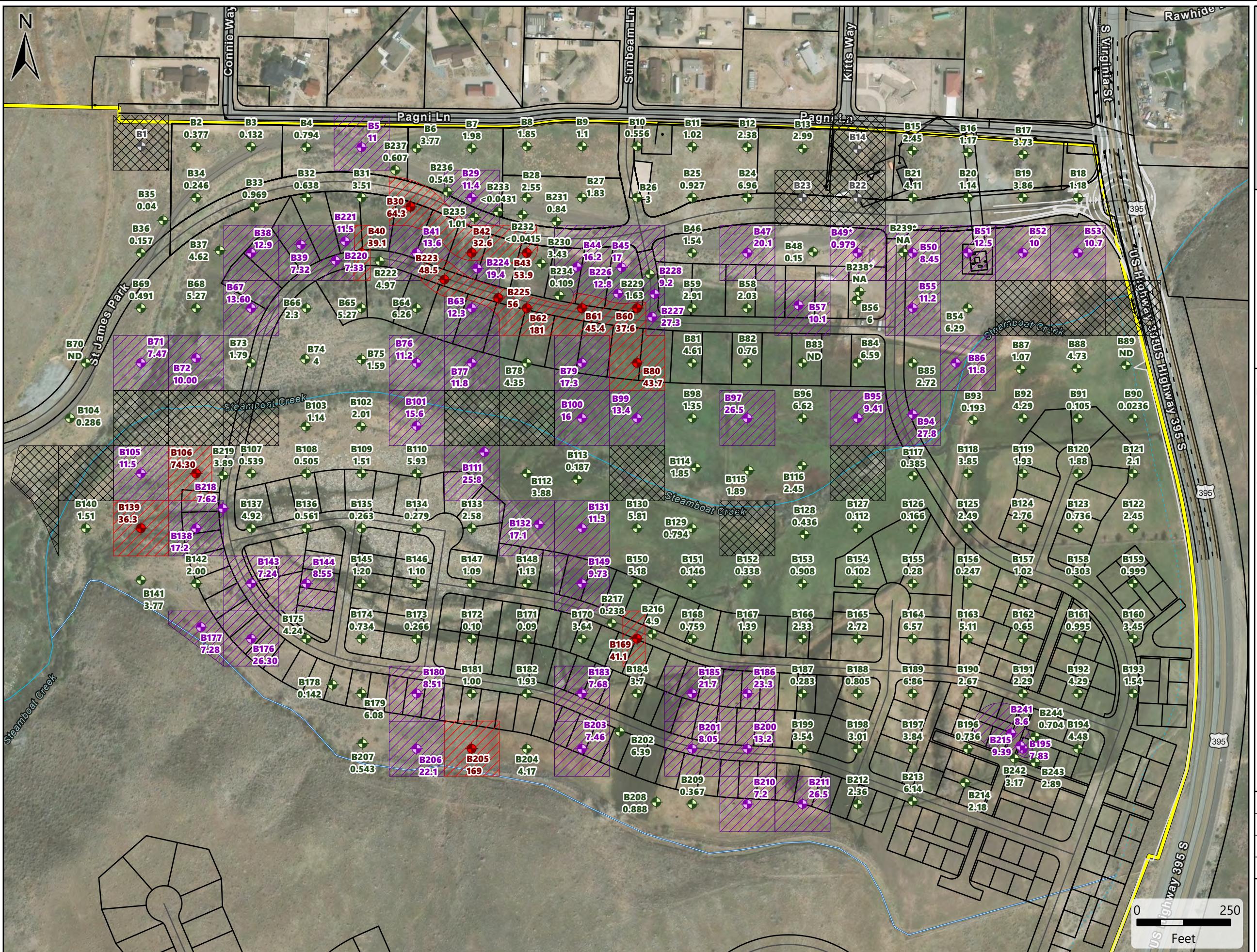
## FIGURES





**FIGURE 2A**

Zone 1 Boring Locations at Depth  
0-4'  
and Roadway Exhibit  
Sierra Reflections Subdivision  
New Washoe City, Washoe County,  
NV





## APPENDIX A

### Remedial Action Grading Plans



## APPENDIX C

### Chain-of-Custody Records and Laboratory Reports for Soil Samples



# ANALYTICAL REPORT

March 11, 2025

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

## Universal Engineering\_dbaMcGinley

Sample Delivery Group: L1833220  
Samples Received: 03/06/2025  
Project Number: KKC012  
Description: Sierra Reflections, Reno, NV

Report To: Anna Henry  
6995 Sierra Center Parkway  
Reno, NV 89511

Entire Report Reviewed By:

Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>7</b>	
<b>Sr: Sample Results</b>	<b>8</b>	
KKC012-B220@4FT L1833220-01	8	
KKC012-B221@4FT L1833220-02	9	
KKC012-B222@4FT L1833220-03	10	
KKC012-B223@4FT L1833220-04	11	
KKC012-B224@4FT L1833220-05	12	
KKC012-B225@4FT L1833220-06	13	
KKC012-B230@4FT L1833220-07	14	
KKC012-B226@4FT L1833220-08	15	
KKC012-B229@4FT L1833220-09	16	
KKC012-B228@4FT L1833220-10	17	
KKC012-B227@4FT L1833220-11	18	
KKC012-B217@4FT L1833220-12	19	
KKC012-B216@4FT L1833220-13	20	
KKC012-B215@4FT L1833220-14	21	
KKC012-B239@4FT L1833220-15	22	
KKC012-B238@4FT L1833220-16	23	
KKC012-B231@4FT L1833220-17	24	
KKC012-B232@4FT L1833220-18	25	
KKC012-B233@4FT L1833220-19	26	
KKC012-B235@4FT L1833220-20	27	
KKC012-B236@4FT L1833220-21	28	
KKC012-B237@4FT L1833220-22	29	
KKC012-B234@4FT L1833220-23	30	
<b>Qc: Quality Control Summary</b>	<b>31</b>	
<b>Total Solids by Method 2540 G-2011</b>	<b>31</b>	
<b>Mercury by Method 7471B</b>	<b>34</b>	
<b>Metals (ICP) by Method 6010D</b>	<b>36</b>	
<b>Gl: Glossary of Terms</b>	<b>37</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>38</b>	
<b>Sc: Sample Chain of Custody</b>	<b>39</b>	

# SAMPLE SUMMARY

			Collected by ZH	Collected date/time 03/04/25 09:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464620	1	03/08/25 09:52	03/08/25 10:02	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	5	03/08/25 13:49	03/10/25 15:52	AKB	Mt. Juliet, TN
KKC012-B221@4FT L1833220-02 Solid			Collected by ZH	Collected date/time 03/04/25 09:20	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464620	1	03/08/25 09:52	03/08/25 10:02	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	10	03/08/25 13:49	03/10/25 16:00	AKB	Mt. Juliet, TN
KKC012-B222@4FT L1833220-03 Solid			Collected by ZH	Collected date/time 03/04/25 09:35	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464620	1	03/08/25 09:52	03/08/25 10:02	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	5	03/08/25 13:49	03/10/25 16:05	AKB	Mt. Juliet, TN
KKC012-B223@4FT L1833220-04 Solid			Collected by ZH	Collected date/time 03/04/25 10:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464620	1	03/08/25 09:52	03/08/25 10:02	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	200	03/08/25 13:49	03/10/25 17:42	AKB	Mt. Juliet, TN
KKC012-B224@4FT L1833220-05 Solid			Collected by ZH	Collected date/time 03/04/25 10:30	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464620	1	03/08/25 09:52	03/08/25 10:02	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	200	03/08/25 13:49	03/10/25 18:05	AKB	Mt. Juliet, TN
KKC012-B225@4FT L1833220-06 Solid			Collected by ZH	Collected date/time 03/04/25 11:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	200	03/08/25 13:49	03/10/25 17:48	AKB	Mt. Juliet, TN
KKC012-B230@4FT L1833220-07 Solid			Collected by ZH	Collected date/time 03/04/25 11:20	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	10	03/08/25 13:49	03/10/25 16:21	AKB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

# SAMPLE SUMMARY

			Collected by ZH	Collected date/time 03/04/25 11:40	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	20	03/08/25 13:49	03/10/25 16:54	AKB	Mt. Juliet, TN
KKC012-B226@4FT L1833220-08 Solid			Collected by ZH	Collected date/time 03/04/25 12:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	10	03/08/25 13:49	03/10/25 16:32	AKB	Mt. Juliet, TN
KKC012-B229@4FT L1833220-09 Solid			Collected by ZH	Collected date/time 03/04/25 12:15	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	10	03/08/25 13:49	03/10/25 16:35	AKB	Mt. Juliet, TN
KKC012-B228@4FT L1833220-10 Solid			Collected by ZH	Collected date/time 03/04/25 12:45	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	10	03/08/25 13:49	03/10/25 16:35	AKB	Mt. Juliet, TN
KKC012-B227@4FT L1833220-11 Solid			Collected by ZH	Collected date/time 03/04/25 12:45	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	200	03/08/25 13:49	03/10/25 18:09	AKB	Mt. Juliet, TN
KKC012-B217@4FT L1833220-12 Solid			Collected by ZH	Collected date/time 03/04/25 13:30	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	5	03/08/25 13:49	03/10/25 17:05	AKB	Mt. Juliet, TN
KKC012-B216@4FT L1833220-13 Solid			Collected by ZH	Collected date/time 03/04/25 14:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464571	20	03/08/25 13:49	03/10/25 18:24	AKB	Mt. Juliet, TN
KKC012-B215@4FT L1833220-14 Solid			Collected by ZH	Collected date/time 03/04/25 15:15	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464626	1	03/08/25 10:04	03/08/25 10:15	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	10	03/08/25 13:41	03/10/25 13:48	AKB	Mt. Juliet, TN



# SAMPLE SUMMARY

			Collected by ZH	Collected date/time 03/05/25 08:30	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2465319	1	03/09/25 09:16	03/10/25 15:08	MAP	Mt. Juliet, TN
KKC012-B239@4FT L1833220-15 Solid			Collected by ZH	Collected date/time 03/05/25 08:50	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2465319	1	03/09/25 09:16	03/10/25 15:10	MAP	Mt. Juliet, TN
KKC012-B238@4FT L1833220-16 Solid			Collected by ZH	Collected date/time 03/05/25 09:15	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:12	AKB	Mt. Juliet, TN
KKC012-B231@4FT L1833220-17 Solid			Collected by ZH	Collected date/time 03/05/25 09:30	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:14	AKB	Mt. Juliet, TN
KKC012-B232@4FT L1833220-18 Solid			Collected by ZH	Collected date/time 03/05/25 09:50	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:14	AKB	Mt. Juliet, TN
KKC012-B233@4FT L1833220-19 Solid			Collected by ZH	Collected date/time 03/05/25 09:50	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:17	AKB	Mt. Juliet, TN
KKC012-B235@4FT L1833220-20 Solid			Collected by ZH	Collected date/time 03/05/25 10:10	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:19	AKB	Mt. Juliet, TN
KKC012-B236@4FT L1833220-21 Solid			Collected by ZH	Collected date/time 03/05/25 10:35	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:22	AKB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

# SAMPLE SUMMARY

KKC012-B237@4FT L1833220-22 Solid			Collected by ZH	Collected date/time 03/05/25 11:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:24	AKB	Mt. Juliet, TN
KKC012-B234@4FT L1833220-23 Solid			Collected by ZH	Collected date/time 03/05/25 15:00	Received date/time 03/06/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2464630	1	03/07/25 15:24	03/07/25 15:29	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2464824	1	03/08/25 13:41	03/10/25 12:27	AKB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris Ward  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> GI
- <sup>8</sup> AI
- <sup>9</sup> Sc

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.5		1	03/08/2025 10:02	<a href="#">WG2464620</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	7.33		0.119	0.231	5	03/10/2025 15:52	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	88.1		1	03/08/2025 10:02	<a href="#">WG2464620</a>

<sup>1</sup>Cp

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	11.5		0.234	0.454	10	03/10/2025 16:00	<a href="#">WG2464571</a>

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.8		1	03/08/2025 10:02	<a href="#">WG2464620</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	4.97		0.113	0.220	5	03/10/2025 16:05	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	88.5		1	03/08/2025 10:02	<a href="#">WG2464620</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	48.5		4.65	9.04	200	03/10/2025 17:42	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.7		1	03/08/2025 10:02	<a href="#">WG2464620</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	19.4		4.49	8.72	200	03/10/2025 18:05	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	82.4		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	56.0		5.00	9.71	200	03/10/2025 17:48	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.5		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	3.43		0.230	0.447	10	03/10/2025 16:21	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.7		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	12.8		0.470	0.912	20	03/10/2025 16:54	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.3		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	1.63		0.236	0.458	10	03/10/2025 16:32	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.8		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	9.20		0.237	0.461	10	03/10/2025 16:35	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.4		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	27.3		4.77	9.26	200	03/10/2025 18:09	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.6		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.238		0.110	0.214	5	03/10/2025 17:05	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.7		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	4.90		0.475	0.922	20	03/10/2025 18:24	<a href="#">WG2464571</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.4		1	03/08/2025 10:15	<a href="#">WG2464626</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	9.39		0.238	0.463	10	03/10/2025 13:48	<a href="#">WG2464824</a>

KKC012-B239@4FT

Collected date/time: 03/05/25 08:30

## SAMPLE RESULTS - 15

L1833220

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.6		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp

## Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Arsenic	11.4		0.924	2.21	1	03/10/2025 15:08	<a href="#">WG2465319</a>
Lead	68.6		0.360	0.552	1	03/10/2025 15:08	<a href="#">WG2465319</a>

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

KKC012-B238@4FT

Collected date/time: 03/05/25 08:50

## SAMPLE RESULTS - 16

L1833220

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.2		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp

## Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Arsenic	22.2		0.870	2.08	1	03/10/2025 15:10	<a href="#">WG2465319</a>
Lead	48.5		0.339	0.520	1	03/10/2025 15:10	<a href="#">WG2465319</a>

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.0		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.840		0.0215	0.0417	1	03/10/2025 12:12	<a href="#">WG2464824</a>

KKC012-B232@4FT

Collected date/time: 03/05/25 09:30

## SAMPLE RESULTS - 18

L1833220

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.5		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	U		0.0214	0.0415	1	03/10/2025 12:14	<a href="#">WG2464824</a>

KKC012-B233@4FT

Collected date/time: 03/05/25 09:50

## SAMPLE RESULTS - 19

L1833220

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.8		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	U		0.0222	0.0431	1	03/10/2025 12:17	<a href="#">WG2464824</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.1		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	1.01		0.0214	0.0416	1	03/10/2025 12:19	<a href="#">WG2464824</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.5		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.545		0.0218	0.0423	1	03/10/2025 12:22	<a href="#">WG2464824</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.4		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.607		0.0214	0.0415	1	03/10/2025 12:24	<a href="#">WG2464824</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.3		1	03/07/2025 15:29	<a href="#">WG2464630</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.109		0.0214	0.0416	1	03/10/2025 12:27	<a href="#">WG2464824</a>

WG2464620

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

L1833220-01,02,03,04,05

## Method Blank (MB)

(MB) R4184344-1 03/08/25 10:02

Analyst	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00300			

<sup>1</sup>Cp

## L1833220-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1833220-05 03/08/25 10:02 • (DUP) R4184344-3 03/08/25 10:02

Analyst	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	91.7	89.2	1	2.79		10

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc

## Laboratory Control Sample (LCS)

(LCS) R4184344-2 03/08/25 10:02

Analyst	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	90.0-110	

<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

ACCOUNT:

Universal Engineering\_dbaMcGinley

PROJECT:

KKC012

SDG:

L1833220

DATE/TIME:

03/11/25 12:12

PAGE:

31 of 41

WG2464626

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

L1833220-06,07,08,09,10,11,12,13,14

## Method Blank (MB)

(MB) R4184345-1 03/08/25 10:15

Analyst	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00300			

<sup>1</sup>Cp

## L1833220-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1833220-06 03/08/25 10:15 • (DUP) R4184345-3 03/08/25 10:15

Analyst	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	82.4	82.4	1	0.0277		10

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc

## Laboratory Control Sample (LCS)

(LCS) R4184345-2 03/08/25 10:15

Analyst	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	99.9	90.0-110	

<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

WG2464630

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

L1833220-15,16,17,18,19,20,21,22,23

## Method Blank (MB)

(MB) R4184056-1 03/07/25 15:29

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00300			

<sup>1</sup>Cp

## L1833220-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1833220-16 03/07/25 15:29 • (DUP) R4184056-3 03/07/25 15:29

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD 0.0154	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	96.2	96.2	1			10

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc

## Laboratory Control Sample (LCS)

(LCS) R4184056-2 03/07/25 15:29

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	90.0-110	

<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

ACCOUNT:

Universal Engineering\_dbaMcGinley

PROJECT:

KKC012

SDG:

L1833220

DATE/TIME:

03/11/25 12:12

PAGE:

33 of 41

WG2464571

Mercury by Method 7471B

## QUALITY CONTROL SUMMARY

[L1833220-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

## Method Blank (MB)

(MB) R4184698-1 03/10/25 14:38

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0206	0.0400

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Laboratory Control Sample (LCS)

(LCS) R4184698-2 03/10/25 14:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Mercury	0.500	0.497	99.3	80.0-120	

## L1833139-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1833139-02 03/10/25 14:43 • (MS) R4184698-4 03/10/25 14:54 • (MSD) R4184698-5 03/10/25 14:57

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.566	0.0263	0.524	0.514	88.0	86.2	1	75.0-125			1.92	20

## QUALITY CONTROL SUMMARY

[L1833220-14,17,18,19,20,21,22,23](#)

## Method Blank (MB)

(MB) R4184695-1 03/10/25 11:40

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0206	0.0400

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Laboratory Control Sample (LCS)

(LCS) R4184695-2 03/10/25 11:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Mercury	0.500	0.519	104	80.0-120	

## L1833351-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1833351-09 03/10/25 11:45 • (MS) R4184695-4 03/10/25 11:50 • (MSD) R4184695-5 03/10/25 11:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.567	U	0.527	0.582	93.0	103	1	75.0-125			9.88	20

WG2465319

Metals (ICP) by Method 6010D

## QUALITY CONTROL SUMMARY

L1833220-15,16

## Method Blank (MB)

(MB) R4184724-1 03/10/25 14:28

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.837	2.00
Lead	U		0.326	0.500

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Laboratory Control Sample (LCS)

(LCS) R4184724-2 03/10/25 14:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Arsenic	100	106	106	80.0-120	
Lead	100	104	104	80.0-120	

## L1833686-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1833686-05 03/10/25 14:34 • (MS) R4184724-5 03/10/25 14:42 • (MSD) R4184724-6 03/10/25 14:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Arsenic	100	5.76	87.0	86.6	81.2	80.8	1	75.0-125			0.451	20
Lead	100	33.5	111	101	77.3	67.8	1	75.0-125	J6		8.93	20

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

**Results Disclaimer -** Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].	<sup>1</sup> Cp
MDL	Method Detection Limit.	<sup>2</sup> Tc
MDL (dry)	Method Detection Limit.	<sup>3</sup> Ss
RDL	Reported Detection Limit.	<sup>4</sup> Cn
RDL (dry)	Reported Detection Limit.	<sup>5</sup> Sr
Rec.	Recovery.	<sup>6</sup> Qc
RPD	Relative Percent Difference.	<sup>7</sup> GI
SDG	Sample Delivery Group.	<sup>8</sup> AI
U	Not detected at the Reporting Limit (or MDL where applicable).	<sup>9</sup> SC
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address:

**Universal Engineering\_dbaMcGinley**6995 Sierra Center Parkway  
Reno, NV 89511Report to:  
**Anna Henry 775-829-2245**Project Description:  
**Sierra Reflections, Reno, NV**

Regulatory Program(DOD,RCRA,DW,etc):

City/State  
Collected:Pres  
Chk**Accounts Payable**  
6995 Sierra Center Parkway  
Reno, NV 89511

Email To: ahenry@mgin.com

Please Circle:  
PT MT CT ETClient Project #  
**KKC012**Lab Project #  
**MCGINRNV-KKC012**

Collected by (print):

**ZH**

Collected by (signature):

**ZH**Immediately  
Packed on Ice N **V**

Site/Facility ID #

P.O. #

**KKC012**

Rush? (Lab MUST Be Notified)

Quote #

Same Day     Five Day  
 Next Day     5 Day (Rad Only)  
 Two Day     10 Day (Rad Only)  
 Three Day     STD TAT

Date Results Needed

No.  
of  
Cntrs

Sample ID Comp/Grab Matrix \* Depth Date Time Cntrs

HG 402Clr+ NoPres

KKC012-B220@4ft	Comp.	ss	4ft	3/4/25	9:00	1	X	- 01
KKC012-B221@4ft		ss			9:20	1	X	- 02
KKC012-B222@4ft+		ss			9:35	1	X	- 03
KKC012-B223@4ft		ss			10:00	1	X	- 04
KKC012-B224@4ft		ss			10:30	1	X	- 05
KKC012-B225@4ft		ss			11:00	1	X	- 06
KKC012-B230@4ft		ss			11:20	1	X	- 07
KKC012-B226@4ft		ss			11:40	1	X	- 08
KKC012-B227@4ft		ss			12:00	1	X	- 09
KKC012-B228@4ft		ss	↓	↓	12:15	1	X	- 10

\* Matrix:

SS - Soil   AIR - Air   F - Filter  
GW - Groundwater   B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other \_\_\_\_\_

Remarks:

Samples returned via:

UPS   FedEx   Courier \_\_\_\_\_

Tracking #

**47169016343**

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Preservation Correct/Checked:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Relinquished by : (Signature)

**ZH**

Date:

**3/6/25**

Time:

**15:00**

Received by: (Signature)

Trip Blank Received: Yes  No HCl / MeOH  
TBR

Relinquished by : (Signature)

**ZH**

Date:

Time:

Received by: (Signature)

Temp: **76.4** °C Bottles Received:**9.0±0.4±9.4 23**

Relinquished by : (Signature)

**ZH**

Date:

Time:

Received for lab by: (Signature)

Date: **3/6/25** Time: **09:00**Hold: **OK**Condition: **NCF / OK**

Chain of Custody Page \_\_\_\_ of \_\_\_\_

**MT JULIET, TN**

12065 Lebanon Rd. Mount Juliet, TN 37122  
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at:  
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG # **L1833220****G21**

Table: \_\_\_\_\_

Acctn#, Inv# **MCGINRNV**Template: **T227393**Prelogin: **P1135307**

PM: 824 - Chris Ward

PB:

Shipped Via: **FedEX Ground**

Remarks: \_\_\_\_\_ Sample # (lab only) \_\_\_\_\_

Company Name/Address: <b>Universal Engineering_dbaMcGinley</b> 6995 Sierra Center Parkway Reno, NV 89511			Billing Information: <b>Accounts Payable</b> 6995 Sierra Center Parkway Reno, NV 89511			Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page ____ of ____
Report to: <b>Anna Henry 775-829-2245</b>			Email To: <b>ahenry@mgin.com</b>											
Project Description: <b>Sierra Reflections, Reno, NV</b>		City/State Collected:		Please Circle: PT MT CT ET										
Regulatory Program(DOD,RCRA,DW,etc): <b>KKC012</b>	Client Project # <b>KKC012</b>		Lab Project # <b>MCGINRNV-KKC012</b>											
Collected by (print): <b>ZH</b>	Site/Facility ID #		P.O. # <b>KKC012</b>											
Collected by (signature): <b>BH</b>	Rush? (Lab MUST Be Notified)		Quote #											
Immediately Packed on Ice N <b>Y</b>	Same Day <input checked="" type="checkbox"/> Five Day Next Day <input type="checkbox"/> 5 Day (Rad Only) Two Day <input type="checkbox"/> 10 Day (Rad Only) Three Day <input type="checkbox"/> STD TAT		Date Results Needed		No. of									
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	HG 4ozClr-NoPres	Lead	Argon					
KKC012-B227@4ft	Comp	ss	4ft	3/4/25	12:45	1	X							
KKC012-B217@4ft		ss		3/4/25	13:30	1	X							
KKC012-B216@4ft		ss		3/4/25	14:00	1	X							
KKC012-B215@4ft		ss		3/4/25	15:15	1	X							
KKC012-B231@4ft		ss		3/5/25	8:30	1	● X X							
KKC012-B236@4ft		ss			8:50	1	● X X							
KKC012-B231@4ft		ss			9:15	1	X							
KKC012-B232@4ft		ss			9:30	1	X							
KKC012-B233@4ft		ss			9:50	1	X							
KKC012-B235@4ft		ss	↓		10:10	1	X							
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks:						pH	Temp						
									Flow	Other				
Samples returned via: UPS FedEx Courier			Tracking #		<b>417166016343</b>		Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		HCl / MeOH TBR		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y N COC Signed/Accurate: <input checked="" type="checkbox"/> Y N Bottles arrive intact: <input checked="" type="checkbox"/> Y N Correct bottles used: <input checked="" type="checkbox"/> Y N Sufficient volume sent: <input checked="" type="checkbox"/> If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y N			
Relinquished by : (Signature)			Date: <b>3/6/25</b>	Time: <b>15:00</b>	Received by: (Signature)		Temp: <b>71.0</b> °C		Bottles Received: <b>23</b>		If preservation required by Login: Date/Time			
Relinquished by : (Signature)			Date: _____	Time: _____	Received by: (Signature)		Temp: <b>71.0</b> °C		Bottles Received: <b>23</b>					
Relinquished by : (Signature)			Date: _____	Time: _____	Received for lab by: (Signature)		Date: <b>3/6/25</b>	Time: <b>09:00</b>	Hold:		Condition: <b>NCF / OK</b>			





# ANALYTICAL REPORT

March 20, 2025

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

## Universal Engineering\_dbaMcGinley

Sample Delivery Group: L1836452  
Samples Received: 03/14/2025  
Project Number: KKC012  
Description: Sierra Reflections, Reno, NV

Report To: Anna Henry  
6995 Sierra Center Parkway  
Reno, NV 89511

Entire Report Reviewed By:

Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

# TABLE OF CONTENTS

Cp: Cover Page	1	 <sup>1</sup> Cp
Tc: Table of Contents	2	 <sup>2</sup> Tc
Ss: Sample Summary	3	 <sup>3</sup> Ss
Cn: Case Narrative	4	 <sup>4</sup> Cn
Sr: Sample Results	5	 <sup>5</sup> Sr
KKC012-B-218@4' L1836452-01	5	 <sup>6</sup> Qc
KKC012-B-219@4' L1836452-02	6	 <sup>7</sup> Gl
KKC012-B-241@3' L1836452-03	7	 <sup>8</sup> Al
KKC012-B-243@4' L1836452-04	8	 <sup>9</sup> Sc
KKC012-B-244@4' L1836452-05	9	
KKC012-B-242@4' L1836452-06	10	
Qc: Quality Control Summary	11	
Total Solids by Method 2540 G-2011	11	
Mercury by Method 7471B	12	
Gl: Glossary of Terms	13	
Al: Accreditations & Locations	14	
Sc: Sample Chain of Custody	15	

# SAMPLE SUMMARY

			Collected by Domonic Whalen	Collected date/time 03/13/25 12:10	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	5	03/18/25 15:44	03/19/25 21:30	AKB	Mt. Juliet, TN
KKC012-B-219@4' L1836452-02 Solid			Collected by Domonic Whalen	Collected date/time 03/13/25 12:45	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	10	03/18/25 15:44	03/19/25 21:50	AKB	Mt. Juliet, TN
KKC012-B-241@3' L1836452-03 Solid			Collected by Domonic Whalen	Collected date/time 03/13/25 10:45	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	5	03/18/25 15:44	03/19/25 21:36	AKB	Mt. Juliet, TN
KKC012-B-243@4' L1836452-04 Solid			Collected by Domonic Whalen	Collected date/time 03/13/25 11:30	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	5	03/18/25 15:44	03/19/25 21:38	AKB	Mt. Juliet, TN
KKC012-B-244@4' L1836452-05 Solid			Collected by Domonic Whalen	Collected date/time 03/13/25 11:45	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	1	03/18/25 15:44	03/19/25 20:43	AKB	Mt. Juliet, TN
KKC012-B-242@4' L1836452-06 Solid			Collected by Domonic Whalen	Collected date/time 03/13/25 11:15	Received date/time 03/14/25 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2470884	1	03/18/25 08:27	03/18/25 08:38	CMB	Mt. Juliet, TN
Mercury by Method 7471B	WG2470821	5	03/18/25 15:44	03/19/25 21:41	AKB	Mt. Juliet, TN



# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris Ward  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> GI
- <sup>8</sup> AI
- <sup>9</sup> Sc

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.2		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	7.62		0.114	0.222	5	03/19/2025 21:30	<a href="#">WG2470821</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	85.4		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	3.89		0.241	0.469	10	03/19/2025 21:50	<a href="#">WG2470821</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	75.0		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	8.60		0.137	0.267	5	03/19/2025 21:36	<a href="#">WG2470821</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	84.0		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	2.89		0.123	0.238	5	03/19/2025 21:38	<a href="#">WG2470821</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.8		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	0.704		0.0227	0.0440	1	03/19/2025 20:43	<a href="#">WG2470821</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	88.3		1	03/18/2025 08:38	<a href="#">WG2470884</a>

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Mercury by Method 7471B

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Mercury	3.17		0.117	0.226	5	03/19/2025 21:41	<a href="#">WG2470821</a>

WG2470884

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

[L1836452-01,02,03,04,05,06](#)

## Method Blank (MB)

(MB) R4187734-1 03/18/25 08:38

Analyst	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.000			

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## L1836452-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1836452-01 03/18/25 08:38 • (DUP) R4187734-3 03/18/25 08:38

Analyst	Original Result %	DUP Result %	Dilution %	DUP RPD 0.0283	<u>DUP Qualifier</u>	DUP RPD Limits 10
Total Solids	90.2	90.2	1			

## Laboratory Control Sample (LCS)

(LCS) R4187734-2 03/18/25 08:38

Analyst	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	90.0-110	

<sup>9</sup>Sc

ACCOUNT:

Universal Engineering\_dbaMcGinley

PROJECT:

KKC012

SDG:

L1836452

DATE/TIME:

03/20/25 15:40

PAGE:

11 of 15

WG2470821

Mercury by Method 7471B

## QUALITY CONTROL SUMMARY

[L1836452-01,02,03,04,05,06](#)

## Method Blank (MB)

(MB) R4188533-1 03/19/25 20:00

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0206	0.0400

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>Sc

## Laboratory Control Sample (LCS)

(LCS) R4188533-2 03/19/25 20:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Mercury	0.500	0.478	95.5	80.0-120	

## L1836452-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1836452-01 03/19/25 20:10 • (MS) R4188533-4 03/19/25 20:19 • (MSD) R4188533-5 03/19/25 20:21

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.554	5.31	4.74	5.66	0.000	64.2	1	75.0-125	<u>E</u> V	<u>E</u> V	17.7	20

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

**Results Disclaimer -** Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].	<sup>1</sup> Cp
MDL	Method Detection Limit.	<sup>2</sup> Tc
MDL (dry)	Method Detection Limit.	<sup>3</sup> Ss
RDL	Reported Detection Limit.	<sup>4</sup> Cn
RDL (dry)	Reported Detection Limit.	<sup>5</sup> Sr
Rec.	Recovery.	<sup>6</sup> Qc
RPD	Relative Percent Difference.	<sup>7</sup> GI
SDG	Sample Delivery Group.	<sup>8</sup> AI
U	Not detected at the Reporting Limit (or MDL where applicable).	<sup>9</sup> SC
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
V	The sample concentration is too high to evaluate accurate spike recoveries.

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address:

**Universal Engineering\_dbaMcGinley**6995 Sierra Center Parkway  
Reno, NV 89511Report to:  
**Caitlin Jelle**

Project Description:

~~McDermitt Motel and Mini Mart, 55 US Hwy 95 N, McD~~City/State  
**NV**

Collected:

Phone: 775-829-2245

*Dominique Jelle*

Collected by (print):

Collected by (signature):

Immediately  
Packed on Ice N  Y 

Sample ID

Client Project #

~~STN001~~**KKC012**Lab Project #  
**MCGINRNV-STN001**

Site/Facility ID #

**55 US HWY 95 N, MCDERMITT,**

P.O. #

Rush? (Lab MUST Be Notified)

- Same Day     Five Day  
 Next Day     5 Day (Rad Only)  
 Two Day     10 Day (Rad Only)  
 Three Day

Date Results Needed

No.  
of  
Cntrs

Comp/Grab Matrix \* Depth Date Time

GW GW

kkc012-B-21809 G 50 4' 3/13/25 1210

kkc012-B-219@4' | 4' 1245

kkc012-B-241@3' | 3' 1045

kkc012-B-243@4' | 4' 1130

kkc012-B-244@4' | 4' 1145

kkc012-B-242@4' | 4' 1115

\* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other \_\_\_\_\_

Remarks:

Samples returned via:  
 UPS  FedEx  CourierTracking # **4301 1543 4502**

Relinquished by : (Signature)

Date: **3/13/25**Time: **1300**

Received by: (Signature)

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Trip Blank Received: Yes / No

HCl / MeOH

TBR

Relinquished by : (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received by: (Signature)

Temp: °C Bottles Received:

TWA 91.5 TD 4 = 1.9

6

Relinquished by : (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received for lab by: (Signature)

Date: **3/14/25**Time: **0900**

Hold:

Chain of Custody Page \_\_\_\_ of \_\_\_\_

**Pace**  
 PEOPLE ADVANCING SCIENCE
**MT JULIET, TN**
 12065 Lebanon Rd. Mount Juliet, TN 37122  
 Submitting a sample via this chain of custody  
 constitutes acknowledgment and acceptance of the  
 Pace Terms and Conditions found at:  
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

 SDG # **1836452**  
**J062**
Acctnum: **MCGINRNV**Template: **T244248**Prelogin: **P1118801**

PM: 824 - Chris Ward

PB: **BW 12124**Shipped Via: **FedEX Ground**

Remarks | Sample # (lab only)

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

If preservation required by Login: Date/Time

Condition: **NCF / OK**