APPENDIX B

Highway 24 Site Inspection Trip Report

TETRA TECH

May 10, 2024

Mr. Ryan Dunham
Site Assessment Manager
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

Subject: **Highway 24 Mill Site Inspection Trip Report**
Colorado Springs, El Paso County, Colorado
EPA Contract No. 68HE0820D001
TD No.: 2361-2312-04
DTN: 1246

Dear Mr. Dunham

Tetra Tech, Inc. Superfund Technical Assessment and Response Team (START) is submitting this Site Assessment Trip Report for the June 2023 sampling event conducted at the Highway 24 Mill site in Colorado Springs, El Paso County, Colorado.

Please contact me at matt.lafemina@tetratech.com if you have any questions regarding this report.

Sincerely,

Matt LaFemina
START V

1560 Broadway, Suite 1400
Denver, Colorado 80202
www.tetratech.com

SITE ASSESSMENT TRIP REPORT

HIGHWAY 24 MILL SITE INSPECTION
COLORADO SPRINGS, EL PASO COUNTY, COLORADO

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 8
1595 Wynkoop Street
Denver, CO 80202

Prepared by

Tetra Tech, Inc.
Superfund Technical Assessment and Response Team Region 8
1560 Broadway, Suite 1400
Denver, CO 80202

Contract No.	:	68HE0820D0001
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Date Prepared	:	May 10, 2024
EPA SAM	:	Ryan Dunham
START V Project Manager	:	Matt LaFemina

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1.0 INTRODUCTION

This report has been prepared under Technical Direction (TD) No. 2361-2312-04, which the U.S. Environmental Protection Agency (EPA) Region 8 assigned to the Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) under Contract No. 68HE0820D0001. The overall scope of this TD, which is monitored by Site Assessment Manager (SAM) Ryan Dunham, was to provide technical assistance during site inspection activities at the Highway 24 Mill site in Colorado Springs, El Paso County, Colorado. Specific elements of this TD included conducting soil, surface water and sediment sampling, conducting water quality monitoring, providing data analysis and management, and preparing a final report.

Field activities were conducted in accordance with the EPA-approved *Highway 24 Mill Site Sampling and Analysis Plan* (SAP) (Tetra Tech 2023a) and the *Quality Assurance Project Plan (QAPP) for Region 8 Site Assessment Task Orders* (Tetra Tech 2023b). Figures that depict the site location, site features, and sample locations and tables that summarize the sampling and analytical results follow the main text of the report. Appendix A contains the photographic log. Appendix B contains the data validation reports. Attachments 1 and 2 include the laboratory data packages.

1.1 PROJECT OBJECTIVES

The objectives of this project were outlined by the following three principal study questions (PSQs):

- PSQ1 – What is the nature of metal concentrations in surface soils, surface water, and sediment in the vicinity of the former mill/roaster stack site?
- PSQ2 – What is the nature of metals concentrations in background surface soils, surface water, and sediment from upgradient areas not likely affected by historical milling operations?
- PSQ3 – Do metals concentrations in surface soils significantly exceed background concentrations and affect adjacent water bodies in the vicinity of the former mill/roaster stack site or exceed human health or aquatic life benchmarks?

The approach taken to address each PSQ is described below:

- PSQ1 – Collection and laboratory analysis of surface soil, surface water, and sediment samples from representative properties within a 3-mile radius of the site was conducted to evaluate metals concentrations.
- PSQ2 – Background surface soil sampling and laboratory analysis was conducted in areas not anticipated to be affected by former milling operations. Background collocated surface water and

sediment sampling and laboratory analysis was conducted in locations that are upstream and representative of surface water and sediment that are not anticipated to be affected by former milling operations. Information on metals concentrations in background surface soils, surface water, and sediment was used to evaluate site attribution and estimate the degree to which source areas may have affected soils, sediment or water quality in the vicinity of the site.

- PSQ3 – Surface water and sediment sampling and laboratory analysis was conducted in locations that are upstream, adjacent to, and downstream of the former milling operations. Metals concentrations in collected surface soils and collocated surface water and sediment were compared to background and human health screening levels, water quality standards, and ecologically based sediment toxicity benchmarks. This evaluation was used in interpreting and presenting the context of analytical results with regard to potential human and ecological health effects from former milling operations. This PSQ was also used to characterize the degree of migration and potential for exposure/risk and assist in decision-making by agencies and stakeholders.

1.2 PROJECT SCOPE

The overall scope of this TD was to investigate the presence of metal contamination attributed to former milling activities in nearby surface water and soil. The assessment included reviewing readily available site information. Assessment activities included the collection of soil, surface water, and sediment samples, field screening of water quality parameters, and Geographic Information System (GIS) mapping.

2.0 SITE BACKGROUND

2.1 SITE LOCATION

The site is located at 1025 ½ Garner Street, Colorado Springs, El Paso County, Colorado (Figure 1). The site consists of the Former Golden Cycle Mill facility and its associated tailings pile and smokestack. The investigation boundary includes the A-1 Mobile Village and surrounding communities within a 3-mile radius around the smokestack in which contaminants may be present. Site-specific geographic coordinates for the Golden Cycle Mill smokestack at the site are 38.8339471, -104.8549243 which is shown on Figure 2.

2.2 SITE DESCRIPTION

The site encompasses an area surrounding the former Golden Cycle Mill facility and the associated tailings pile near the A-1 Mobile Village. Elevated lead and arsenic concentrations have been found in soils at the A-1 Mobile Home Village and historically around the existing smokestack area (Tetra Tech 2022). There are two main contamination sources at the site: emissions from the smokestack and the tailings pile associated with historical milling activities.

The tailings pile, located immediately adjacent to the western boundary of the A-1 Mobile Home Village, historically covered approximately 170 acres and consisted of tailings produced by the milling of ore that were transported in from the Cripple Creek Mining District in Colorado (Figure 2). A total of 14.3 million tons of ore were processed yielding 12.5 million tons of tailings. The tailings were produced by the Golden Cycle Mill mining facility from approximately 1901 until February 1949. The mill processed the ore using a bromide process until 1907 when the mill began using a roasting and cyanide method to process the ore (Morrison Knudsen Corporation 1993). Since 2000, the former mill and tailings pile have been the subject of a state Voluntary Cleanup Program (VCUP), with the mine waste being capped by hardscape or engineered soil cap and a housing development constructed on the property. The 196-foot-tall concrete smokestack associated with the former mill remains intact at the site.

3.0 SITE ASSESSMENT ACTIVITIES

START conducted field activities at the site and within a 3-mile investigation boundary surrounding the site from June 12 through 13, 2023. These activities consisted of surface water, sediment, and soil sampling. Figure 2 depicts the site features and Figure 3 depicts the sampling locations associated with the site. The following subsections provide a description of the field activities and samples collected. Appendix A contains a photographic log that shows on-site activities.

Personnel present for the June 2023 sampling activities are listed in the table below:

Exhibit 1: Personnel and agency present for field activities

Name	Agency/Organization	Dates Present
Ryan Dunham	EPA Region 8	June 12 and 13, 2023
Michael Carney	U.S. Fish and Wildlife/EPA Region 8 Liason	June 12 and 13, 2023
Matt LaFemina	Tetra Tech START	June 12 and 13, 2023
Brandi Davis	Tetra Tech START	June 12 and 13, 2023
Patrick Ieyoub	Tetra Tech START	June 12 and 13, 2023
Drew Umyn	Tetra Tech START	June 12 and 13, 2023
Brendan Deckelman	Tetra Tech START	June 12 and 13, 2023
Gillian Allison	Tetra Tech START	June 12 and 13, 2023
Ellen McEntee	Tetra Tech START	June 13, 2023

3.1 SAMPLE IDENTIFICATION AND LOCATION

Sample locations and sample numbers were identified using a site-specific alpha-numeric identification scheme that was established in the SAP (Tetra Tech 2023a) and includes the following abbreviations and identifications:

Site Location:

HWY = Highway 24

Environmental Media:

SS = Surface Soil

SW = Surface Water

SD = Sediment

Sample Location ID

= 01 through 35

Sample Depth Interval (soil samples only)

0-1 = 0 to 1 inch below ground surface (in. bgs)

1-6 = 1 to 6 in. bgs

3.2 SURFACE WATER SAMPLING

A total of four surface water samples, including one field duplicate sample, were collected from three locations (sample location IDs 06, 08, 08-DUP and 09) in Fountain Creek. Sample location 06 is upstream of the site, sample locations 08 and 08-DUP are adjacent to the site and sample location 09 is downstream from the site (see Figure 3). Fountain Creek flows from the northwest to the southeast and samples were collected in order from downstream to upstream.

Grab surface water samples submitted for analysis of total recoverable metals (TRM) were collected directly from the water body from 0 to 3 inches below the water surface by partially submerging the sample container until filled, taking caution to not overfill any containers that contained sample preservatives. Surface water samples submitted for analysis of dissolved metals (DM) were collected directly from the water body from 0 to 3 inches below the water surface using secondary containment. The DM samples were filtered using a peristaltic pump and vacuum driven disposable 0.45-micron filter after collection and prior to preservation. Surface water sampling was conducted in accordance with the approved SAP (Tetra Tech 2023a).

Surface water samples were shipped under chain of custody on June 13, 2023 to SGS North America (Dayton, New Jersey) for laboratory analysis of alkalinity by Standard Methods 2320 B-11 and anions by

EPA SW-846 Method 9056A and on June 23, 2023 to Chemtech Consulting Group (Mountainside, New Jersey) for laboratory analysis of TRM and DM by SFAM01.1 metals under the EPA Contract Laboratory Program (CLP).

3.3 SEDIMENT SAMPLING

A total of four composite sediment samples, including one field duplicate sample, were collocated with the surface water samples and were collected at three locations (sample location IDs 06, 08, 08-DUP and 09) starting downstream and moving upstream in Fountain Creek. Sample location 06 is upstream of the site, sample locations 08 and 08-DUP are adjacent to the site and sample location 09 is downstream from the site (see Figure 3).

Sediment samples were collected using a pre-cleaned stainless-steel spoon from five previously submersed aliquot locations in the streambed of the creek near the location of the surface water sample. All five aliquots of sediment were homogenized in a resealable bag then placed into the sample container. Sediment sampling was conducted in accordance with the approved SAP (Tetra Tech 2023a).

Sediment samples were shipped under chain of custody on June 23, 2023 to Chemtech Consulting Group (Mountainside, New Jersey) for laboratory analysis of TRM by SFAM01.1 metals under the CLP.

3.4 SOIL SAMPLING

During this sampling event, composite soil samples were collected from a total of 30 decision units (DUs) which were roughly 900 ft^2 each. The area of each DU was verified with a measuring wheel and all four corners of the DU were marked with pink pin-flags. Soil samples collected from each DU were biased toward areas with bare soil and these aliquot locations were marked with yellow pin flags. Both the perimeter of the DU and sample aliquot locations were logged electronically using a Trimble R1 mobile GPS device and ArcGIS Field Maps software. Location data for DU perimeters and sample aliquot locations are stored in Scribe. The sampled DUs comprised individual parcels located in the vicinity of the site. The two-digit sample location ID was also used as the DU identifier. The DU samples include the following:

- 25 properties owned by the City of Colorado Springs;
- 4 properties owned by El Paso County; and
- 1 private property.

Table 4 lists the property owner associated with each DU. It should be noted that three DUs (25, 31, and 32) that were originally included in the SAP were not sampled because of access restrictions at the time of sampling.

During sampling activities, five-point composite soil samples were collected from two depth intervals (0-1 in. bgs. and 1-6 in. bgs.) at each sampled DU using a newly decontaminated 6-inch diameter stainless steel hand operated coring device. Each sample was homogenized and placed into a resealable plastic bag that was labeled with the sample number. Additional five-point composite samples were collected from both depth intervals in each DU to assess the presence of mercury contamination. The mercury samples were stored separately from the other soil collected. A summary of the total quantities of soil samples is provided below:

- A total of 68 composite soil samples for metals analysis, including 8 field duplicates, were collected from 30 DUs associated with the site.
- A total of 68 composite soil samples for mercury analysis, including 8 field duplicates, were collected from 30 DUs associated with the site.

Soil samples were transported to the EPA warehouse in Arvada, Colorado for processing. During the week of June 19, 2023, START dried, disaggregated and sieved the composite soil samples to prepare a sub-sample of each for laboratory analysis. Each sample was placed in a dedicated aluminum pan and dried in a convection oven until the moisture content of each sample was 10 percent or below; moisture content was verified with a moisture probe that was decontaminated between each sample. The dried sample was disaggregated and then sieved using 10- and then 100-mesh sieves. Material from each sub-sample that passed through the 100-mesh sieve was placed into a 4-ounce jar, labeled, placed on ice, and packaged for delivery to the CLP laboratory. No drying, disaggregating, or sieving was performed on the samples for mercury analysis.

Soil samples were shipped under chain of custody on June 23, 2023 to Chemtech Consulting Group (Mountainside, New Jersey) for analysis of TRM by SFAM01.1 metals under the CLP.

3.5 WATER QUALITY MONITORING

Water quality measurements (pH, temperature, dissolved oxygen, conductivity, salinity, turbidity, oxidation-reduction potential [ORP], and total dissolved solids [TDS]) were collected at each sample location using a YSI water quality metering kit placed directly into the stream. The instrument was calibrated prior to use and placed slightly upstream of each sample location so that turbidity from

sampling activities did not interfere with data collection. Surface water quality measurements were collected in accordance with the approved SAP (Tetra Tech 2023a). Water quality measurements are presented in Table 8. A summary of the water quality measurements collected across the three sampling locations is provided below:

- pH ranged from 7.57 to 7.94
- Temperature ranged from 11 to 11.4 degrees Celsius
- Dissolved oxygen levels ranged from 8.71 to 8.84 milligrams per liter
- Conductivity ranged from 186.1 to 376.9 microsiemens per centimeter
- Salinity ranged from 0.12 to 0.20 part per thousand
- Turbidity ranged from 16.0 to 25.98 nephelometric turbidity units
- ORP ranged from 214.9 to 302.1 millivolts
- TDS ranged from 121 to 247 grams per liter

3.6 QUALITY CONTROL SAMPLING

Quality control (QC) sampling conducted during field activities were completed in accordance with the approved QAPP/SAP and included the collection of the following samples:

- One aqueous field blank sample was collected at the start of field activities using laboratory-grade deionized water to assess potential contamination resulting from ambient conditions.
- Two aqueous equipment blank samples were collected at the end of field activities using laboratory-grade deionized water that was poured over decontaminated sampling equipment to assess the effectiveness of equipment decontamination procedures.
- Eight field duplicate composite soil samples for metals analysis and eight field duplicate composite soil samples for mercury analysis were collected, including four samples from each depth interval. These field duplicate samples were collected from DUs 01, 13, 22, and 29

Field duplicate assessment is discussed in Section 5.3. Equipment and field blank assessments are discussed in Section 5.4.

4.0 ANALYTICAL RESULTS

Soil samples were submitted to Chemtech Consulting Group (Mountainside, New Jersey) for analysis of TRM and mercury under CLP. Surface water samples were submitted to Chemtech Consulting Group (Mountainside, New Jersey) for analysis of TRM and DM (including mercury) under CLP and to SGS

North America (Dayton, New Jersey) for analysis of alkalinity by Standard Methods 2320 B-11 and anions by EPA SW-846 Method 9056A. Sediment samples were submitted to Chemtech Consulting Group (Mountainside, New Jersey) for analysis of TRM (including mercury) under the CLP. Soil, surface water, and sediment samples were received by Chemtech Consulting Group on June 27, 2023 on a 21-business day turnaround time (TAT). The associated data packages were received by Tetra Tech on July 17, 2023. Surface water samples were received by SGS North America on June 14, 2023 on a 10-business day TAT. The associated data package was received by Tetra Tech on June 21, 2023.

Tables that summarize the analytical results follow the main text of the report. Appendix B provides the data validation reports. Attachments 1 and 2 provide the laboratory data packages. The following subsections discuss the analytical results for surface water, sediment and soil samples, including screening criteria.

4.1 SURFACE WATER SAMPLES

Analytical results for surface water samples were compared to water quality standards (WQS) outlined in Colorado Department of Public Health and Environment (CDPHE) *Water Quality Control Commission Regulation No. 32 – Classifications and Numeric Standards for Arkansas River Basin* (CDPHE 2023a) and CDPHE Water Quality Control Commission *Regulation No. 31 – The Basic Standards and Methodologies for Surface Water (WQCC Reg. 31)* (CDPHE 2023b). The regulations divide Fountain Creek into individual segments; Segment COARFO01a is the specific section of Fountain Creek applicable to the sampling locations and is the main stem of Fountain Creek from the source to a point immediately above the confluence with Monument Creek. The classifications of Fountain Creek as outlined in Regulation 32 are as follows:

- Agriculture
- Aquatic Life Cold
- Recreation
- Water Supply

Tables 1 and 2 provide a summary of the analytical results for TRM and alkalinity and anions in surface water samples respectively, including a comparison to the WQS. In accordance with WQCC Reg. 31, the WQS for some metals are calculated based on sample-specific hardness. These WQS are sample-specific and are listed in Table 9.

A summary of analytical results for TRM samples are provided below:

- Aluminum was detected above both the acute and chronic aquatic life WQS in the upstream sample HWY-SW-06 and above the chronic aquatic life WQS only in HWY-SW-08 (located adjacent to the site)
- Arsenic was detected above the domestic water supply WQS in all four samples
- Iron was detected above the chronic aquatic life WQS in samples HWY-SW-06 (upstream) and HWY-SW-08 (adjacent to the site)

A summary of analytical results for DM and anion samples are provided below:

- Iron was detected above the domestic water supply WQS in samples upstream and adjacent to the site (HWY-SW-06 and HWY-SW-08, respectively)
- Fluoride was detected above the domestic water supply WQS in all four samples
- Manganese was detected above domestic water supply WQS in samples adjacent to the site (HWY-SW-08 and HWY-SW-08-DUP) and downstream of the site (HWY-SW-09)

4.2 SEDIMENT SAMPLES

A U.S. Geological Survey (USGS) report prepared for EPA titled *Prediction of Sediment Toxicity Using Consensus-Based Freshwater Sediment Quality Guidelines* (USGS 2000) was used to obtain screening criteria for sediment. These sediment quality guidelines are routinely used by federal, state, and local agencies across North America to identify potential problem chemicals, design monitoring plans, classify hot spots, and make decisions for more detailed studies. The Consensus-Based Probable Effect Concentrations (PECs) from this document were used as the screening criteria for metals in sediment. PECs reflect concentrations of metals above which harmful effects to benthic invertebrates are likely to be observed.

No concentrations were identified in sediment samples that exceeded screening criteria. Sediment samples were analyzed for mercury but these results were rejected during data validation because the samples arrived at the laboratory above the acceptable temperature range due to shipping delays and the samples were analyzed past the holding time. Table 3 provides a summary of the analytical results for sediment samples, including a comparison to screening levels.

4.3 SOIL SAMPLES

Analytical results for soil samples were compared to EPA Regional Screening Levels (RSLs) for residential and industrial soil (EPA 2023). RSLs for lead were updated in a 2024 EPA guidance document titled *Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*

(EPA 2024). The updated guidance recommends an RSL of 200 mg/kg of lead in residential soil and 100 mg/kg of lead in residential soil for communities with additional sources of lead contamination (e.g., lead water service lines, lead-based paint, non-attainment lead air quality areas). At this time, it is unknown whether an additional source of lead contamination is present at this site so both screening levels were used as a conservative measure.

Arsenic was detected in both depth intervals at or above the EPA RSL for both residential and industrial soil at all sample locations except locations 20 and 21. Manganese and thallium were detected above the EPA residential RSL in both depth intervals at location 17. Lead was detected above the EPA residential RSL in the 0–1-inch depth interval at locations 13, 17, 23, 35 and at locations 17, 23, 24, 29 and 35 in the 1-6-inch depth interval. Cadmium was detected above the EPA residential RSL in the 1-6-inch depth interval at location 35.

No mercury concentrations exceeded the residential RSL (11 milligrams per kilogram) in any of the mercury samples. Four mercury results were rejected during data validation because the associated samples arrived at the laboratory above the acceptable temperature range due to shipping delays and the samples were analyzed past the holding time. Tables 5 through 7 contain analytical results for soil samples.

5.0 DATA QUALITY ASSESSMENT

QC methods and samples used during this sampling event are discussed in the following sections and include field instrument calibration, equipment decontamination, field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples, equipment blanks, data validation, and data management, and deviations from the SAP.

5.1 FIELD INSTRUMENT CALIBRATION

Field instrument calibration of the YSI water quality meter occurred immediately prior to sample collection activities. Procedures followed the standard operating procedures presented in the approved SAP (Tetra Tech 2023a).

5.2 EQUIPMENT DECONTAMINATION

Equipment decontamination was performed on site for all soil sampling equipment, both between samples and prior to moving to the next sampling location. While sieving samples off-site, each sieve and catch pan was also decontaminated after each sample. Decontamination procedures used in the field followed

ERT-PROC-2006-20: Sampling Equipment Decontamination (EPA 2020). Decontamination water that was produced during field activities was minimal in volume and was poured onto the ground at the end of each day's sampling activities. A new, pre-cleaned stainless-steel spoon was used to collect each sediment sample and decontamination in the field was not necessary for this equipment. All stainless-steel spoons were brought back to the EPA warehouse following the field event where they were decontaminated.

Any dried, disaggregated, and sieved soil that was not used for samples was returned to the site. All other sampling equipment such as nitrile gloves and paper towels were disposable and treated as general municipal refuse.

5.3 FIELD DUPLICATE AND MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLES

A total of 4 surface water samples (including 1 field duplicate), 4 sediment samples (including 1 field duplicate) and 136 soil samples (68 composite soil samples including 8 field duplicates for total metals analysis and 68 composite samples including 8 field duplicates for mercury analysis) were collected. All field duplicate samples were submitted for the same analysis as the parent samples. Samples were shipped on ice, accompanied by chain-of-custody forms, via overnight courier to the designated laboratory.

Field duplicate samples are used to assess field precision. The Tetra Tech *Quality Assurance Project Plan (QAPP) for Region 8 Site Assessment Task Orders* (Tetra Tech 2023b) states that for samples with reported results greater than the laboratory reporting limit (RL), the parent sample and field duplicate result should have a relative percent difference (RPD) of 70 percent for soil and sediment samples and 50 percent for surface water samples. For analytes with a reported result less than five times the RL, the absolute difference was calculated and the acceptable criterion for these results is less than or equal to the RL. These criteria were used during the data validation process. However, for this report, EPA requested that an RPD criterion of 35 percent for soil and sediment samples and 20 percent for surface water samples is used.

For surface water samples, the field duplicate results for all analytes were within the acceptable QC criteria except total aluminum, total iron, and dissolved iron. For sediment samples, the field duplicate results for all analytes were within the acceptable QC criteria except total copper. For soil samples, the field duplicate results for all analytes were within the acceptable QC criteria except barium, copper, and lead for samples HWY-SS29-1-6 and HWY-SS29-1-6-DUP.

The recoveries of the spiked analytes in MS/MSD samples are used to assess accuracy within a given matrix and the RPD of the MS/MSD is used to assess precision. The MS/MSD precision and accuracy

criteria are 75 percent for surface water samples and 125 percent for soil and sediment samples as outlined in the QAPP (Tetra Tech 2023b). For surface water samples, the matrix spike was performed using sample HWY-SW-08-DUP. The MS percent recovery for "nitrogen, nitrate + nitrite" was 25 percent which is less than the laboratory lower control limit of 90 percent.

- Sample HWY-SW-08-DUP had an existing qualification for "nitrogen, nitrate + nitrite" with a competing bias caused by a continuing calibration blank detection; therefore the "nitrogen, nitrate + nitrite" result for HWY-SW-08-DUP was qualified as estimated (flagged J).
- Because the "nitrogen, nitrate" results were calculated using the "nitrogen, nitrate + nitrite" results, the "nitrogen, nitrate" result for sample HWY-SW-08-DUP was also qualified as estimated (flagged J).

For sediment samples, the matrix spike was analyzed using sample HWY-SD-08-DUP. Spike recoveries for lead and manganese were below the lower laboratory control limit; however, the parent sample concentration was greater than four times the spike concentration and no qualifiers were applied.

For soil samples, the matrix spike was analyzed using sample HWY-SS-01-0-1-DUP and the percent recovery exceeded the upper acceptance limit for barium and lead. Consequently, the parent sample result for barium was qualified as estimated, with a possible high bias (flagged J+). The parent sample result for lead was greater than four times the spike concentration; therefore, the result was not qualified.

The spike recovery for arsenic was below the acceptance limit in sample HWY-SS01-0-1; therefore, the result was qualified as estimated, with possible low bias (flagged J-). In addition, spike recoveries for lead and manganese were outside the QAPP limits; however, the parent sample concentration was greater than four times the spike concentration and results were not qualified.

Appendix A provides the data validation report, including a full evaluation of the MS/MSD samples. A stage 2B data validation was performed on the laboratory analytical results and is discussed further in Section 5.5.

5.4 EQUIPMENT BLANKS AND FIELD BLANKS

Two aqueous equipment blank samples were collected at the end of field activities using laboratory-grade deionized water that was poured over decontaminated sampling equipment to assess the effectiveness of equipment decontamination procedures. Equipment blank samples were used in the data validation process and sample results were qualified accordingly. The following analytes were detected in one or both equipment blank samples: aluminum, barium, chromium, cobalt, manganese, nickel and zinc. Results for chromium, nickel, and zinc in several soil samples were qualified as estimated, with possible

high bias (flagged J+) due to equipment blank contamination. None of these equipment blank detections exceeded the relevant screening levels for their respective analytes (Table 1).

One aqueous field blank sample was also collected. Field blanks are collected by pouring analyte-free water into a sampling container in the field, preserving, and then sending the sample to the laboratory along with the field samples. The purpose of the field blank is to assess contamination from field conditions during sampling, which is relevant to the accuracy of the results. Field blank samples were used in the data validation process and sample results were qualified accordingly. No analytes were detected in the field blank sample (Table 1).

5.5 DATA VALIDATION AND DATA MANAGEMENT

Sampling data and laboratory results were loaded into the Scribe database. Tetra Tech performed a Stage 2B validation of the laboratory analytical results in accordance with the Tetra Tech *Quality Assurance Project Plan for Region 8 Site Assessment Task Orders, Superfund Technical Assessment and Response Team, EPA Region 8* (Tetra Tech 2023b) and the EPA *National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2020).

As discussed in Section 5.3, minor QC issues were noted for surface water and soil sample results. Mercury results for all sediment samples and four soil samples were rejected during data validation due to temperature and holding time exceedances. Appendix B provides the data validation report. The validation qualifiers have been applied to the sample results in the analytical results tables. Attachments 1 and 2 contain the laboratory data packages.

5.6 DEVIATIONS FROM THE SAMPLING PLAN

START made every effort to perform site activities in accordance with the approved SAP (Tetra Tech 2023a). Site conditions and directions from the EPA SAM in the field resulted in two deviations:

- DUs 25, 31, and 32 were not sampled because property access was not obtained prior to sampling.
- The locations of all samples associated with DU-11 were changed in the field based on field conditions. The updated locations of these samples contained more bare soil and provided safer access for field crews.

6.0 REFERENCES

Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Commission. 2023a. "Regulation No. 31 – The Basic Standards and Methodologies for Surface Water (*WQCC Reg. 31)*." June.

CDPHE Water Quality Control Commission. 2023b. "Regulation No. 32 – Classifications and Numeric Standards for Arkansas River Basin." December.

Morrison Knudsen Corporation. 1993. "Preliminary Assessment, Gold Hill Tailings Site." December.

Tetra Tech, Inc. (Tetra Tech). 2022. "Garner Street Soils Letter Report." March.

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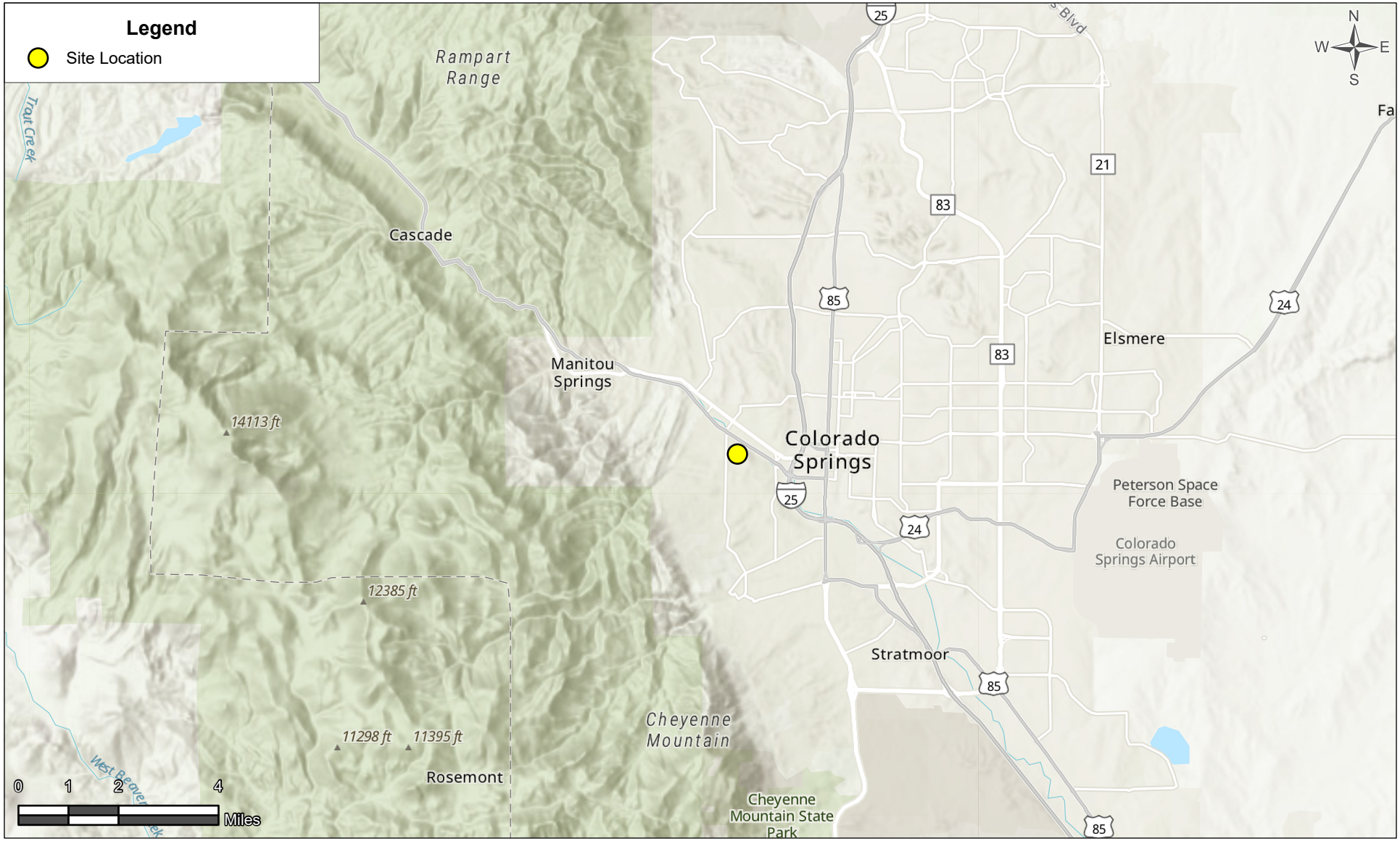
EPA Emergency Response Team (ERT). 2020. "ERT-PROC-2006-20: Sampling Equipment Decontamination." October.

EPA. 2023. "Regional Screening Levels (RSLs)." November.

EPA Office of Land and Emergency Management (OLEM). 2024. "Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities." January.

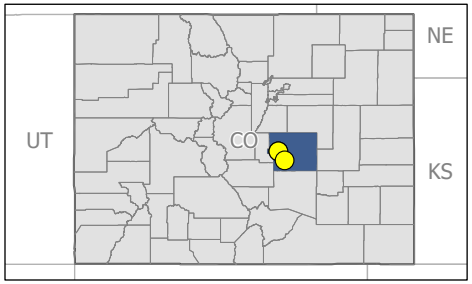
U.S. Geological Survey (USGS). 2000. "Prediction of Sediment Toxicity Using Consensus-Based Freshwater Sediment Quality Guidelines." EPA 905/R-00/007. June.

FIGURES



Notes:

Source:
Background Esri World Topographic
Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere Coordinate System



United States Environmental Protection Agency

Region 8 START V
TD: 2361-2312-04

TETRA TECH

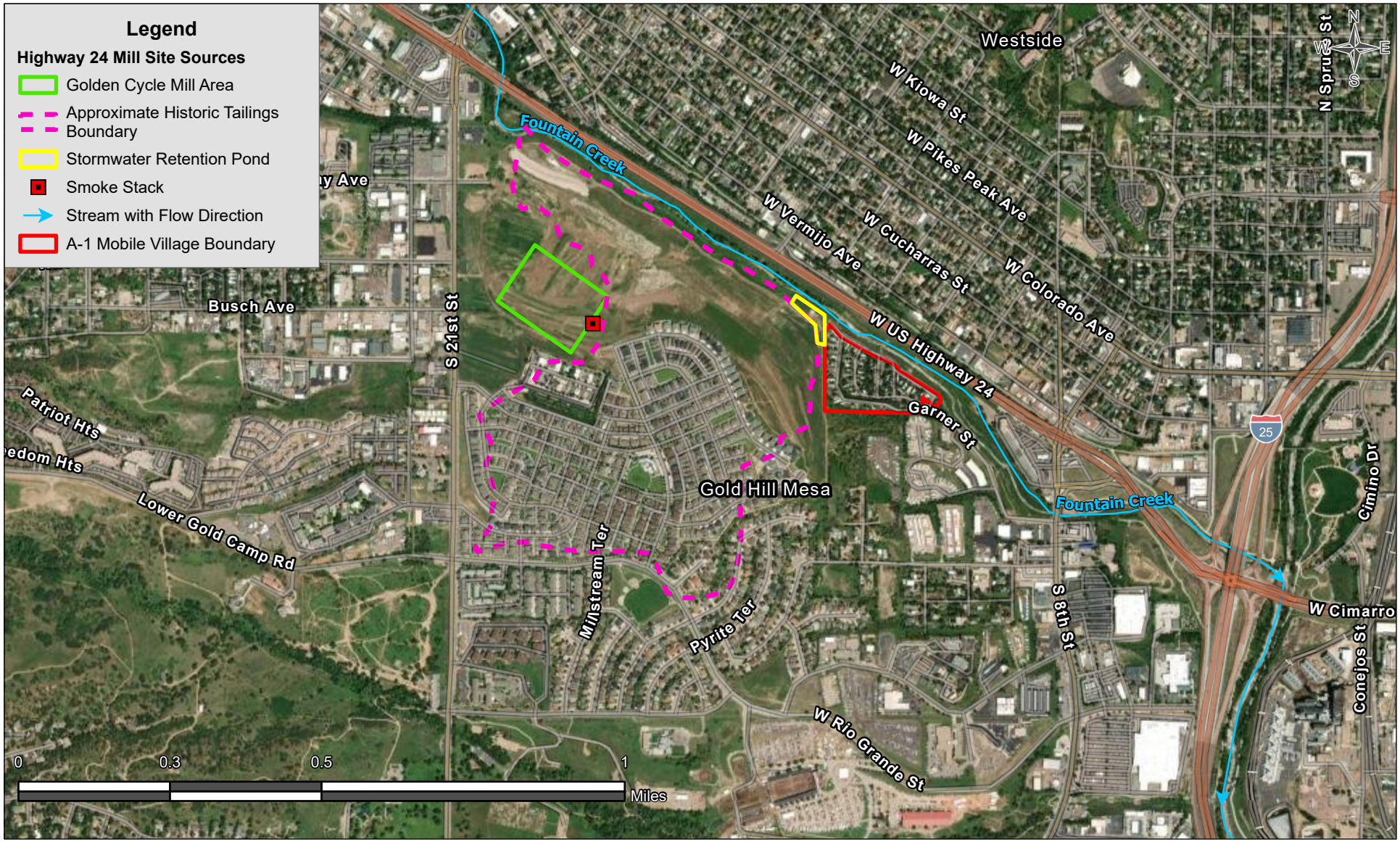
Analyst: S. DeNeice
Date: 3/26/2024

Highway 24 Mill Site Inspection

Colorado Springs, El Paso County, Colorado

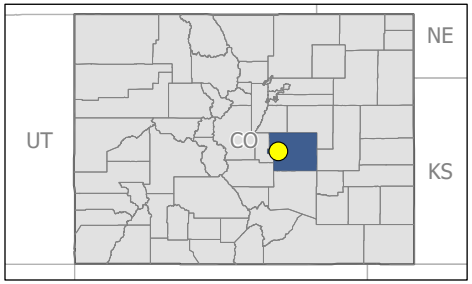
Figure 1
Site Location

Path: \\etss706gisfs1\CORPArcGisShare\EMI\R08_STARTV\Hwy24MillSite\ArcGIS_Pro\Hwy24MillSite.aprx\Fig 1 Site Location



Notes:

Source:
Background: Esri World Imagery Hybrid
Stream with Flow Direction: USGS National Hydrography Data Set (NHD)
Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere Coordinate System



United States Environmental Protection Agency

Region 8 START V
TD: 2071-2105-03

TETRA TECH

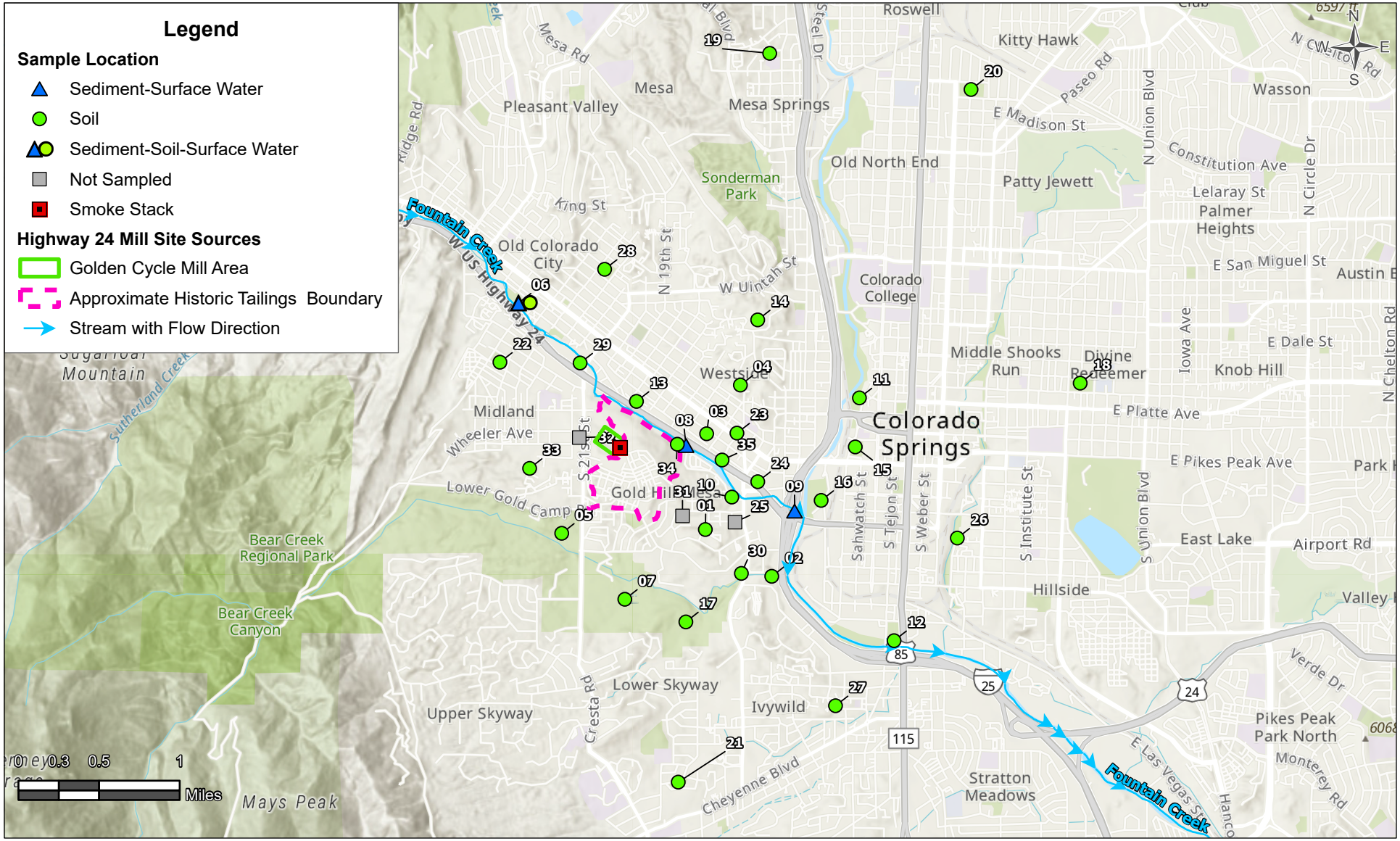
Analyst: M. Caldwell
Date: 3/25/2024

Highway 24 Mill Site Inspection

Colorado Springs, El Paso County, Colorado

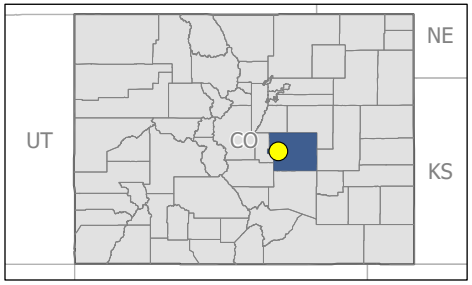
Figure 2
Site Features

Path: \\etss706gisfs1\CORPArcGisShare\EMI\R08_STARTV\Hwy24MillSite\ArcGIS_Pro\Hwy24MillSite.aprx\Hwy24_SiteFeatures



Notes:
Location 34 represents a soil sample and location 08 represents a sediment/surface water sample.

Source:
Esri World Topography
Sampling Locations: START (6/12/2023)
Rivers/Streams: National Hydrography Dataset (NHD)
Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere Coordinate System



United States Environmental Protection Agency

Region 8 START V
TD: 2361-2312-04

TETRA TECH

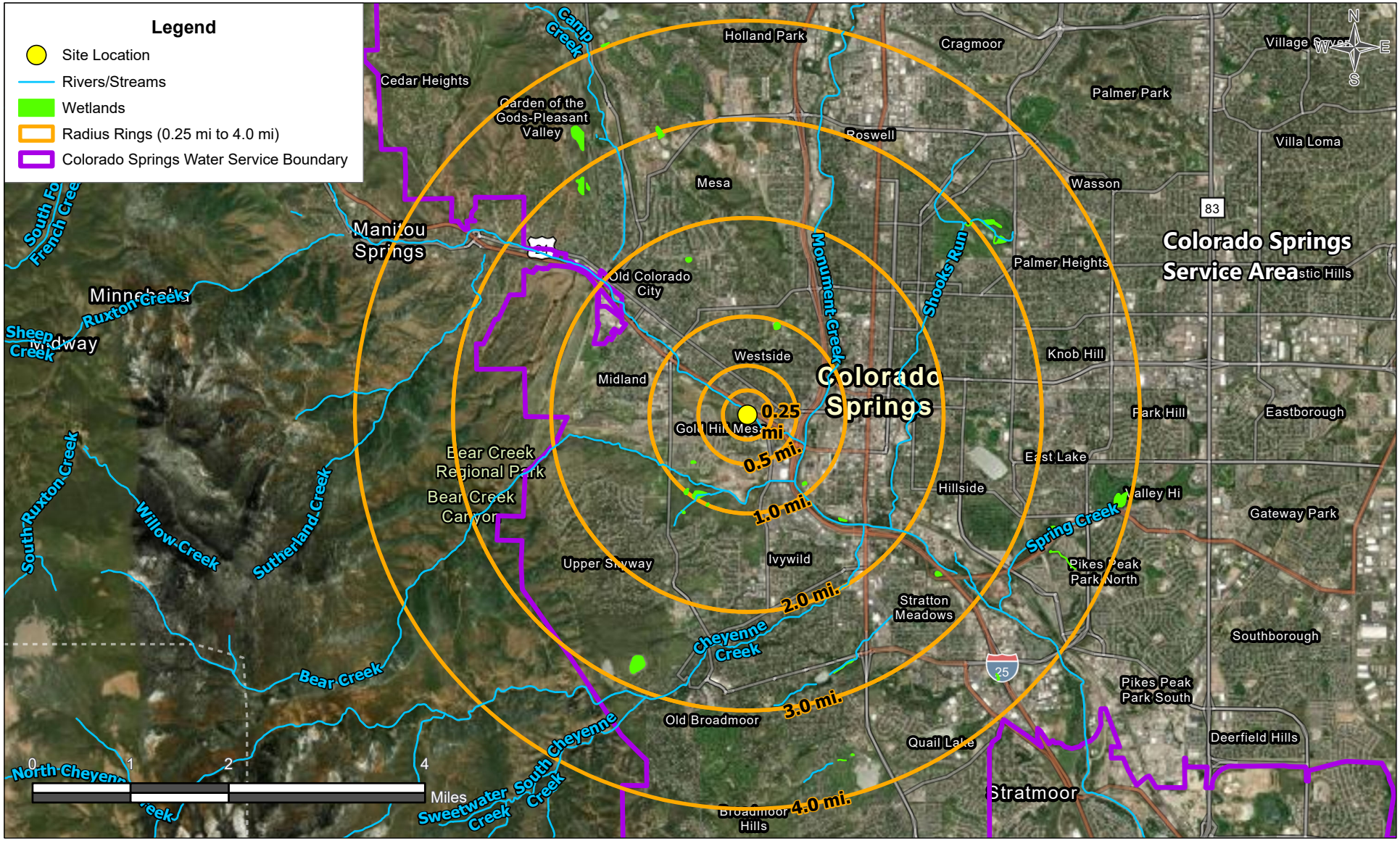
Analyst: S. DeNeice
Date: 3/25/2024

Highway 24 Mill Site Inspection

Colorado Springs, El Paso County, Colorado

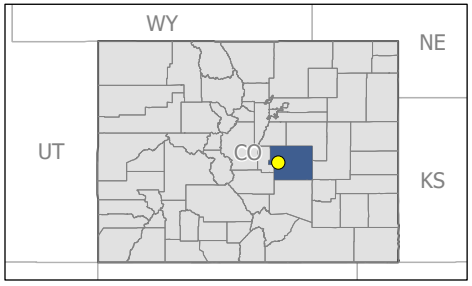
Figure 3
Sample Locations

Path: \\etss706gisfs1\CORPArcGisShare\EMI\R08_STARTV\Hwy24MillSite\ArcGIS_Pro\Hwy24MillSite.aprx\Fig 3 Sample Locations



Notes:

Source:
Background: ESRI World Imagery
Rivers/Streams: USGS National Hydrography Data Set (NHD)
Wetlands: US Fish and Wildlife National Wetlands Inventory (NWI)
Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere Coordinate System



United States Environmental Protection Agency

Region 8 START V
TD: 2361-2312-04

TETRA TECH

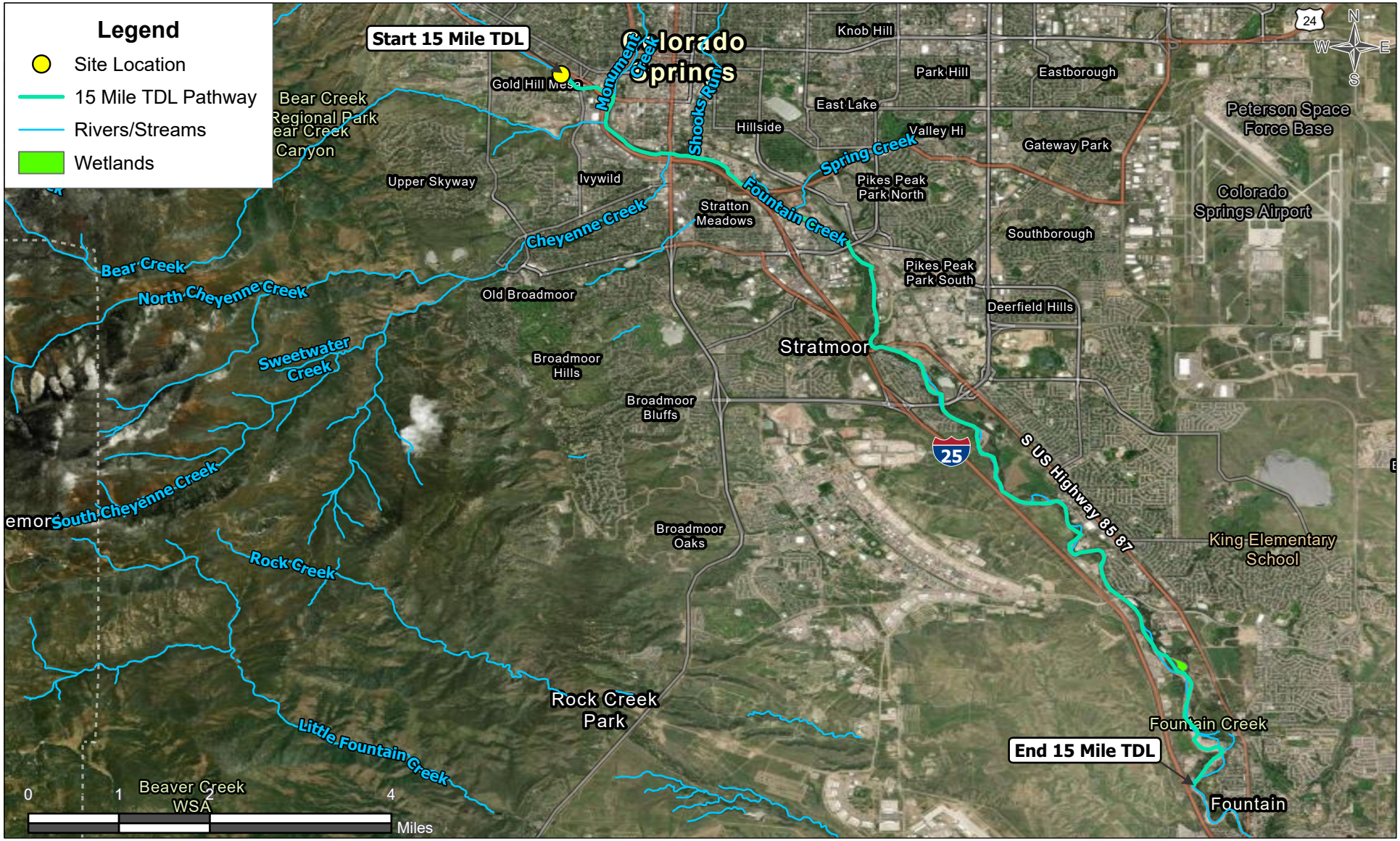
Analyst: S. DeNeice
Date: 3/26/2024

Highway 24 Mill Site Inspection

Colorado Springs, El Paso County Colorado

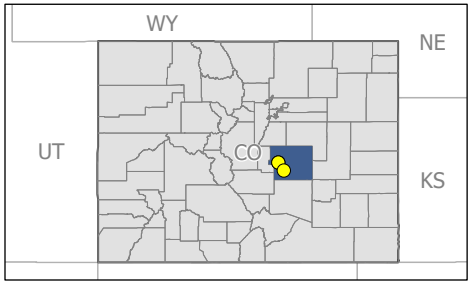
Figure 4
4-Mile Radius Target Distance Limit

Path: V:\R08_STARTV\Hwy24MillSite\ArcGIS_Pro\Hwy24MillSite.aprx/4 Mile Radius Layout



Notes:
TDL - Target Distance Limit

Source:
Background: ESRI World Imagery
Rivers/Streams: USGS National Hydrography Data Set (NHD)
Wetlands: US Fish and Wildlife National Wetlands Inventory (NWI)
Spatial Reference: GCS WGS 1984
Coordinate System



United States Environmental Protection Agency

Region 8 START V
TD: 2361-2312-04

TETRA TECH

Analyst: S. DeNeice
Date: 3/26/2024

Highway 24 Mill Site Inspection

Colorado Springs, El Paso County
Colorado

Figure 5
15 Mile Downstream
Target Distance Limit

Path: V:\R08_STARTV\Hwy24MillSite\GarnerStreetSoil_Old\GarnerStreetSoilsSiteRS\ArcPro\GarnerStQuickscore\GarnerStreetQuickscore\GarnerStreetQuickscore.aprx

TABLES

Table 1
Analytical Results - Metals in Surface Water Samples

Sample Location ID	Field Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Hardness[b]	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium[c]	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
					Units	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Agriculture[a][c][2]						--	--	--	100	--	100	10	--	100	200	200	--	100	--	200	--	200	--	20	--	--	--	--	2,000
Domestic Water Supply[a][c][2]						--	--	6	0.02	490	4	5	--	50	--	1,000	300[1]	50	--	50[1]	2.0	100	--	50	100	--	0.5	--	5,000
Aquatic Life - Acute[a][1]					TRM	--	CALC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
					DM	--	--		340	--	--	CALC	--	16	--	CALC	--	CALC	--	CALC	--	CALC	--	18.4	CALC	--	--	--	CALC
Aquatic Life - Chronic[a][1]					TRM	--	CALC	--	--	--	--	--	--	--	--	--	1,000[2]	--	--	--	0.01[2]	--	--	--	--	--	--	--	--
					DM		--	--	150	--	--	CALC	--	11	--	CALC	--	CALC	--	CALC	--	CALC	--	4.6	CALC	--	15	--	CALC
06	HWY-SW-06	MH0F91	SW	6/13/2023	TRM	49	1,600	2.0 U	**0.84** J	66	1.0 U	1.0 U	25,000	1.7 J	0.45 J	2.2	2,100	2.6	5,100	110	0.20 U	1.3	2,800	5.0 U	1.0 U	16,000	1.0 U	2.7 J	33
06		MH0F96			DM	--	38 J+	2.0 U	0.19 J	28	1.0 U	1.0 U	15,000	4.2	0.23 J	2.0 U	**360**	1.0 U	2,900	12	0.20 U	1.7	1,700	5.0 U	1.0 U	11,000	1.0 U	0.44 J	17
08	HWY-SW-08	MH0F93	SW	6/13/2023	TRM	110	970 J	2.0 U	**0.96** J	58	1.0 U	1.0 U	29,000	1.3 J	0.68 J	1.7 J	1,400 J	2.2 J+	7,200	120	0.20 U	1.2	3,000	5.0 U	1.0 U	20,000	1.0 U	1.6 J	54
08		MH0F97			DM	--	46 J+	2.0 U	0.42 J	48	1.0 U	1.0 U	31,000	1.9 J	0.55 J	0.97 J	900 J	1.0 U	7,300	**60**	0.20 U	0.87 J	2,900	5.0 U	1.0 U	21,000	1.0 U	0.36 J	43
08	HWY-SW-08-DUP	MH0F92	SW	6/13/2023	TRM	110	320 J	2.0 U	**0.81** J	55	1.0 U	1.0 U	30,000	0.41 J	0.58 J	1.4 J	650 J	1.6 J+	7,200	120	0.20 U	0.62 J	2,700	5.0 U	1.0 U	20,000	1.0 U	0.81 J	46
08		MH0F98			DM	--	51 J+	2.0 U	0.52 J	48	1.0 U	1.0 U	31,000	2.4	0.71 J	1.1 J	190 J	1.0 U	7,200	**59**	0.20 U	1.4	2,800	5.0 U	1.0 U	21,000	1.0 U	0.50 J	46
09	HWY-SW-09	MH0F94	SW	6/13/2023	TRM	110	310	2.0 U	**0.77** J	56	1.0 U	1.0 U	32,000	0.51 J	0.57 J	1.2 J	650	1.7 J+	8,100	120	0.20 U	0.71 J	2,800	5.0 U	1.0 U	21,000	1.0 U	0.75 J	49
09		MH0F99			DM	--	44 J+	2.0 U	0.39 J	46	1.0 U	1.0 U	32,000	0.48 J	0.58 J	2.0 U	110 J	1.0 U	7,900	**53**	0.20 U	0.64 J	2,700	5.0 U	1.0 U	21,000	1.0 U	0.34 J	33
--	HWY-SS-EB-1	MH0F89	EB	6/13/2023	TRM	--	24	2.0 U	1.0 U	0.81 J	1.0 U	1.0 U	500 U	2.7	0.08 J	2.0 U	200 U	1.0 U	500 U	2.9	0.20 U	3.4	500 U	5.0 U	1.0 U	500 U	1.0 U	5.0 U	17 U
--	HWY-SS-EB-2	MH0F90	EB	6/13/2023	TRM	--	9.7 J	2.0 U	1.0 U	**10** U	1.0 U	1.0 U	500 U	2.0 U	1.0 U	2.0 U	**200** U	1.0 U	**500** U	0.92 J	**0.20** U	1.0	**500** U	5.0 U	1.0 U	**500** U	1.0 U	5.0 U	**14**
--	HWY-SW-FB-1	MH0F95	FB	6/13/2023	TRM	3.3	20 U	2.0 U	1.0 U	10 U	1.0 U	1.0 U	500 U	2.0 U	1.0 U	2.0 U	200 U	1.0 U	500 U	1.0 U	0.20 U	1.0 U	500 U	5.0 U	1.0 U	500 U	1.0 U	5.0 U	5.0 U
		MH0FA0			DM	--	20 U	2.0 U	1.0 U	10 U	1.0 U	1.0 U	500 U	2.0 U	1.0 U	2.0 U	200 U	1.0 U	500 U	1.0 U	0.20 U	1.0 U	500 U	5.0 U	1.0 U	500 U	1.0 U	5.0 U	5.0 U

Sample Location ID	Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Hardness[b]	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
					Units	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
08	HWY-SW-08	MH0F93	SW	6/13/2023	TRM	110	970 J	2.0 U	0.96 J	58	1.0 U	1.0 U	29,000	1.3 J	0.68 J	1.7 J	1,400 J	2.2 J+	7,200	120	0.20 U	1.2	3,000	5.0 U	1.0 U	20,000	1.0 U	1.6 J	54
08	HWY-SW-08-DUP	MH0F92	SW	6/13/2023		110	320 J	2.0 U	0.81 J	55	1.0 U	1.0 U	30,000	0.41 J	0.58 J	1.4 J	650 J	1.6 J+	7,200	120	0.20 U	0.62 J	2,700	5.0 U	1.0 U	20,000	1.0 U	0.81 J	46
					RPD	--	100.78%	0.00*	0.15*	5.31%	0.00*	0.00*	3.39%	0.89*	0.10*	0.30*	750*	0.60*	0.00%	0.00%	0*	0.58*	10.53%	0.00*	0.00*	0.00%	0.00*	0.79*	16.00%

Sample Location ID	Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Hardness[b]	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
					Units	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
08	HWY-SW-08	MH0F97	SW	6/13/2023	DM	--	46 J+	2.0 U	0.42 J	48	1.0 U	1.0 U	31,000	1.9 J	0.55 J	0.97 J	900 J	1.0 U	7,300	60	0.20 U	0.87 J	2,900	5.0 U	1 U	21,000	1 U	0.36 J	43
08	HWY-SW-08-DUP	MH0F98	SW	6/13/2023		--	51 J+	2.0 U	0.52 J	48	1.0 U	1.0 U	31,000	2.4	0.71 J	1.1 J	190 J	1.0 U	7,200	59	0.20 U	1.4	2,800	5.0 U	1 U	21,000	1 U	0.50 J	46
					RPD	--	5.00*	0.00*	0.10*	0.00*	0.00*	0.00*	0.00%	0.50*	0.16*	0.13*	710*	0.00*	1.38%	1.68%	0.00*	0.53*	3.51%	0.00*	0.00*	0.00%	0.00*	0.14*	6.74%

Notes:

--	Not established or not applicable
(1)	Screening levels apply to DM only except where noted
(2)	Screening level applies to TRM only except where noted
(a)	Reglation No. 31 - The Basic Standards and Methodologies for Surface Water (CDPHE)
(b)	Laboratory calculated sample-specific harness value used to determine analyte-specific screening levels
(c)	Per CDPHE Regulation No. 31, the screening value for Chromium VI was used. Unless the stable forms of chromium in a water body have been characterized and shown not to be predominantly chromium VI, data reported as the measurement of all valence states of chromium combined should be treated as chromium VI. In addition, in no case can the sum of the concentrations of chromium III and chromium VI or data reported as the measurement of all valence states of chromium combined exceed the water supply standards of 50 µg/L chromium in those waters classified for domestic water use
*	The absolute difference was used because one or both analytical results were less than 5X the Reporting Limit
µg/L	Micrograms per liter
CALC	Calculated Sample-Specific Water Quality Standard (CO Regulation No. 31), see Table 8
CLP	US EPA Superfund Contract Laboratory Program
DM	Dissolved Metals
DUP	Field duplicate
EB	Equipment blank
FB	Field blank
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high
mg/L	Milligrams per liter
RPD	Relative Percent Difference
SW	Surface Water
TRM	Total Recoverable Metals
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
	Exceeds 20% RPD or absolute difference criteria. Absolute difference was used where reported results for both samples were less than 5X the analyte's reporting limit. An absolute difference that is less than or equal to the reporting limit is considered acceptable.
	Exceeds one or more Water Quality Standards (CO Regulation No. 31)
BOLD	Exceeds Water Quality Standard for Domestic Water Supply

Table 2
Analytical Results - Alkalinity and Anions in Surface Water Samples

	Location ID:	06		08		08		09	
	Field Sample ID:	HWY-SW-06		HWY-SW-08		HWY-SW-08-DUP		HWY-SW-09	
	Sample Date:	6/13/2023		6/13/2023		6/13/2023		6/13/2023	
Analyte	**Domestic Water Supply**								
Water Quality (mg/L)									
Alkalinity, Total as CaCO3	--	59.6		66.9		67.2		68.6	
Bromide	--	0.5	U	0.5	U	0.5	U	0.11	J
Chloride	250[(1)]	26.4		23.4		23.1		23.5	
Fluoride	2[(2)]	**2.5**		**2.7**		**2.7**		**2.7**	
Nitrogen, Nitrate	10[(2)]	0.52	J+	0.54	J+	0.59	J	0.55	J+
Nitrogen, Nitrate + Nitrite	--	0.52	J+	0.54	J+	0.59	J	0.55	J+
Nitrogen, Nitrite	1[(2)]	0.003	J	0.01	U	0.0042	J	0.01	U
Sulfate	250[(1)]	17.1		40.9		40.1		50.6	

Notes:

--	Screening level is not established or not applicable for the associated analyte
(1)	Domestic Water Supply; Chronic (CO Regulation 31: The Basic Standards and Methodologies for Surface Water)
(2)	Domestic Water Supply; Acute (CO Regulation 31: The Basic Standards and Methodologies for Surface Water)
BOLD	Exceeds Domestic Water Supply Screening Level
$CaCO_3$	Calcium carbonate
DUP	Field duplicate
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high
mg/L	Milligrams per liter
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 3
Analytical Results - Metals in Sediment Samples

Sample Location ID	Field Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Consensus-Based PEC[a]						--	33	--	--	4.98	111	--	149	128	--	1.06	48.6	--	--	--	--	459
06	HWY-SD-06	MH0F05	SD	6/13/2023	TRM	0.72 U	2.9	65	0.58	0.094 J	7.2	1.8	4.5	9.5	240	-- R	3.1	2.4 U	0.042 J	0.36 U	6.9	39
08	HWY-SD-08	MH0F01	SD	6/13/2023	TRM	0.78 U	3.5	70	0.59 J+	0.13 J	7.2	1.8	4.7	11	220	-- R	3.2	2.5 U	0.06 J	0.39 U	7.3	53
08	HWY-SD-08-DUP	MH0F80	SD	6/13/2023	TRM	0.68 U	3.3	70	0.62	0.14 J	6.1	1.7	7.4	12	230	-- R	3.5	2.0 U	0.056 J	0.33 U	7.1	55
09	HWY-SD-09	MH0F06	SD	6/13/2023	TRM	1.1 U	1.1	18	0.24	0.53 U	0.8 J	0.53	1.3 J+	2.1	150	-- R	0.68	2.6 U	0.53 U	0.53 U	1.7 J	24

Sample Location ID	Field Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
08	HWY-SD-08	MH0F01	SD	6/13/2023	TRM	0.78 U	3.5	70	0.59 J+	0.13 J	7.2	1.8	4.7	11	220	-- R	3.2	2.5 U	0.06 J	0.39 U	7.3	53
08	HWY-SD-08-DUP	MH0F80	SD	6/13/2023	TRM	0.68 U	3.3	70	0.62	0.14 J	6.1	1.7	7.4	12	230	-- R	3.5	2.0 U	0.056 J	0.33 U	7.1	55
					RPD	0.10*	5.88%	0.00%	0.03*	0.01*	16.54%	0.10*	44.63%	8.70%	4.44%	--	8.96%	0.50*	0.004*	0.06*	0.20*	3.70%

Notes:

--	Not established or not applicable
*	The absolute difference was used because one or both analytical results were less than 5X the reporting limit. Results are reported in mg/kg
[a]	"Prediction of Sediment Toxicity Using Consensus-based Freshwater Sediment Quality Guidelines," United States Geological Survey (USGS) EPA 905/R-00/007 June 2000.
CLP	U.S. EPA Contract Laboratory Program
DUP	Field Duplicate
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high
mg/kg	Milligrams per kilogram
PEC	Probable Effect Concentration
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample
RPD	Relative Percent Difference
SD	Sediment
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
	Exceeds 35 percent RPD

Sample Location ID	Property Owner	CLP Sample ID	Field Sample ID	Description	Coordinates	
					Latitude	Longitude
01	City of Colorado Springs	MH0F02	HWY-SS01-0-1	Unoccupied parcel north of Communication Circle	38.826636	-104.844874
		MH0F81	HWY-SS01-0-1-DUP			
		MH0F03	HWY-SS01-1-6			
		MH0F82	HWY-SS01-1-6-DUP			
02	City of Colorado Springs	MH0F07	HWY-SS02-0-1	Unoccupied parcel south of Walmart and west of I-25	38.822696	-104.838125
		MH0F08	HWYY-SS02-1-6			
03	City of Colorado Springs	MH0F09	HWY-SS03-0-1	Cucharras Park	38.835378	-104.845007
		MH0F10	HWY-SS03-1-6			
04	City of Colorado Springs	MH0F11	HWY-SS04-0-1	Unoccupied parcel southwest of Pony Ln and northwest of Promontory Peak Dr	38.839586	-104.840921
		MH0F12	HWY-SS04-1-6			
05	El Paso County	MH0F13	HWY-SS05-0-1	Bear Creek Regional Park	38.825281	-104.862694
		MH0F14	HWY-SS05-1-6			
06	City of Colorado Springs	MH0F15	HWY-SS06-0-1	Vermijo Park	38.846284	-104.866191
		MH0F16	HWY-SS06-1-6			
		MH0F05	HWY-SD-06			
		MH0F91	HWY-SW-06			
		MH0F96				
07	El Paso County	MH0F17	HWY-SS07-0-1	Bear Creek Regional Park	38.821309	-104.8544
		MH0F18	HWY-SS07-1-6			
08	Colorado Department of Transportation	MH0F01	HWY-SD-08	Public Right of Way	38.831218	-104.843296
		MH0F80	HWY-SD-08-DUP			
		MH0F93	HWY-SW-08			
		MH0F97				
		MH0F92	HWY-SW-08-DUP			
		MH0F98				
09	Colorado Department of Transportation	MH0F06	HWY-SD-09	Public Right of Way	38.828399	-104.834584
		MH0F94	HWY-SW-09			
		MH0F99				
10	City of Colorado Springs	MH0F21	HWY-SS10-0-1	Public Right of Way	38.82965	-104.842304
		MH0F22	HWY-SS10-1-6			
11	City of Colorado Springs	MH0F23	HWY-SS11-0-1	Monument Valley Park	38.838405	-104.827428
		MH0F24	HWY-SS11-1-6			
12	City of Colorado Springs	MH0F25	HWY-SS12-0-1	Open space between S Tejon St and S Nevada Ave. North of I-25, near the pavillion	38.81732	-104.822877
		MH0F26	HWY-SS12-1-6			
13	City of Colorado Springs	MH0F27	HWY-SS13-0-1	Public Right of Way	38.837896	-104.852655
		MH0F83	HWY-SS13-0-1-DUP			
		MH0F28	HWY-SS13-1-6			
		MH0F84	HWY-SS13-1-6-DUP			
14	City of Colorado Springs	MH0F29	HWY-SS14-0-1	Unoccupied parcel between Manitou Blvd and Uintah Bluffs Pl. South of the storage tank	38.844605	-104.840151
		MH0F30	HWY-SS14-1-6			
15	City of Colorado Springs	MH0F31	HWY-SS15-0-1	Antlers Park	38.834162	-104.828082
		MH0F32	HWY-SS15-1-6			
16	City of Colorado Springs	MH0F33	HWY-SS16-0-1	America The Beautiful Park (suspected non-native soils)	38.828971	-104.833216
		MH0F34	HWY-SS16-1-6			
17	El Paso County	MH0F35	HWY-SS17-0-1	Bear Creek Regional Park (suspected tailings materials)	38.819028	-104.847465
		MH0F36	HWY-SS17-1-6			
18	City of Colorado Springs	MH0F37	HWY-SS18-0-1	Boulder Park	38.839725	-104.802056
		MH0F38	HWY-SS18-1-6			
19	City of Colorado Springs	MH0F39	HWY-SS19-0-1	Pike Park	38.869242	-104.83774
		MH0F40	HWY-SS19-1-6			

Sample Location ID	Property Owner	CLP Sample ID	Field Sample ID	Description	Coordinates	
					Latitude	Longitude
20	City of Colorado Springs	MH0F74	HWY-SS20-0-1	Bonforte Park	38.865507	-104.8154
		MH0F76	HWY-SS20-1-6			
21	City of Colorado Springs	MH0F75	HWY-SS21-0-1	Jenkins Park	38.80355	-104.848194
		MH0F45	HWY-SS21-1-6			
22	City of Colorado Springs	MH0F46	HWY-SS22-0-1	Bott Park	38.841556	-104.869037
		MH0F85	HWY-SS22-0-1-DUP			
		MH0F47	HWY-SS22-1-6			
		MH0F86	HWY-SS22-1-6-DUP			
23	Private	MH0F48	HWY-SS23-0-1	Private Property	38.835387	-104.841414
		MH0F49	HWY-SS23-1-6			
24	City of Colorado Springs	MH0F50	HWY-SS24-0-1	Public Right of Way	38.830831	-104.839117
		MH0F51	HWY-SS24-1-6			
25	Private	No sample collected				
26	City of Colorado Springs	MH0F54	HWY-SS26-0-1	Unoccupied parcel north of the intersection of S Corona St and E Moreno Ave	38.825806	-104.816428
		MH0F55	HWY-SS26-1-6			
27	City of Colorado Springs	MH0F56	HWY-SS27-0-1	Ivywild Park	38.810999	-104.830344
		MH0F57	HWY-SS27-1-6			
28	City of Colorado Springs	MH0F58	HWY-SS28-0-1	Thorndale Park	38.850023	-104.856809
		MH0F59	HWY-SS28-1-6			
29	City of Colorado Springs	MH0F60	HWY-SS29-0-1	Unoccupied parcel on the north corner of Naegle Rd and S 21st St.	38.841557	-104.859519
		MH0F87	HWY-SS29-0-1-DUP			
		MH0F61	HWY-SS29-1-6			
		MH0F88	HWY-SS29-1-6-DUP			
30	El Paso County	MH0F62	HWY-SS30-0-1	Bear Creek Regional Park	38.822377	-104.841392
		MH0F63	HWY-SS30-1-6			
31	Private	No sample collected				
32	Private	No sample collected				
33	City of Colorado Springs	MH0F68	HWY-SS33-0-1	Unoccupied parcel south of South Blvd and north of Lone Willow Vw	38.832085	-104.864471
		MH0F69	HWY-SS33-1-6			
34	City of Colorado Springs	MH0F70	HWY-SS34-0-1	Unoccupied parcel northeast of Garner Street near the embankment of Fountain Creek	38.831054	-104.84316
		MH0F71	HWY-SS34-1-6			
35	City of Colorado Springs	MH0F72	HWY-SS35-0-1	Public Right of Way	38.832879	-104.843397
		MH0F73	HWY-SS35-1-6			

Notes:

CLP U.S. EPA Contract Laboratory Program
DUP Field Duplicate
SS Surface soil

Table 5
Analytical Results - Metals in Soil Samples (0-1 in. bgs)

Analyte					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Units					(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
CAS No.					7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-43-9	7440-47-3	7440-48-4	7440-50-8	7439-92-1	7439-96-5	7440-02-0	7782-49-2	7440-22-4	7440-28-0	7440-62-2	7440-66-6
Residential Screening Level (mg/kg)					31[a]	0.68[a]	15,000[a]	160[a]	7.1[a]	--	23[a]	3,100[a]	100/200[c]	1,800[a]	1,500[a]	390[a]	390[a]	0.78[a]	390[a]	23,000[a]
Industrial Screening Level (mg/kg)					470[b]	3[b]	220,000[b]	2,300[b]	100[b]	--	350[b]	47,000[b]	800[d]	26,000[b]	18,000[b]	5,800[b]	5,800[b]	12[b]	5,800[b]	350,000[b]
Sample Location ID	**Field Sample ID**	**CLP Sample ID**	**Sample Date**	**Sample Depth Interval (in. bgs)**																
01	HWY-SS01-0-1	MH0F02	6/13/2023	0-1	0.82 U	**11** J-	160	0.75	0.63	9.1	6.8	31	35	410	13	0.71 J	0.15 J	0.41 U	24	130
	HWY-SS01-0-1-DUP	MH0F81		0-1	0.89 U	**12**	180 J+	0.79	0.76 J	10	7.4	36	39	430	15	0.70 J	0.19 J	0.44 U	26	140
02	HWY-SS02-0-1	MH0F07	6/13/2023	0-1	0.85 U	**17**	170	0.89	0.67	14	8.7	24	28	900	19	0.90 J	0.20 J	0.42 U	30	160
03	HWY-SS03-0-1	MH0F09	6/13/2023	0-1	0.76 U	**26**	170	0.80	1.1	8.4	5.2	18	75	490	10	0.42 J	0.46	0.38 U	24	140
04	HWY-SS04-0-1	MH0F11	6/13/2023	0-1	0.78 U	**4.6**	130	0.76	0.37 J	6.0	3.6	9.1	22	330	5.8	0.43 J	0.093 J	0.39 U	14	57
05	HWY-SS05-0-1	MH0F13	6/13/2023	0.1	0.92 U	**5.1**	140	0.98	0.62	8.1	5.5	13	28	440	16 J+	0.69 J	0.11 J	0.46 U	19	96
06	HWY-SS06-0-1	MH0F15	6/12/2023	0-1	0.68 U	**6.4**	130	0.43	0.27 J	7.9 J+	4.6	11	18	230	9.3 J+	1.7 U	0.095 J	0.34 U	19	57 J+
07	HWY-SS07-0-1	MH0F17	6/13/2023	0-1	0.89 U	**7.6**	260	2.2	0.63	6.6	5.9	13	34	1,500	10	1.3 J	0.13 J	0.45 U	18	150
10	HWY-SS10-0-1	MH0F21	6/13/2023	0-1	0.89 U	**18**	180	0.80	0.89	11	9.8	42	42	680	21	0.83 J	0.25 J	0.45 U	31	160
11	HWY-SS11-0-1	MH0F23	6/13/2023	0-1	0.88 U	**6.8**	130	1.1	0.61	6.2 J+	4.5	12	40	240	9.0	0.57 J	0.23 J	0.44 U	17	100 J+
12	HWY-SS12-0-1	MH0F25	6/12/2023	0-1	0.89 U	**5.5**	140	0.65	1.2	12	3.8	18	85	330	7.2 J+	0.44 J	1.1	0.44 U	20	160
13	HWY-SS13-0-1	MH0F27	6/12/2023	0-1	1.1	**22**	300	1.5	1.6	16	6.0	45	**280**	580	13	0.79 J	0.54	0.49 U	30	470
	HWY-SS13-0-1-DUP	MH0F83		0-1	1.2	**24**	310	1.6	1.7	19	6.7	55	**280**	640	15	0.67 J	0.52	0.42 U	34	520
14	HWY-SS14-0-1	MH0F29	6/12/2023	0-1	0.83 U	**6.5**	130	0.87	0.34 J	8.1	5.3	12	33	290	12	0.36 J	0.23 J	0.42 U	24	66
15	HWY-SS15-0-1	MH0F31	6/13/2023	0-1	0.80 U	**4.2**	88	0.59	0.52	5.5 J+	2.7	16	52	180	4.2 J+	0.32 J	0.22 J	0.4 U	11	89
16	HWY-SS16-0-1	MH0F33	6/13/2023	0-1	0.85 U	**4.9**	110	0.90	0.34 J	6.6 J+	4.8	14	27	330	8.1 J+	0.46 J	0.089 J	0.42 U	13	93
17	HWY-SS17-0-1	MH0F35	6/13/2023	0-1	14	**260**	620	1.3	3.6	15	8.8	48	**240**	**2,400**	13	1.7 U	4.1	**1.1**	130	720
18	HWY-SS18-0-1	MH0F37	6/12/2023	0-1	0.81 U	**3.7**	96	0.46	0.63	9.4	3.3	12	28	170	6.9	0.35 J	0.19 J	0.4 U	13	71
19	HWY-SS19-0-1	MH0F39	6/12/2023	0-1	0.83 U	**6.4**	80	0.46	0.82	9.0	4.7	15	13	270	11	0.84 J	0.10 J	0.42 U	18	110
20	HWY-SS20-0-1	MH0F74	6/12/2023	0-1	0.89 U	**3.0**	230	0.84	0.44 J	7.3 J+	4.9	14	18	270	5.8 J+	0.44 J	0.098 J	0.45 U	23	91 J+
21	HWY-SS21-0-1	MH0F75	6/12/2023	0-1	0.68 U	**2.9**	130	0.52	0.18 J	5.7 J+	3.2	8.1	12	230	5.1 J+	0.35 J	0.047 J	0.34 U	18	54 J+
22	HWY-SS22-0-1	MH0F46	6/12/2023	0-1	0.91 U	**7.7**	83	0.46 U	0.84	10 J+	5.3	15	15	200	14	0.39 J	0.14 J	0.46 U	23	94 J+
	HWY-SS22-0-1-DUP	MH0F85		0-1	0.89 U	**6.6**	83	0.45 U	0.71	8.3 J+	4.3	12	14	170	12 J+	0.46 J	0.14 J	0.45 U	20	83
23	HWY-SS23-0-1	MH0F48	6/13/2023	0-1	0.86 U	**17**	210	0.84	1.3	13	6.3	31	**160**	520	13 J+	0.43 J	0.44	0.43 U	26	260
24	HWY-SS24-0-1	MH0F50	6/13/2023	0-1	0.86 U	**28**	190	0.89	1.0	11 J+	5.7	41	94	570	14 J+	0.65 J	0.45	0.43 U	25	230
26	HWY-SS26-0-1	MH0F54	6/12/2023	0-1	0.74 U	**4.9**	190	0.56	0.51	9.1 J+	5.1	15	30	270	9.2 J+	0.29 J	0.096 J	0.37 U	23	110 J+
27	HWY-SS27-0-1	MH0F56	6/12/2023	0-1	0.79 U	**15**	160	0.68	0.40	19	12	27	22	930	29	1.1 J	0.12 J	0.4 U	39	110
28	HWY-SS28-0-1	MH0F58	6/12/2023	0-1	0.86 U	**9.8**	110	0.65	0.81	12 J+	5.4	17	29	270	13	0.65 J	0.20 J	0.43 U	25	120 J+
29	HWY-SS29-0-1	MH0F60	6/12/2023	0-1	0.91 U	**10**	130	1.4	0.71	7.8	4.8	17	46	400	8.2	0.76 J	0.80	0.46 U	20	140
	HWY-SS29-0-1-DUP	MH0F87		0-1	0.67 U	**7.9**	110	1.2	0.60	6.5	4.0	14	40	350	6.9	0.54 J	0.70	0.34 U	17	110
30	HWY-SS30-0-1	MH0F62	6/13/2023	0-1	0.67 U	**14**	150	0.97	0.41	12	7.9	18	25	690	18	0.62 J	0.17 J	0.34 U	28	110
33	HWY-SS33-0-1	MH0F68	6/12/2023	0-1	0.75 U	**6.7**	120	0.73	0.42	9.9 J+	5.7	15	21	350	15	0.76 J	0.12 J	0.37 U	25	96
34	HWY-SS34-0-1	MH0F70	6/13/2023	0-1	0.80 U	**28**	190	1.5	1.3	10	6.3	24	100	810	12	0.67 J	0.71	0.40 U	26	260
35	HWY-SS35-0-1	MH0F72	6/13/2023	0-1	1.4	**35**	190	0.91	3.8	13	5.5	62	**640**	730	12	0.60 J	3.7	0.36 U	26	660

Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS01-0-1	MH0F02	SS	6/13/2023	TRM	0.82 U	11 J-	160	0.75	0.63	9.1	6.8	31	35	410	13	0.71 J	0.15 J	0.41 U	24	130
HWY-SS01-0-1-DUP	MH0F81	SS			0.89 U	12	180 J+	0.79	0.76 J	10	7.4	36	39	430	15	0.70 J	0.19 J	0.44 U	26	140
				RPD	0.07*	8.70%	11.76%	0.04*	0.13*	9.42%	8.45%	14.93%	10.81%	4.76%	14.29%	0.01*	0.04*	0.03*	8.00%	7.41%

Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS13-0-1	MH0F27	SS	6/12/2023	TRM	1.1	22	300	1.5	1.6	16	6.0	45	280	580	13	0.79 J	0.54	0.49 U	30	470
HWY-SS13-0-1-DUP	MH0F83	SS			1.2	24	310	1.6	1.7	19	6.7	55	280	640	15	0.67 J	0.52	0.42 U	34	520
				RPD	0.10*	8.70%	3.28%	0.10*	0.10*	17.14%	11.02%	20.00%	0.00%	9.84%	14.29%	0.12*	0.02*	0.07*	12.50%	10.10%

Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS22-0-1	MH0F46	SS	6/12/2023	TRM	0.91 U	7.7	83	0.46 U	0.84	10 J+	5.3	15	15	200	14	0.39 J	0.14 J	0.46 U	23	94 J+
HWY-SS22-0-1-DUP	MH0F85	SS			0.89 U	6.6	83	0.45 U	0.71	8.3 J+	4.3	12	14	170	12 J+	0.46 J	0.14 J	0.45 U	20	83
				RPD	0.02*	15.38%	0.00%	0.01*	0.13*	18.58%	20.83%	22.22%	6.90%	16.22%	15.38%	0.07*	0.00*	0.01*	13.95%	12.43%

Sample ID	CLP Sample ID	Matrix	Sample Date	Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS29-0-1	MH0F60	SS	6/12/2023	TRM	0.91 U	10	130	1.4	0.71	7.8	4.8	17	46	400	8.2	0.76 J	0.80	0.46 U	20	140
HWY-SS29-0-1-DUP	MH0F87	SS			0.67 U	7.9	110	1.2	0.60	6.5	4.0	14	40	350	6.9	0.54 J	0.70	0.34 U	17	110
				RPD	0.24*	23.46%	16.67%	0.20*	0.11*	18.18%	18.18%	19.35%	13.95%	13.33%	17.22%	0.22*	0.10*	0.12*	16.22%	24.00%

Notes:

--	Not established or not applicable
*	The absolute difference was used because one or both analytical results were less than 5X the reporting limit. Results are reported in mg/kg
[a]	EPA Regional Screening Level (RSL) for Residential Soil (TR=1E-06, THQ=1.0)
[b]	EPA Regional Screening Level (RSL) for Industrial Soil (TR=1E-06, THQ=1.0)
BOLD	Exceeds EPA Screening Level for Residential Soil
BOLD	Exceeds EPA Screening Level for Residential and Industrial Soil
[c]	EPA Office of Land and Emergency Management Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, 2024: EPA Regions should use a screening level of 200 mg/kg for residential soil lead and 100 mg/kg if an additional source of lead (such as lead water service lines, lead-based paint, etc.) is identified. It is unknown at this time whether an additional source of lead is present at this site and both screening levels are presented as a conservative measure
CAS No.	Chemical Abstracts Service Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	U.S. EPA Contract Laboratory Program
[d]	EPA Regional Removal Management Level (RML) for Composite Worker Soil (TR=1E-06, THQ=3.0)
DUP	Field Duplicate
EPA	U.S. Environmental Protection Agency
in. bgs	inches below ground surface
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high
mg/kg	milligram per kilogram
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SS	Surface Soil
THQ	Target Hazard Quotient
TR	Target Cancer Risk
TRM	Total Recoverable Metals
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 6
Analytical Results - Metals in Soil Samples (1-6 in. bgs.)

				Analyte	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
				CAS No.	7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-43-9	7440-47-3	7440-48-4	7440-50-8	7439-92-1	7439-96-5	7440-02-0	7782-49-2	7440-22-4	7440-28-0	7440-62-2	7440-66-6
				Residential Screening Level (mg/kg)	31[a]	0.68[a]	15,000[a]	160[a]	7.1[a]	NE[a]	23[a]	3,100[a]	100/200[c]	1,800[a]	1,500[a]	390[a]	390[a]	0.78[a]	390[a]	23,000[a]
				Industrial Screening Level (mg/kg)	470[b]	3[b]	220,000[b]	2,300[b]	100[b]	NE[b]	350[b]	47,000[b]	800[d]	26,000[b]	18,000[b]	5,800[b]	5,800[b]	12[b]	5,800[b]	350,000[b]
Sample Location ID	**Field Sample ID**	**CLP Sample ID**	**Sample Date**	**Sample Depth Interval (in. bgs)**																
01	HWY-SS01-1-6	MH0F03	6/13/2023	1-6	0.79 U	**12**	220	0.82	0.56	12	9	26	37	420	19	0.73 J	0.18 J	0.40 U	28	110
	HWY-SS01-1-6-DUP	MH0F82		1-6	0.88 U	**13**	200	0.79	0.53	13	9.7	28	34	430	20	0.89 J	0.15 J	0.44 U	31	120
02	HWYY-SS02-1-6	MH0F08	6/13/2023	1-6	0.89 U	**13**	120	0.71	0.77	9.6	5.5	16	19	590	13	0.78 U	0.19 J	0.45 U	20	170
03	HWY-SS03-1-6	MH0F10	6/13/2023	1-6	0.85 U	**25**	120	0.61	0.85	6.9	4.1	17	70	360	8.7 J+	0.34 J	0.31 J	0.42 U	18	110
04	HWY-SS04-1-6	MH0F12	6/13/2023	1-6	0.89 U	**5.1**	74	0.49	0.24 J	7.3	2.9	6.1	20	200	5.3	2.2 U	0.084 J	0.44 U	12	30 J+
05	HWY-SS05-1-6	MH0F14	6/13/2023	1-6	0.76 U	**4.5**	140	1.0	0.45	10	5.7	11	22	490	12	0.55 J	0.084 J	0.38 U	19	80
06	HWY-SS06-1-6	MH0F16	6/12/2023	1-6	0.83 U	**8.8**	140	0.45	0.33 J	8.1 J+	5.3	11	21	250	11 J+	0.36 J	0.12 J	0.41 U	21	56 J+
07	HWY-SS07-1-6	MH0F18	6/13/2023	1-6	0.78 U	**7.6**	240	2.0	0.65	5.9	5.1	11	31	1,300	9.1	1.2 J	0.13 J	0.39 U	16	130
10	HWY-SS10-1-6	MH0F22	6/13/2023	1-6	0.81 U	**18**	120	0.65	0.69	7.9	10	35	37	850	22	0.82 J	0.27 J	0.41 U	25	120
11	HWY-SS11-1-6	MH0F24	6/13/2023	1-6	0.93 U	**6.5**	140	1.6	0.50	8.8 J+	6.0	17	40	290	11	0.57 J	0.29 J	0.46 U	20	100 J+
12	HWY-SS12-1-6	MH0F26	6/12/2023	1-6	0.86 U	**4.6**	93	0.46	0.95	9.8 J+	3.1	13	68	330	6.6	0.33 J	0.81	0.43 U	15	120 J+
13	HWY-SS13-1-6	MH0F28	6/12/2023	1-6	0.85 U	**20**	210	1.0	0.80	12	6.6	30	87	490	16	0.67 J	0.3 J	0.42 U	32	150
	HWY-SS13-1-6-DUP	MH0F84		1-6	0.91 U	**20**	220	1.0	0.77	13	6.8	31	84	490	16	0.46 J	0.26 J	0.46 U	33	150
14	HWY-SS14-1-6	MH0F30	6/12/2023	1-6	0.78 U	**5.3**	140	1.1	0.18 J	10	5.5	10	14	260	13	0.41 J	0.07 J	0.39 U	25	44 J+
15	HWY-SS15-1-6	MH0F32	6/13/2023	1-6	0.82 U	**3.5**	58	0.48	0.38 J	4.6 J+	2.4	11	31	180	3.3 J+	2.1 U	0.14 J	0.41 U	9.3	55 J+
16	HWY-SS16-1-6	MH0F34	6/13/2023	1-6	0.84 U	**4.1**	110	0.59	0.22 J	15	4.8	13	58	860	7.6 J+	2.1 U	0.097 J	0.42 U	11	56 J+
17	HWY-SS17-1-6	MH0F36	6/13/2023	1-6	14	**250**	250	1.3	3.6	10	7.5	53	**200**	**2,100**	12	0.29 J	3.8	**0.89**	110	610
18	HWY-SS18-1-6	MH0F38	6/12/2023	1-6	0.78 U	**4.0**	94	0.45	0.52	7.5	3.1	9.4	24	160	5.7	1.9 U	0.14 J	0.39 U	12	49 J+
19	HWY-SS19-1-6	MH0F40	6/12/2023	1-6	0.90 U	**10**	76	0.65 J+	0.55	8.8	6.5	16	20	160	17	0.83 J	0.14 J	0.45 U	22	73
20	HWY-SS20-1-6	MH0F76	6/12/2023	1-6	0.79 U	**2.9**	170	0.84	0.34 J	6.5 J+	5.6	13	14	340	5.9 J+	0.34 J	0.083 J	0.39 U	24	63 J+
21	HWY-SS21-1-6	MH0F45	6/12/2023	1-6	0.76 U	**2.9**	76	0.49	0.13 J	7.9 J+	2.7	7.9	9.5	180	6.1 J+	0.29 J	0.038 J	0.38 U	13	32 J+
22	HWY-SS22-1-6	MH0F47	6/12/2023	1-6	0.78 U	**8.3**	100	0.43	0.73	8.5 J+	5.5	13	15	200	14	0.39 J	0.15 J	0.39 U	22	66 J+
	HWY-SS22-1-6-DUP	MH0F86		1-6	0.67 U	**9.6**	120	0.51	0.91	12	6.5	15	18	240	17	0.44 J	0.19 J	0.34 U	27	83
23	HWY-SS23-1-6	MH0F49	6/13/2023	1-6	0.92 U	**16**	180	0.78	1.2	8.9 J+	6.6	25	**130**	470	13 J+	0.46 J	0.34 J	0.46 U	26	180
24	HWY-SS24-1-6	MH0F51	6/13/2023	1-6	0.93 U	**24**	200	1.1	1.3	21 J+	6.5	40	**110**	650	17 J+	0.84 J	0.53	0.46 U	30	240
26	HWY-SS26-1-6	MH0F55	6/12/2023	1-6	0.77 U	**3.8**	120	0.40	0.19 J	5.9 J+	3.6	8.5	14	190	7.2 J+	1.9 U	0.046 J	0.39 U	15	46 J+
27	HWY-SS27-1-6	MH0F57	6/12/2023	1-6	0.88 U	**14**	190	0.82	0.48	16 J+	12	24	26	1,100	28	1.6 J	0.11 J	0.44 U	37	89
28	HWY-SS28-1-6	MH0F59	6/12/2023	1-6	0.81 U	**11**	120	0.76	0.97	13	6.7	16	33	380	15	0.62 J	0.31 J	0.40 U	26	100
29	HWY-SS29-1-6	MH0F61	6/12/2023	1-6	1.5	**27**	200	1.4	0.84	13	5.3	29	**110**	520	11	0.6 J	0.88	0.34 U	27	160
	HWY-SS29-1-6-DUP	MH0F88		1-6	0.92 J+	**20**	130	0.93	0.61	9.9	4.4	20	65	480	13	2.1 U	0.72	0.41 U	22	120
30	HWY-SS30-1-6	MH0F63	6/13/2023	1-6	0.92 U	**19**	130	0.81	0.47	20	9.1	20	23	920	21	1.1 J	0.16 J	0.46 U	32	120
33	HWY-SS33-1-6	MH0F69	6/12/2023	1-6	0.67 U	**8.8**	150	0.92	0.53	14	7.4	17	25	380	20	0.89	0.11	0.50 U	32	90
34	HWY-SS34-1-6	MH0F71	6/13/2023	1-6	0.74 J+	**27**	180	1.4	1.4	11	7.1	31	89	880	14	0.75 J	0.62	0.34 U	27	230
35	HWY-SS35-1-6	MH0F73	6/13/2023	1-6	1.5	**43**	200	1.0	**7.2**	11	5.2	65	**390**	750	12	0.47 J	2.3	0.44 U	32	1,000

Sample ID	**CLP Sample ID**	**Matrix**	**Sample Date**	**Analyte**	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS01-1-6	MH0F03	SS	6/13/2023	TRM	0.79 U	12	220	0.82	0.56	12	9.0	26	37	420	19	0.73 J	0.18 J	0.4 U	28	110
HWY-SS01-1-6-DUP	MH0F82	SS			0.88 U	13	200	0.79	0.53	13	9.7	28	34	430	20	0.89 J	0.15 J	0.44 U	31	120
				RPD	0.09*	8.00%	9.52%	0.03*	0.03*	8.00%	7.49%	7.41%	8.45%	2.35%	5.13%	0.16*	0.03*	0.04*	10.17%	8.70%

Sample ID	**CLP Sample ID**	**Matrix**	**Sample Date**	**Analyte**	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS13-1-6	MH0F28	SS	6/12/2023	TRM	0.85 U	20	210	1	0.8	12	6.6	30	87	490	16	0.67 J	0.3 J	0.42 U	32	150
HWY-SS13-1-6-DUP	MH0F84	SS			0.91 U	20	220	1	0.77	13	6.8	31	84	490	16	0.46 J	0.26 J	0.46 U	33	150
				RPD	0.06*	0.00%	4.65%	0.00*	0.03*	8.00%	2.99%	3.28%	3.51%	0.00%	0.00%	0.21*	0.04*	0.04*	3.08%	0.00%

Sample ID	**CLP Sample ID**	**Matrix**	**Sample Date**	**Analyte**	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS22-1-6	MH0F47	SS	6/12/2023	TRM	0.78 U	8.3	100	0.43	0.73	8.5 J+	5.5	13	15	200	14	0.39 J	0.15 J	0.39 U	22	66 J+
HWY-SS22-1-6-DUP	MH0F86	SS			0.67 U	9.6	120	0.51	0.91	12	6.5	15	18	240	17	0.44 J	0.19 J	0.34 U	27	83
				RPD	0.11*	14.53%	18.18%	0.08*	0.18*	34.15%	16.67%	14.29%	18.18%	18.18%	19.35%	0.05*	0.04*	0.05*	20.41%	22.82%

Sample ID	**CLP Sample ID**	**Matrix**	**Sample Date**	**Analyte**	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
				Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HWY-SS29-1-6	MH0F61	SS	6/12/2023	TRM	1.5	27	200	1.4	0.84	13	5.3	29	110	520	11	0.60 J	0.88	0.34 U	27	160
HWY-SS29-1-6-DUP	MH0F88	SS			0.92 J+	20	130	0.93	0.61	9.9	4.4	20	65	480	13	2.1 U	0.72	0.41 U	22	120
				RPD	0.58*	29.79%	42.42%	0.47*	0.23*	27.07%	18.56%	36.73%	51.43%	8.00%	16.67%	1.5*	0.16*	0.07*	20.41%	28.57%

Notes:

*	The absolute difference was used because one or both analytical results were less than 5X the reporting limit. Results are reported in mg/kg
[a]	EPA Regional Screening Level (RSL) for Residential Soil (TR=1E-06, THQ=1.0)
[b]	EPA Regional Screening Level (RSL) for Industrial Soil (TR=1E-06, THQ=1.0)
BOLD	Exceeds EPA Screening Level for Residential Soil
BOLD	Exceeds EPA Screening Level for Residential and Industrial Soil
[c]	EPA Office of Land and Emergency Management Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, 2024: EPA Regions should use a screening level of 200 mg/kg for residential soil lead and 100 mg/kg if an additional source of lead (such as lead water service lines, le based paint, etc.) is identified. It is unknown at this time whether an additional source of lead is present at this site and both screening levels are presented as a conservative measure
CAS No.	Chemical Abstracts Service Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	U.S. EPA Contract Laboratory Program
[d]	EPA Removal Management Level (RML) for Composite Worker Soil (TR=1E-06, THQ=3.0)
DUP	Field Duplicate
EPA	U.S. Environmental Protection Agency
in. bgs	inches below ground surface
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high
mg/kg	milligrams per kilogram
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SS	Surface Soil
THQ	Target Hazard Quotient
TR	Target Cancer Risk
TRM	Total Recoverable Metals
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
	Exceeds 35 percent RPD

				Analyte	Mercury	
				Units	(mg/kg)	
				CAS No.	7439-97-6	
				EPA Residential RSL[a] (mg/kg)	11	
				EPA Industrial RSL[b] (mg/kg)	46	
Sample Location ID	**Sample Date**	**CLP Sample ID**	**Field Sample ID**	**Sample Depth Interval (in. bgs)**		
01	6/13/2023	MH0FC4	HWY-SS01-0-1HG	0-1	0.035	J-
		MH0FC6	HWY-SS01-0-1-DUPHG	0-1	0.036	J-
		MH0FC7	HWY-SS01-1-6HG	1-6	0.047	J-
		MH0FC5	HWY-SS01-1-6-DUPHG	1-6	0.088	J-
02	6/13/2023	MH0FC8	HWY-SS02-0-1HG	0-1	0.035	J-
		MH0FC9	HWY-SS02-1-6HG	1-6	0.046	J-
03	6/13/2023	MH0FD0	HWY-SS03-0-1HG	0-1	0.42	J-
		MH0FD1	HWY-SS03-1-6HG	1-6	0.079	J-
04	6/13/2023	MH0FD2	HWY-SS04-0-1HG	0-1	--	R
		MH0FD3	HWY-SS04-1-6HG	1-6	--	R
05	6/13/2023	MH0FD4	HWY-SS05-0-1HG	0-1	0.069	J-
		MH0FD5	HWY-SS05-1-6HG	1-6	0.064	J-
06	6/12/2023	MH0FD6	HWY-SS06-0-1HG	0-1	0.069	J-
		MH0FD7	HWY-SS06-1-6HG	1-6	0.081	J-
07	6/13/2023	MH0FD8	HWY-SS07-0-1HG	0-1	0.098	J-
		MH0FD9	HWY-SS07-1-6HG	1-6	0.11	J-
10	6/13/2023	MH0FE0	HWY-SS10-0-1HG	0-1	0.082	J-
		MH0FE1	HWY-SS10-1-6HG	1-6	0.062	J-
11	6/13/2023	MH0FE2	HWY-SS11-0-1HG	0-1	0.11	J-
		MH0FE3	HWY-SS11-1-6HG	1-6	0.12	J-
12	6/12/2023	MH0FE4	HWY-SS12-0-1HG	0-1	0.11	J-
		MH0FE5	HWY-SS12-1-6HG	1-6	0.11	J-
13	6/12/2023	MH0FE7	HWY-SS13-0-1HG	0-1	0.22	J-
		MH0FE6	HWY-SS13-0-1-DUPHG	0-1	0.11	J-
		MH0FE9	HWY-SS13-1-6HG	1-6	0.058	J-
		MH0FE8	HWY-SS13-1-6-DUPHG	1-6	0.17	J-
14	6/12/2023	MH0FF0	HWY-SS14-0-1HG	0-1	0.03	J-
		MH0FF1	HWY-SS14-1-6HG	1-6	0.02	J-
15	6/13/2023	MH0FF2	HWY-SS15-0-1HG	0-1	0.11	J-
		MH0FF3	HWY-SS15-1-6HG	1-6	0.053	J-
16	6/13/2023	MH0FF4	HWY-SS16-0-1HG	0-1	0.062	J-
		MH0FF5	HWY-SS16-1-6HG	1-6	1.1	J-
17	6/13/2023	MH0FF6	HWY-SS17-0-1HG	0-1	--	R
		MH0FF7	HWY-SS17-1-6HG	1-6	0.031	J-
18	6/12/2023	MH0FF8	HWY-SS18-0-1HG	0-1	0.079	J-
		MH0FF9	HWY-SS18-1-6HG	1-6	0.065	J-
19	6/12/2023	MH0FG0	HWY-SS19-0-1HG	0-1	0.055	J-
		MH0FG1	HWY-SS19-1-6HG	1-6	0.057	J-

				Analyte	Mercury	
				Units	(mg/kg)	
				CAS No.	7439-97-6	
				EPA Residential RSL[a] (mg/kg)	11	
				EPA Industrial RSL[b] (mg/kg)	46	
Sample Location ID	**Sample Date**	**CLP Sample ID**	**Field Sample ID**	**Sample Depth Interval (in. bgs)**		
20	6/12/2023	MH0FG2	HWY-SS20-0-1HG	0-1	0.044	J-
		MH0FG3	HWY-SS20-1-6HG	1-6	0.031	J-
21	6/12/2023	MH0FG4	HWY-SS21-0-1HG	0-1	--	R
		MH0FG5	HWY-SS21-1-6HG	1-6	0.041	J-
22	6/12/2023	MH0FG7	HWY-SS22-0-1HG	0-1	0.067	J-
		MH0FG6	HWY-SS22-0-1-DUPHG	0-1	0.092	J-
		MH0FG9	HWY-SS22-1-6HG	1-6	0.068	J-
		MH0FG8	HWY-SS22-1-6-DUPHG	1-6	0.068	J-
23	6/13/2023	MH0FH0	HWY-SS23-0-1HG	0-1	0.17	J-
		MH0FH1	HWY-SS23-1-6HG	1-6	0.36	J-
24	6/13/2023	MH0FH2	HWY-SS24-0-1HG	0-1	0.10	J-
		MH0FH3	HWY-SS24-1-6HG	1-6	0.056	J-
26	6/12/2023	MH0FH4	HWY-SS26-0-1HG	0-1	0.043	J-
		MH0FH5	HWY-SS26-1-6HG	1-6	0.039	J-
27	6/12/2023	MH0FH6	HWY-SS27-0-1HG	0-1	0.046	J-
		MH0FH7	HWY-SS27-1-6HG	1-6	0.063	J-
28	6/12/2023	MH0FH8	HWY-SS28-0-1HG	0-1	0.082	J-
		MH0FH9	HWY-SS28-1-6HG	1-6	0.091	J-
29	6/12/2023	MH0FJ1	HWY-SS29-0-1HG	0-1	0.05	J-
		MH0FJ0	HWY-SS29-0-1-DUPHG	0-1	0.21	J-
		MH0FJ3	HWY-SS29-1-6HG	1-6	0.12	J-
		MH0FJ2	HWY-SS29-1-6-DUPHG	1-6	1.7	J-
30	6/13/2023	MH0FJ4	HWY-SS30-0-1HG	0-1	0.074	J-
		MH0FJ5	HWY-SS30-1-6HG	1-6	0.028	J-
33	6/12/2023	MH0FJ6	HWY-SS33-0-1HG	0-1	0.053	J-
		MH0FJ7	HWY-SS33-1-6HG	1-6	11	J-
34	6/13/2023	MH0FJ8	HWY-SS34-0-1HG	0-1	0.053	J-
		MH0FJ9	HWY-SS34-1-6HG	1-6	0.15	J-
35	6/13/2023	MH0FK0	HWY-SS35-0-1HG	0-1	0.20	J-
		MH0FK1	HWY-SS35-1-6HG	1-6	0.24	J-

Notes:

--	No value available
[a]	EPA Regional Screening Level (RSL) for Residential Soil (TR=1E-06, THQ=1.0)
[b]	EPA Regional Screening Level (RSL) for Industrial Soil (TR=1E-06, THQ=1.0)
BOLD	Exceeds EPA Residential RSL
CAS No.	Chemical Abstracts Service Number
CLP	U.S. EPA Contract Laboratory Program
DUP	Field Duplicate
EPA	U.S. Environmental Protection Agency
HG	Mercury
in. bgs	inches below ground surface
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low
R	The sample result is rejected as unusable based on serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
SS	Surface Soil
THQ	Target Hazard Quotient
TR	Target Cancer Risk

	Location ID	06	08		09
	Field Sample ID	HWY-SW06	HWY-SW08	HWY-SW08-DUP	HWY-SW09
	Sample Date	6/13/2023	6/13/2023	6/13/2023	6/13/2023
Parameter	**Units**				
Temperature	°C	11.0	11.1	11.0	11.4
pH	SU	7.86	7.94	7.94	7.57
Conductivity	µS/cm	186.1	240	240	376.9
ORP	mV	257.9	214.9	214.9	302.1
Dissolved Oxygen	mg/L	8.77	8.84	8.84	8.71
Turbidity	NTU	25.98	16.47	16.47	16.0
TDS	g/L	121	202	202	247
Salinity	ppt	0.12	0.16	0.16	0.20

Notes:

All parameters were measured in the field using a YSI water quality meter

°C	Degrees Celsius
DUP	Field Duplicate
g/L	Grams per liter
µS/cm	Microsiemens per centimeter
mg/L	Milligrams per liter
mV	Millivolts
NTU	Nephelometric turbidity unit
ORP	Oxidation-reduction potential
ppt	Parts per thousand
SU	Standard Units
TDS	Total dissolved solids

Table 9
Sample Specific Water Quality Standards
(CO Regulation No. 31)

Sample Location ID	Field Sample ID	Matrix	Sample Date	Hardness (mg/L)	CO Aquatic Life WQS[1]	Aluminum[a] (µg/L)	Cadmium[b] (µg/L)	Copper[b] (µg/L)	Lead[b] (µg/L)	Manganese[b] (µg/L)	Nickel[b] (µg/L)	Silver[b] (µg/L)	Zinc[b] (µg/L)
06	HWY-SW-06	SW	6/13/2023	49	Acute	1,288	0.92	6.9	29	2,354	256	0.59	84
					Chronic	184	0.42	4.9	1.1	1,301	28	0.09	63
08	HWY-SW-08	SW	6/13/2023	110	Acute	3,898	1.96	14.7	72	3,082	508	2.39	174
					Chronic	556	0.77	9.7	2.8	1,703	56	0.38	132
08	HWY-SW-08-DUP	SW	6/13/2023	110	Acute	3,898	1.96	14.7	72	3,082	508	2.39	174
					Chronic	556	0.77	9.7	2.8	1,703	56	0.38	132
09	HWY-SW-09	SW	6/13/2023	110	Acute	3,898	1.96	14.7	72	3,082	508	2.39	174
					Chronic	556	0.77	9.7	2.8	1,703	56	0.38	132

Notes

[1] CO Regulation 31: The Basic Standards and Methodologies for Surface Water
[a] Screening level applies to TRM only
[b] Screening level applies to DM only
µg/L Micrograms per liter
CO Colorado
DUP Field duplicate
mg/L Milligrams per liter
SW Surface Water
WQS Water Quality Standard

APPENDIX A
PHOTOGRAPHIC LOG

APPENDIX B
DATA VALIDATION REPORTS