



FINAL ADDITIONAL SOIL INVESTIGATION REPORT

Santa Fe Trackbed to Park
Berkeley, California

Prepared for:

City of Berkeley

Department of Parks, Recreation, and Waterfront
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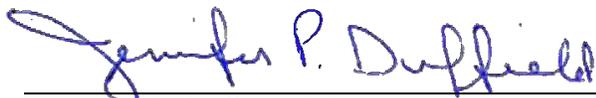
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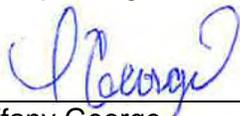
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Issued: September 9, 2024



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FINAL ADDITIONAL SOIL INVESTIGATION REPORT

Santa Fe Trackbed to Park

Berkeley, California

1.0 INTRODUCTION

GSI Environmental Inc. (GSI) has prepared this Final Additional Soil Investigation Report (Report) on behalf of the City of Berkeley Department of Parks, Recreation, and Waterfront (the City) to describe the findings of the additional environmental investigation at the Santa Fe Trackbed to Park Conversion project site (the Site) in Berkeley, California. The City has entered into a voluntary cleanup agreement with the California Department of Toxic Substances Control (DTSC) to oversee environmental characterization and remediation of the Site. The purpose of the additional soil sampling investigation was to further characterize the extent of arsenic, lead, mercury, and polycyclic aromatic hydrocarbons (PAHs) in soil to support the City's plans to redevelop the Site into a community asset, which will include a community garden, dog park, children's play area, and teaching garden. Figure 1 shows the Site location.

This Report describes the Site background, investigation objectives, field and analytical methodologies, a summary of results for the additional investigation, and an evaluation of the soil data collected to date.

An initial version of this report was submitted to DTSC on June 21, 2024. DTSC provided comments on the report in a letter dated July 31, 2024. A revised report was submitted on August 28, 2024, and DTSC provided additional comments on September 3, 2024. This version of the report has been revised to address and incorporate all of DTSC's comments.

2.0 SITE SETTING

The Site extends north-to-south between Blake Street and Ward Street and east-to-west between Sacramento Street and Mabel Street and includes four parcels, as shown on Figure 2.

- Parcel 1 – located between Blake and Parker Streets
- Parcel 2 – located between Parker and Carleton Streets
- Parcel 3 – located between Carleton and Derby Streets
- Parcel 4 – located between Derby and Ward Streets

Collectively, the area of these parcels is approximately 1.32 acres. The Site is currently undeveloped land that was historically a railroad right-of-way (ROW).

3.0 BACKGROUND

GSI performed an initial soil investigation in July 2022 (GSI, 2022). GSI collected soil samples from 15 soil borings to evaluate whether historical activities within the former Santa Fe Railroad ROW have impacted shallow soil with metals, PAHs, organochlorine pesticides (OCPs), and TPH. TPH and OCPs were not detected at concentrations exceeding human health screening criteria in any samples. Results are available in the Santa Fe Right-of-Way Phase II Environmental Site Assessment – Report of Findings (GSI, 2022) and summarized below.

- Arsenic was detected at concentrations exceeding background in samples collected from 1.0 foot and 2.5 feet below ground surface (bgs) at various locations across the site with no discernable source area. Arsenic was also detected in samples collected at 4.0 feet bgs at two locations (P2-1 at Parcel 2 and P3-4 at Parcel 3); soil samples were not collected deeper than 4.0 feet bgs during the 2022 investigation.
- Lead, mercury, and various individual PAHs were detected at concentrations exceeding the human health screening criteria in samples collected at 1.0 foot bgs at a limited number of boring locations.
- PAHs are present in soils in both rural and urban areas due to naturally occurring and anthropogenic sources. The analytical results for PAHs were further evaluated by comparison to concentrations considered background in Northern California soils. “This assessment may be needed because the calculated health-based or ecologically based cleanup goal for PAHs can be one to two orders of magnitude below ambient PAH concentrations in developed areas. In general, DTSC does not require cleanup of sites to concentrations that are less than ambient” (DTSC, 2009). As such, carcinogenic benzo(a)pyrene-like PAHs were further evaluated with a comparison to regional ambient levels, which were published by DTSC using the benzo(a)pyrene equivalency (BaPe). Specifically, the BaPe values were calculated using equivalency factors recommended by DTSC (2015) and compared to the regional ambient level of 0.9 milligrams per kilogram (mg/kg) established by DTSC (2009). BaPe exceeded background at one location on Parcel 4 (P4-4 at 1.0 foot bgs). Due to an existing neighbor encroachment, no samples were collected on the southernmost portion of Parcel 1 during the 2022 investigation. Results of the previous investigation are included in Tables 2 through 5.

On April 6, 2023, the City, GSI, and DTSC met via video conference to discuss the results of the initial soil investigation and next steps. DTSC requested that the City conduct additional soil investigation to characterize potential impacts to soil on the southern portion of Parcel 1 that had not been investigated due to the neighbor encroachment, delineate the vertical extent of arsenic-impacted soil at Parcels 2 and 3, and delineate the elevated concentrations of PAHs detected at a previous boring in Parcel 4.

After that meeting, the City’s remediation approach changed. On June 15, 2023, the City, GSI, and DTSC met via video conference to discuss the City’s updated remediation approach. The initial remediation approach was to mitigate where possible to reduce remediation costs. However, the City had since learned remediation costs would be higher than anticipated and does not have enough funding to remediate and fully construct all four parcels as originally intended. As such, the City would like to prioritize remediation to alleviate barriers for future development. The City continues to seek additional funding to bridge their funding gap. If the City cannot secure additional funding, the City will remediate to unrestricted use and develop the parcels as much as possible.

An Additional Soil Sampling Work Plan was submitted to DTSC on December 7, 2023 (Work Plan; GSI, 2023). The Work Plan incorporated the requests for further investigation from the DTSC, and included a Site-wide gridded sampling strategy to delineate the extent of soil removal that would be required to remediate the entire area of Parcels 1 through 4 for unrestricted use. DTSC approved the work plan on December 13, 2023.

GSI completed the additional soil sampling investigation in January 2024. Preliminary evaluation of the data collected in January 2024 indicated the vertical extent of arsenic was not delineated in some grid cells on Parcels 1, 2, and 3.

Also, within Parcel 3, the vertical extent of arsenic remained unknown beneath the driplines of a protected tree. Along the southwestern fence line of Parcel 3, a Coast Live Oak extends from the neighboring property into grid cells P3-A8 and P3-A9 (Figure 3C). The Coast Live Oak is a protected species in the City of Berkeley. The soil sampling completed in January 2024 confirmed the presence of arsenic in soil at a concentration exceeding the DTSC screening level in cell P3-A9. Additional characterization was needed underneath the tree dripline to assess the extent of soil removal that will be required to remediate the soil immediately surrounding the tree.

GSI submitted the Addendum to the Additional Soil Sampling Work Plan (Addendum; GSI, 2024) to DTSC on April 9, 2024. The Addendum included additional soil sampling to delineate the vertical extent of arsenic in grid cells where it was not yet delineated and to further characterize soil around the Coast Live Oak. DTSC staff indicated that they had no comments on the Addendum and authorized GSI to proceed with the work via email on April 15, 2024. DTSC issued an approval letter for the Addendum on April 24, 2024. GSI completed the additional investigation described in the Addendum in April 2024.

4.0 CONCEPTUAL SITE EXPOSURE MODEL

In this section, the conceptual Site model regarding the source, nature and extent of constituents of potential concern (COPCs) in soil, and potential for human receptors to contact COPCs in soil is discussed.

- Historical Operations and Source of COPCs
 - The Site is a former railroad corridor within a residential neighborhood. No buildings are present at the Site and the Site surfaces consist of mostly uncovered soils.
 - Typical environmental impacts on railroad corridors include deposition of petroleum-related constituents, metals, and weed control chemicals to shallow soil. Soil sampling has identified arsenic, lead, mercury, and PAHs as COPCs.
 - There is no record of industrial activities at the Site based on available Site history documentation.
- Nature and Extent of COPCs
 - These COPCs are not mobile in soil, and the impacts are typically limited to surficial soils.
 - Soil assessments have demonstrated that COPC impacts are primarily limited to depths up to 5 feet bgs.
 - Groundwater has not been encountered during investigation activities, which have extended to a maximum depth of 10 feet bgs. Site COPCs are only present in the vadose zone, are not mobile in soil, and have low solubility. As such, mobilization of COPCs to groundwater does not represent a complete exposure pathway.
- Conceptual Site Exposure Model
 - Under current conditions, access to the Site is restricted with chain link fencing and limited to workers involved in environmental characterization of the Site or construction work. Soil removal actions will be completed under a Removal Action Workplan and under regulatory oversight of DTSC.

- The planned future use of the Site is a community garden, dog park, children’s play area, and teaching garden. The community garden is currently planned to have edible produce for human consumption in both in-ground and raised planters. Potential future human receptors at the Site that may come into contact with COPCs in soil include a future child and adult recreational user, future maintenance worker, future construction worker, and future docent. These receptors may contact soil via the direct contact pathways (i.e., incidental ingestion, inhalation of particulates and volatile compounds, and dermal absorption) following the completion of Site remediation and development activities.
- In addition, to assist with remediation planning, the CSM includes a hypothetical current resident (baseline scenario). For this scenario, it is assumed that no soil remediation occurs, and the Site is used for residential purposes.

The Conceptual Site Exposure Model is shown in Figure 4.

5.0 ADDITIONAL SOIL INVESTIGATION

The objectives of the additional soil investigation were to:

- pre-characterize the extent of remediation required for unrestricted use by collecting gridded soil samples across Parcels 1 through 4;
- characterize soil at a previously inaccessible portion of Parcel 1;
- delineate the vertical extent of arsenic at two previous sampling locations at Parcels 2 and 3;
- delineate the extent of PAHs at Parcel 4; and
- characterize the soil near a protected tree at Parcel 3.

Sampling conducted to meet each of these objectives is described below. A Sampling and Analysis Summary for this SOW is included as Table 1.

5.1 Delineate Extent of Remediation Required for Unrestricted Use

Due to budgetary constraints, the City plans to remediate Parcels 1 through 4 to unrestricted use and redevelop them to the extent feasible. Gridded soil sampling was completed to pre-characterize the extent of remediation that may be required. To accomplish this, a 30-foot by 30-foot grid was overlain on Parcel 1 through Parcel 4 (Figures 3A through 3D). In January 2024, a soil boring was advanced to approximately 4 feet bgs within each 30-foot by 30-foot cell with soil samples collected from approximately 2.0, 3.0, and 4.0 feet bgs from each boring. The sample collected from 4.0 feet bgs was held and only analyzed if the 3.0 feet bgs sample contained COPCs at concentrations exceeding screening levels. Based on findings of the 2022 investigation, soil samples from Parcel 1 were analyzed for arsenic, and soil samples from Parcels 2 through 4 were analyzed for arsenic, lead, and mercury. Additionally, analysis for PAHs was performed in some grid locations at Parcel 4 for delineation purposes, as described in Section 4.4.

The results of the soil sampling in January 2024 indicated the vertical extent of arsenic in some areas was still unknown. To determine the depth of remedial excavation, 17 additional soil borings were advanced to approximately 10 feet bgs in the following cells:

- Parcel 1: Cells P1-B5 and P1-B6 (Figure 3A)
- Parcel 2: Cells P2-B1, P2-B4, P2-B6, P2-B7, P2-B9, and P2-B10 (Figure 3B)
- Parcel 3: Cells P3-B1 through P3-B9 (Figure 3C)

Soil samples were collected from depths of approximately 5.0, 6.0, 7.0, 8.0 and 10.0 feet bgs at each boring. The deeper soil borings were placed adjacent to the previous boring location within each grid cell. The second soil borings were given the same alpha-numerical soil boring identifier as the initial boring with a “D” to denote a deeper boring at the previous investigation location. The shallowest soil sample from each boring was analyzed for arsenic using United States Environmental Protection Act (USEPA) Method 6010B. Deeper samples were analyzed based on results of the shallow soil sample results.

5.2 Sampling Within Encroachment Area at Parcel 1

The DTSC’s request for sampling within the encroachment area in Parcel 1 was accomplished as part of the gridded sampling program. Soil samples were collected from two locations (grid cells P1-A7 and P1-A8; Figure 3A) and analyzed for the same expanded analytical suite that was used in the 2022 investigation which included Title 22 metals, organochlorine pesticides (OCPs), total petroleum hydrocarbons quantified as diesel (TPHd) and motor oil (TPHmo), and PAHs. Additionally, grid cells P1-A9, P1-A10, and P1-B7 are located on the encroachment area. Samples collected from these grid cells were analyzed for arsenic.

5.3 Vertical Delineation of Arsenic at Previous Sampling Locations

Additional sampling was conducted at Parcels 2 and 3 to address the remaining data gaps related to the vertical extent of arsenic in soil. During the 2022 soil investigation, arsenic was detected at concentrations exceeding background at a depth of 4 feet bgs (the total depth drilled) at two previous boring locations (boring P2-1 at Parcel 2 and boring P3-4 at Parcel 3; GSI, 2022). Additional sampling was conducted at previous boring locations P2-1 and P3-4 to complete delineation of the vertical extent of arsenic in soil (Figures 3B and 3C). Soil samples were collected from approximately 5.0, 6.0, and 7.0 feet bgs from each boring (P2-1d and P3-4d).

5.4 Delineation of PAHs on Parcel 4

Soil samples collected from three grid cells in Parcel 4 (P4-A9, P4-B9, and P4-B10) were analyzed for PAHs to delineate elevated concentrations of PAHs detected at previous boring location P4-4 (Figure 3D).

5.5 Soil Characterization Near the Coast Live Oak Tree

Borings P3-T1 through P3-T4 were placed below the drip line of the Coast Live Oak within grid squares P3-A8 and P3-A9 (Figure 3C) to delineate the extent of arsenic previously detected at boring location P3-A9 and assess the extent of soil removal that would be required to remediate the soil immediately surrounding the tree. Soil samples were collected at depths of 1.0, 1.5, and 2.0 feet bgs.

The soil samples collected near the Coast Live Oak were analyzed for Site COPCs, which include:

- Arsenic, lead, and mercury, using USEPA Methods 6010B/7471A, and
- PAHs using USEPA Method 8270C with selective ion monitoring (SIM).

6.0 FIELD AND ANALYTICAL METHODS

Investigation activities were conducted in accordance with the DTSC-approved QAPP and HASP (GSI, 2023). The methodology used to collect soil samples at the Site and analytical methods are described below.

6.1 Field Preparation Activities

Prior to the sampling activities, GSI performed the following tasks:

- Marked sampling area and contacted Underground Service Alert North (USA) at least 2 days in advance of field activities, as required by law.
- Obtained Subsurface Drilling Permits from the City of Berkeley. Copies of boring permits are included in Appendix A.

The City of Berkeley conducted a utility survey of the Site prior to the start of the investigation and provided GSI with the results for review prior to conducting field activities. The City's surveyors staked out the corners of the 30-foot by 30-foot grid cells to guide sampling locations.

6.2 Soil Sample Collection

This investigation was completed in two phases, one in January 2024, and the other in April 2024.

In January 2024, GSI subcontracted with PeneCore Drilling of Woodland, California, to advance a total of 71 borings. Sixty-seven borings were advanced to 4.0 feet bgs for grid sampling, two borings were advanced to 5.5 feet bgs in a previously inaccessible portion of Parcel 1, two borings were advanced to 7.0 feet bgs for vertical delineation at previous sample locations on Parcels 2 and 3. The 71 borings were advanced with a hand auger.

In April 2024, GSI subcontracted with Cascade Drilling, LP. of Richmond, California to advance 17 borings. Four borings were advanced using a hand auger to approximately 2.0 feet bgs within the drip line of a Coast Live Oak Tree on the southeastern edge of Parcel 3. Samples from these four borings were screened for real-time concentrations of arsenic, lead, and mercury with a hand-held X-Ray Fluorescence (XRF) spectrometer. XRF data is included in Appendix B. An additional 14 borings were advanced to 10 feet bgs in grid squares where the vertical extent of arsenic was not delineated in January 2024. The borings were advanced with a GeoProbe direct push drill rig.

During January and April 2024, samples were collected in accordance with the methods described in the DTSC-approved QAPP. Soil was screened for organic vapors using a portable photoionization detector (PID). Samples were collected directly from the hand auger or from new, acetate liners and placed into laboratory-supplied jars, stored on ice, and transferred to the laboratory under standard chain-of-custody procedures. Re-usable downhole equipment utilized during the investigation was decontaminated using Alconox detergent, followed by rinsing with potable water.

After sampling, the soil borings were backfilled with potting soil. Soil cuttings generated during drilling and decontamination water were placed into Department of Transportation-approved 55-gallon steel drums and transported to an approved location on Parcel 1. Following laboratory

analysis and profiling, the investigation-derived waste will be transported to an off-Site facility for disposal in accordance with state and federal regulations.

6.3 Analytical Testing

Soil samples were submitted to Enthalpy Analytical, a California-certified analytical laboratory located in Berkeley, California, for analysis of one or more of the following:

- Arsenic using USEPA Method 6010B;
- Lead using USEPA Method 6010B;
- Mercury using USEPA Method 7471A;
- Title 22 metals using USEPA Method 6010B/7471A;
- TPHd and TPHmo using USEPA Method 8015;
- OCPs using USEPA Method 8081A; and
- PAHs using USEPA Method 8270C with selective ion monitoring (SIM).

7.0 INVESTIGATION RESULTS

This section presents the results of shallow soil sampling, including a comparison of analytical results to risk-based screening criteria.

7.1 Soil Lithology

The soil at the Site generally consists of dark grayish brown poorly graded sand with silt or silty sand underlain by very dark brown lean clay. Coarse gravel was observed in most grid cells on the eastern side of Parcel 2. Water was encountered between 2.0 and 4.0 feet bgs in seven grid cells on the eastern side of Parcel 2 during the January 2024 investigation. Water was not encountered on the western side of Parcel 2 or on any other parcels, therefore, the water that was encountered on the eastern side of Parcel 2 was likely perched water from recent rain events and not groundwater.

Fill materials including small amounts of glass fragments and brick fragments were noted on the eastern side of Parcels 2, 3 and 4. Pieces of asphalt-like material were noted in grid cells P1-B4 and P4-A8. No staining or odors were observed at any of the soil boring locations during sampling activities.

7.2 Analytical Results

Analytical results for soil samples are presented in Tables 2 through 5 and discussed below. Analytical laboratory data reports are included in Appendix C.

7.2.1 Data Quality Summary

The analytical data were reviewed to determine the data usability in accordance with guidelines published by the United States Environmental Protection Agency (USEPA):

- *National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020a)*
- *National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020b)*

The data usability evaluation included a review of surrogate recovery results, laboratory blank sample results, matrix spike (MS) and matrix spike duplicate (MSD) results, laboratory control sample results and laboratory calibration standards. Data quality issues that resulted in qualification of the data are summarized in the Data Quality Summary provided in Appendix D.

Overall, the soil sample analytical results were found to be compliant with the data objectives for the project and are considered usable.

7.2.2 Screening Criteria

The analytical results for soil samples are evaluated herein by comparison to risk-based screening levels for residential and commercial/industrial land use to 1) identify potential source areas of chemical impacts to the subsurface, and 2) evaluate potential exposures to future Site occupants following redevelopment. The analytical results are compared to Regional Screening Levels (RSLs) published by the USEPA for residential and commercial/industrial soil (USEPA, 2024), as endorsed or modified by DTSC (2022), except as noted below:

- Arsenic typically exceeds its conservative risk-based screening criterion at naturally occurring, “background” concentrations. Therefore, the detected concentrations of arsenic are compared to regional background values. For arsenic, a background value of 11 mg/kg was established in an evaluation of background concentrations in urbanized flatland soils within the San Francisco Bay Area, completed at San Francisco State University in coordination with staff of the San Francisco Bay Regional Water Quality Control Board (Duverge, 2011).
- Chromium was evaluated by comparing total chromium concentrations to the USEPA residential and commercial/industrial RSLs for chromium III (Target Risk [TR]=1E-06, Target Hazard Quotient [THQ]=1, lower of the soluble and insoluble chromium III RSLs). Chromium VI is not likely to be present at the Site due to its use in specific industrial processes, such as welding or “hot work” on stainless steel and other metals that contain chromium, spray paintings and coatings, and chrome plating baths. There is no record of these industrial activities at the Site based on available Site history documentation.
- Carcinogenic benzo(a)pyrene-like PAHs are evaluated by calculating the benzo(a)pyrene equivalency (BaPe) using equivalency factors recommended by DTSC (2015), with non-detect values represented as the detection limit. BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009). A comparison of individual PAHs to their individual screening levels is also included.
- RSLs are not published for TPHd or TPHmo. As such, analytical results for TPHd, and TPHmo were evaluated by comparison to residential Environmental Screening Levels (ESLs) published by the Water Board (2019).

The DTSC-SLs and ESLs are generic screening levels, derived using standard default exposure assumptions that represent reasonable maximum exposure (RME) conditions and USEPA or DTSC recommended toxicity values. These screening levels correspond to concentrations in soil that are not expected to pose a significant human health risk. In general, generic screening levels are more stringent (i.e., more likely to significantly overstate actual risks) than Site-specific screening levels due to the conservative nature of the assumptions used. Thus, when contaminant concentrations are below generic screening levels, no further action or study is typically warranted.

Additionally, analytical results were compared to the following waste characterization criteria to aid in redevelopment planning.

- Toxicity Characteristic (TC) values (Resource Conservation and Recovery Act [RCRA])¹ – Total constituent concentrations that are greater than 20 times the TC value do not necessarily indicate that a soil is hazardous; rather, representative samples should undergo the toxicity characteristic leaching procedure (TCLP), and the extract run for the metals in question. If the extract result exceeds the TC, then the soil would be considered a Resource Conservation and Recovery Act (RCRA) hazardous waste.
- Total Threshold Limit Concentration (TTLC)² – Constituent concentrations exceeding the TTLC indicate the soil would be considered a non-RCRA, California hazardous waste for disposal.
- Solubility Threshold Limit Concentration (STLC) values³ – Total constituent concentrations greater than 10 times the STLC are not indicative of hazardous waste; rather, the sample should undergo the Waste Extraction Test (WET), and the extract run for the constituent in question. If the extract result exceeds the STLC, the soil would be considered a non-RCRA, California hazardous waste for disposal.

7.2.3 Summary of Soil Analytical Results

The analytical results from the 2024 soil investigations are presented below by chemical class.

7.2.3.1 Metals

The analytical results for metals are included in Table 2. A summary of the waste characterization analyses is included in Table 6.

Five soil samples were analyzed for the full list of California Title 22 Metals. Two hundred and nine samples were analyzed for arsenic, 129 samples were analyzed for lead, and 125 samples were analyzed for mercury.

- Arsenic detections ranged from 2.7 to 310 mg/kg. Detected concentrations in 100 of the 209 samples analyzed (collected from Parcels 1, 2, 3, and 4) exceeded the regional background concentration of 11 mg/kg. Samples containing arsenic exceeding background were collected at depths ranging from 2.0 to 5.0 feet bgs.

Arsenic was not detected at concentrations exceeding the TTLC in any samples. Arsenic concentrations exceeded the California waste characterization screening criteria of 10xSTLC in 51 samples. Sixteen of these samples were subjected to the WET for arsenic. Arsenic concentrations in the WET leachate exceeded the STLC in one sample (P2-B7-2.0). Arsenic concentrations exceeded the federal waste characterization screening criteria of 20xTC in 18 samples. Eight of these samples were subjected to the TCLP for arsenic. Arsenic concentrations did not exceed the TC in any of the TCLP leachate samples.

¹ Code of Federal Regulations (CFR), Title 40, Part 261, Subpart C, Section 261.24

² California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Section 66261.24

- Lead detections ranged from 6.0 to 190 mg/kg. Detected concentrations in 21 of the 129 samples analyzed (collected from Parcels 2, 3, and 4) exceeded the residential human health screening criteria of 80 mg/kg. All 21 samples were collected at depths between 1.0 and 3.0 feet bgs. Lead was detected at a concentration exceeding the commercial/industrial screening level of 320 mg/kg in one sample (P3-T4-1.0).

Lead was not detected at concentrations exceeding the TTLC in any samples. Lead concentrations exceeded the California waste characterization screening criteria of 10xSTLC in 46 samples. Fifteen of these samples were subjected to the WET for lead. Lead concentrations in the WET leachate did not exceed the STLC in any of the samples analyzed. Lead concentrations exceeded the federal waste characterization screening criteria of 20xTC in 12 samples. Five of these samples were subjected to the TCLP for lead. Lead concentrations did not exceed the TC in any of the TCLP leachate samples.

- Mercury detections ranged from 0.17 to 16 mg/kg. Detected concentrations in four of the 125 samples analyzed (collected from Parcels 2, 3, and 4) exceeded the residential human health screening criteria of 1.0 mg/kg. Mercury was detected at concentrations exceeding the commercial/industrial screening criteria in the same four samples that exceeded the residential human health screening criteria (P2-B7-2.0, P3-A1-2.0, P3-A1-3.0, and P4-B10-2.0).

Mercury was not detected at concentrations exceeding the TTLC in any samples. Mercury concentrations exceeded the California waste characterization screening criteria of 10xSTLC in six samples. Four of these samples were subjected to the WET for mercury. Mercury concentrations in the WET leachate did not exceed the STLC in any of the samples analyzed. Mercury concentrations exceeded the federal waste characterization screening criteria of 20xTC in four samples. All four of these samples were subjected to the TCLP for mercury. Mercury concentrations did not exceed the TC in any of the TCLP leachate samples.

- No other metals were detected at concentrations exceeding residential or commercial/industrial human health screening criteria.
- Seventy-one samples contained one or more metals (arsenic, lead, or mercury) at concentrations exceeding 10 times their respective soluble threshold limit concentration (STLC), indicating a waste extraction test (WET) would be needed to determine if waste soil would be classified as non-Resource Conservation and Recovery Act (RCRA) California hazardous waste. Concentrations of metals (arsenic, lead or mercury) in 27 of these samples also exceeded 20 times the toxicity criteria (TC) indicating a toxicity characteristic leaching procedure (TCLP) would be required to determine if waste soil would be classified as RCRA hazardous waste.

7.2.3.2 PAHs

The analytical results for PAHs are included in Table 3.

Fourteen soil samples were analyzed for PAHs. Benzo(a)pyrene was detected in sample P4-B10-2.0 at a concentration of 0.27 mg/kg which exceeds the residential screening level of 0.11 mg/kg. Benzo(a)pyrene was not detected in the sample collected from 3 feet bgs in the same boring (P4-B10-3.0). No other PAHs were detected at concentrations exceeding their individual residential or commercial screening levels.

Laboratory reporting limits (RLs) for dibenz(a,h)anthracene exceeded the residential screening level of 0.028 mg/kg in 13 samples. Where possible, the laboratory reported results to the method detection limit (MDL). The MDL was below the residential screening level in one of the 13 samples with elevated RLs. Dibenz(a,h)anthracene was only detected in four samples across the Site. Several other PAHs were detected in each of the samples that had dibenz(a,h)anthracene detections. Nine of the 12 samples with elevated dibenz(a,h)anthracene RLs or MDLs did not have any other PAHs detected. Therefore, a consistent pattern was observed in the data and dibenz(a,h)anthracene is unlikely to be present in soil at concentrations exceeding residential screening levels without the presence of other PAHs.

The calculated BaPe did not exceed the regional background screening criteria of 0.9 mg/kg in any of the 14 samples.

7.2.3.3 *Organochlorine Pesticides*

The analytical results for organochlorine pesticides are included in Table 4.

Five soil samples were analyzed for organochlorine pesticides. No organochlorine pesticides were detected at concentrations above the laboratory reporting limits. The laboratory reporting limits are below the residential and commercial/industrial screening levels.

7.2.3.4 *Total Petroleum Hydrocarbons*

The analytical results for total petroleum hydrocarbons are included in Table 5.

Five soil samples were analyzed for TPH-d and TPH-mo. TPH-d and TPH-mo were not detected at concentrations exceeding the residential or commercial/industrial screening levels:

- TPH-d was detected in one sample at a concentration of 11 mg/kg. This detection is below the residential human health screening criteria of 260 mg/kg.
- TPH-mo was not detected in any of the samples. The laboratory reporting limit of 20 mg/kg is below the residential human health screening criteria of 12,000 mg/kg.

8.0 DATA EVALUATION

A discussion of 2022 and 2024 soil data with respect to the investigation objectives is provided below.

8.1 **Delinate Extent of Remediation Needed for Unrestricted Use**

All data collected from the 2022 and 2024 soil investigations were compared to residential screening levels to determine the extent of affected soil that may require remediation to allow for unrestricted use of the Site. A description of screening level exceedances and a summary of the vertical extent of impacts by grid cell for each parcel is provided below. Analytical results are presented in Tables 2 through 5. A visual summary of data exceeding screening levels on each parcel is included in Figures 3A through 3D. These figures indicate the maximum depth each grid cell would need to be excavated to remove any detected COPCs that were detected at concentrations exceeding their respective screening levels.

8.1.1 Parcel 1

Parcel 1 is shown on Figure 3A.

Metals

Arsenic was the only metal detected at concentrations exceeding its screening criterion. Arsenic was detected above the background concentration in the samples collected from 1.0 and 2.5 feet bgs at boring P1-2 and P1-3 and in several samples collected between 2.0 and 5.0 feet bgs at grid cells P1-B2, P1-B3, P1-B4, P1-B5, P1-B6, and P1-B7.

PAHs

One individual PAH, benzo(a)pyrene, was detected above its screening criterion in the sample collected at P1-3 at 1.0 foot bgs. The calculated BaPe for this sample was below the screening threshold of 0.9 mg/kg.

Summary

- COPCs exceeded screening levels at 1.0 foot bgs in two of three samples collected at that depth.
- The following grid cells did not have any COPCs exceeding their respective screening levels at 2 or 3 feet bgs: P1-A1 through P1-A10.
- The following grid cells had at least one COPC exceeding a screening level at 2 feet bgs, but all COPCs are vertically delineated at 3 feet bgs: P1-B2 and P1-B3.
- The following grid cells had at least one COPC exceeding a screening level at 3 feet bgs, but all COPCs are vertically delineated at 4 feet bgs: P1-B4 and P1-B7.
- The following grid cells had at least one COPC exceeding a screening level at 4 feet bgs, but all COPCs are vertically delineated at 5 feet bgs: P1-B5.
- The following grid cells had at least one COPC exceeding a screening level at 5 feet bgs, but all COPCs are vertically delineated at 6 feet bgs: P1-B6.

8.1.2 Parcel 2

Parcel 2 is shown on Figure 3B.

Metals

Arsenic was detected above its screening criterion in the sample collected at 1.0 foot bgs from borings P2-1 through P2-4. Arsenic was also detected above screening criterion in the samples collected from 2.5 and 4.0 feet bgs at boring P2-1, in the sample collected at 2.5 feet bgs at boring P2-2 and in the sample collected at 5.0 feet in P2-1D. In the grid cell samples, arsenic was detected above its screening criterion in samples collected between 2.0 and 5.0 in grid cells and P2-B1 through P2-B10.

Lead was detected above its screening criterion in the samples collected at 1.0 foot at borings P2-1, P2-2, and P2-3. Lead was detected above its screening criterion in the samples collected at 2.0 feet in grid cell samples P2-A8, P2-A9, P2-B1, P2-B10 and the sample collected from 3.0 feet in grid cell P2-B10.

Mercury was detected above its screening criterion in the sample collected at 1.0 foot in boring P2-4 and in the sample collected from 2.0 feet in grid cell sample P2-B7.

PAHs

One individual PAH, benzo(a)pyrene, was detected above its screening criterion in the sample collected at 1.0 foot bgs in grid cell P2-2. The calculated BaPe for this sample was below the screening threshold of 0.9 mg/kg.

Summary

- COPCs exceeded screening levels at 1.0 foot bgs in all four samples collected at that depth.
- COPCs were present in at 1.0 foot bgs in all four samples collected from 1 foot bgs in the during the 2024 investigation.
- The following grid cells did not have any COPCs exceeding their respective screening levels at two or three feet bgs: P2-A4 through P2-A7 and P2-A10.
- The following grid cells had at least one COPC exceeding a screening level at 2 feet bgs, but all COPCs are vertically delineated at 3 feet bgs: P2-A8 and P2-A9.
- The following grid cells had at least one COPC exceeding a screening level at 3 feet bgs, but all COPCs are vertically delineated at 4 feet bgs: P2-B3, P2-B5, and P2-B8.
- The following grid cells had at least one COPC exceeding a screening level at 4 feet bgs, but all COPCs are vertically delineated at 5 feet bgs: P2-B1, P2-B4, P2-B6, and P2-B7.
- The following grid cells had at least one COPC exceeding a screening level at 5 feet bgs, but all COPCs are vertically delineated at 6 feet bgs: P2-B2, P2-B9 and P2-B10.

8.1.3 Parcel 3

Parcel 3 are shown on Figure 3C.

Metals

Arsenic, lead and/or mercury were detected above screening criteria in the sample collected at 1.0 foot bgs from borings P3-1 through P3-4, P3-T1-1.0, and P3-T4-1.0. Arsenic was also detected above its screening criteria in the samples collected from 2.5 feet bgs at boring P3-2 and at 2.5 and 4.0 feet bgs at boring P3-4. In the grid cell samples, arsenic was detected above its screening criteria in samples collected between 2.0 and 5.0 feet at locations P3-A1, P3-A2, P3-A4, P3-A5, P3-A7, P3-A9, and P3-B1 through P3-B10.

Lead was also detected above its screening criteria in the samples collected at 1.0 foot bgs in the sample collected from boring P3-3 and at 1.0, 1.5, and 2.0 feet bgs from boring P3-T4. In the grid cell samples, lead was detected above its screening criteria in samples collected between 2.0 and 3.0 feet in grid cells P3-A1, P3-A4, P3-A7, P3-A9, P3-B1, P3-B4, P3-B6, P3-B7, P3-B8, and P3-B9.

Mercury was detected above its screening criterion in the samples collected from 1.0 foot bgs in boring P3-2 and from 2.0 and 3.0 feet bgs in grid cell sample P3-A1.

PAHs

One individual PAH, benzo(a)pyrene, was detected above its screening criterion in the sample collected at 1.0 foot bgs from boring P3-2. The calculated BaPe for this sample was below the screening criterion of 0.9 mg/kg.

Summary

- COPCs exceeded screening levels at 1.0 foot bgs in all four samples collected at that depth.
- The following grid cells did not have any COPCs exceeding their respective screening levels at two or three feet bgs: P3-A3, P3-A6, P3-A8, and P3-A10.
- The following grid cells had at least one COPC exceeding a screening level at 2 feet bgs, but all COPCs are vertically delineated at 3 feet bgs: P3-A4, P3-A5 and P3-A9.
- The following grid cells had at least one COPC exceeding a screening level at 3 feet bgs, but all COPCs are vertically delineated at 4 feet bgs: P3-A1, P3-A2, P3-A7, and P3-B10.
- The following grid cells had at least one COPC exceeding a screening level at 4 feet bgs, but all COPCs are vertically delineated at 5 feet bgs: P3-B2 through P3-B6, P3-B8, and P3-B9.
- The following grid cells had at least one COPC exceeding a screening level at 5 feet bgs, but all COPCs are vertically delineated at 6 feet bgs: P3-B1 and P3-B7.

8.1.4 Parcel 4

Parcel 4 are shown in Figure 3D.

Metals

At Parcel 4, arsenic was detected above screening criteria in the sample collected at 1.0 foot bgs from boring P4-1 through P4-4 and in the samples collected from 2.5 feet bgs in borings P4-1 and P4-4. Lead and mercury were also detected in the sample collected at 1.0 foot bgs from boring P4-1. In the grid cell samples, arsenic was detected above screening criteria in the samples collected from between 2.0 and 3.0 feet in grid cells P4-A1, P4-A2, P4-A7, P4-A8, and P4-B2 through P4-B10. Lead and mercury were detected in the sample collected at 2.0 feet bgs at grid cell P4-B10.

PAHs

Individual PAHs were detected above their screening criterion at the sample collected from 1.0 foot bgs at boring P4-1 (benzo(a)pyrene), the samples collected from 1.0 and 2.5 feet bgs at boring P4-4 and the sample collected at 2.0 feet bgs from grid cell P4-B10. The calculated value of BaPe for carcinogenic PAHs exceeded its screening threshold of 0.9 mg/kg in the sample collected at 1.0 foot bgs at boring P4-4.

Summary

- COPCs exceeded screening levels at 1.0 foot bgs in all four samples collected at that depth.
- The following grid cells did not have any COPCs exceeding their respective screening levels at 2 or 3 feet bgs: P4-A3, P4-A4, P4-A5, P4-A6, and P4-A9.
- The following grid cells had at least one COPC exceeding a screening level at 2 feet bgs, but all COPCs are vertically delineated at 3 feet bgs: P4-A1, P4-A2, P4-A7, P4-B2, P4-B3, P4-B5, P4-B7, P4-B8, and P4-B10.
- The following grid cells had at least one COPC exceeding a screening level at 3 feet bgs, but all COPCs are vertically delineated at 4 feet bgs: P4-A8, P4-B4, P4-B6, and P4-B9.

8.2 Sampling Within Encroachment Area at Parcel 1

To complete the general soil characterization of the southern portion of Parcel 1 that was inaccessible during the 2022 investigation, soil samples were collected from two locations (grid cells P1-A7 and P1-A8; Figure 3A) and analyzed for same expanded analytical suite that was used in the 2022 investigation which included Title 22 metals, organochlorine pesticides (OCPs), total petroleum hydrocarbons quantified as diesel (TPHd) and motor oil (TPHmo), and PAHs. Additionally, grid cells P1-A9, P1-A10, and P1-B7 are located on the encroachment area. Samples collected from these grid cells were analyzed for arsenic.

Metals, OCPs, TPHd, TPHmo, and PAHs were not detected at concentrations exceeding their respective screening criteria in the samples collected at 1.0 and 2.5 feet bgs at grid cell samples P1-A7 and P1-A8. Arsenic was detected in samples collected at 2.0 and 3.0 from grid cell P1-B7; arsenic did not exceed the screening criteria in the sample collected at 3.0 feet bgs at this location.

These results are consistent with the results from the northern portion of Parcel 1.

8.3 Vertical Delineation of Arsenic at Previous Sampling Locations

Additional sampling was conducted at Parcels 2 and 3 to address the remaining data gaps related to the vertical extent of arsenic in soil. During the 2022 soil investigation, arsenic was detected at concentrations exceeding background at a depth of 4 feet bgs (the total depth drilled) at boring P2-1 at Parcel 2 and boring P3-4 at Parcel 3 (GSI, 2022). Additional sampling was conducted at previous boring locations P2-1 and P3-4 to complete delineation of the vertical extent of arsenic in soil (Figures 3B and 3C). Soil samples were collected from approximately 5.0, 6.0, and 7.0 feet bgs from each boring (P2-1d and P3-4d).

At boring location P2-1, arsenic was detected at concentration exceeding the screening criterion of 11 mg/kg in the sample collected at 5.0 feet bgs (14 mg/kg); the concentration in the sample collected at 6.0 feet bgs (5.8 mg/kg) did not exceed the screening criterion.

At boring location P3-4, arsenic was not detected at concentration exceeding the screening criterion of 11 mg/kg in the samples collected at 5.0 feet bgs (6.9 mg/kg) or 6.0 feet bgs (5.8 mg/kg).

Based on these results, the vertical extent of arsenic-affected soil has been delineated at boring locations P2-1 and P3-4.

8.4 Delineation of PAHs on Parcel 4

Soil samples collected from three grid cells in Parcel 4 (P4-A9, P4-B9, and P4-B10) were analyzed for PAHs to delineate elevated concentrations of PAHs detected at previous boring location P4-4 (Figure 3D).

PAHs were not detected above laboratory screening levels in the samples collected from grid cells P4-B9 or P4-B10 with the exception of the sample collected at 2.0 feet from grid cell P4-B10. Benzo(a)pyrene was detected at a concentration exceeding its residential screening criterion at this location. The calculated BaPe for this sample was below the screening criterion of 0.9 mg/kg. Based on these results, the extent of PAHs in the vicinity of previous location P4-4 has been delineated.

8.5 Soil Characterization Near the Coast Live Oak Tree

Borings P3-T1 through P3-T4 were placed below the drip line of the Coast Live Oak within grid squares P3-A8 and P3-A9 (Figure 3C) to delineate the extent of arsenic previously detected at boring location P3-A9 and assess the extent of soil removal that would be required to remediate the soil immediately surrounding the tree. Soil samples were collected at depths of 1.0, 1.5, and 2.0 feet bgs.

The soil samples collected near the Coast Live Oak were analyzed for Site COPCs, which include:

- Arsenic, lead, and mercury, using USEPA Methods 6010B/7471A, and
- PAHs using USEPA Method 8270C with selective ion monitoring (SIM).

Arsenic and lead were the only COPCs detected at concentrations exceeding their respective screening criteria samples collected from borings P3-T1 through P3-T4.

Arsenic was detected at concentrations exceeding the screening criteria in the primary and duplicate soil sample (46 and 27 mg/kg) collected at 1.0 foot bgs in the sample collected at 2.0 feet bgs (27 mg/kg) from boring P3-T1, located within cell P3-A9.

Lead was detected at concentrations exceeding its screening criterion in the samples collected at 1.0, 1.5, and 2.0 feet bgs (190, 88, and 170 mg/kg, respectively) at boring P3-T4, located with grid cell P4-A9.

Both samples from within the tree drip line that contained metals concentrations exceeding screening levels are located in grid cell P3-A9. Based on these analytical results and the results, metals-impacted soil beneath the tree extends to at least 2 feet bgs. Based on the grid sampling, metals-impacted soil has been delineated at 3.0 feet bgs in grid cell P3-A9.

8.6 Waste Characterization Planning

For remediation planning purposes, analytical results for metals were compared to state and federal waster characterization screening criteria. Arsenic, lead, and mercury exceed 10xSTLC and 20xTC in several samples. Select samples were subjected to the WET and TCLP leaching tests and extracts were analyzed for arsenic, lead, and/or mercury. Of the WET leachate samples analyzed, only one sample contained concentrations of arsenic exceeding California hazardous waste criteria (STLC). Lead and mercury concentrations in the WET leachate did not exceed the STLC. TCLP leachate did not contain concentrations of arsenic, lead, or mercury exceeding the federal hazardous waste criteria (TC). Additional samples will likely be required for waste characterization during remediation.

9.0 CONCLUSIONS

The investigation activities completed for the Additional Soil Investigation and the Addendum to the Additional Soil Investigation confirmed the vertical and horizontal extents of the Site COPCs at Parcels 1 through 4. Remediation will be necessary to further Site redevelopment. The data collected to date will inform which remediation strategy is proposed. A Remedial Action Work Plan including a discussion of the data, a human health and ecological risk evaluation and a comparison of remediation alternatives will be prepared and submitted after receiving DTSC approval of this investigation report.

10.0 REFERENCES

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FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

TABLES

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Table 4. Pesticides in Soil

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TABLE 1: SOIL SAMPLING AND ANALYSIS SUMMARY
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Sample ID	Description	Sample Depth (feet bgs)	Analytes and Analytical Methods							Duplicate Sample ID ¹	
				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs		
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM		
1	P1-A2	Grid Cell A2	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	DUP-01-01112024	
1	P1-A3	Grid Cell A3	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-A4	Grid Cell A4	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-A5	Grid Cell A5	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-A6	Grid Cell A6	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-A7	Grid Cell A7 & Encroachment Area Sampling	0.5-1.0	X	--	--	X	X	X	X	--	
			2.0-2.5	X	--	--	X	X	X	X	--	
			3.5-4.0	NA	--	--	NA	NA	NA	NA	--	
	P1-A7d		5.0-5.5	--	--	--	NA	NA	NA	NA	--	
1	P1-A8	Grid Cell A8 & Encroachment Area Sampling	0.5-1.0	--	--	--	X	X	X	X	DUP-02-01112024	
			2.0-2.5	--	--	--	X	X	X	X	--	
			3.5-4.0	--	--	--	NA	NA	NA	NA	--	
	P1-A8d		5.0-5.5	--	--	--	NA	NA	NA	NA	--	
1	P1-A9	Grid Cell A9	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-A10	Grid Cell A10	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-B2	Grid Cell B2	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-B3	Grid Cell B3	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	NA	--	--	--	--	--	--	--	
1	P1-B4	Grid Cell B4	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	X	--	--	--	--	--	--	--	
1	P1-B5	Grid Cell B5	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	X	--	--	--	--	--	--	--	
	P1-B5d		4.5-5.0	X	--	--	--	--	--	--	--	DUP-2-240419
			5.5-6.0	NA	--	--	--	--	--	--	--	
			6.5-7.0	NA	--	--	--	--	--	--	--	
			7.5-8.0	NA	--	--	--	--	--	--	--	
1	P1-B6	Grid Cell B6	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	X	--	--	--	--	--	--	--	
	P1-B6d		4.5-5.0	X	--	--	--	--	--	--	--	
			5.5-6.0	X	--	--	--	--	--	--	--	
6.5-7.0			NA	--	--	--	--	--	--	--		
7.5-8.0			NA	--	--	--	--	--	--	--		
1	P1-B7	Grid Cell B7	1.5-2.0	X	--	--	--	--	--	--	--	
			2.5-3.0	X	--	--	--	--	--	--	--	
			3.5-4.0	X	--	--	--	--	--	--	--	

TABLE 1: SOIL SAMPLING AND ANALYSIS SUMMARY
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Sample ID	Description	Sample Depth (feet bgs)	Analytes and Analytical Methods							Duplicate Sample ID ¹
				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs	
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM	
2	P2-A4	Grid Cell A4	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A5	Grid Cell A5	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A6	Grid Cell A6	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A7	Grid Cell A7	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A8	Grid Cell A8	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A9	Grid Cell A9	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-A10	Grid Cell A10	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
2	P2-B1	Grid Cell B1	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P2-B1d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
2	P2-1d	Vertical Delineation (deeper sample depth at P2-1)	4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
2	P2-B3	Grid Cell B3	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
2	P2-B4	Grid Cell B4	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P2-B4d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
2	P2-B5	Grid Cell B5	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
2	P2-B6	Grid Cell B6	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	DUP-02-01082024
	P2-B6d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--

TABLE 1: SOIL SAMPLING AND ANALYSIS SUMMARY
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Sample ID	Description	Sample Depth (feet bgs)	Analytes and Analytical Methods							Duplicate Sample ID ¹
				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs	
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM	
2	P2-B7	Grid Cell B7	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P2-B7d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
2	P2-B8	Grid Cell B8	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
2	P2-B9	Grid Cell B9	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P2-B9d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
2	P2-B10	Grid Cell B10	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P2-B10d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-A1	Grid Cell A1	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	X	--	--	--	--	--
3	P3-A2	Grid Cell A2	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
3	P3-A3	Grid Cell A3	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A4	Grid Cell A4	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A5	Grid Cell A5	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A6	Grid Cell A6	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A7	Grid Cell A7	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	DUP-02-01092024
3	P3-A8	Grid Cell A8	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A9	Grid Cell A9	1.5-2.0	X	X	X	--	--	--	--	DUP-03-01092024
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
3	P3-A10	Grid Cell A10	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--

TABLE 1: SOIL SAMPLING AND ANALYSIS SUMMARY
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Berkeley, California

Parcel	Sample ID	Description	Sample Depth (feet bgs)	Analytes and Analytical Methods							Duplicate Sample ID ¹
				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs	
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM	
3	P3-B1	Grid Cell B1	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B1d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B2	Grid Cell B2	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	DUP-01-01092024
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B2d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B3	Grid Cell B3	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B3d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B4	Grid Cell B4	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	X	NA	--	--	--	--	--
	P3-B4d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B5	Grid Cell B5	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B5d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B6	Grid Cell B6	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B6d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B7	Grid Cell B7	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B7d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--

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Parcel	Sample ID	Description	Sample Depth (feet bgs)	Analytes and Analytical Methods							Duplicate Sample ID ¹
				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs	
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM	
3	P3-B8	Grid Cell B8	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	X	NA	--	--	--	--	--
	P3-B8d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-4d	Vertical Delineation (deeper sample depth at P3-4)	4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	X	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
3	P3-B9	Grid Cell B9	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
	P3-B9d		4.5-5.0	X	--	--	--	--	--	--	--
			5.5-6.0	NA	--	--	--	--	--	--	--
			6.5-7.0	NA	--	--	--	--	--	--	--
			7.5-8.0	NA	--	--	--	--	--	--	--
			9.5-10.0	NA	--	--	--	--	--	--	--
3	P3-B10	Grid Cell B10	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--
3	P3-T1	Characterization Near Protected Tree	0.5-1.0	X	X	X	--	--	--	X	DUP-3-240418
			1.0-1.5	X	NA	NA	--	--	--	NA	--
			1.5-2.0	X	NA	NA	--	--	--	NA	--
3	P3-T2	Characterization Near Protected Tree	0.5-1.0	X	X	X	--	--	--	X	--
			1.0-1.5	NA	NA	NA	--	--	--	NA	--
			1.5-2.0	NA	NA	NA	--	--	--	NA	--
3	P3-T3	Characterization Near Protected Tree	0.5-1.0	X	X	X	--	--	--	X	--
			1.0-1.5	NA	NA	NA	--	--	--	NA	--
			1.5-2.0	NA	NA	NA	--	--	--	NA	--
3	P3-T4	Characterization Near Protected Tree	0.5-1.0	X	X	X	--	--	--	X	--
			1.0-1.5	NA	X	NA	--	--	--	NA	--
			1.5-2.0	NA	X	NA	--	--	--	NA	--
4	P4-A1	Grid Cell A1	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A2	Grid Cell A2	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A3	Grid Cell A3	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A4	Grid Cell A4	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A5	Grid Cell A5	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A6	Grid Cell A6	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--
4	P4-A7	Grid Cell A7	1.5-2.0	X	X	X	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--

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				Arsenic	Lead	Mercury	Title 22 Metals	OCPs	TPHd/TPHmo	PAHs		
				EPA 6010B	EPA 6010B	EPA 7471A	EPA 6010B/7471A	EPA 8081A	EPA 8015M	EPA 8270C SIM		
4	P4-A8	Grid Cell A8	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	DUP-01-01122024
			3.5-4.0	X	NA	NA	--	--	--	--	--	--
4	P4-A9	Grid Cell A9; PAH Step-out sampling	1.5-2.0	X	X	X	--	--	--	X	--	--
			2.5-3.0	X	X	X	--	--	--	X	--	--
			3.5-4.0	NA	NA	NA	--	--	--	NA	--	--
4	P4-B2	Grid Cell B2	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--	DUP-01-01102024
4	P4-B3	Grid Cell B3	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--	--
4	P4-B4	Grid Cell B4	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--	--
4	P4-B5	Grid Cell B5	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	DUP-02-01102024
			3.5-4.0	NA	NA	NA	--	--	--	--	--	--
4	P4-B6	Grid Cell B6	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	X	NA	NA	--	--	--	--	--	--
4	P4-B7	Grid Cell B7	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--	--
4	P4-B8	Grid Cell B8	1.5-2.0	X	X	X	--	--	--	--	--	--
			2.5-3.0	X	X	X	--	--	--	--	--	--
			3.5-4.0	NA	NA	NA	--	--	--	--	--	--
4	P4-B9	Grid Cell B9; PAH Step-out sampling	1.5-2.0	X	X	X	--	--	--	X	--	--
			2.5-3.0	X	X	X	--	--	--	X	--	--
			3.5-4.0	NA	NA	NA	--	--	--	NA	--	--
4	P4-B10	Grid Cell A10; PAH Step-out sampling	1.5-2.0	X	X	X	--	--	--	X	--	--
			2.5-3.0	X	X	X	--	--	--	X	--	--
			3.5-4.0	NA	NA	NA	--	--	--	NA	--	--

Notes:

1. Duplicate samples were analyzed for the same constituents as the primary sample.

Abbreviations:

X = sample was analyzed

NA = sample was placed on hold and not analyzed

OCPs = organochlorine pesticides

PAHs = polycyclic aromatic hydrocarbons

-- = not applicable

bgs = below ground surface

SIM = selective ion monitoring

TPHd = total petroleum hydrocarbons quantified as diesel

TPHmo = total petroleum hydrocarbons quantified as motor oil

TABLE 2: METALS IN SOIL
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Sample Depth	Title 22 Metals																							
					CASRN	Antimony	Arsenic	Arsenic WET	Arsenic TCLP	Barium	Beryllium	Cadmium	Chromium (total)	Cobalt	Copper	Lead	Lead WET	Lead TCLP	Mercury	Mercury WET	Mercury TCLP	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					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			7439-97-6			7439-98-7	7440-02-0	7782-49-2	7440-22-4	7440-28-0	7440-62-2	7440-66-6	
Sample Depth (ft bgs)	mg/kg		mg/L		mg/kg						mg/L		mg/kg		mg/L		mg/kg											
2022 Soil Investigation																												
P1-1	P1-1-1.0	7/13/2022	1.0	0.91	9.3	--	--	180	0.56	<0.50	62	15	37	34	--	--	0.30	--	--	0.78	57	1.2	<0.50	<0.50	72	100		
	P1-1-2.5	7/13/2022	2.5	<0.50	8.4	--	--	200	0.65	<0.50	69	17	33	9.0	--	--	<0.050	--	--	0.90	67	1.3	<0.50	<0.50	74	72		
	P1-1-4.0	7/13/2022	4.0	<0.50	6.1	--	--	180	0.63	<0.50	70	12	29	6.8	--	--	<0.050	--	--	<0.50	58	1.2	<0.50	<0.50	71	59		
P1-2	P1-2-1.0	7/13/2022	1.0	--	62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-2-2.5	7/13/2022	2.5	1.3	12	--	--	300	0.73	<0.50	37	16	28	13	--	--	0.079	--	--	1.3	53	1.3	<0.50	<0.50	40	66		
	P1-2-4.0	7/13/2022	4.0	--	5.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-3	P1-3-1.0	7/13/2022	1.0	2.7	83	--	--	190	0.50	<0.50	33	19	32	34	--	--	0.23	--	--	1.0	48	1.1	<0.50	<0.50	42	74		
	P1-3-2.5	7/13/2022	2.5	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-3-4.0	7/13/2022	4.0	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2024 Soil Investigation																												
P1-A2	P1-A2-2.0	1/11/2024	2.0	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A2-3.0	1/11/2024	3.0	--	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A3	P1-A3-2.0	1/11/2024	2.0	--	5.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A3-3.0	1/11/2024	3.0	--	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A4	P1-A4-2.0	1/11/2024	2.0	--	4.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A4-3.0	1/11/2024	3.0	--	5.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A5	P1-A5-2.0	1/11/2024	2.0	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A5-3.0	1/11/2024	3.0	--	4.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A6	P1-A6-2.0	1/11/2024	2.0	--	5.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A6-3.0	1/11/2024	3.0	--	5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A7	P1-A7-1.0	1/11/2024	1.0	<2.9 UJ	8.0	--	--	160	<0.48	<0.48	50	12	31	34	--	--	<0.16	--	--	<1.1	45	<2.9	<0.48	<2.9	58	81		
	P1-A7-2.5	1/11/2024	2.5	<2.9 UJ	4.1	--	--	130	<0.49	<0.49	46	11	20	6.0	--	--	<0.16	--	--	<1.1	41	<2.9	<0.49	<2.9	55	40		
P1-A8	P1-A8-1.0	1/11/2024	1.0	<2.9 UJ	7.5	--	--	200	0.49	0.71	47	23	35	54	0.16	--	<0.16	--	--	<1	52	<2.9	<0.48	<2.9	63	100		
	P1-A8-1.0(DUP)	1/11/2024	1.0	<2.9 UJ	6.1	--	--	170	<0.48	<0.48	48	14	33	47	--	--	<0.16	--	--	<1.0	46	<2.9	<0.48	<2.9	58	95		
	P1-A8-2.5	1/11/2024	2.5	<2.9 UJ	5.5	--	--	140	<0.49	<0.49	40	11	21	9.5	--	--	<0.16	--	--	<1.0	40	<2.9	0.51	<2.9	57	41		
P1-A9	P1-A9-2.0	1/11/2024	2.0	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A9-3.0	1/11/2024	3.0	--	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-A10	P1-A10-2.0	1/11/2024	2.0	--	4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-A10-3.0	1/11/2024	3.0	--	4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B2	P1-B2-2.0	1/11/2024	2.0	--	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B2-3.0	1/11/2024	3.0	--	4.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B3	P1-B3-2.0	1/11/2024	2.0	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B3-3.0	1/11/2024	3.0	--	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B4	P1-B4-2.0	1/11/2024	2.0	--	62	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B4-3.0	1/11/2024	3.0	--	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B4-4.0	1/11/2024	4.0	--	9.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B5	P1-B5-2.0	1/11/2024	2.0	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B5-3.0	1/11/2024	3.0	--	150	2.5	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B5-4.0	1/11/2024	4.0	--	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B5D-5.0	4/19/2024	5.0	--	5.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B5D-5.0(DUP)	4/19/2024	5.0	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
P1-B6	P1-B6-2.0	1/11/2024	2.0	--	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B6-3.0	1/11/2024	3.0	--	110	1.2	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B6-4.0	1/11/2024	4.0	--	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B6D-5.0	4/19/2024	5.0	--	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B7	P1-B6D-6.0	4/19/2024	6.0	--	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B7-2.0	1/11/2024	2.0	--	32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	P1-B7-3.0	1/11/2024	3.0	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
P1-B7-4.0	1/11/2024	4.0	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

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TABLE 2: METALS IN SOIL
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Sample Depth	Title 22 Metals																											
					Antimony	Arsenic	Arsenic WET	Arsenic TCLP	Barium	Beryllium	Cadmium	Chromium (total)	Cobalt	Copper	Lead	Lead WET	Lead TCLP	Mercury	Mercury WET	Mercury TCLP	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc					
					CASRN	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			7439-97-6			7439-98-7	7440-02-0	7782-49-2	7440-22-4	7440-28-0	7440-62-2	7440-66-6					
Sample Depth (ft bgs)	mg/kg		mg/L		mg/kg						mg/L		mg/kg	mg/L		mg/kg																
4	P4-B5	P4-B5-2.0	1/10/2024	2.0	--	130	--	--	--	--	--	--	--	--	18	--	--	0.28	--	--	--	--	--	--	--	--						
		P4-B5-2.0(DUP)	1/10/2024	2.0	--	89	0.61	--	--	--	--	--	--	--	12	--	--	0.29	--	--	--	--	--	--	--	--						
		P4-B5-3.0	1/10/2024	3.0	--	2.2	--	--	--	--	--	--	--	--	5.4	--	--	<0.14	--	--	--	--	--	--	--	--						
	P4-B6	P4-B6-2.0	1/10/2024	2.0	--	75	--	--	--	--	--	--	--	--	13	--	--	<0.15	--	--	--	--	--	--	--	--						
		P4-B6-3.0	1/10/2024	3.0	--	30	--	--	--	--	--	--	--	--	9.4	--	--	<0.16	--	--	--	--	--	--	--	--						
		P4-B6-4.0	1/10/2024	4.0	--	4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
	P4-B7	P4-B7-2.0	1/10/2024	2.0	--	73	--	--	--	--	--	--	--	--	9.5	--	--	<0.16	--	--	--	--	--	--	--	--						
		P4-B7-3.0	1/10/2024	3.0	--	6.1	--	--	--	--	--	--	--	--	6.0	--	--	0.18	--	--	--	--	--	--	--	--						
	P4-B8	P4-B8-2.0	1/10/2024	2.0	--	38	--	--	--	--	--	--	--	--	12	--	--	<0.15	--	--	--	--	--	--	--	--						
		P4-B8-3.0	1/10/2024	3.0	--	8.7	--	--	--	--	--	--	--	--	7.3	--	--	<0.15	--	--	--	--	--	--	--	--						
	P4-B9	P4-B9-2.0	1/10/2024	2.0	--	16	--	--	--	--	--	--	--	--	13	--	--	<0.16	--	--	--	--	--	--	--	--						
		P4-B9-3.0	1/10/2024	3.0	--	5.4	--	--	--	--	--	--	--	--	6.4	--	--	<0.15	--	--	--	--	--	--	--	--						
	P4-B10	P4-B10-2.0	1/10/2024	2.0	--	21	--	--	--	--	--	--	--	--	180	1.3	0.034	4.8	0.034	<0.010	--	--	--	--	--	--						
		P4-B10-3.0	1/10/2024	3.0	--	6.1	--	--	--	--	--	--	--	--	7.2	--	--	0.41	--	--	--	--	--	--	--	--						
Screening Criteria																																
Residential DTSC-SLs ²					31	11 ³	NA	NA	15,000	16	7.1	85,000	23	3,100	80	NA	NA	1.0	NA	NA	390	820	390	390	0.78	390	23,000					
Commercial/Industrial DTSC-SLs ²					470	11 ³	NA	NA	220,000	230	79	360,000	350	47,000	500	NA	NA	4.4	NA	NA	5,800	11,000	5,800	5,800	12	5,800	350,000					
Total Threshold Limit Concentration ⁴					500	500	NA	NA	10,000	75	100	2,500	8,000	2,500	1000	NA	NA	20	NA	NA	3,500	2,000	100	500	700	2,400	5,000					
Soluble Threshold Leaching Criteria (STLC) ⁵					NA	5	5	NA	NA	NA	NA	NA	NA	NA	5	5	NA	NA	0.2	NA	NA	NA	NA	NA	NA	NA	NA					
10 x Soluble Threshold Leaching Criteria ⁶					150	50	NA	NA	1,000	7.5	10	50	800	250	50	NA	NA	2	NA	NA	3,500	200	10	50	70	240	2,500					
Toxicity Criteria					NA	5	NA	5	NA	NA	NA	NA	NA	NA	5	NA	5	NA	NA	0.2	NA	NA	NA	NA	NA	NA	NA					
20x Toxicity Criteria ⁶					None	100	NA	NA	2,000	None	20	100	None	None	100	NA	NA	4	NA	NA	None	None	20	100	None	None	None					

Notes:

- Soil samples collected by GSI Environmental Inc. and analyzed by Enthalpy Analytical using USEPA Methods 6010B and 7471A (for mercury). Select samples were analyzed by McCampbell Analytical for metals using USEPA Method 6020.
- Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California DTSC (2022).
- Analytical results for arsenic in soil are compared to the 99th percentile of background arsenic concentrations as presented by Duvergé (2011).
- Total Threshold Limit Concentration, as presented in the CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- The Soluble Threshold Limit Concentration, as presented in CCR Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
- Ten times the Soluble Threshold Limit Concentration, as presented in CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- The Toxicity Criteria, as presented in the CFR, Title 40, Part 261, Subpart C, Section 261.24.
- Twenty times the Toxicity Criteria, as presented in the CFR, Title 40, Part 261, Subpart C, Section 261.24.

Abbreviations:

< = analyte not detected above the reporting limit shown
 -- = not analyzed
bold = analyte detected above the reporting limit
 Shaded concentrations indicate analyte exceeds either USEPA or DTSC residential screening level.
 CASRN = chemical abstract services registry number
 CCR = California Code of Regulations
 CFR = Code of Federal Regulations
 DUP = duplicate sample
 DTSC = Department of Toxic Substances Control

ft bgs = feet below ground surface
 HERO = Human and Ecological Risk Office
 J = The value is estimated because the Matrix Spike (MS)/Matrix Spike Duplicate (MSD) results are outside specifications.
 mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 NA = not applicable
 R = The data are rejected because the MS/MSD results are outside specifications or the holding time was exceeded
 UJ = The non-detected data is estimated because the Matrix Spike (MS)/Matrix Spike Duplicate (MSD) results are outside specifications
 USEPA = United States Environmental Protection Agency

References:

DTSC. 2022. HERO, HHRA Note Number 3. May. Available at: <https://dtsc.ca.gov/wp-content/uploads/sites/31/2022/02/HHRA-Note-3-June2020-Revised-May2022A.pdf>
 Duvergé, Dylan Jacques. 2011. Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region. December.
 USEPA. 2024. Regional Screening Levels. May.

TABLE 3: POLYCYCLIC AROMATIC HYDROCARBONS IN SOIL

Santa Fe Tracked to Park
Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Analyte	Polycyclic Aromatic Hydrocarbons																			
					Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluoranthene	Fluorene	Indeno-(1,2,3-cd)-pyrene	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Phenanthrene	Pyrene	BaPe ²	
					CASRN	83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	218-01-9	53-70-3	206-44-0	86-73-7	193-39-5	90-12-0	91-57-6	91-20-3	85-01-8	129-00-0	NA
					Concentration (mg/kg)																			
2022 Soil Investigation																								
4	P4-1	P4-1-1.0	7/13/2022	1.0	<0.250	<0.250	<0.250	<0.250	0.310	0.290	0.250	0.270	0.260	<0.250	<0.250	<0.250	0.290	<0.250	<0.250	<0.250	<0.250	0.260	0.646	
		P4-1-2.5	7/13/2022	2.5	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
	P4-2	P4-2-1.0	7/13/2022	1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
		P4-2-2.5	7/13/2022	2.5	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
	P4-3	P4-3-1.0	7/13/2022	1.0	<0.010 R	<0.010 R	0.014 J	0.036 J	0.066 J	0.042 J	0.036 J	0.047 J	0.045 J	<0.010 R	0.040 J	<0.010 R	0.039 J	<0.010 R	<0.010 R	<0.010 R	0.019 J	0.048 J	0.088	
		P4-3-2.5	7/13/2022	2.5	0.012	<0.010	0.048	0.079	0.066	0.049	0.033	0.049	0.064	<0.010	0.170	0.021	0.042	<0.010	<0.010	<0.010	0.210	0.160	0.094	
	P4-4	P4-4-1.0	7/13/2022	1.0	<0.200	<0.200	<0.200	1.70	3.50	2.40	2.30	2.40	1.80	0.540	1.10	<0.200	3.10	<0.200	<0.200	<0.200	0.260	1.500	4.79	
		P4-4-2.5	7/13/2022	2.5	<0.010 R	<0.010 R	0.013 J	0.200 J	0.390 J	0.260 J	0.250 J	0.270 J	0.190 J	0.079 J	0.140 J	<0.010 R	0.350 J	<0.010 R	<0.010 R	<0.010 R	0.046 J	0.180 J	0.553	
		P4-4-4.0	7/13/2022	4.0	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	<0.0099 R	NA	
	2024 Soil Investigation																							
	P4-B9	P4-B9-2.0	1/10/2024	2.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
		P4-B9-3.0	1/10/2024	3.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA
P4-B10	P4-B10-2.0	1/10/2024	2.0	<0.250	<0.250	<0.250	0.140 J	0.270	0.260	0.220 J	0.093 J	0.180 J	<0.130 ⁸	0.280	<0.250	0.220 J	<0.250	<0.250	<0.250	0.110 J	0.340	0.583		
	P4-B10-3.0	1/10/2024	3.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	
Screening Criteria²																								
Residential Risk-Based Screening Levels ³					3300	None	17000	1.1	0.11	1.1	None	11	110	0.028	2400	2300	1.1	9.9	190	2.0	None	1800	0.9 ⁴	
Commercial/Industrial Risk-Based Screening Levels ³					23000	None	130000	12	1.3	13	None	130	1300	0.31	18000	17000	13	30	1300	6.5	None	13000	0.9 ⁴	
Total Threshold Limit Concentration ⁵					None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	
10x Soluble Threshold Limit Concentration ⁶					None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	
20x Toxicity Criteria ⁷					None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	

Notes:

- Soil samples collected by GSI Environmental Inc. And analyzed by Enthalpy Analytical for polycyclic aromatic hydrocarbons (PAHs) using United States Environmental Protection Agency (USEPA) Method 8270C with selective ion monitoring (SIM).
- BaPe is calculated using potency equivalency factors for seven PAHs considered carcinogenic by the State of California. These PAHs, with their corresponding equivalency factors, are: benzo(a)anthracene (0.1), benzo(a)pyrene (1), benzo(b)fluoranthene (0.1), benzo(k)fluoranthene (0.1), chrysene (0.01), dibenzo(a,h)anthracene (0.34), and indeno(1,2,3-cd)pyrene (0.1). Note that while naphthalene is the eighth carcinogenic PAH, it is not included in the BaPe because this PAH is evaluated separately from the other PAHs.
- Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).
- BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009).
- Total Threshold Limit Concentration, as presented in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- Ten times the Soluble Threshold Limit Concentration, as presented in CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- Twenty times the Toxicity Criteria, as presented in the Code of Federal Regulations (CFR), Title 40, Part 261, Subpart C, Section 261.24.
- Result reported to the method detection limit.

Abbreviations:

bold = analyte detected above the reporting limit
 Shaded concentrations indicate detect or non-detect MDL exceedance of residential screening criteria.
 < = analyte not detected above the reporting limit shown
 BaPe = benzo(a)pyrene equivalent value
 CASRN = chemical abstract services registry number
 DUP = duplicate sample
 ft bgs = feet below ground surface
 J = The detected result is estimated.
 mg/kg = milligrams per kilogram
 NA = not applicable; PAHs were not detected; therefore, a BaPe was not calculated
 R = The non-detected result is rejected because the holding time was exceeded.

References:

- California Department of Toxic Substances Control (DTSC), 2009, Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process, July 1.
 DTSC, 2015, Preliminary Endangerment Assessment Guidance Manual, October.
 DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 United States Environmental Protection Agency, 2024, Regional Screening Levels, May.

TABLE 4: PESTICIDES IN SOIL
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Analyte	Organochlorine Pesticides																				
					Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC	Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	
					CASRN	309-00-2	319-84-6	319-85-7	319-86-8	58-89-9	12789-03-6	72-54-8	72-55-9	50-29-3	60-57-1	959-98-8	33213-65-9	1031-07-8	72-20-8	7421-93-4	53494-70-5	76-44-8	1024-57-3	72-43-5	8001-35-2
Sample Depth (ft bgs)	Concentration (mg/kg)																								
2022 Soil Investigation																									
1	P1-1	P1-1-1.0	7/13/2022	1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.020	<0.200		
		P1-1-2.5	7/13/2022	2.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
		P1-1-4.0	7/13/2022	4.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
	P1-2	P1-2-2.5	7/13/2022	2.5	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.098	
	P1-3	P1-3-1.0	7/13/2022	1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.100	
2024 Soil Investigation																									
1	P1-A7	P1-A7-1.0	1/11/2024	1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099	<0.099		
		P1-A7-2.5	1/11/2024	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.100	
	P1-A8	P1-A8-1.0	1/11/2024	1.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.057	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.098	
		P1-A8-1.0(DUP)	1/11/2024	1.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0100	<0.100	
		P1-A8-2.5	1/11/2024	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099	<0.099	
2022 Soil Investigation																									
2	P2-1	P2-1-2.5	7/13/2022	2.5	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099	<0.099		
		P2-2	P2-2-1.0	7/13/2022	1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.100	<0.010	<0.010	0.012 C J	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.200
	P2-3	P2-3-1.0	7/13/2022	1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.099	<0.0099	0.025	0.024	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.020	<0.200
		P2-3-2.5	7/13/2022	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099	<0.099	
	P2-4	P2-4-1.0	7/13/2022	1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.200	
2022 Soil Investigation																									
3	P3-1	P3-1-2.5	7/13/2022	2.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
		P3-2	P3-2-1.0	7/13/2022	1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.098	<0.0098	0.011 C	0.040	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.020	<0.200
	P3-3	P3-2-2.5	7/13/2022	2.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
		P3-3-1.0	7/13/2022	1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.099	<0.0099	<0.0099	<0.0099	0.010	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.020	<0.200
		P3-3-2.5	7/13/2022	2.5	<0.025	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.049	<0.490
P3-4	P3-4-1.0	7/13/2022	1.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.050	<0.500	
2022 Soil Investigation																									
4	P4-1	P4-1-1.0	7/13/2022	1.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.250	<0.025	0.037	0.140	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.050	<0.500
		P4-1-2.5	7/13/2022	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099	<0.099
	P4-2	P4-2-1.0	7/13/2022	1.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
		P4-2-2.5	7/13/2022	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.100	
	P4-3	P4-3-2.5	7/13/2022	2.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.100	
P4-4	P4-4-1.0	7/13/2022	1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.200		
Screening Criteria																									
Residential Risk-Based Screening Levels ²					0.039	0.086	0.3	0.3 ³	0.57	1.7	1.9	2.0	1.9	0.034	450	450 ⁴	380	19	19 ⁵	19 ⁵	0.13	0.07	320	0.45	
Commercial/Industrial Risk-Based Screening Levels ²					0.18	0.24	0.82	0.82 ³	2	6.1	6.2	9.3	7.1	0.093	6000	6000 ⁴	3200	160	160 ⁵	160 ⁵	0.63	0.33	2600	1.2	
Total Threshold Limit Concentration ⁶					1.4	None	None	None	None	2.5	1.0	1.0	1.0	8.0	None	None	None	0.2	None	None	4.7	None	100	5.0	
10x Soluble Threshold Limit Concentration ⁷					1.4	None	None	None	None	2.5	1.0	1.0	1.0	8.0	None	None	None	0.2	None	None	4.7	None	100	5.0	
20x Toxicity Criteria ⁸					None	None	None	None	None	0.6	None	None	None	None	None	None	None	0.4	None	None	0.16	None	200	10	

Notes:

- Soil samples collected by GSI Environmental Inc. and analyzed by Enthalpy Analytical for organochlorine pesticides using United States Environmental Protection Agency (USEPA) Method 8081A.
- Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).
- There are currently no published DTSC-SLs for delta-BHC; therefore, the residential and commercial/industrial DTSC-SLs for beta-BHC are used as surrogate SLs for this analyte.
- There are currently no published DTSC-SLs for endosulfan II; therefore, the residential and commercial/industrial DTSC-SLs for endosulfan I are used as surrogate SLs for this analyte.
- There are currently no published DTSC-SLs for endrin aldehyde and endrin ketone; therefore, the residential and commercial/industrial DTSC-SLs for endrin are used as surrogate SLs for this analyte.
- Total Threshold Limit Concentration, as presented in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- Ten times the Soluble Threshold Limit Concentration, as presented in CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- Twenty times the Toxicity Criteria, as presented in the Code of Federal Regulations (CFR), Title 40, Part 261, Subpart C, Section 261.24.

Abbreviations:

< = analyte not detected above the reporting limit shown
bold = analyte detected above the reporting limit
CASRN = chemical abstract services registry number
C = Presence confirmed, but the Relative Percent Difference (RPD) between columns exceeds 40%
DUP = duplicate sample
ft bgs = feet below ground surface
J = The detected result is an estimate
mg/kg = milligrams per kilogram

References:

DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
United States Environmental Protection Agency, 2024, Regional Screening Levels, May.

TABLE 5: TOTAL PETROLEUM HYDROCARBONS IN SOIL
Santa Fe Trackbed to Park
 Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Sample Depth	Total Petroleum Hydrocarbons	
					TPH-d	TPH-mo
				feet bgs	mg/kg	
1	2022 Soil Investigation					
	P1-1	P1-1-1.0	7/13/2022	1.0	<10	<20
		P1-1-2.5	7/13/2022	2.5	<10	<20
		P1-1-4.0	7/13/2022	4.0	<10	<20
	P1-2	P1-2-2.5	7/13/2022	2.5	<10	<20
	P1-3	P1-3-1.0	7/13/2022	1.0	14	22
	2024 Soil Investigation					
	P1-A7	P1-A7-1.0	1/11/2024	1.0	<10	<20
		P1-A7-2.5	1/11/2024	2.5	<10	<20
	P1-A8	P1-A8-1.0	1/11/2024	1.0	<10	<20
P1-A8-1.0(DUP)		1/11/2024	1.0	11	<20	
P1-A8-2.5		1/11/2024	2.5	<9.9	<20	
2	2022 Soil Investigation					
	P2-1	P2-1-2.5	7/13/2022	2.5	<10	<20
	P2-2	P2-2-1.0	7/13/2022	1.0	20	51
	P2-3	P2-3-1.0	7/13/2022	1.0	25	61
		P2-3-2.5	7/13/2022	2.5	<10	<20
	P2-4	P2-4-1.0	7/13/2022	1.0	47	89
3	2022 Soil Investigation					
	P3-1	P3-1-2.5	7/13/2022	2.5	<10	<20
	P3-2	P3-2-1.0	7/13/2022	1.0	<50	<100
		P3-2-2.5	7/13/2022	2.5	<10	<20
	P3-3	P3-3-1.0	7/13/2022	1.0	120	87
		P3-3-2.5	7/13/2022	2.5	160	490
P3-4	P3-4-1.0	7/13/2022	1.0	65	210	
4	2022 Soil Investigation					
	P4-1	P4-1-1.0	7/13/2022	1.0	<50	<100
		P4-1-2.5	7/13/2022	2.5	<10	<20
	P4-2	P4-2-1.0	7/13/2022	1.0	<10	<20
		P4-2-2.5	7/13/2022	2.5	<10	<20
	P4-3	P4-3-2.5	7/13/2022	2.5	<10	<20
P4-4	P4-4-1.0	7/13/2022	1.0	45	76	

TABLE 5: TOTAL PETROLEUM HYDROCARBONS IN SOIL
Santa Fe Trackbed to Park
Berkeley, California

Parcel	Boring	Sample Name	Date Collected	Sample Depth	Total Petroleum Hydrocarbons	
				feet bgs	TPH-d	TPH-mo
					mg/kg	
Screening Criteria						
Residential Risk-Based Screening Levels ²				260	12,000	
Commercial/Industrial Risk-Based Screening Levels ²				1,200	180,000	
Total Threshold Limit Concentration ³				None	None	
10x Soluble Threshold Limit Concentration ⁴				None	None	
20x Toxicity Criteria ⁵				None	None	

Notes:

1. Soil samples collected by GSI Environmental Inc. and analyzed by Enthalpy Analytical for TPH using United States Environmental Protection Agency (USEPA) Method 8015M.
2. Direct exposure environmental screening levels for human health published by the San Francisco Bay Regional Water Quality Control Board (Water Board, 2019).
3. Total Threshold Limit Concentration, as presented in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
4. Ten times the Soluble Threshold Limit Concentration, as presented in CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
5. Twenty times the Toxicity Criteria, as presented in the Code of Federal Regulations (CFR), Title 40, Part 261, Subpart C, Section 261.24.

Abbreviations:

- < = analyte not detected above the reporting limit shown
- bold** = analyte detected above the reporting limit
- bgs = below ground surface
- DUP = duplicate sample
- mg/kg = milligrams per kilogram
- TPH = total petroleum hydrocarbons
- TPHd = TPH quantified as diesel (diesel range organics [DRO] C10-C28)
- TPHmo = TPH quantified as motor oil (oil range organics [ORO] C28-C44)

References:

San Francisco Bay Regional Water Quality Control Board (Water Board), 2019, Environmental Screening Levels, Summary Tables, January (Rev. 2).

TABLE 6: WASTE CHARACTERIZATION ANALYSIS SUMMARY

Santa Fe Trackbed to Park
Berkeley, California

Analyte ¹	California Waste Characterization Criteria ²						Federal Waste Characterization Criteria ³				
	No. Samples > TTLC	No. Samples >10xSTLC	WET - No. of Samples Analyzed ⁴	Concentration Range of Samples Analyzed using WET (mg/kg)	WET Results Concentration Range (mg/L)	No. Samples Exceeding CA Hazardous Waste Criteria (STLC)	Number Samples >20xTC	TCLP - No. of Samples Analyzed	Concentration Range of Samples Analyzed using TCLP (mg/kg)	TCLP Results Concentration Range (mg/L)	No. Samples Exceeding RCRA Hazardous Waste Criteria (TC)
Arsenic	0	51	16	53 - 310	0.61 - 10	1	18	8	100 - 310	0.079 - 0.43	0
Lead	0	46	15	52 - 180	<0.15 - 1.3	0	12	5	110 - 180	<0.015 - 0.034	0
Mercury	0	6	4	4.5 - 16	0.012 - 0.052	0	4	4	4.5 - 16	<0.010	0

Notes:

- Waste characterization leaching tests were performed on select samples for remediation planning purposes. Analytical results are presented on Table 2.
- CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.
- CFR, Title 40, Part 261, Subpart C, Section 261.24.
- The extract from the WET for one sample with a total arsenic concentration of 21 mg/kg was erroneously analyzed for arsenic. This sample is not included in this summary because total arsenic concentrations did not exceed 10 x STLC.

Abbreviations:

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
RCRA = Resource Conservation and Recovery Act
STLC = soluble threshold limit concentration
TC = toxicity criteria
TCLP = toxicity characteristic leaching procedure
TTLC = total threshold limit concentration
WET = waste extraction test

FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

FIGURES

Figure 1. Site Location Map

Figure 2. Site Overview

Figure 3a. Vertical Delineation of Affected Soil – Parcel 1

Figure 3b. Soil Sampling Results – Metals, Parcel 1

Figure 3c. Soil Sampling Results – PAHs, Parcel 1

Figure 4a. Vertical Delineation of Affected Soil – Parcel 2

Figure 4b. Soil Sampling Results – Metals, Parcel 2

Figure 4c. Soil Sampling Results – PAHs, Parcel 2

Figure 5a. Vertical Delineation of Affected Soil – Parcel 3

Figure 5b. Soil Sampling Results – Metals, Parcel 3

Figure 5c. Soil Sampling Results – PAHs, Parcel 3

Figure 5d. Soil Sampling Results – Targeted Samples, Parcel 3

Figure 6a. Vertical Delineation of Affected Soil – Parcel 4

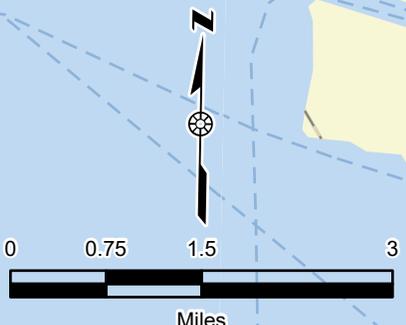
Figure 6b. Soil Sampling Results – Metals, Parcel 4

Figure 6c. Soil Sampling Results – PAHs, Parcel 4

Figure 7. Conceptual Site Exposure Model

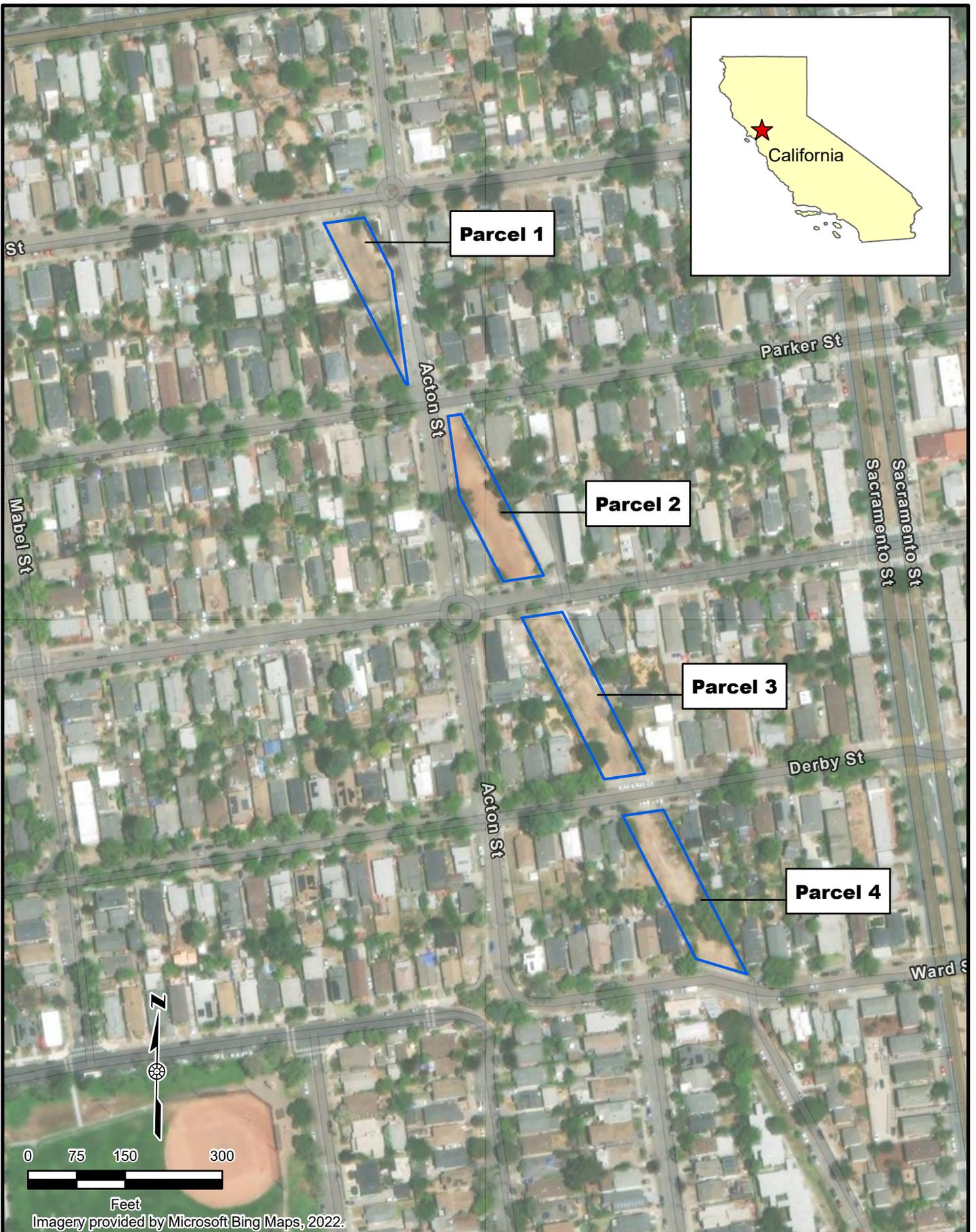


SITE LOCATION



Imagery provided by Microsoft Bing Maps, 2022.

	GSI job No. 6272	Drawn By: AV	SITE LOCATION MAP Santa Fe Tracked to Park Berkeley, California
	Issued: 5-Oct-2023	Chk'd By: TRK	
		App'v'd By: JPD	
	Map ID: SFROW_SiteLocMap	FIGURE 1	



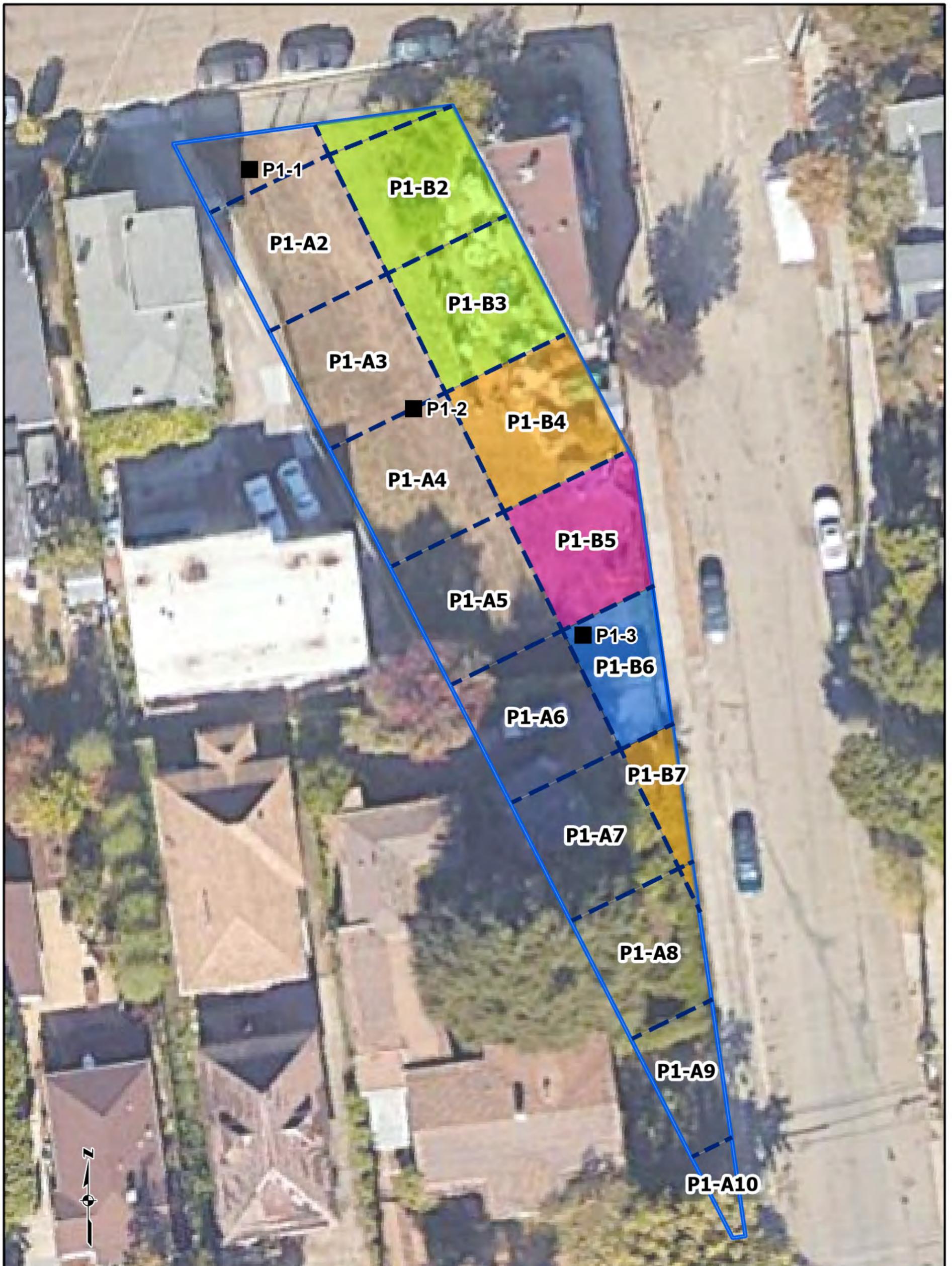
Imagery provided by Microsoft Bing Maps, 2022.



GSI job No.	6272	Drawn By:	AV
Issued:	5-Oct-2023	Chk'd By:	TRK
		App'v'd By:	JPD
Map ID:	SFROW_SiteOverview	FIGURE 2	

SITE OVERVIEW

Santa Fe Trackbed to Park
Berkeley, California



Notes:

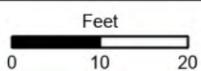
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = polycyclic aromatic hydrocarbons, BaPe = benzo(a)pyrene equivalent value

LEGEND

- No SL exceedances detected
- SL exceedance at 2 ft bgs, delineated at 3 ft bgs
- SL exceedance at 3 ft bgs, delineated at 4 ft bgs
- SL exceedance at 4 ft bgs, delineated at 5 ft bgs
- SL exceedance at 5 ft bgs, delineated at 6 ft bgs
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb & Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009).
 All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.



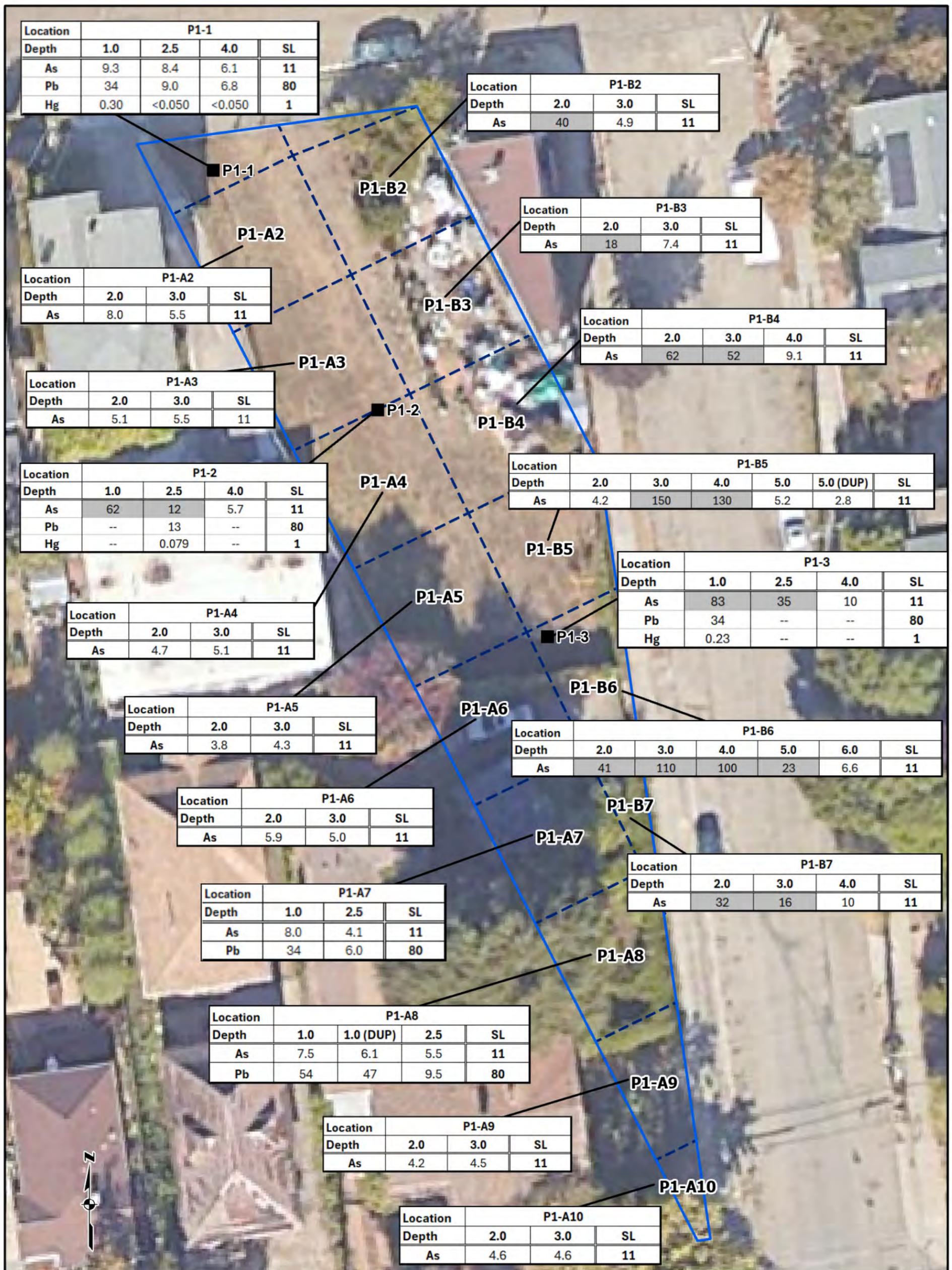
GSI Job No. 6272	Map ID: P1_AllResults
Issued: 6-Sep-2024	Drawn By: AJC
Chk'd By: TRG	Apr'd By: JPD

VERTICAL EXTENT OF AFFECTED SOIL

PARCEL 1

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 3a



Notes:

- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, As = Arsenic, Pb = Lead, Hg = Mercury, -- = not analyzed
- 5) Data is shown for arsenic, lead, and mercury at locations with one or more detections. See Table 2 for complete analytical results for metals.

LEGEND

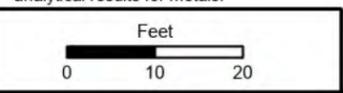
- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.

Pb: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.

Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.



Aerial imagery provided by Esri ArcGIS Online, September 2021.

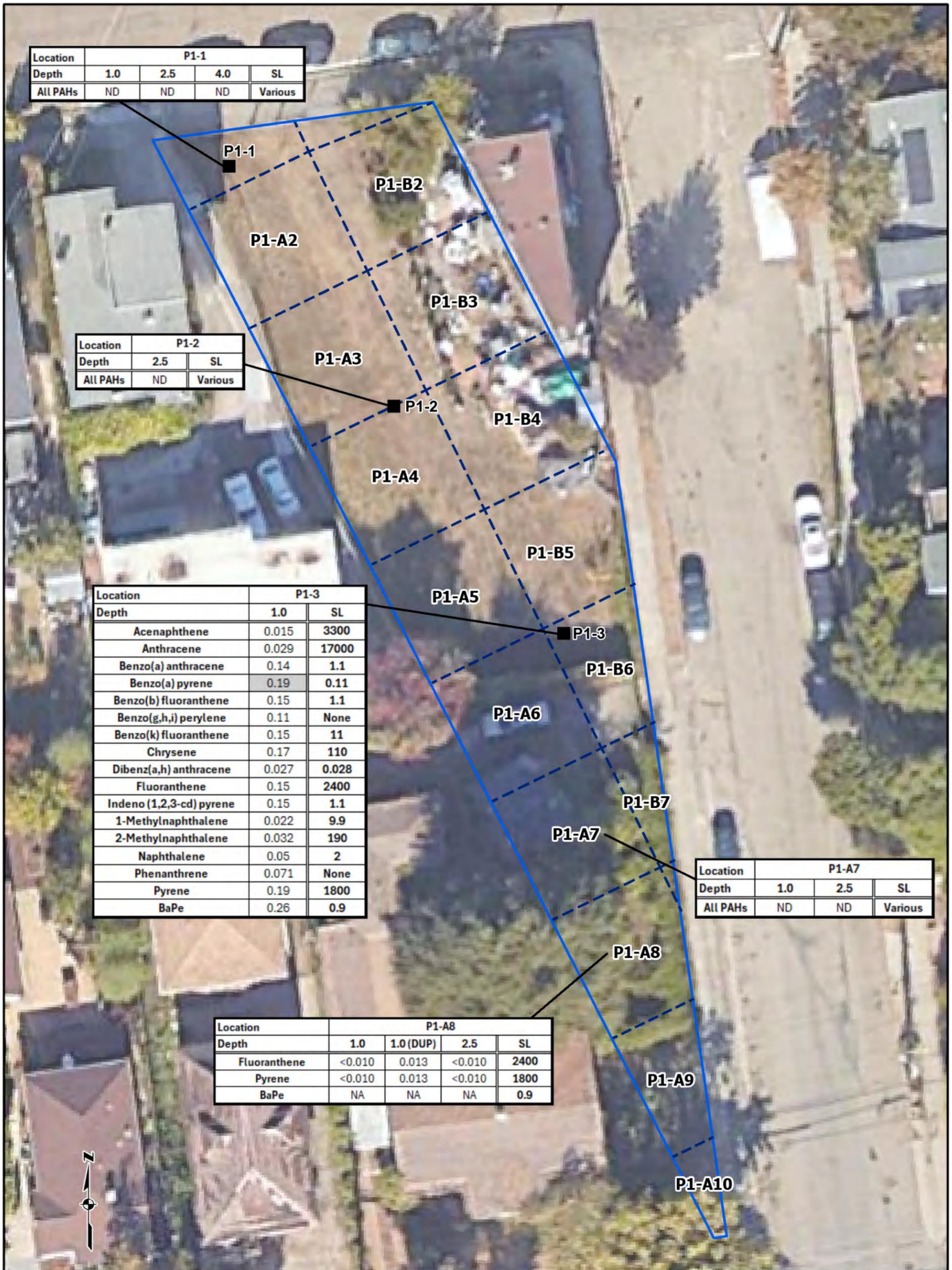


GSI Job No.	6272	Map ID:	P1_Metals
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- SELECT METALS
PARCEL 1**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 3b



Location	P1-1			
Depth	1.0	2.5	4.0	SL
All PAHs	ND	ND	ND	Various

Location	P1-2	
Depth	2.5	SL
All PAHs	ND	Various

Location	P1-3	
Depth	1.0	SL
Acenaphthene	0.015	3300
Anthracene	0.029	17000
Benzo(a) anthracene	0.14	1.1
Benzo(a) pyrene	0.19	0.11
Benzo(b) fluoranthene	0.15	1.1
Benzo(g,h,i) perylene	0.11	None
Benzo(k) fluoranthene	0.15	11
Chrysene	0.17	110
Dibenz(a,h) anthracene	0.027	0.028
Fluoranthene	0.15	2400
Indeno (1,2,3-cd) pyrene	0.15	1.1
1-Methylnaphthalene	0.022	9.9
2-Methylnaphthalene	0.032	190
Naphthalene	0.05	2
Phenanthrene	0.071	None
Pyrene	0.19	1800
BaPe	0.26	0.9

Location	P1-A7		
Depth	1.0	2.5	SL
All PAHs	ND	ND	Various

Location	P1-A8			
Depth	1.0	1.0 (DUP)	2.5	SL
Fluoranthene	<0.010	0.013	<0.010	2400
Pyrene	<0.010	0.013	<0.010	1800
BaPe	NA	NA	NA	0.9

Notes:

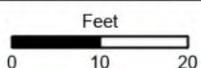
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = Polyaromatic Hydrocarbons, BaPe = benzo(a)pyrene equivalent value, NA = not applicable, ND = not detected
- 5) See Table 3 for analytical results for complete analytical results for PAHs and data flag definitions.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009). All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.



GSI Job No.	6272	Map ID:	P1_PAHs
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- PAHs
PARCEL 1**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 3c



Notes:

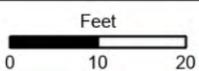
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = polycyclic aromatic hydrocarbons, BaPe = benzo(a)pyrene equivalent value

LEGEND

- No SL exceedances detected
- SL exceedance at 2 ft bgs, delineated at 3 ft bgs
- SL exceedance at 3 ft bgs, delineated at 4 ft bgs
- SL exceedance at 4 ft bgs, delineated at 5 ft bgs
- SL exceedance at 5 ft bgs, delineated at 6 ft bgs
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb & Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009).
 All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.

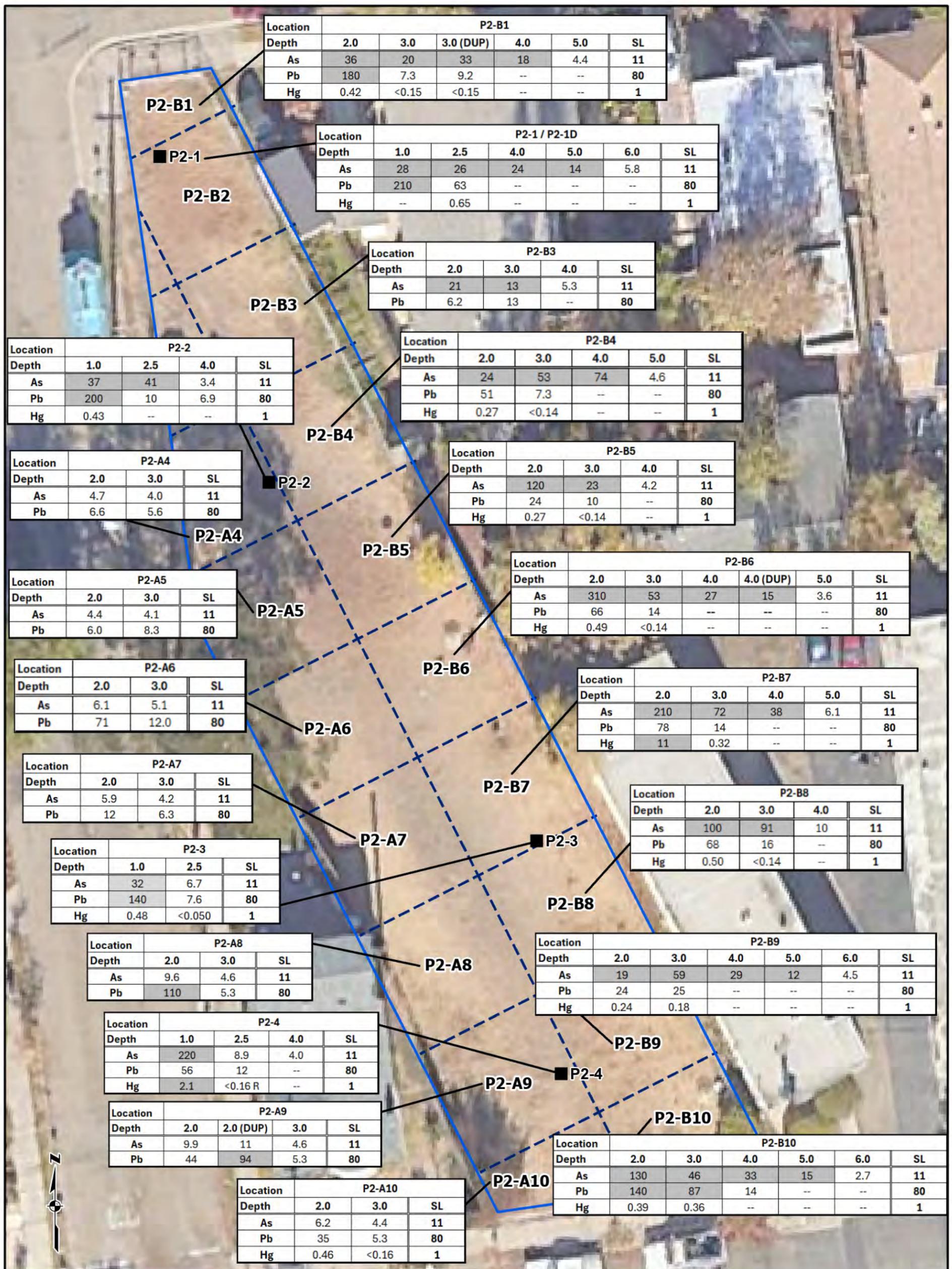


GSI Job No.	6272	Map ID:	P2_AllResults
Issued:	6-Sep-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**VERTICAL EXTENT OF AFFECTED SOIL
PARCEL 2**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 4a



Location	P2-B1					
Depth	2.0	3.0	3.0 (DUP)	4.0	5.0	SL
As	36	20	33	18	4.4	11
Pb	180	7.3	9.2	--	--	80
Hg	0.42	<0.15	<0.15	--	--	1

Location	P2-1 / P2-1D					
Depth	1.0	2.5	4.0	5.0	6.0	SL
As	28	26	24	14	5.8	11
Pb	210	63	--	--	--	80
Hg	--	0.65	--	--	--	1

Location	P2-B3			
Depth	2.0	3.0	4.0	SL
As	21	13	5.3	11
Pb	6.2	13	--	80

Location	P2-B4				
Depth	2.0	3.0	4.0	5.0	SL
As	24	53	74	4.6	11
Pb	51	7.3	--	--	80
Hg	0.27	<0.14	--	--	1

Location	P2-2			
Depth	1.0	2.5	4.0	SL
As	37	41	3.4	11
Pb	200	10	6.9	80
Hg	0.43	--	--	1

Location	P2-B5			
Depth	2.0	3.0	4.0	SL
As	120	23	4.2	11
Pb	24	10	--	80
Hg	0.27	<0.14	--	1

Location	P2-A4		
Depth	2.0	3.0	SL
As	4.7	4.0	11
Pb	6.6	5.6	80

Location	P2-B6					
Depth	2.0	3.0	4.0	4.0 (DUP)	5.0	SL
As	310	53	27	15	3.6	11
Pb	66	14	--	--	--	80
Hg	0.49	<0.14	--	--	--	1

Location	P2-A5		
Depth	2.0	3.0	SL
As	4.4	4.1	11
Pb	6.0	8.3	80

Location	P2-B7				
Depth	2.0	3.0	4.0	5.0	SL
As	210	72	38	6.1	11
Pb	78	14	--	--	80
Hg	11	0.32	--	--	1

Location	P2-A6		
Depth	2.0	3.0	SL
As	6.1	5.1	11
Pb	71	12.0	80

Location	P2-B8			
Depth	2.0	3.0	4.0	SL
As	100	91	10	11
Pb	68	16	--	80
Hg	0.50	<0.14	--	1

Location	P2-A7		
Depth	2.0	3.0	SL
As	5.9	4.2	11
Pb	12	6.3	80

Location	P2-3		
Depth	1.0	2.5	SL
As	32	6.7	11
Pb	140	7.6	80
Hg	0.48	<0.050	1

Location	P2-B9					
Depth	2.0	3.0	4.0	5.0	6.0	SL
As	19	59	29	12	4.5	11
Pb	24	25	--	--	--	80
Hg	0.24	0.18	--	--	--	1

Location	P2-A8		
Depth	2.0	3.0	SL
As	9.6	4.6	11
Pb	110	5.3	80

Location	P2-4			
Depth	1.0	2.5	4.0	SL
As	220	8.9	4.0	11
Pb	56	12	--	80
Hg	2.1	<0.16 R	--	1

Location	P2-A9			
Depth	2.0	2.0 (DUP)	3.0	SL
As	9.9	11	4.6	11
Pb	44	94	5.3	80

Location	P2-A10		
Depth	2.0	3.0	SL
As	6.2	4.4	11
Pb	35	5.3	80
Hg	0.46	<0.16	1

Notes:

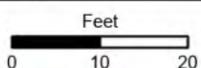
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, As = Arsenic, Pb = Lead, Hg = Mercury, -- = not analyzed
- 5) Data is shown for arsenic, lead, and mercury at locations with one or more detections. See Table 2 for complete analytical results for metals.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.



Aerial imagery provided by Esri ArcGIS Online, September 2021.

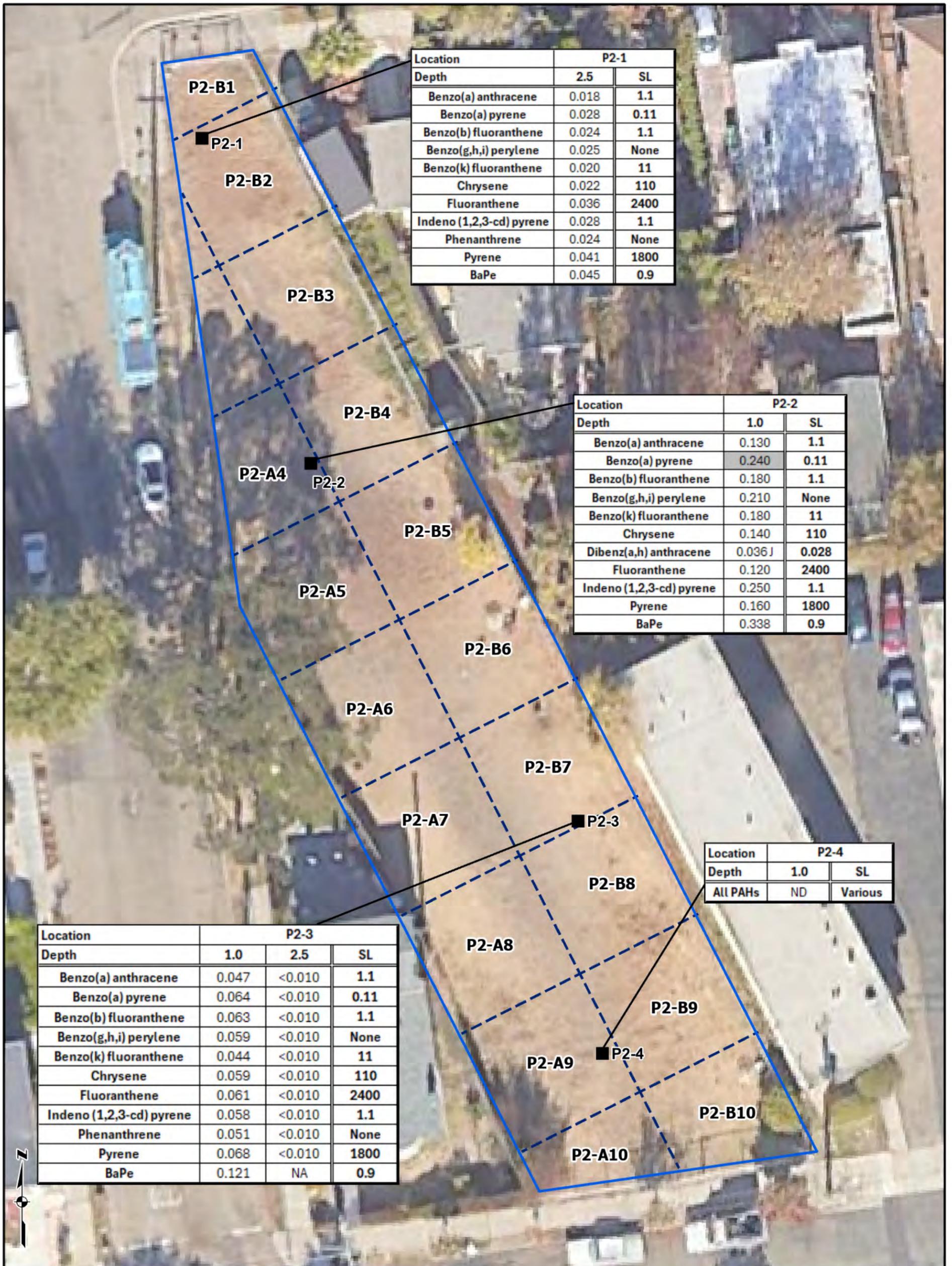


GSI Job No.	6272	Map ID:	P2_Metals
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- SELECT METALS
PARCEL 2**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 4b



Notes:

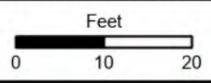
- 1) all depths in ft bgs (feet below ground surface)
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- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = Polycyclic Aromatic Hydrocarbons, BaPe = benzo(a)pyrene equivalent value, NA = not applicable, ND = not detected
- 5) See Table 3 for analytical results for complete analytical results for PAHs and data flag definitions.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009). All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.



GSI Job No.	6272	Map ID:	P2_PAHs
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

SOIL SAMPLING RESULTS- PAHs
PARCEL 2
 Santa Fe Trackbed to Park
 Berkeley, California

FIGURE 4c



Notes:

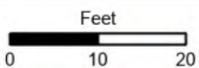
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = polyaromatic hydrocarbons, BaPe = benzo(a)pyrene equivalent value

LEGEND

- No SL exceedances detected
- SL exceedance at 2 ft bgs, delineated at 3 ft bgs
- SL exceedance at 3 ft bgs, delineated at 4 ft bgs
- SL exceedance at 4 ft bgs, delineated at 5 ft bgs
- SL exceedance at 5 ft bgs, delineated at 6 ft bgs
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb & Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
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Aerial imagery provided by Esri ArcGIS Online, September 2021.

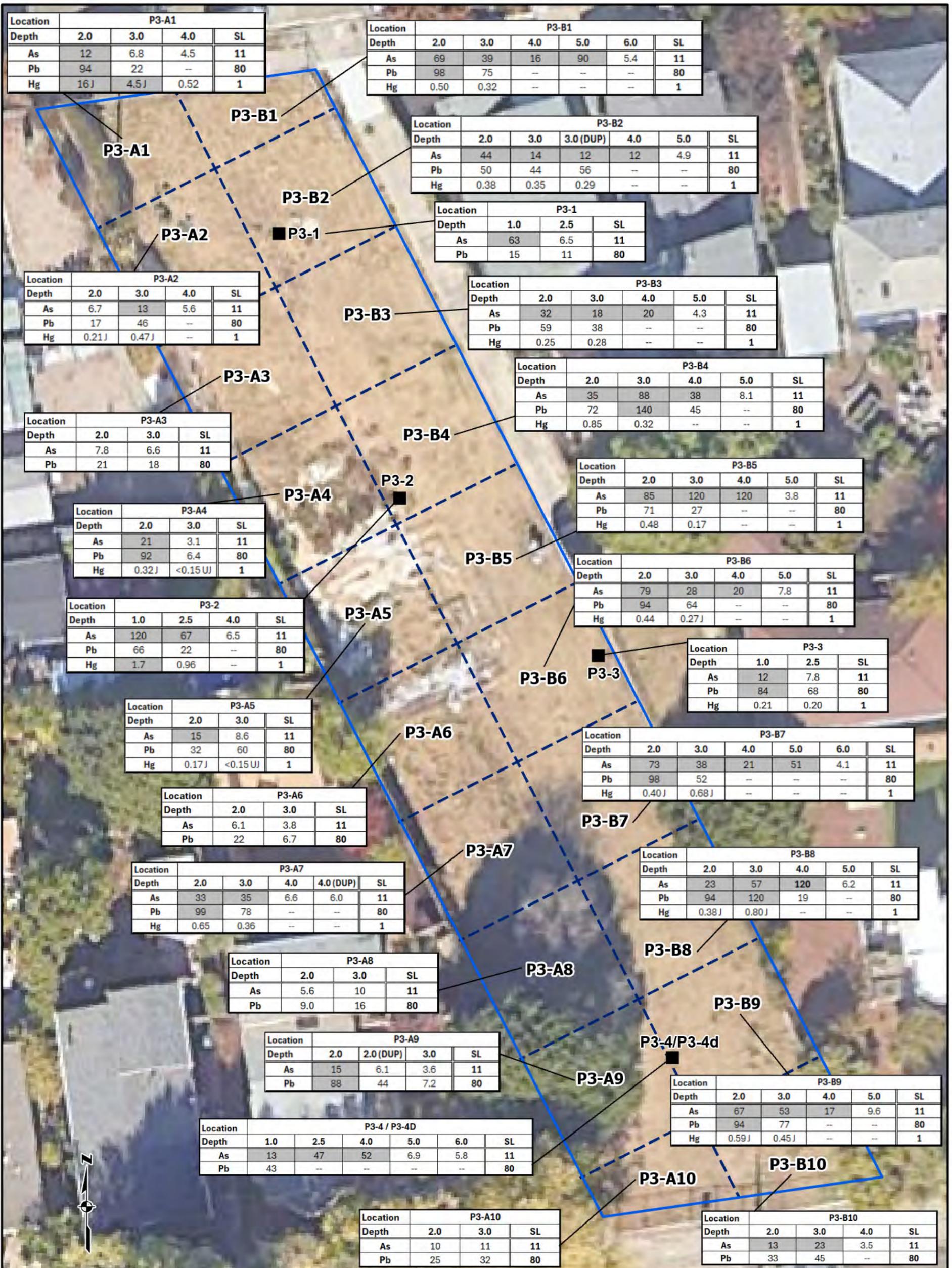


GSI Job No.	6272	Map ID:	P3_AllResults
Issued:	6-Sep-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**VERTICAL EXTENT OF AFFECTED SOIL
PARCEL 3**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 5a



Notes:

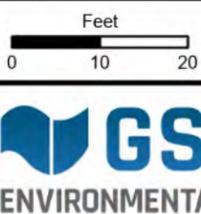
- 1) all depths in ft bgs (feet below ground surface)
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- 4) SL = screening level, As = Arsenic, Pb = Lead, Hg = Mercury, -- = not analyzed
- 5) Data is shown for arsenic, lead, and mercury at locations with one or more detections. See Table 2 for complete analytical results for metals.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.



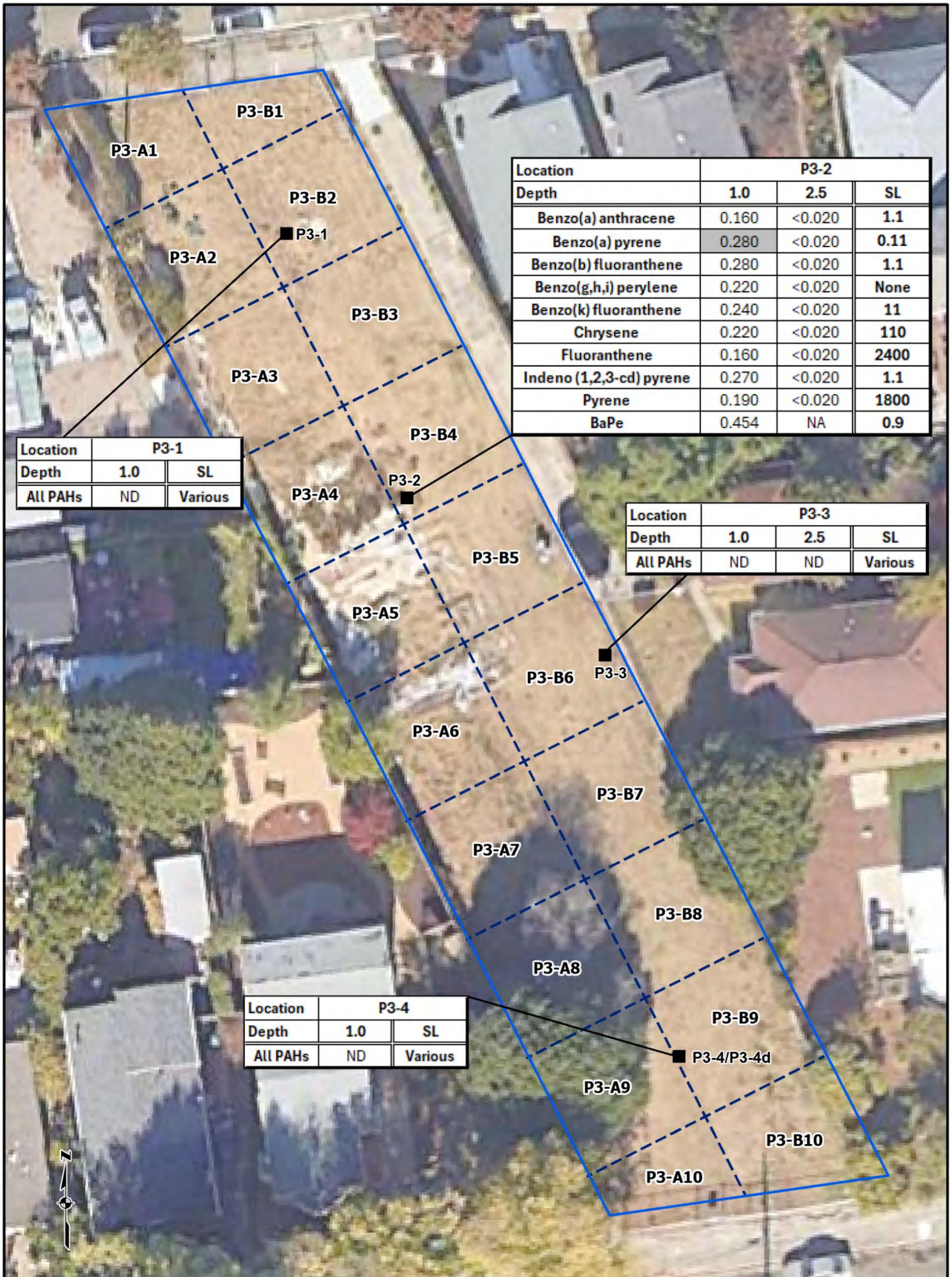
Aerial imagery provided by Esri ArcGIS Online, September 2021.

GSI Job No.	6272	Map ID:	P3_Metals
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- SELECT METALS
PARCEL 3**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 5b



Location	P3-2		
Depth	1.0	2.5	SL
Benzo(a) anthracene	0.160	<0.020	1.1
Benzo(a) pyrene	0.280	<0.020	0.11
Benzo(b) fluoranthene	0.280	<0.020	1.1
Benzo(g,h,i) perylene	0.220	<0.020	None
Benzo(k) fluoranthene	0.240	<0.020	11
Chrysene	0.220	<0.020	110
Fluoranthene	0.160	<0.020	2400
Indeno (1,2,3-cd) pyrene	0.270	<0.020	1.1
Pyrene	0.190	<0.020	1800
BaPe	0.454	NA	0.9

Location	P3-1	
Depth	1.0	SL
All PAHs	ND	Various

Location	P3-3		
Depth	1.0	2.5	SL
All PAHs	ND	ND	Various

Location	P3-4	
Depth	1.0	SL
All PAHs	ND	Various

Notes:

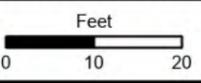
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = Polycyclic Aromatic Hydrocarbons, BaPe = benzo(a)pyrene equivalent value, NA = not applicable, ND = not detected
- 5) See Table 3 for analytical results for complete analytical results for PAHs and data flag definitions.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009). All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.

	GSI Job No. 6272	Map ID: P3_PAHs	SOIL SAMPLING RESULTS- PAHs PARCEL 3 Santa Fe Trackbed to Park Berkeley, California	FIGURE 5c
	Issued: 28-Aug-2024	Drawn By: AJC		
	Chk'd By: TRG	Apr'd By: JPD		

P3-A7

P3-A8

P3-B9

P3-4/P3-4d

P3-A9

P3-A10

Location	P3-T3	
Depth	1.0	SL
As	7.5	11
Pb	43	80
All PAHs	ND	Various

Location	P3-T2	
Depth	1.0	SL
As	5.9	11
Pb	52	80
Hg	0.16	1
All PAHs	ND	Various

Location	P3-T1				
Depth	1.0	1.0 (DUP)	1.5	2.0	SL
As	46	27	7.0	27	11
Pb	50J	46	--	--	80
Hg	0.28	0.20	--	--	1
All PAHs	ND	ND	--	--	Various

Location	P3-T4			
Depth	1.0	1.5	2.0	SL
As	11	--	--	11
Pb	190	88	170	80
Hg	0.17	--	--	1
All PAHs	ND	--	--	Various



Notes:

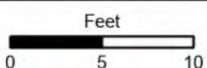
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, As = Arsenic, Pb = Lead, Hg = Mercury, PAHs = Polycyclic Aromatic Hydrocarbons, ND = not detected
- 5) See Table 3 for analytical results for complete analytical results for PAHs and data flag definitions.

LEGEND

- Targeted Soil Samples
- Tree Canopy
- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.
 Pb: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.
 Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.



Aerial imagery provided by Esri ArcGIS Online, September 2021.

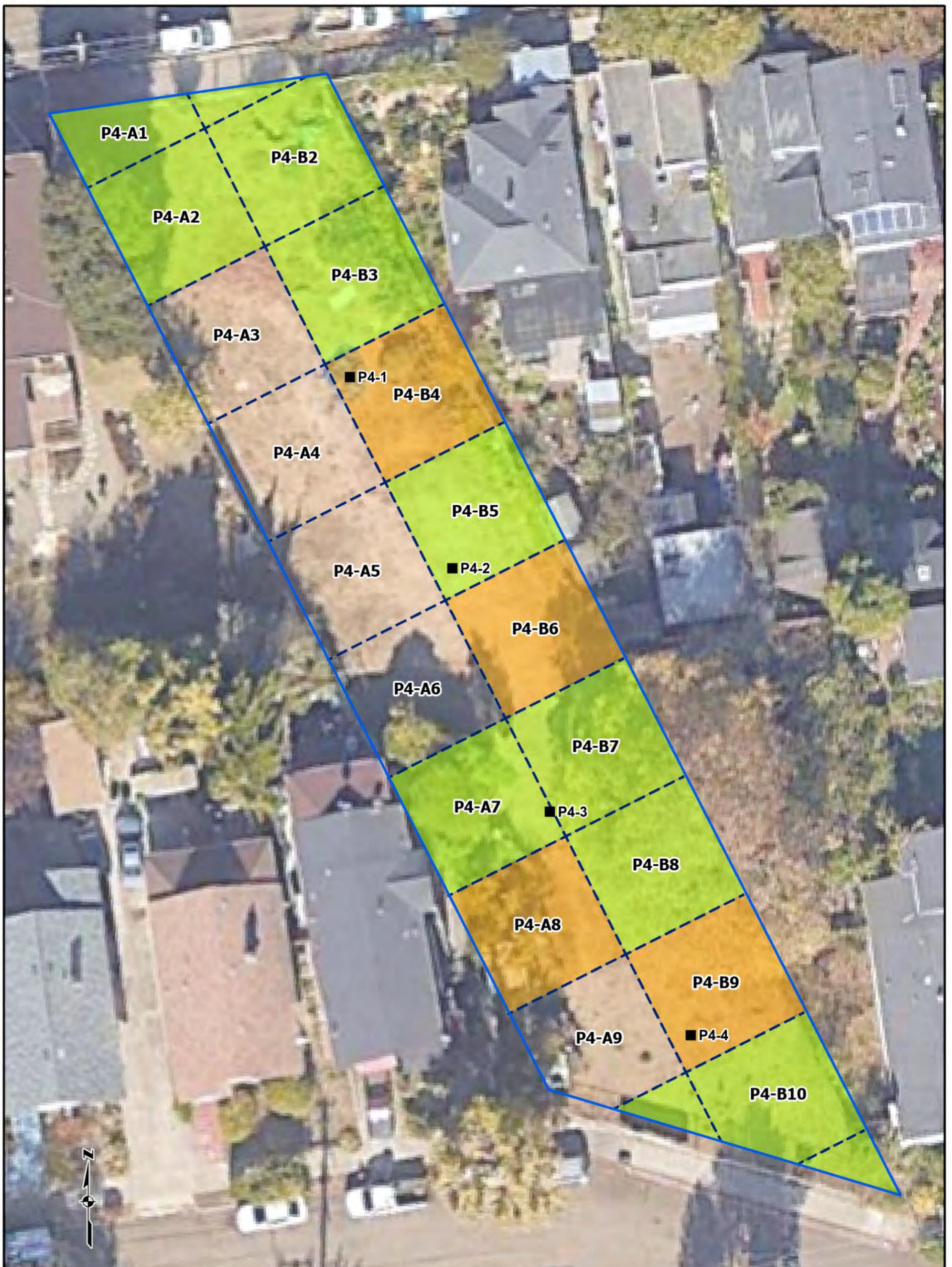


GSI Job No.	6272	Map ID:	P3_Tree
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- TARGETED SAMPLES
PARCEL 3**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 5d



Notes:

- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = polycyclic aromatic hydrocarbons, BaPe = benzo(a)pyrene equivalent value

LEGEND

- No SL exceedances detected
- SL exceedance at 2 ft bgs, delineated at 3 ft bgs
- SL exceedance at 3 ft bgs, delineated at 4 ft bgs
- SL exceedance at 4 ft bgs, delineated at 5 ft bgs
- SL exceedance at 5 ft bgs, delineated at 6 ft bgs
- Previous Investigation Sample (2022)

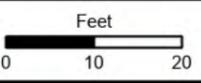
Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.

Pb & Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.

BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009).

All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



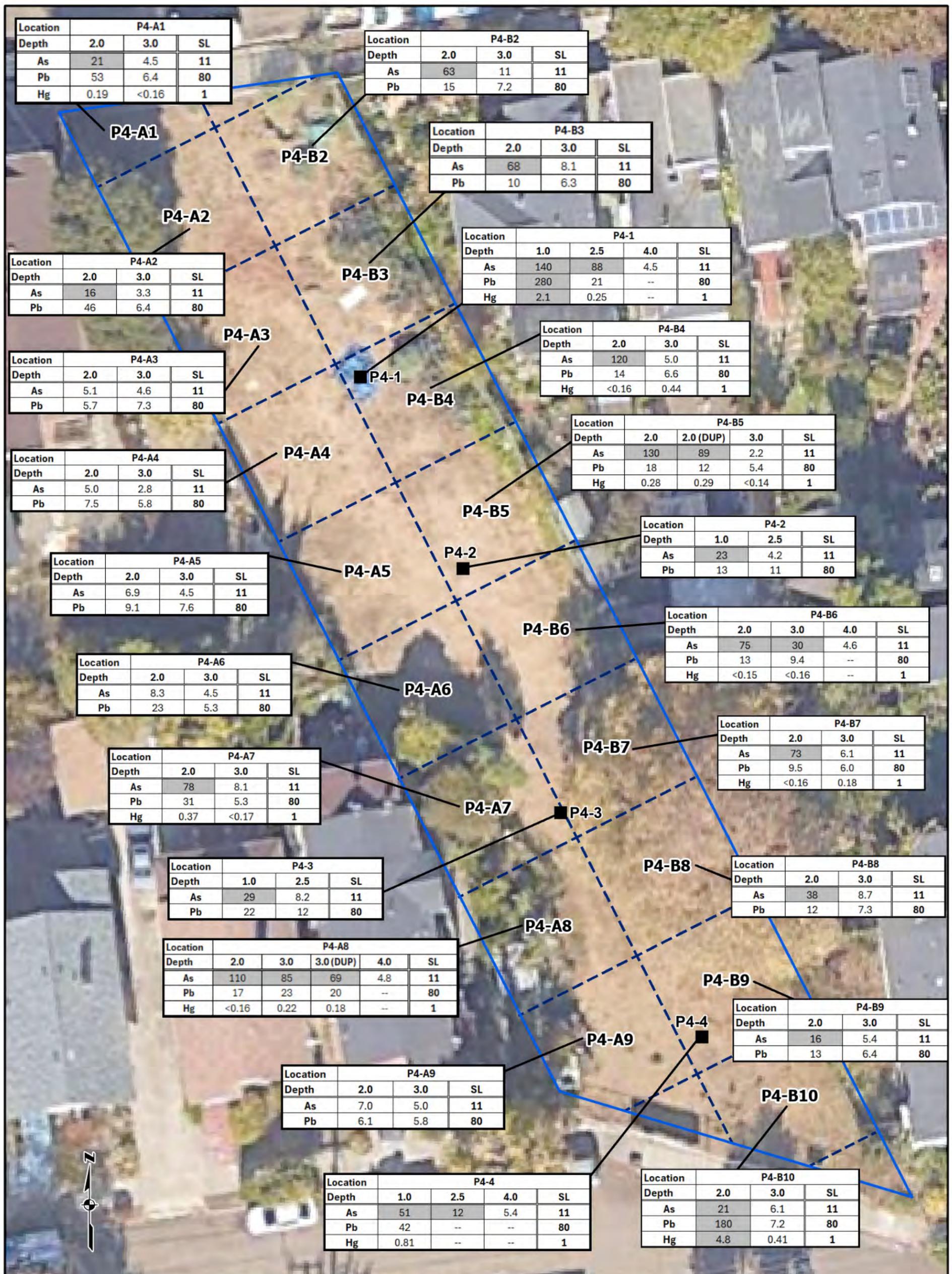
Aerial imagery provided by Esri ArcGIS Online, September 2021.



GSI Job No.	6272	Map ID:	P4_AllResults
Issued:	6-Sep-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**VERTICAL EXTENT OF AFFECTED SOIL
PARCEL 4**
Santa Fe Trackbed to Park
Berkeley, California

FIGURE 6a



Notes:

- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, As = Arsenic, Pb = Lead, Hg = Mercury, -- = not analyzed
- 5) Data is shown for arsenic, lead, and mercury at locations with one or more detections. See Table 2 for complete analytical results for metals.

LEGEND

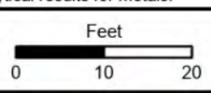
- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

As: Duverge, Dylan Jacques, 2011, Establishing background Arsenic in soil for the Urbanized San Francisco Bay Region, December.

Pb: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.

Hg: United States Environmental Protection Agency, 2024, Regional Screening Levels, May. & DTSC, 2022, Human and Ecological Risk (HERO), HHRA Note Number 3, May.



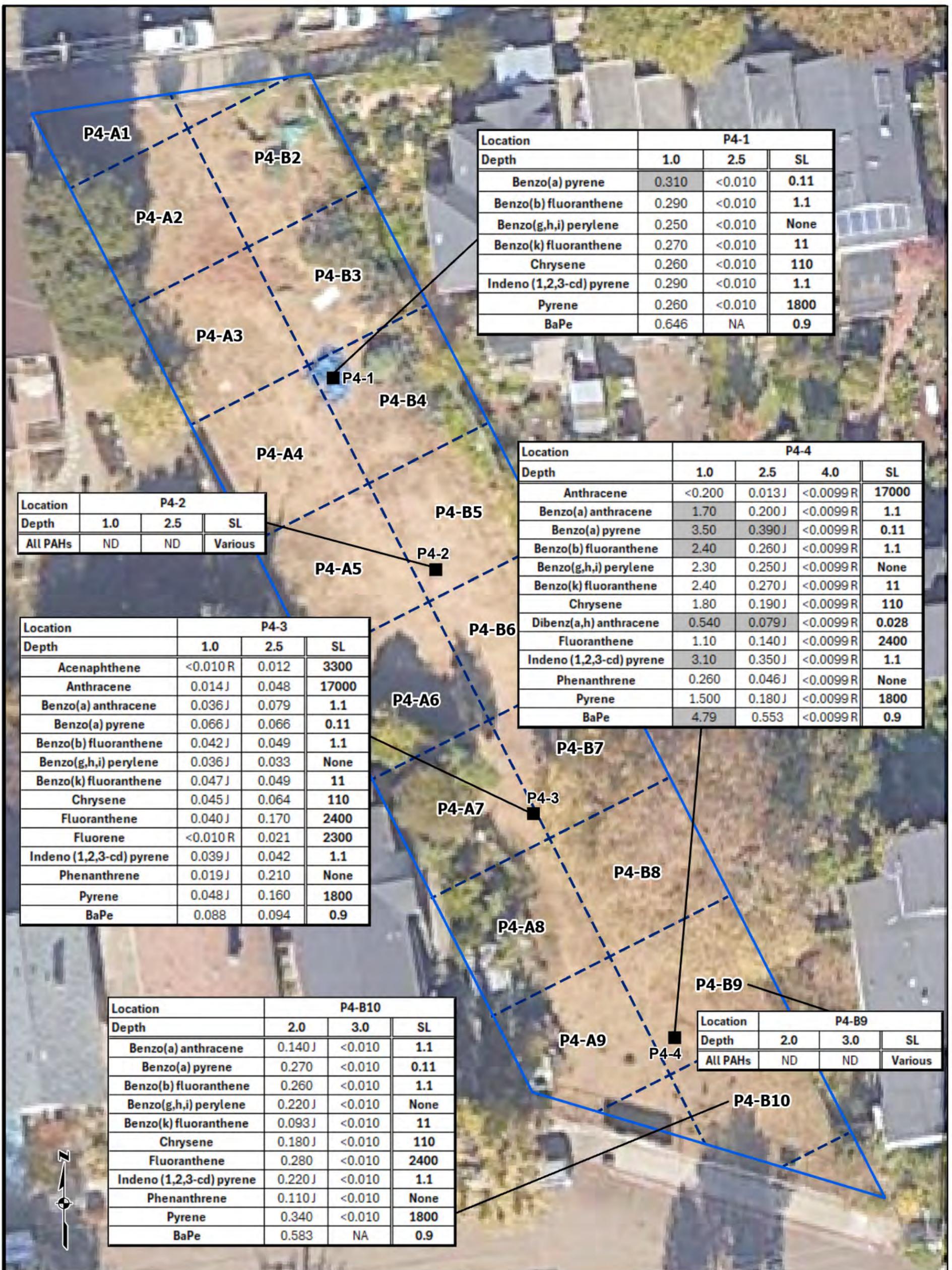
Aerial imagery provided by Esri ArcGIS Online, September 2021.



GSI Job No.	6272	Map ID:	P4_Metals
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

SOIL SAMPLING RESULTS- SELECT METALS
PARCEL 4
 Santa Fe Trackbed to Park
 Berkeley, California

FIGURE6b



Notes:

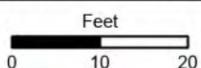
- 1) all depths in ft bgs (feet below ground surface)
- 2) grey shading indicates result exceeded SL
- 3) results & SLs are reported in milligrams per kilogram
- 4) SL = screening level, PAHs = Polycyclic Aromatic Hydrocarbons, BaPe = benzo(a)pyrene equivalent value, NA = not applicable, ND = not detected
- 5) See Table 3 for analytical results for complete analytical results for PAHs and data flag definitions.

LEGEND

- Extent of Sample Grid Cell
- Previous Investigation Sample (2022)

Screening Level References:

BaPe: BaPe are compared to the regional ambient level of 0.9 mg/kg established by DTSC (2009). All other PAHs: Regional screening levels for residential and commercial/industrial soil published by the USEPA (2024) and approved or modified by the California Department of Toxic Substances Control (2022).



Aerial imagery provided by Esri ArcGIS Online, September 2021.

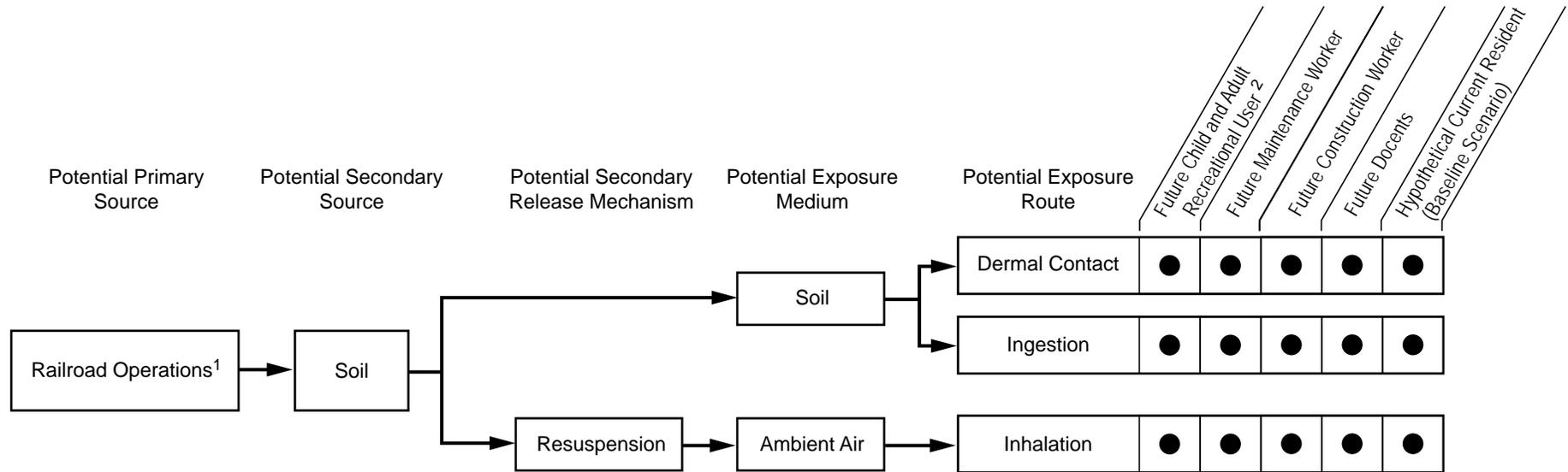


GSI Job No.	6272	Map ID:	P4_PAHs
Issued:	28-Aug-2024	Drawn By:	AJC
		Chk'd By:	TRG
		Apr'd By:	JPD

**SOIL SAMPLING RESULTS- PAHs
PARCEL 4**

Santa Fe Trackbed to Park
Berkeley, California

FIGURE 6c



Notes:

- 1) All parcels were formerly part of the Santa Fe Railroad Right-of-Way and contained railroad tracks. Typical environmental impacts on railroad corridors include deposition of petroleum-related constituents, metals, and weed control chemicals to shallow soil.
- 2) Site chemicals of potential concern (COPCs) are only present in the vadose zone, are not mobile in soil, and have low solubility. As such, mobilization of COPCs to groundwater does not represent a complete pathway.

EXPLANATION

- Incomplete pathway if blank
- Complete exposure pathway; included in HHRA



GSI Job No.	6272	Drawn By:	JC
Issued:	8/20/2024	Chk'd By:	JW
	Figure 7	Aprv'd By:	PS
Scale:	Not to scale		

CONCEPTUAL SITE EXPOSURE MODEL

Santa Fe Tracked to Park
Berkeley, California

FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

APPENDICES

Appendix A. City of Berkeley Boring Permits

Appendix B. XRF Data

Appendix C. Analytical Laboratory Reports

Appendix D. Data Quality Summary

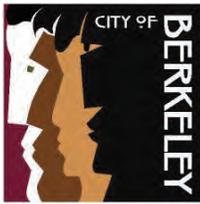
GSI Job No.: 6272



FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

APPENDIX A

City of Berkeley Boring Permits



Planning and Development Department
Toxics Management Division
A Certified Unified Program Agency

TMD Use Only	
Permit No.:	<u>24-EB-039</u> (expires 120 days from approval)
Permit Fee:	<u>\$10710</u> Check #: _____
Approved by:	<u>KE</u> Date: <u>12/21/2023</u>
Admin:	Contractor Licenses – Reviewed by: _____
	Geo/Eng license <input checked="" type="radio"/> Y <input type="radio"/> N CoB Business <input checked="" type="radio"/> Y <input type="radio"/> N
	Driller license <input checked="" type="radio"/> Y <input type="radio"/> N CoB Business <input checked="" type="radio"/> Y <input type="radio"/> N
	Documents Scanned by: _____

Revised 7/10/2018

SUBSURFACE DRILLING PERMIT APPLICATION

Purpose of Application	<input type="checkbox"/> Groundwater Monitoring/Vapor Well Installation <input type="checkbox"/> Groundwater Monitoring/Vapor Well Destruction (Provide approval letter from oversight agency) <input type="checkbox"/> Well Modification (pumps, vacuums, probes, elevation, etc.)	<input checked="" type="checkbox"/> Soil Borings, probes, sampling points Number of Borings: <u>70</u> <u>71</u>
	Number of Wells: _____	<input type="checkbox"/> Extension of Permit # _____

Name of Facility: Berkeley Santa Fe Right-of-Way	
Address: Parcel 1 (Blake St. to Parker St.), Parcel 2 (Parker St. to Carleton St.), Parcel 3 (Carleton St. to Derby St.), Parcel 4 (Derby St. to Ward St.)	
Business Telephone: (510) 981-6738	Emergency Telephone: _____

Property Owner: City of Berkeley
Owner Address: 1947 Center St. 5th Floor Berkeley, CA 94704

Supervising Geological or Engineering Co.:	GSI Environmental Inc.	City of Berkeley Business Lic #:	BL-012951
Address/City: 2000 Powell St, Suite 820, Emeryville CA 94608			
Geol/Eng Lic. #: CA PE #C59161	Tel.: 510-821-8925	Fax: _____	
Contact Person: Jennifer Duffield	Email: jpduffield@gsienv.com		

Drilling Co.:	Penecore Drilling	City of Berkeley Business Lic #:	BL-050226
Address/City: 220 N. East St. Woodland, CA 95776			
C-57 License #: 906899	Exp. Date: 11/30/2025	Tel.: 530-661-3600	Fax: _____
Local Contact Person: Xavier Green	Email: Xavier@penecore.com		

Construction/Destruction Specifications (attach information as needed for multiple construction types)			
Borehole/Well Casing Diameter: 3.25 inches		Gauge of Well Casing: NA	
Borehole/Well Depth: 4-7 ft	Well Screen type: NA	Slot Size: NA	
Type of grout (specify mix or product): As discussed with Meredith Lear via email on 6/30/22, borings will be backfilled with clean fill/potting soil.			

- **Provide a scaled plan** identifying the proposed drilling locations, property boundaries, streets, structures, pollution source areas.
- Call the Toxics Management Division (TMD) at (510) 981-7460 to schedule an inspection of the grout sealing of wells, probes and boreholes. **Notify TMD a minimum of two (2) working days in advance** of first scheduled day of drilling
- This permit is subject to the Conditions of Approval stated on the following page.

I certify that I have prepared this application and that the work will be done in accordance with the conditions of this permit, the provisions of the laws of the State of California, including State Water Well Standards, and the ordinances and the rules and regulations of the City of Berkeley.

Signed Jennifer P. Duffield Representing GSI Environmental Inc. Date 12/14/23

FEES: First Well/Each add'l: \$420/\$150 First Soil Boring/Each add'l: \$210/\$150

CONDITIONS OF APPROVAL:

- A. Applicant must possess a City of Berkeley Business License. Contact (510) 981-7200.
- B. Call the Toxics Management Division (TMD) at (510) 981-7460 and schedule an inspection of the grout sealing of boreholes, probes, or wells. Notify TMD a minimum of two (2) working days in advance of first scheduled day of drilling (review City holidays and reduced service days at <http://ci.berkeley.ca.us/>). Failure to notify staff of cancellation or delays may result in the applicant being billed for mobilization time.
- C. All borings must be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
- D. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually. Wastes must be removed from the site within 2 weeks of conclusion of the drilling.
- E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit must be submitted to Toxics Management Division within 60 days of sample collection.
- F. If your permit was for construction, alteration, or destruction of a water well, cathodic protection well, groundwater monitoring well, etc., you must file a report of completion within 60 days of the completion of the work through the Department of Water Resources Online System of Well Completion Reports (OSWCR), https://civicnet.resources.ca.gov/DWR_WELLS/.
- G. A copy of the boring logs, well construction details, confirmation of submittal of the well completion report through OSWCR, and finalized as-built locations for all borings/wells (except geotechnical borings), must be submitted to TMD within 60 days of drilling/construction/destruction.
- H. Permit is valid for 120 days for the purpose specified herein. Construction aspects can be changed based on conditions encountered in the field. The permit is valid for only one TMD inspection.
- I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
- J. All work performed must conform to Business and Profession Codes and State Water Well Standards.
- K. The permit applicant and the property owner are required to ensure stormwater pollution prevention is implemented throughout the drilling process.
- L. Drilling company is required to contain all fluids and solids in compliance with stormwater pollution prevention rules. Any violation will lead to stop work, or cleanup order and potential enforcement.



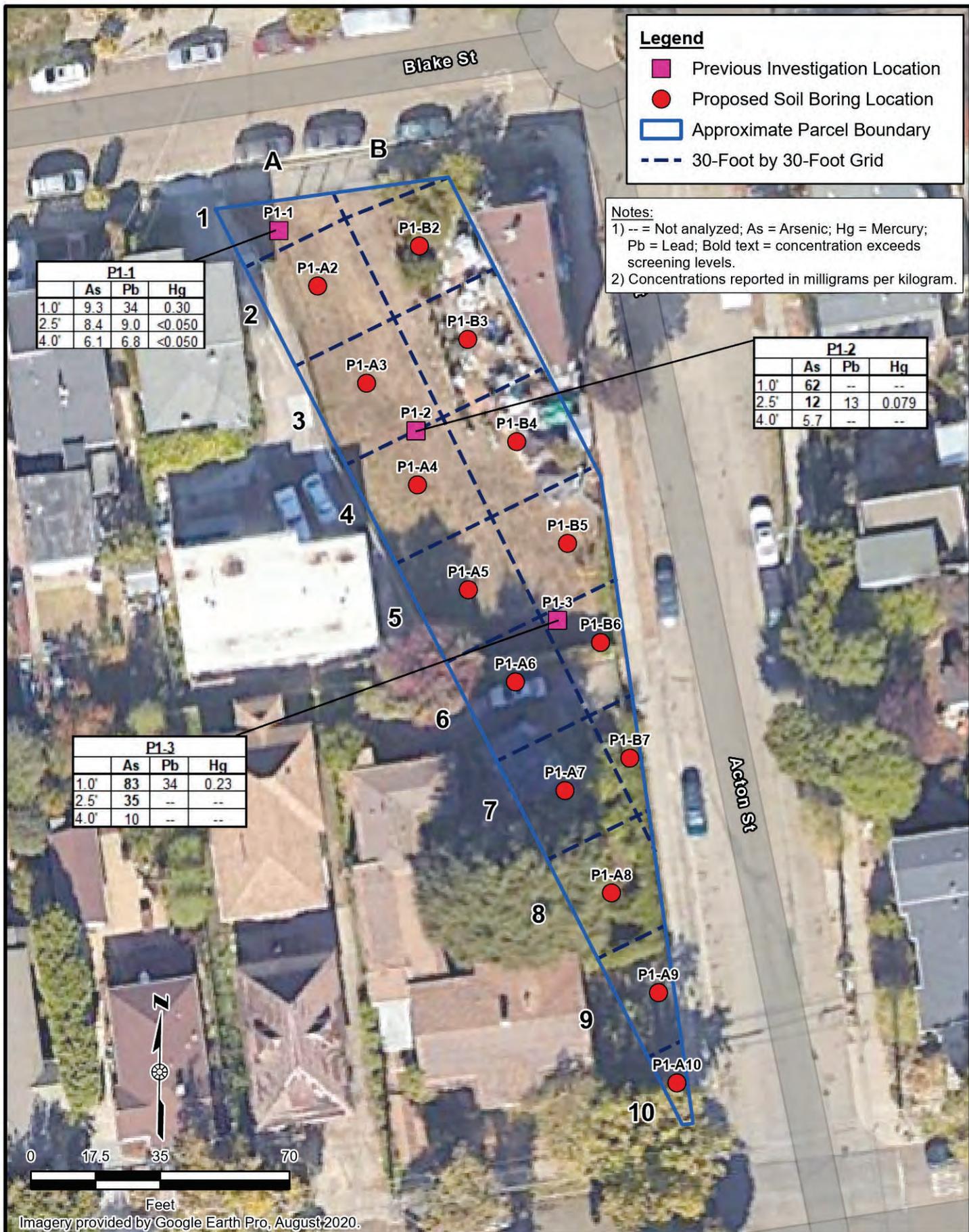
Imagery provided by Microsoft Bing Maps, 2022.



GSI job No.	6272	Drawn By:	AV
Issued:	5-Oct-2023	Chk'd By:	TRK
		App'v'd By:	JPD
Map ID:	SFROW_SiteOverview	FIGURE 2	

SITE OVERVIEW

Santa Fe Trackbed to Park
Berkeley, California



Imagery provided by Google Earth Pro, August 2020.

	GSI job No.	6272	Drawn By:	AV
	Issued:	17-Nov-2023	Chk'd By:	LMS
			Appv'd By:	JPD
	Map ID:	SFR0W_Parcel1_PrpsOGrid		

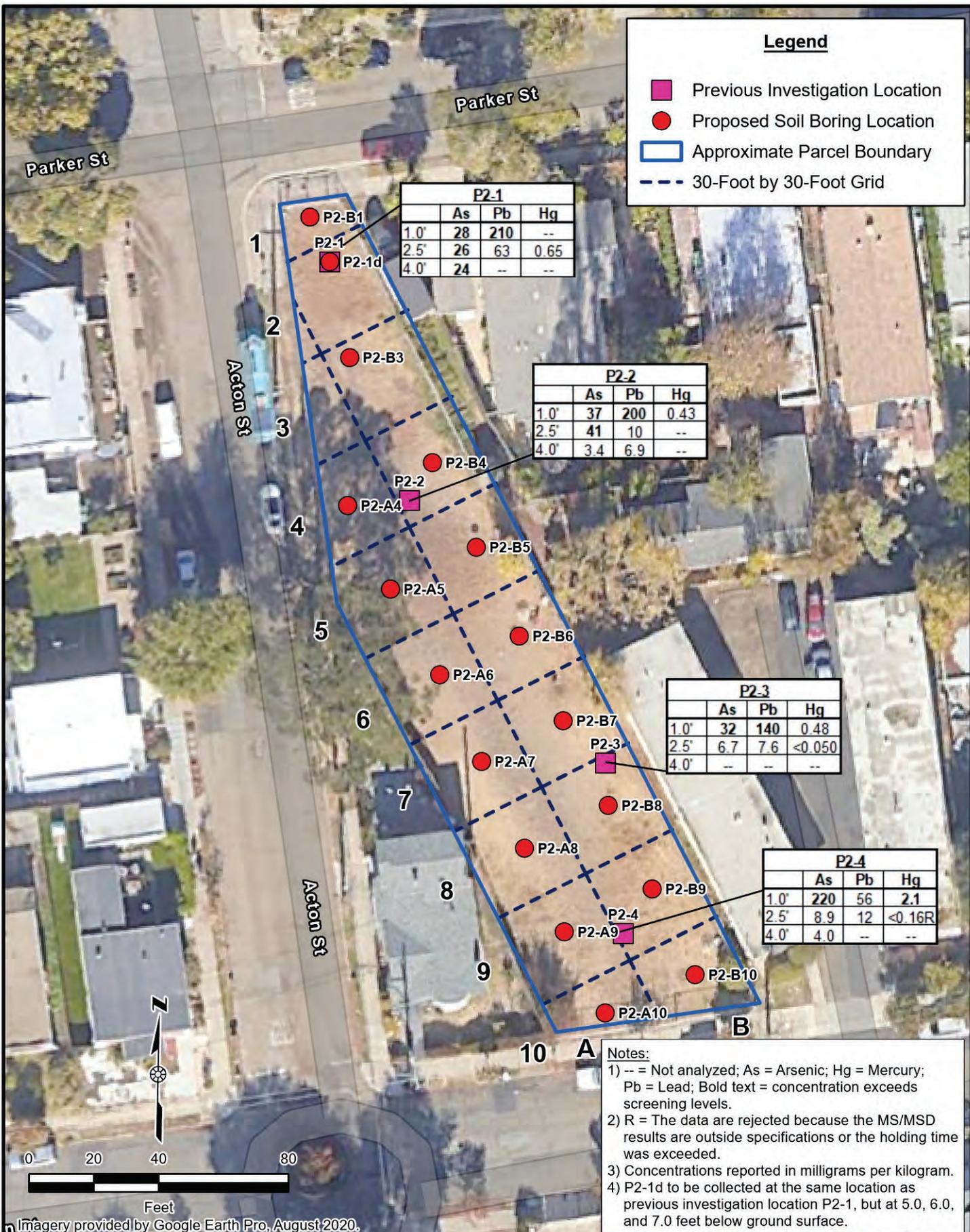
PROPOSED SOIL SAMPLING LOCATIONS - PARCEL 1

Santa Fe Tracked to Park
Berkeley, California

FIGURE 3A

Legend

- Previous Investigation Location
- Proposed Soil Boring Location
- Approximate Parcel Boundary
- 30-Foot by 30-Foot Grid



P2-1			
	As	Pb	Hg
1.0'	28	210	--
2.5'	26	63	0.65
4.0'	24	--	--

P2-2			
	As	Pb	Hg
1.0'	37	200	0.43
2.5'	41	10	--
4.0'	3.4	6.9	--

P2-3			
	As	Pb	Hg
1.0'	32	140	0.48
2.5'	6.7	7.6	<0.050
4.0'	--	--	--

P2-4			
	As	Pb	Hg
1.0'	220	56	2.1
2.5'	8.9	12	<0.16R
4.0'	4.0	--	--

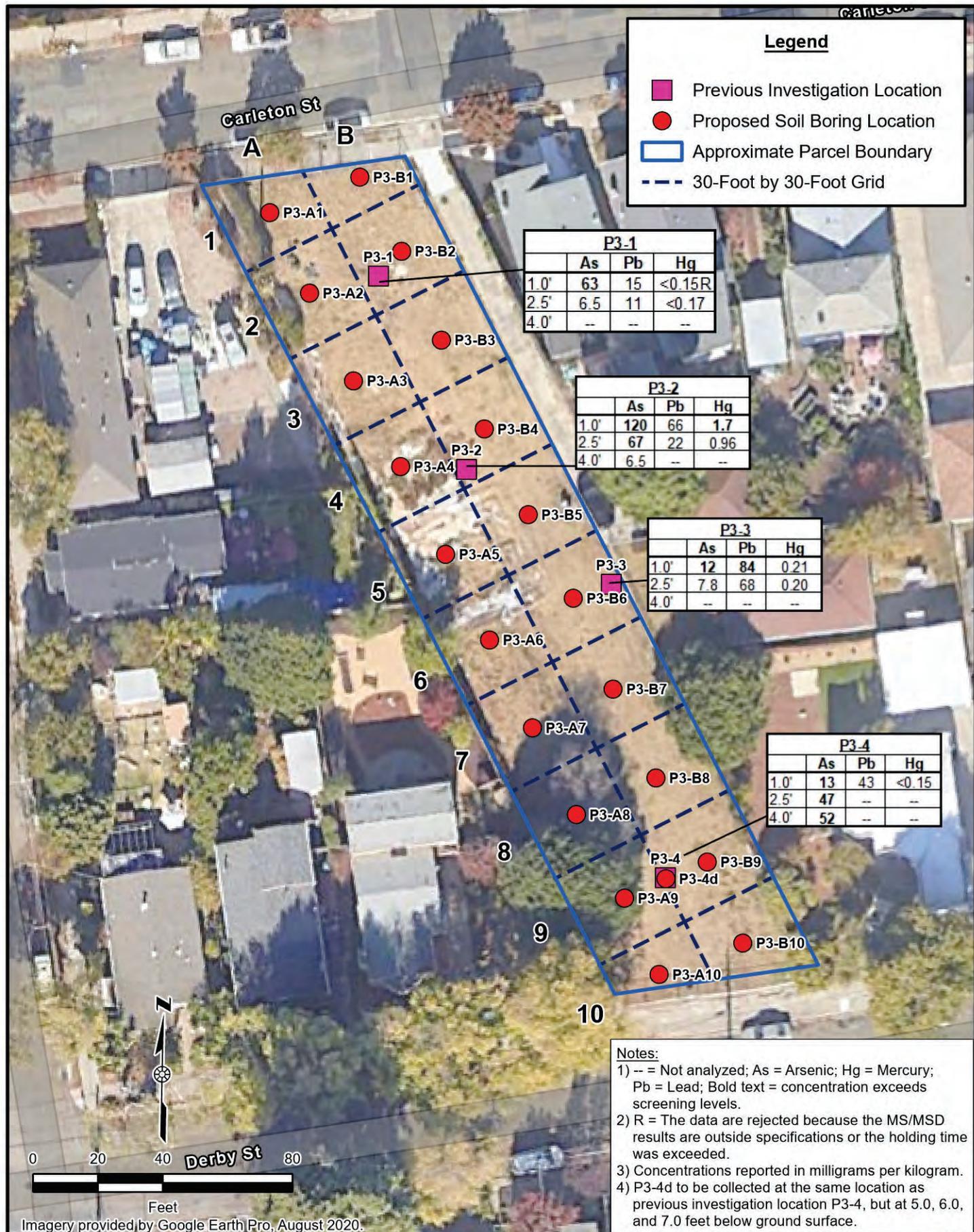
- Notes:**
- 1) -- = Not analyzed; As = Arsenic; Hg = Mercury; Pb = Lead; Bold text = concentration exceeds screening levels.
 - 2) R = The data are rejected because the MS/MSD results are outside specifications or the holding time was exceeded.
 - 3) Concentrations reported in milligrams per kilogram.
 - 4) P2-1d to be collected at the same location as previous investigation location P2-1, but at 5.0, 6.0, and 7.0 feet below ground surface.



GSI job No.	6272	Drawn By:	AV
Issued:	17-Nov-2023	Chk'd By:	LMS
		Appv'd By:	JPD
Map ID:	SPROW_Parcel2_PrpSOGrid		FIGURE 3B

PROPOSED SOIL SAMPLING LOCATIONS - PARCEL 2

Santa Fe Tracked to Park
Berkeley, California



Notes:

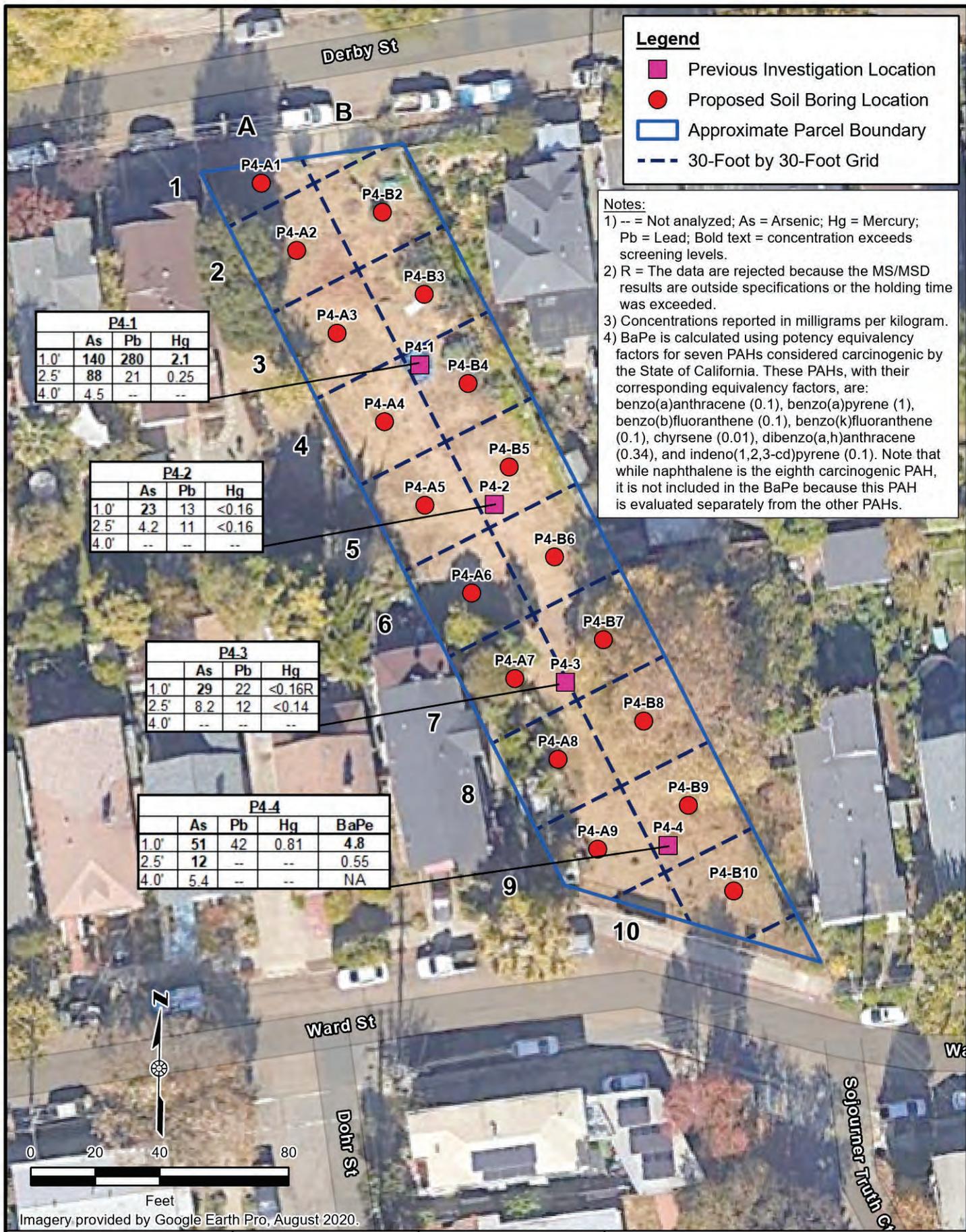
- = Not analyzed; As = Arsenic; Hg = Mercury; Pb = Lead; Bold text = concentration exceeds screening levels.
- R = The data are rejected because the MS/MSD results are outside specifications or the holding time was exceeded.
- Concentrations reported in milligrams per kilogram.
- P3-4d to be collected at the same location as previous investigation location P3-4, but at 5.0, 6.0, and 7.0 feet below ground surface.



GSI job No.	6272	Drawn By:	AV
Issued:	17-Nov-2023	Chk'd By:	LMS
		Appv'd By:	JPD
Map ID:	SFR0W_Parcel3_PrpSOGrid		FIGURE 3C

PROPOSED SOIL SAMPLING LOCATIONS - PARCEL 3

Santa Fe Tracked to Park
Berkeley, California



Legend

- Previous Investigation Location
- Proposed Soil Boring Location
- Approximate Parcel Boundary
- 30-Foot by 30-Foot Grid

Notes:

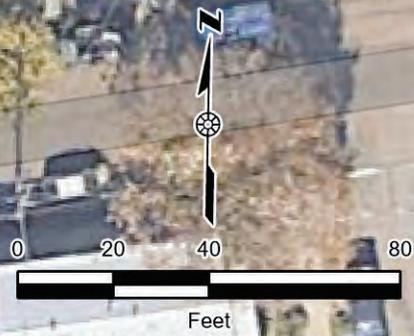
- 1) -- = Not analyzed; As = Arsenic; Hg = Mercury; Pb = Lead; Bold text = concentration exceeds screening levels.
- 2) R = The data are rejected because the MS/MSD results are outside specifications or the holding time was exceeded.
- 3) Concentrations reported in milligrams per kilogram.
- 4) BaPe is calculated using potency equivalency factors for seven PAHs considered carcinogenic by the State of California. These PAHs, with their corresponding equivalency factors, are: benzo(a)anthracene (0.1), benzo(a)pyrene (1), benzo(b)fluoranthene (0.1), benzo(k)fluoranthene (0.1), chrysene (0.01), dibenzo(a,h)anthracene (0.34), and indeno(1,2,3-cd)pyrene (0.1). Note that while naphthalene is the eighth carcinogenic PAH, it is not included in the BaPe because this PAH is evaluated separately from the other PAHs.

P4-1			
	As	Pb	Hg
1.0'	140	280	2.1
2.5'	88	21	0.25
4.0'	4.5	--	--

P4-2			
	As	Pb	Hg
1.0'	23	13	<0.16
2.5'	4.2	11	<0.16
4.0'	--	--	--

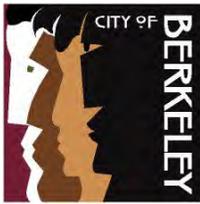
P4-3			
	As	Pb	Hg
1.0'	29	22	<0.16R
2.5'	8.2	12	<0.14
4.0'	--	--	--

P4-4				
	As	Pb	Hg	BaPe
1.0'	51	42	0.81	4.8
2.5'	12	--	--	0.55
4.0'	5.4	--	--	NA



Imagery provided by Google Earth Pro, August 2020.

	GSI job No. 6272	Drawn By: AV	<p>PROPOSED SOIL SAMPLING LOCATIONS - PARCEL 4</p> <p>Santa Fe Tracked to Park Berkeley, California</p>
	Issued: 17-Nov-2023	Chk'd By: TRK	
		Appv'd By: JPD	
	Map ID: SPROW_Parcel4_PrpsOGrid	FIGURE 3D	



Planning and Development Department
 Toxics Management Division
 A Certified Unified Program Agency

TMD Use Only	
Permit No.:	<u>24-EB-039B</u> (expires 120 days from approval)
Permit Fee:	<u>\$2550</u> Check #: _____
Approved by:	<u>KE</u> Date: <u>4/12/2024</u>
Admin:	Contractor Licenses – Reviewed by: <u>KE</u>
	Geo/Eng license <input checked="" type="radio"/> Y / N CoB Business <input checked="" type="radio"/> Y / N
	Driller license <input checked="" type="radio"/> Y / N CoB Business <input type="radio"/> Y / N
	Documents Scanned by: _____

Revised 7/10/2018

SUBSURFACE DRILLING PERMIT APPLICATION

Purpose of Application	<input type="checkbox"/> Groundwater Monitoring/Vapor Well Installation <input type="checkbox"/> Groundwater Monitoring/Vapor Well Destruction (Provide approval letter from oversight agency) <input type="checkbox"/> Well Modification (pumps, vacuums, probes, elevation, etc.) Number of Wells: _____	<input type="checkbox"/> Soil Borings, probes, sampling points Number of Borings: _____ <input type="checkbox"/> Extension of Permit # _____
-------------------------------	---	---

Name of Facility:	
Address:	
Business Telephone:	Emergency Telephone:

Property Owner:
Owner Address:

Supervising Geological or Engineering Co.:	City of Berkeley Business Lic #:	
Address/City:		
Geol/Eng Lic. #:	Tel.:	Fax:
Contact Person:	Email:	

Drilling Co.:	City of Berkeley Business Lic #:		
Address/City:			
C-57 License #:	Exp. Date:	Tel.:	Fax:
Local Contact Person:	Email:		

Construction/Destruction Specifications (attach information as needed for multiple construction types)			
Borehole/Well Casing Diameter:		Gauge of Well Casing:	
Borehole/Well Depth:	Well Screen type:	Slot Size:	
Type of grout (specify mix or product):			

- **Provide a scaled plan** identifying the proposed drilling locations, property boundaries, streets, structures, pollution source areas.
- Call the Toxics Management Division (TMD) at (510) 981-7460 to schedule an inspection of the grout sealing of wells, probes and boreholes. **Notify TMD a minimum of two (2) working days in advance** of first scheduled day of drilling
- This permit is subject to the Conditions of Approval stated on the following page.

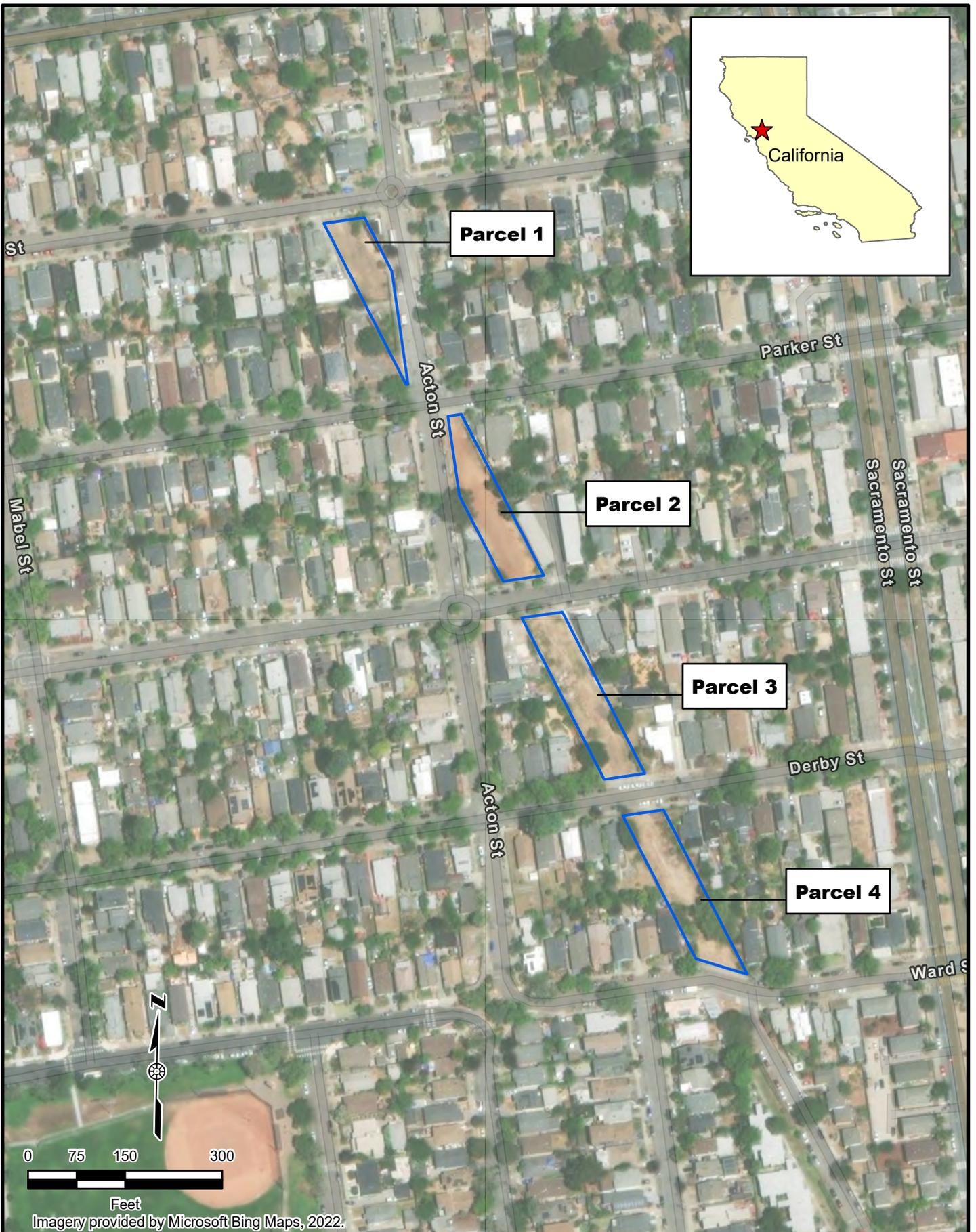
I certify that I have prepared this application and that the work will be done in accordance with the conditions of this permit, the provisions of the laws of the State of California, including State Water Well Standards, and the ordinances and the rules and regulations of the City of Berkeley.

Signed Tiffany George Representing _____ Date _____

FEES: First Well/Each add'l: \$420/\$150 First Soil Boring/Each add'l: \$210/\$150

CONDITIONS OF APPROVAL:

- A. Applicant must possess a City of Berkeley Business License. Contact (510) 981-7200.
- B. Call the Toxics Management Division (TMD) at (510) 981-7460 and schedule an inspection of the grout sealing of boreholes, probes, or wells. Notify TMD a minimum of two (2) working days in advance of first scheduled day of drilling (review City holidays and reduced service days at <http://ci.berkeley.ca.us/>). Failure to notify staff of cancellation or delays may result in the applicant being billed for mobilization time.
- C. All borings must be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
- D. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually. Wastes must be removed from the site within 2 weeks of conclusion of the drilling.
- E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit must be submitted to Toxics Management Division within 60 days of sample collection.
- F. If your permit was for construction, alteration, or destruction of a water well, cathodic protection well, groundwater monitoring well, etc., you must file a report of completion within 60 days of the completion of the work through the Department of Water Resources Online System of Well Completion Reports (OSWCR), https://civicnet.resources.ca.gov/DWR_WELLS/.
- G. A copy of the boring logs, well construction details, confirmation of submittal of the well completion report through OSWCR, and finalized as-built locations for all borings/wells (except geotechnical borings), must be submitted to TMD within 60 days of drilling/construction/destruction.
- H. Permit is valid for 120 days for the purpose specified herein. Construction aspects can be changed based on conditions encountered in the field. The permit is valid for only one TMD inspection.
- I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
- J. All work performed must conform to Business and Profession Codes and State Water Well Standards.
- K. The permit applicant and the property owner are required to ensure stormwater pollution prevention is implemented throughout the drilling process.
- L. Drilling company is required to contain all fluids and solids in compliance with stormwater pollution prevention rules. Any violation will lead to stop work, or cleanup order and potential enforcement.



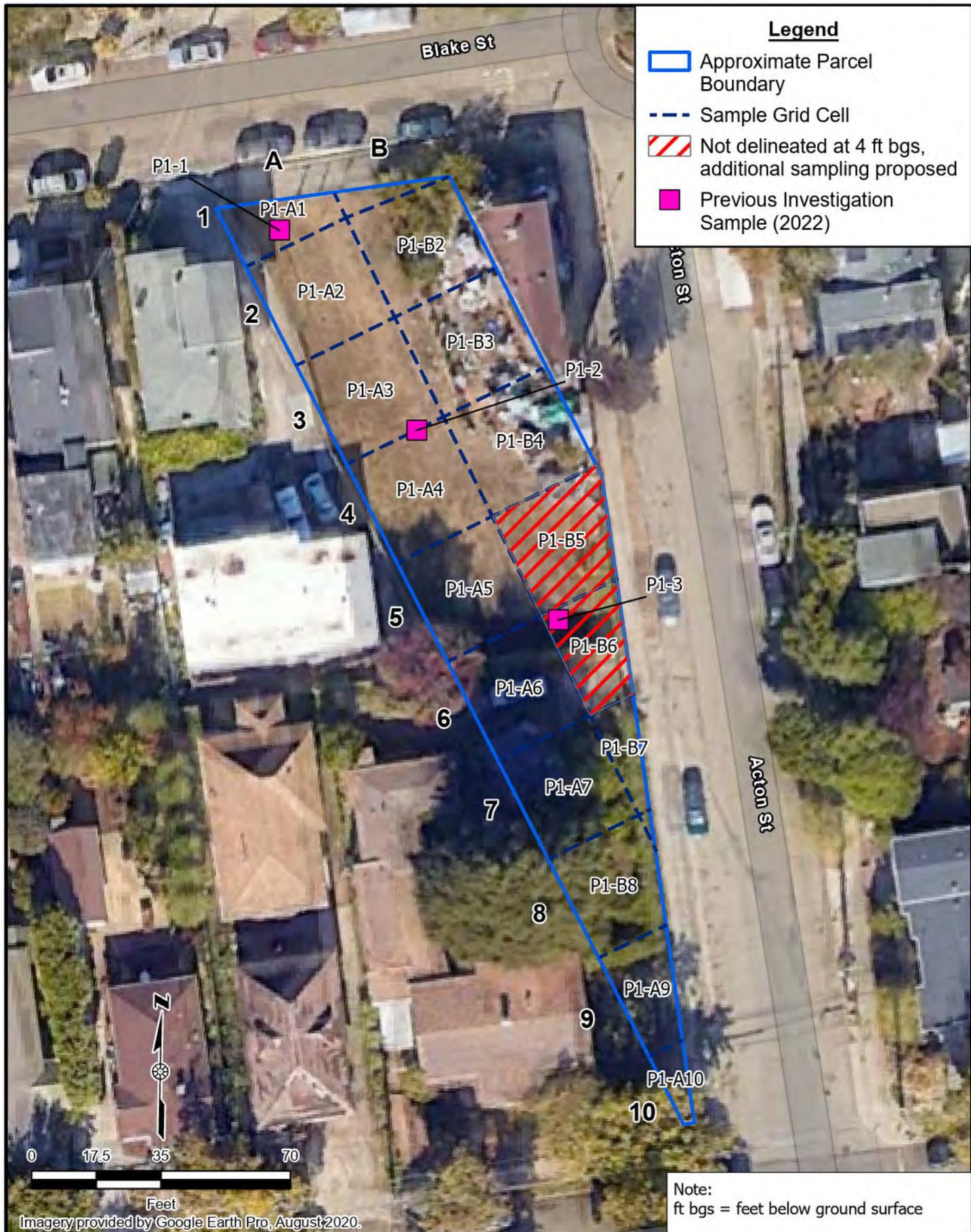
Imagery provided by Microsoft Bing Maps, 2022.



GSI job No.	6272	Drawn By:	AV
Issued:	5-Oct-2023	Chk'd By:	TRK
		App'v'd By:	JPD
Map ID:	SFROW_SiteOverview	FIGURE 2	

SITE OVERVIEW

Santa Fe Trackbed to Park
Berkeley, California



Legend

- Approximate Parcel Boundary
- Sample Grid Cell
- Not delineated at 4 ft bgs, additional sampling proposed
- Previous Investigation Sample (2022)

Note:
ft bgs = feet below ground surface

Imagery provided by Google Earth Pro, August-2020.



GSI job No.	6272	Drawn By:	AJC
Issued:	5-Apr-2024	Chk'd By:	TRG
		App'd By:	JPD
Map ID:	SFROW_Parcel1-add	FIGURE 3A	

PARCEL 1

Santa Fe Tracked to Park
Berkeley, California



Legend

- Approximate Parcel Boundary
- Sample Grid Cell
- Not delineated at 4 ft bgs, additional sampling proposed
- Previous Investigation Sample (2022)

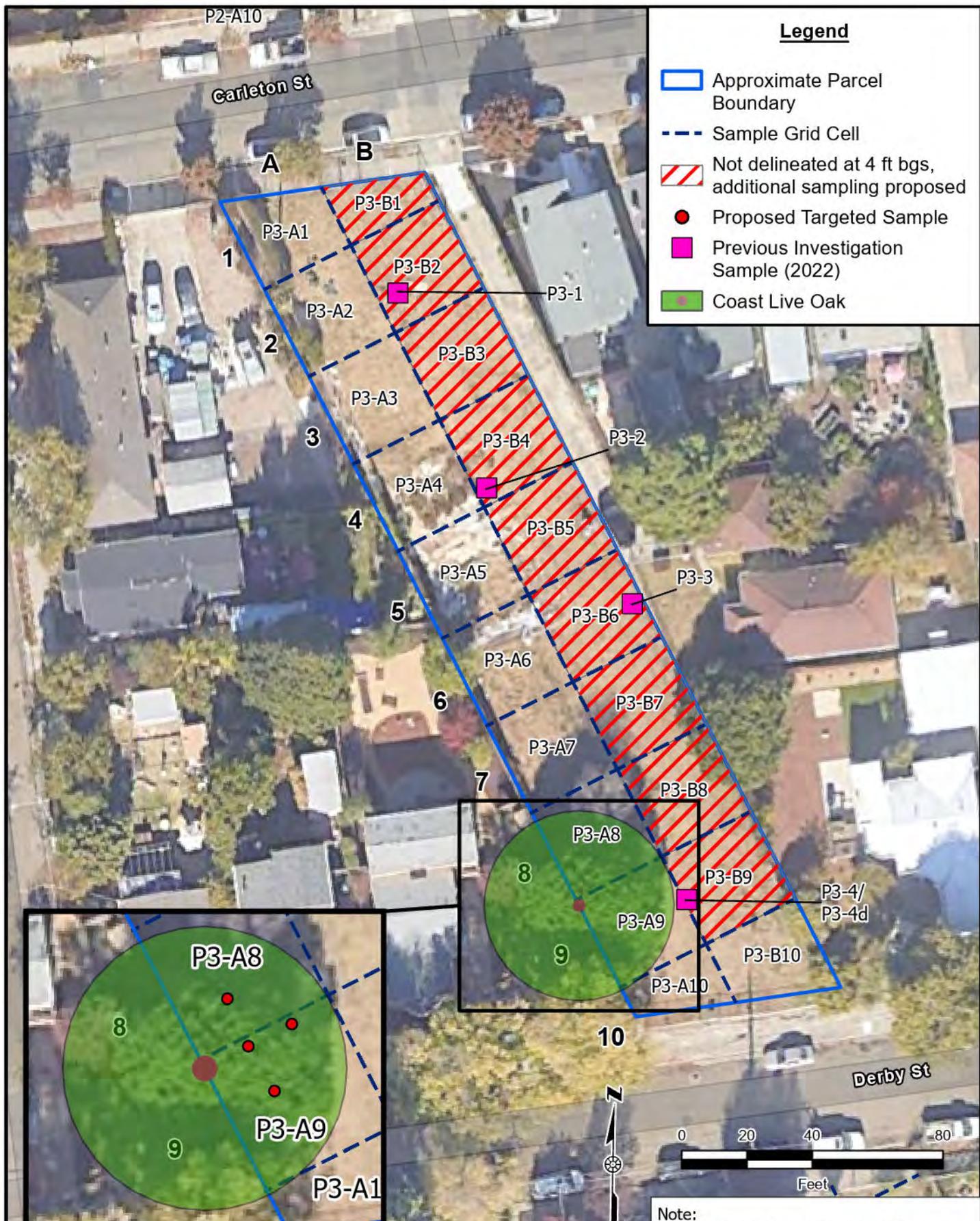
Note:
ft bgs = feet below ground surface



GSI job No.	6272	Drawn By:	AJC
Issued:	5-Apr-2024	Chk'd By:	TRG
		App'v'd By:	JPD
Map ID:	SFROW_Parcel2-add	FIGURE 3B	

PARCEL 2

Santa Fe Tracked to Park
Berkeley, California



Legend

- Approximate Parcel Boundary
- Sample Grid Cell
- Not delineated at 4 ft bgs, additional sampling proposed
- Proposed Targeted Sample
- Previous Investigation Sample (2022)
- Coast Live Oak

Imagery provided by Google Earth Pro, August 2020.

Note:
ft bgs = feet below ground surface



GSI job No.	6272	Drawn By:	AJC
Issued:	5-Apr-2024	Chk'd By:	TRG
		App'v'd By:	JPD
Map ID:	SFROW_Parcel3-add		

FIGURE 3C

PARCEL 3
Santa Fe Tracked to Park
Berkeley, California

FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

APPENDIX B

XRF Data

Table D-1: XRF MEASUREMENTS
Santa Fe Trackbed to Park
Berkeley, California

Boring	Depth (feet bgs)	Metals		
		parts per million (ppm)		
		Arsenic	Lead	Mercury
P3-T1	0.5-1.0	37	66	<3
	1.0-1.5	<1	15	<3
	1.5-2.0	3	15	<3
P3-T2	0.5-1.0	7	102	<3
	1.0-1.5	<2	102	<3
	1.5-2.0	<2	49	<3
P3-T3	0.5-1.0	<2	79	<3
	1.0-1.5	<2	37	<3
	1.5-2.0	<2	38	<3
P3-T4	0.5-1.0	<2	60	<3
	1.0-1.5	<2	81	<4
	1.5-2.0	<2	76	<3

Notes:

1. Date of collection: 4/18/2024
2. Each measurements was taken after 30 seconds of analysis with Niton XL5 Plus

FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

APPENDIX C

Analytical Laboratory Reports



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number : 465695
Report Level : II
Report Date : 08/01/2024

Analytical Report *prepared for:*

Jennifer Duffield
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Santa Fe Row

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Jennifer Duffield GSI Environmental, Inc. 2000 Powell Street Suite 820 Emeryville, CA 94608	Lab Job #: 465695 Project No: 6272 Location: Berkeley Santa Fe Row Date Received: 07/13/22
---	---

Sample ID	Lab ID	Collected	Matrix
PI-1-1.0	465695-001	07/13/22 10:10	Soil
PI-1-2.5	465695-002	07/13/22 10:15	Soil
PI-1-4.0	465695-003	07/13/22 10:20	Soil
P1-2-1.0	465695-004	07/13/22 10:40	Soil
P1-2-2.5	465695-005	07/13/22 10:45	Soil
P1-2-4.0	465695-006	07/13/22 10:50	Soil
P1-3-1.0	465695-007	07/13/22 11:15	Soil
P1-3-2.5	465695-008	07/13/22 11:40	Soil
P1-3-4.0	465695-009	07/13/22 11:55	Soil
P2-1-1.0	465695-010	07/13/22 13:20	Soil
P2-1-2.5	465695-011	07/13/22 13:30	Soil
P2-1-4.0	465695-012	07/13/22 13:35	Soil
P2-2-1.0	465695-013	07/13/22 13:55	Soil
P2-2-2.5	465695-014	07/13/22 14:00	Soil
P2-2-4.0	465695-015	07/13/22 14:05	Soil
P2-3-1.0	465695-016	07/13/22 14:45	Soil
P2-3-2.5	465695-017	07/13/22 14:50	Soil
P2-3-4.0	465695-018	07/13/22 15:00	Soil
P2-4-1.0	465695-019	07/13/22 15:15	Soil
P2-4-2.5	465695-020	07/13/22 15:25	Soil
P2-4-4.0	465695-021	07/13/22 15:30	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Jennifer Duffield

Lab Job 465695
Number:
Project No: 6272
Location: Berkeley Santa Fe Row
Date Received: 07/13/22

- This data package contains sample and QC results for twelve soil samples, requested for the above referenced project on 07/13/22. The samples were received cold and intact.
- Report revised and reissued 08.01.2024 with dibenz(a,h)anthracene MDLs included for samples 013 and 016.

TPH-Extractables by GC (EPA 8015M):

No analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- High responses were observed for benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene in the CCV analyzed 07/22/22 14:12; affected data was qualified with "b".
- High recoveries were observed for 2-methylnaphthalene and naphthalene in the MSD of P2-4-1.0 (lab # 465695-019); the LCS was within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.
- A number of samples were diluted due to the dark and viscous nature of the sample extracts.
- No other analytical problems were encountered.

Pesticides (EPA 8081A):

- PI-1-1.0 (lab # 465695-001) was diluted due to the color of the sample extract.
- P2-2-1.0 (lab # 465695-013), P2-3-1.0 (lab # 465695-016), and P2-4-1.0 (lab # 465695-019) were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

Metals (EPA 6010B):

No analytical problems were encountered.

(EPA 6020):

McC Campbell Analytical, Inc. in Pittsburg, CA performed the analysis (see sublab report section for certifications). Please see the McC Campbell Analytical, Inc. case narrative.



Enthalpy Analytical - Berkeley

2323 5th Street, Berkeley, CA 94710
Phone 510-486-0900

Chain of Custody Record

Lab No: 465695

Page: 2 of 3

Matrix: A = Air S = Soil/Solid
W = Water DW = Drinking Water SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)

Standard: X 5 Day: 1 Day: 3 Day: Custom TAT:

Sample Receipt Temp:

Preservatives:
1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
4 = H₂SO₄ 5 = NaOH 6 = Other

(lab use only)

PROJECT INFORMATION

Company:	CSI Environmental	Name:	Berkeley Santa Fe Row
Report To:	Jennifer Duffield, Tiffany Kitzke	Number:	6272-002
Email:	jduffield@csienv.com, tkitzke@csienv.com	P.O. #:	6272-002
Address:	155 Grand Ave, Suite 704	Address:	
Phone:	Oakland, CA 94612	Global ID:	NA
	831-227-5144	Sampled By:	T. Kitzke

Analysis Request

Test Instructions / Comments

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request	Test Instructions / Comments
1	7/13/22	1330	SD	8oz jar	-	X	
2		1335				X	Parts by 8015 TPT/Time by 8015 HOLD
3		1355				X	
4		1400				X	
5		1405				X	
6		1445				X	
7		1450				X	
8		1500				X	
9		1515				X	
10		1525				X	

Signature	Print Name	Company / Title	Date / Time
<i>[Signature]</i>	Tiffany Kitzke	GSI / Senior Scientist	7/13/22 / 1436
<i>[Signature]</i>	USPHH BAUGHMAN	EA	7/13/22 / 1436
<i>[Signature]</i>	USPHH	EA	7/14/22 / 1107
<i>[Signature]</i>	ERIC GALVAN	EA	7/15/22 / 1006



Enthalpy Analytical - Berkeley
 2323 5th Street, Berkeley, CA 94710
 Phone 510-486-0900

Chain of Custody Record

Lab No: 465695

Page: 3 of 3

Matrix: A = Air S = Soil/Solid
 W = Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day:
 2 Day: 1 Day: Custom TAT:

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION				PROJECT INFORMATION				Analysis Request				Test Instructions / Comments			
Company:	Name:	Report To:	Number:	Matrix	Sampling Date	Sampling Time	Container No. / Size	Matrix	Pres.	Company / Title	Date / Time	Company / Title	Date / Time		
GSI Environmental	Berkeley Santa Fe Row	Jennifer Duffield, Tiffany Kitzke	6272-002	SO	7/13/22	1530	8 oz jar	SO	-	GSI / Senior Scientist	7/13/22	EA	1436		
Email:	P.O. #:	Address:	Global ID:	Sampled By:						DK	7/13/22	EA	1436		
Jennifer Duffield@gsienv.com		155 Grand Ave, Suite 704	NA	T. Kitzke						EA	7/14/22	EA	1006		
Address:		Oakland, CA 94612													
Phone:		831-227-5144													
Sample ID															
1	P2-4-4.0														
2															
3															
4															
5															
6															
7															
8															
9															
10															
1	Relinquished By:	Signature	Print Name	Company / Title	Date / Time										
1	Received By:	<i>[Signature]</i>	Tiffany Kitzke	GSI / Senior Scientist	7/13/22										
2	Relinquished By:	<i>[Signature]</i>	BOBBA BAUGHMAN	DK	7/13/22										
2	Received By:	<i>[Signature]</i>	inserting	EA	7/14/22										
3	Relinquished By:	<i>[Signature]</i>	Eric Galvan	EA	7/15/22										
3	Received By:														

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 465675 Client: GSI
 Date Received: 7/13/22 Project: _____

Section 2: Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A
 Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # B, or C
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 7/13/22 By (print) my (sign) _____

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Cooler Temp (°C): #1: _____, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?		/	
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted concerning this sample delivery?		/	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged in 7/13/22 By (print) my PERSHLY (sign) _____
 Date Labeled 7/14/22 By (print) UEP (sign) _____



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental Project: Berkeley Santa Fe Row
 Date Received: 7/15/2022 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 NO (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 9.3 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Greyhound

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 3.8 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time: _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: Yamita Date: 7/15/2022

STD PPD

14JUL22 06:53P

** LABEL **

GLI 3090284120

Schd: 6747

GLI
LOS ANGELES, CA

Pcs: 7 of 8

FROM: ENTHALPY ANALYTICAL
000-000-0000

REC'D: ENTHALPY ANALYTICAL

931 W. BARKLEY AVE

ORANGE, CA 92868

Phone: 925-487-8029
Standard

Agency Phone: (213) 629-8420

WWW.SHIPGREYHOUND.COM

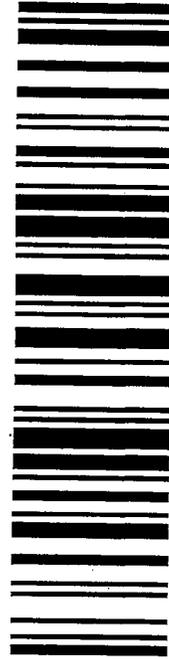
Manual Wght: 462.4

Tariff Wght: 465.0

PO/Ref #:



**PACKAGE
EXPRESS**



A8648596B

LBLBC-GPX (REV 11/19)

Analysis Results for 465695

Jennifer Duffield
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 465695
 Project No: 6272
 Location: Berkeley Santa Fe Row
 Date Received: 07/13/22

Sample ID: PI-1-1.0 Lab ID: 465695-001 Collected: 07/13/22 10:10
Matrix: Soil

465695-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates				Limits						
n-Triacontane	93%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
beta-BHC	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
gamma-BHC	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
delta-BHC	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Heptachlor	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Aldrin	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Heptachlor epoxide	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endosulfan I	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Dieldrin	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
4,4'-DDE	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endrin	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endosulfan II	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endosulfan sulfate	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
4,4'-DDD	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endrin aldehyde	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Endrin ketone	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
4,4'-DDT	ND		ug/Kg	9.9		2	293616	07/22/22	07/24/22	TRN
Methoxychlor	ND		ug/Kg	20		2	293616	07/22/22	07/24/22	TRN
Toxaphene	ND		ug/Kg	200		2	293616	07/22/22	07/24/22	TRN
Chlordane (Technical)	ND		ug/Kg	99		2	293616	07/22/22	07/24/22	TRN
Surrogates				Limits						
TCMX	61%		%REC	23-120		2	293616	07/22/22	07/24/22	TRN
Decachlorobiphenyl	81%		%REC	24-120		2	293616	07/22/22	07/24/22	TRN
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
2-Methylnaphthalene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Naphthalene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Acenaphthylene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Acenaphthene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Fluorene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Phenanthrene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Anthracene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Fluoranthene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

465695-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Pyrene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Benzo(a)anthracene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Chrysene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Benzo(b)fluoranthene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Benzo(k)fluoranthene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Benzo(a)pyrene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	20	8.8	2	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	20		2	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	100%		%REC	27-125		2	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	85%		%REC	30-120		2	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	93%		%REC	33-155		2	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: PI-1-2.5	Lab ID: 465695-002	Collected: 07/13/22 10:15
Matrix: Soil		

465695-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates				Limits						
n-Triacontane	100%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Aldrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDD	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	10		1	293616	07/22/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	100		1	293616	07/22/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	51		1	293616	07/22/22	07/24/22	TJW
Surrogates				Limits						
TCMX	71%		%REC	23-120		1	293616	07/22/22	07/24/22	TJW
Decachlorobiphenyl	89%		%REC	24-120		1	293616	07/22/22	07/24/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
2-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Naphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Acenaphthylene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Acenaphthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Fluorene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Phenanthrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Anthracene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(a)anthracene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Chrysene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(b)fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(k)fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

465695-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	10	4.4	1	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	82%		%REC	27-125		1	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	69%		%REC	30-120		1	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	88%		%REC	33-155		1	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: PI-1-4.0	Lab ID: 465695-003	Collected: 07/13/22 10:20
Matrix: Soil		

465695-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	94%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Aldrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDD	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	5.1		1	293616	07/22/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	10		1	293616	07/22/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	100		1	293616	07/22/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	51		1	293616	07/22/22	07/24/22	TJW
Surrogates			Limits							
TCMX	69%		%REC	23-120		1	293616	07/22/22	07/24/22	TJW
Decachlorobiphenyl	105%		%REC	24-120		1	293616	07/22/22	07/24/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
2-Methylnaphthalene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Naphthalene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Acenaphthylene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Acenaphthene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Fluorene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Phenanthrene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Anthracene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Fluoranthene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Pyrene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(a)anthracene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Chrysene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(b)fluoranthene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(k)fluoranthene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	

Analysis Results for 465695

465695-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	ND		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	9.9	4.3	0.99	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	94%		%REC	27-125		0.99	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	74%		%REC	30-120		0.99	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	84%		%REC	33-155		0.99	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: P1-2-2.5	Lab ID: 465695-005	Collected: 07/13/22 10:45
Matrix: Soil		

465695-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	94%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Aldrin	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endrin	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
4,4'-DDD	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	4.9	0.98		293616	07/22/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	9.8	0.98		293616	07/22/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	98	0.98		293616	07/22/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	49	0.98		293616	07/22/22	07/24/22	TJW
Surrogates			Limits							
TCMX	64%		%REC	23-120		0.98	293616	07/22/22	07/24/22	TJW
Decachlorobiphenyl	100%		%REC	24-120		0.98	293616	07/22/22	07/24/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
2-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Naphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Acenaphthylene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Acenaphthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Fluorene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Phenanthrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Anthracene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(a)anthracene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Chrysene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(b)fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Benzo(k)fluoranthene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

465695-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	10	4.4	1	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	10		1	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	96%		%REC	27-125		1	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	82%		%REC	30-120		1	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	96%		%REC	33-155		1	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: P1-3-1.0	Lab ID: 465695-007	Collected: 07/13/22 11:15
Matrix: Soil		

465695-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	14		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	22		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	80%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Aldrin	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endrin	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
4,4'-DDD	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	5.0		1	293616	07/22/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	10		1	293616	07/22/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	100		1	293616	07/22/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	50		1	293616	07/22/22	07/24/22	TJW
Surrogates			Limits							
TCMX	74%		%REC	23-120		1	293616	07/22/22	07/24/22	TJW
Decachlorobiphenyl	94%		%REC	24-120		1	293616	07/22/22	07/24/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	22		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
2-Methylnaphthalene	32		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Naphthalene	50		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Acenaphthylene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Acenaphthene	15		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Fluorene	ND		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Phenanthrene	71		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Anthracene	29		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Fluoranthene	150		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Pyrene	190		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(a)anthracene	140		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Chrysene	170		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(b)fluoranthene	150		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	
Benzo(k)fluoranthene	150		ug/Kg	9.9	0.99	293258	07/19/22	07/21/22	HQN	

Analysis Results for 465695

465695-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	190		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	150		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	27		ug/Kg	9.9	4.3	0.99	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	110		ug/Kg	9.9		0.99	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	75%		%REC	27-125		0.99	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	68%		%REC	30-120		0.99	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	82%		%REC	33-155		0.99	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: P2-1-2.5	Lab ID: 465695-011	Collected: 07/13/22 13:30
Matrix: Soil		

465695-011 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	84%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Aldrin	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endrin	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
4,4'-DDD	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	5.0	0.99		293616	07/22/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	9.9	0.99		293616	07/22/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	99	0.99		293616	07/22/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	50	0.99		293616	07/22/22	07/24/22	TJW
Surrogates			Limits							
TCMX	78%		%REC	23-120		0.99	293616	07/22/22	07/24/22	TJW
Decachlorobiphenyl	97%		%REC	24-120		0.99	293616	07/22/22	07/24/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
2-Methylnaphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Naphthalene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Acenaphthylene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Acenaphthene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Fluorene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Phenanthrene	24		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Anthracene	ND		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Fluoranthene	36		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Pyrene	41		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Benzo(a)anthracene	18		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Chrysene	22		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Benzo(b)fluoranthene	24		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN
Benzo(k)fluoranthene	20		ug/Kg	10		1	293258	07/19/22	07/20/22	HQN

Analysis Results for 465695

Sample ID: P2-2-1.0	Lab ID: 465695-013	Collected: 07/13/22 13:55
Matrix: Soil		

465695-013 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	20		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	51		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates				Limits						
n-Triacontane	85%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Dieldrin	15		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDD	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	12	C	ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20		2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200		2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	100		2	293639	07/23/22	07/25/22	TJW
Surrogates				Limits						
TCMX	76%		%REC	23-120		2	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	105%		%REC	24-120		2	293639	07/23/22	07/25/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
2-Methylnaphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Naphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Acenaphthylene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Acenaphthene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Fluorene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Phenanthrene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Anthracene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Fluoranthene	120		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Pyrene	160		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(a)anthracene	130		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Chrysene	140		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(b)fluoranthene	180		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(k)fluoranthene	180		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

465695-013 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	240		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	250		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	36	J	ug/Kg	40	18	4	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	210		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	95%		%REC	27-125		4	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	87%		%REC	30-120		4	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	91%		%REC	33-155		4	293258	07/19/22	07/21/22	HQN

Sample ID: P2-2-4.0	Lab ID: 465695-015	Collected: 07/13/22 14:05
Matrix: Soil		

465695-015 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B										
Prep Method: EPA 3050B										
Arsenic	3.4		mg/Kg	1.0		1	294091	08/01/22	08/02/22	SBW
Lead	6.9		mg/Kg	1.0		1	294091	08/01/22	08/02/22	SBW

Analysis Results for 465695

Sample ID: P2-3-1.0	Lab ID: 465695-016	Collected: 07/13/22 14:45
Matrix: Soil		

465695-016 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	25		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	61		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	86%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	25		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
4,4'-DDD	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	24		ug/Kg	9.9		2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20		2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200		2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	99		2	293639	07/23/22	07/25/22	TJW
Surrogates			Limits							
TCMX	81%		%REC	23-120		2	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	79%		%REC	24-120		2	293639	07/23/22	07/25/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
2-Methylnaphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Naphthalene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Acenaphthylene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Acenaphthene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Fluorene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Phenanthrene	51		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Anthracene	ND		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Fluoranthene	61		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Pyrene	68		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(a)anthracene	47		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Chrysene	59		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(b)fluoranthene	63		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Benzo(k)fluoranthene	44		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

465695-016 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	64		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Indeno(1,2,3-cd)pyrene	58		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	40	18	4	293258	07/19/22	07/21/22	HQN
Benzo(g,h,i)perylene	59		ug/Kg	40		4	293258	07/19/22	07/21/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	76%		%REC	27-125		4	293258	07/19/22	07/21/22	HQN
2-Fluorobiphenyl	72%		%REC	30-120		4	293258	07/19/22	07/21/22	HQN
Terphenyl-d14	78%		%REC	33-155		4	293258	07/19/22	07/21/22	HQN

Analysis Results for 465695

Sample ID: P2-3-2.5	Lab ID: 465695-017	Collected: 07/13/22 14:50
Matrix: Soil		

465695-017 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	81%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
beta-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
gamma-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
delta-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Heptachlor	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Aldrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Heptachlor epoxide	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endosulfan I	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Dieldrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
4,4'-DDE	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endosulfan II	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endosulfan sulfate	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
4,4'-DDD	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endrin aldehyde	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Endrin ketone	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
4,4'-DDT	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW	
Methoxychlor	ND		ug/Kg	9.9	0.99	293639	07/23/22	07/25/22	TJW	
Toxaphene	ND		ug/Kg	99	0.99	293639	07/23/22	07/25/22	TJW	
Chlordane (Technical)	ND		ug/Kg	50	0.99	293639	07/23/22	07/25/22	TJW	
Surrogates			Limits							
TCMX	84%		%REC	23-120	0.99	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	97%		%REC	24-120	0.99	293639	07/23/22	07/25/22	TJW	
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
2-Methylnaphthalene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Naphthalene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Acenaphthylene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Acenaphthene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Fluorene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Phenanthrene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Anthracene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Fluoranthene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Pyrene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Benzo(a)anthracene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Chrysene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Benzo(b)fluoranthene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Benzo(k)fluoranthene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN

Analysis Results for 465695

465695-017 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	10	4.4	1	293479	07/21/22	07/22/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	10		1	293479	07/21/22	07/22/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	85%		%REC	27-125		1	293479	07/21/22	07/22/22	HQN
2-Fluorobiphenyl	75%		%REC	30-120		1	293479	07/21/22	07/22/22	HQN
Terphenyl-d14	74%		%REC	33-155		1	293479	07/21/22	07/22/22	HQN

Analysis Results for 465695

Sample ID: P2-4-1.0	Lab ID: 465695-019	Collected: 07/13/22 15:15
Matrix: Soil		

465695-019 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	47		mg/Kg	10		1	293456	07/21/22	07/22/22	MES
ORO C28-C44	89		mg/Kg	20		1	293456	07/21/22	07/22/22	MES
Surrogates			Limits							
n-Triacontane	87%		%REC	70-130		1	293456	07/21/22	07/22/22	MES
Method: EPA 8081A										
Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDD	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	10		2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20		2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200		2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	100		2	293639	07/23/22	07/25/22	TJW
Surrogates			Limits							
TCMX	83%		%REC	23-120		2	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	82%		%REC	24-120		2	293639	07/23/22	07/25/22	TJW
Method: EPA 8270C-SIM										
Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
2-Methylnaphthalene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Naphthalene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Acenaphthylene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Acenaphthene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Fluorene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Phenanthrene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Anthracene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Fluoranthene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Pyrene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Benzo(a)anthracene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Chrysene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Benzo(b)fluoranthene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Benzo(k)fluoranthene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN

Analysis Results for 465695

465695-019 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(a)pyrene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	100	44	10	293479	07/21/22	07/22/22	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	100		10	293479	07/21/22	07/22/22	HQN
Surrogates				Limits						
Nitrobenzene-d5	77%		%REC	27-125		10	293479	07/21/22	07/22/22	HQN
2-Fluorobiphenyl	81%		%REC	30-120		10	293479	07/21/22	07/22/22	HQN
Terphenyl-d14	74%		%REC	33-155		10	293479	07/21/22	07/22/22	HQN

Sample ID: P2-4-4.0	Lab ID: 465695-021	Collected: 07/13/22 15:30
	Matrix: Soil	

465695-021 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B										
Prep Method: EPA 3050B										
Arsenic	4.0		mg/Kg	0.99		0.99	294091	08/01/22	08/02/22	SBW

C Presence confirmed, but RPD between columns exceeds 40%
 J Estimated value
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1003824	Batch: 294091
Matrix: Miscell.	Method: EPA 6010B	Prep Method: EPA 3050B

QC1003824 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0		08/01/22	08/02/22
Lead	ND		mg/Kg	1.0		08/01/22	08/02/22

Type: Lab Control Sample	Lab ID: QC1003825	Batch: 294091
Matrix: Miscell.	Method: EPA 6010B	Prep Method: EPA 3050B

QC1003825 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	99.68	100.0	mg/Kg	100%		80-120
Lead	106.7	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1003826	Batch: 294091
Matrix (Source ID): Soil (466288-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1003826 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.4	2.359	94.34	mg/Kg	104%		75-125	0.94
Lead	105.0	7.363	94.34	mg/Kg	103%		75-125	0.94

Type: Matrix Spike Duplicate	Lab ID: QC1003827	Batch: 294091
Matrix (Source ID): Soil (466288-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1003827 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	92.73	2.359	88.50	mg/Kg	102%		75-125	2	35	0.88
Lead	97.65	7.363	88.50	mg/Kg	102%		75-125	1	20	0.88

Type: Blank	Lab ID: QC1002014	Batch: 293456
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC1002014 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	10		07/21/22	07/22/22
ORO C28-C44	ND		mg/Kg	20		07/21/22	07/22/22
Surrogates				Limits			
n-Triacontane	100%		%REC	70-130		07/21/22	07/22/22

Type: Lab Control Sample	Lab ID: QC1002015	Batch: 293456
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC1002015 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	232.0	250.0	mg/Kg	93%		76-122
Surrogates						
n-Triacontane	9.623	10.00	mg/Kg	96%		70-130

Batch QC

Type: Matrix Spike	Lab ID: QC1002016	Batch: 293456
Matrix (Source ID): Soil (465695-005)	Method: EPA 8015M	Prep Method: EPA 3580

QC1002016 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	193.6	ND	250.0	mg/Kg	77%		62-126	1
Surrogates								
n-Triacontane	8.272		10.00	mg/Kg	83%		70-130	1

Type: Matrix Spike Duplicate	Lab ID: QC1002017	Batch: 293456
Matrix (Source ID): Soil (465695-005)	Method: EPA 8015M	Prep Method: EPA 3580

QC1002017 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	204.0	ND	250.0	mg/Kg	82%		62-126	5	35	1
Surrogates										
n-Triacontane	9.314		10.00	mg/Kg	93%		70-130			1

Type: Blank	Lab ID: QC1002308	Batch: 293616
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002308 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
alpha-BHC	ND		ug/Kg	5.1		07/22/22	07/24/22
beta-BHC	ND		ug/Kg	5.1		07/22/22	07/24/22
gamma-BHC	ND		ug/Kg	5.1		07/22/22	07/24/22
delta-BHC	ND		ug/Kg	5.1		07/22/22	07/24/22
Heptachlor	ND		ug/Kg	5.1		07/22/22	07/24/22
Aldrin	ND		ug/Kg	5.1		07/22/22	07/24/22
Heptachlor epoxide	ND		ug/Kg	5.1		07/22/22	07/24/22
Endosulfan I	ND		ug/Kg	5.1		07/22/22	07/24/22
Dieldrin	ND		ug/Kg	5.1		07/22/22	07/24/22
4,4'-DDE	ND		ug/Kg	5.1		07/22/22	07/24/22
Endrin	ND		ug/Kg	5.1		07/22/22	07/24/22
Endosulfan II	ND		ug/Kg	5.1		07/22/22	07/24/22
Endosulfan sulfate	ND		ug/Kg	5.1		07/22/22	07/24/22
4,4'-DDD	ND		ug/Kg	5.1		07/22/22	07/24/22
Endrin aldehyde	ND		ug/Kg	5.1		07/22/22	07/24/22
Endrin ketone	ND		ug/Kg	5.1		07/22/22	07/24/22
4,4'-DDT	ND		ug/Kg	5.1		07/22/22	07/24/22
Methoxychlor	ND		ug/Kg	10		07/22/22	07/24/22
Toxaphene	ND		ug/Kg	100		07/22/22	07/24/22
Chlordane (Technical)	ND		ug/Kg	51		07/22/22	07/24/22
Surrogates				Limits			
TCMX	35%		%REC	23-120		07/22/22	07/24/22
Decachlorobiphenyl	75%		%REC	24-120		07/22/22	07/24/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1002309	Batch: 293616
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002309 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	27.96	50.00	ug/Kg	56%		22-129
beta-BHC	36.45	50.00	ug/Kg	73%		28-125
gamma-BHC	28.78	50.00	ug/Kg	58%		22-128
delta-BHC	24.63	50.00	ug/Kg	49%		24-131
Heptachlor	28.82	50.00	ug/Kg	58%		18-124
Aldrin	28.28	50.00	ug/Kg	57%		23-120
Heptachlor epoxide	33.95	50.00	ug/Kg	68%		26-120
Endosulfan I	36.94	50.00	ug/Kg	74%		25-126
Dieldrin	34.83	50.00	ug/Kg	70%		23-124
4,4'-DDE	37.18	50.00	ug/Kg	74%		28-121
Endrin	37.99	50.00	ug/Kg	76%		25-127
Endosulfan II	42.70	50.00	ug/Kg	85%		29-121
Endosulfan sulfate	40.74	50.00	ug/Kg	81%		30-121
4,4'-DDD	41.27	50.00	ug/Kg	83%		26-120
Endrin aldehyde	42.29	50.00	ug/Kg	85%		10-120
Endrin ketone	59.06	50.00	ug/Kg	118%	#	28-125
4,4'-DDT	40.04	50.00	ug/Kg	80%		22-125
Methoxychlor	45.66	50.00	ug/Kg	91%		28-130
Surrogates						
TCMX	21.57	50.00	ug/Kg	43%		23-120
Decachlorobiphenyl	38.02	50.00	ug/Kg	76%		24-120

Batch QC

Type: Matrix Spike	Lab ID: QC1002310	Batch: 293616
Matrix (Source ID): Soil (465695-001)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002310 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
alpha-BHC	34.63	ND	50.00	ug/Kg	69%		46-120	2
beta-BHC	42.02	ND	50.00	ug/Kg	84%		41-120	2
gamma-BHC	36.24	ND	50.00	ug/Kg	72%		41-120	2
delta-BHC	42.11	ND	50.00	ug/Kg	84%		38-123	2
Heptachlor	34.75	ND	50.00	ug/Kg	70%		39-120	2
Aldrin	33.79	ND	50.00	ug/Kg	68%		34-120	2
Heptachlor epoxide	38.00	ND	50.00	ug/Kg	76%		43-120	2
Endosulfan I	40.59	ND	50.00	ug/Kg	81%		45-120	2
Dieldrin	36.52	ND	50.00	ug/Kg	73%		45-120	2
4,4'-DDE	41.01	2.912	50.00	ug/Kg	76%		34-120	2
Endrin	41.10	ND	50.00	ug/Kg	82%		40-120	2
Endosulfan II	43.48	ND	50.00	ug/Kg	87%		41-120	2
Endosulfan sulfate	46.17	ND	50.00	ug/Kg	92%		42-120	2
4,4'-DDD	39.94	ND	50.00	ug/Kg	80%		41-120	2
Endrin aldehyde	33.73	ND	50.00	ug/Kg	67%		30-120	2
Endrin ketone	60.93	7.110	50.00	ug/Kg	108%	#	45-120	2
4,4'-DDT	45.57	5.118	50.00	ug/Kg	81%		35-127	2
Methoxychlor	51.70	ND	50.00	ug/Kg	103%		42-136	2
Surrogates								
TCMX	25.50		50.00	ug/Kg	51%		23-120	2
Decachlorobiphenyl	38.86		50.00	ug/Kg	78%		24-120	2

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1002311	Batch: 293616
Matrix (Source ID): Soil (465695-001)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002311 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
alpha-BHC	37.98	ND	49.02	ug/Kg	77%		46-120	11	30	2
beta-BHC	42.42	ND	49.02	ug/Kg	87%		41-120	3	30	2
gamma-BHC	38.84	ND	49.02	ug/Kg	79%		41-120	9	30	2
delta-BHC	42.66	ND	49.02	ug/Kg	87%		38-123	3	30	2
Heptachlor	37.39	ND	49.02	ug/Kg	76%		39-120	9	30	2
Aldrin	35.96	ND	49.02	ug/Kg	73%		34-120	8	30	2
Heptachlor epoxide	39.29	ND	49.02	ug/Kg	80%		43-120	5	30	2
Endosulfan I	40.87	ND	49.02	ug/Kg	83%		45-120	3	30	2
Dieldrin	36.49	ND	49.02	ug/Kg	74%		45-120	2	30	2
4,4'-DDE	39.91	2.912	49.02	ug/Kg	75%		34-120	1	30	2
Endrin	40.93	ND	49.02	ug/Kg	83%		40-120	2	30	2
Endosulfan II	43.02	ND	49.02	ug/Kg	88%		41-120	1	30	2
Endosulfan sulfate	45.63	ND	49.02	ug/Kg	93%		42-120	1	30	2
4,4'-DDD	39.89	ND	49.02	ug/Kg	81%		41-120	2	30	2
Endrin aldehyde	34.81	ND	49.02	ug/Kg	71%		30-120	5	30	2
Endrin ketone	60.33	7.110	49.02	ug/Kg	109%	#	45-120	1	30	2
4,4'-DDT	45.27	5.118	49.02	ug/Kg	82%		35-127	1	30	2
Methoxychlor	49.85	ND	49.02	ug/Kg	102%		42-136	2	30	2
Surrogates										
TCMX	29.50		49.02	ug/Kg	60%		23-120			2
Decachlorobiphenyl	37.63		49.02	ug/Kg	77%		24-120			2

Batch QC

Type: Blank	Lab ID: QC1002408	Batch: 293639
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002408 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
alpha-BHC	ND		ug/Kg	5.0		07/23/22	07/24/22
beta-BHC	ND		ug/Kg	5.0		07/23/22	07/24/22
gamma-BHC	ND		ug/Kg	5.0		07/23/22	07/24/22
delta-BHC	ND		ug/Kg	5.0		07/23/22	07/24/22
Heptachlor	ND		ug/Kg	5.0		07/23/22	07/24/22
Aldrin	ND		ug/Kg	5.0		07/23/22	07/24/22
Heptachlor epoxide	ND		ug/Kg	5.0		07/23/22	07/24/22
Endosulfan I	ND		ug/Kg	5.0		07/23/22	07/24/22
Dieldrin	ND		ug/Kg	5.0		07/23/22	07/24/22
4,4'-DDE	ND		ug/Kg	5.0		07/23/22	07/24/22
Endrin	ND		ug/Kg	5.0		07/23/22	07/24/22
Endosulfan II	ND		ug/Kg	5.0		07/23/22	07/24/22
Endosulfan sulfate	ND		ug/Kg	5.0		07/23/22	07/24/22
4,4'-DDD	ND		ug/Kg	5.0		07/23/22	07/24/22
Endrin aldehyde	ND		ug/Kg	5.0		07/23/22	07/24/22
Endrin ketone	ND		ug/Kg	5.0		07/23/22	07/24/22
4,4'-DDT	ND		ug/Kg	5.0		07/23/22	07/24/22
Methoxychlor	ND		ug/Kg	10		07/23/22	07/24/22
Toxaphene	ND		ug/Kg	100		07/23/22	07/24/22
Chlordane (Technical)	ND		ug/Kg	50		07/23/22	07/24/22
Surrogates				Limits			
TCMX	83%		%REC	23-120		07/23/22	07/24/22
Decachlorobiphenyl	88%		%REC	24-120		07/23/22	07/24/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1002409	Batch: 293639
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002409 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	43.56	49.50	ug/Kg	88%		22-129
beta-BHC	43.46	49.50	ug/Kg	88%		28-125
gamma-BHC	42.95	49.50	ug/Kg	87%		22-128
delta-BHC	45.97	49.50	ug/Kg	93%		24-131
Heptachlor	46.85	49.50	ug/Kg	95%		18-124
Aldrin	40.44	49.50	ug/Kg	82%		23-120
Heptachlor epoxide	44.62	49.50	ug/Kg	90%		26-120
Endosulfan I	48.84	49.50	ug/Kg	99%		25-126
Dieldrin	45.47	49.50	ug/Kg	92%		23-124
4,4'-DDE	47.42	49.50	ug/Kg	96%		28-121
Endrin	49.73	49.50	ug/Kg	100%		25-127
Endosulfan II	49.08	49.50	ug/Kg	99%		29-121
Endosulfan sulfate	44.07	49.50	ug/Kg	89%		30-121
4,4'-DDD	52.54	49.50	ug/Kg	106%	#	26-120
Endrin aldehyde	40.22	49.50	ug/Kg	81%		10-120
Endrin ketone	45.69	49.50	ug/Kg	92%		28-125
4,4'-DDT	46.07	49.50	ug/Kg	93%		22-125
Methoxychlor	55.03	49.50	ug/Kg	111%		28-130
Surrogates						
TCMX	38.55	49.50	ug/Kg	78%		23-120
Decachlorobiphenyl	42.79	49.50	ug/Kg	86%		24-120

Batch QC

Type: Matrix Spike	Lab ID: QC1002410	Batch: 293639
Matrix (Source ID): Soil (465763-005)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002410 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
alpha-BHC	42.82	ND	50.51	ug/Kg	85%		46-120	1
beta-BHC	42.51	ND	50.51	ug/Kg	84%		41-120	1
gamma-BHC	42.59	ND	50.51	ug/Kg	84%		41-120	1
delta-BHC	46.24	ND	50.51	ug/Kg	92%		38-123	1
Heptachlor	46.73	ND	50.51	ug/Kg	93%		39-120	1
Aldrin	41.25	ND	50.51	ug/Kg	82%		34-120	1
Heptachlor epoxide	44.09	ND	50.51	ug/Kg	87%		43-120	1
Endosulfan I	47.48	ND	50.51	ug/Kg	94%		45-120	1
Dieldrin	45.31	ND	50.51	ug/Kg	90%		45-120	1
4,4'-DDE	46.77	ND	50.51	ug/Kg	93%		34-120	1
Endrin	48.88	ND	50.51	ug/Kg	97%		40-120	1
Endosulfan II	47.38	ND	50.51	ug/Kg	94%		41-120	1
Endosulfan sulfate	42.46	ND	50.51	ug/Kg	84%		42-120	1
4,4'-DDD	50.00	ND	50.51	ug/Kg	99%	#	41-120	1
Endrin aldehyde	41.44	ND	50.51	ug/Kg	82%		30-120	1
Endrin ketone	44.07	ND	50.51	ug/Kg	87%		45-120	1
4,4'-DDT	47.64	ND	50.51	ug/Kg	94%		35-127	1
Methoxychlor	50.07	ND	50.51	ug/Kg	99%		42-136	1
Surrogates								
TCMX	36.00		50.51	ug/Kg	71%		23-120	1
Decachlorobiphenyl	38.76		50.51	ug/Kg	77%		24-120	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1002411	Batch: 293639
Matrix (Source ID): Soil (465763-005)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002411 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
alpha-BHC	44.70	ND	50.51	ug/Kg	89%		46-120	4	30	1
beta-BHC	43.31	ND	50.51	ug/Kg	86%		41-120	2	30	1
gamma-BHC	44.22	ND	50.51	ug/Kg	88%		41-120	4	30	1
delta-BHC	49.12	ND	50.51	ug/Kg	97%		38-123	6	30	1
Heptachlor	48.41	ND	50.51	ug/Kg	96%		39-120	4	30	1
Aldrin	42.43	ND	50.51	ug/Kg	84%		34-120	3	30	1
Heptachlor epoxide	44.74	ND	50.51	ug/Kg	89%		43-120	1	30	1
Endosulfan I	48.62	ND	50.51	ug/Kg	96%		45-120	2	30	1
Dieldrin	46.15	ND	50.51	ug/Kg	91%		45-120	2	30	1
4,4'-DDE	47.99	ND	50.51	ug/Kg	95%		34-120	3	30	1
Endrin	49.56	ND	50.51	ug/Kg	98%		40-120	1	30	1
Endosulfan II	47.97	ND	50.51	ug/Kg	95%		41-120	1	30	1
Endosulfan sulfate	41.48	ND	50.51	ug/Kg	82%		42-120	2	30	1
4,4'-DDD	50.15	ND	50.51	ug/Kg	99%	#	41-120	0	30	1
Endrin aldehyde	40.48	ND	50.51	ug/Kg	80%		30-120	2	30	1
Endrin ketone	44.57	ND	50.51	ug/Kg	88%		45-120	1	30	1
4,4'-DDT	47.47	ND	50.51	ug/Kg	94%		35-127	0	30	1
Methoxychlor	49.43	ND	50.51	ug/Kg	98%		42-136	1	30	1
Surrogates										
TCMX	37.57		50.51	ug/Kg	74%		23-120			1
Decachlorobiphenyl	38.59		50.51	ug/Kg	76%		24-120			1

Batch QC

Type: Matrix Spike	Lab ID: QC1001521	Batch: 293258
Matrix (Source ID): Soil (465695-011)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1001521 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	155.1	5.126	199.0	ug/Kg	75%		25-130	1
2-Methylnaphthalene	185.6	6.730	199.0	ug/Kg	90%		32-133	1
Naphthalene	175.5	5.581	199.0	ug/Kg	85%		33-130	1
Acenaphthylene	169.2	ND	199.0	ug/Kg	85%		14-157	1
Acenaphthene	165.3	ND	199.0	ug/Kg	83%		28-134	1
Fluorene	172.1	ND	199.0	ug/Kg	87%		27-140	1
Phenanthrene	208.4	24.48	199.0	ug/Kg	92%		29-147	1
Anthracene	165.8	3.070	199.0	ug/Kg	82%		24-156	1
Fluoranthene	197.7	35.97	199.0	ug/Kg	81%		28-160	1
Pyrene	194.5	41.15	199.0	ug/Kg	77%		26-153	1
Benzo(a)anthracene	201.9	18.09	199.0	ug/Kg	92%		26-174	1
Chrysene	166.0	21.81	199.0	ug/Kg	72%		40-139	1
Benzo(b)fluoranthene	211.1	24.30	199.0	ug/Kg	94%		36-164	1
Benzo(k)fluoranthene	182.4	20.19	199.0	ug/Kg	82%		36-161	1
Benzo(a)pyrene	175.9	28.22	199.0	ug/Kg	74%		18-173	1
Indeno(1,2,3-cd)pyrene	222.8	27.66	199.0	ug/Kg	98%		26-154	1
Dibenz(a,h)anthracene	195.4	4.436	199.0	ug/Kg	96%		38-132	1
Benzo(g,h,i)perylene	176.8	25.36	199.0	ug/Kg	76%		36-130	1
Surrogates								
Nitrobenzene-d5	201.7		199.0	ug/Kg	101%		27-125	1
2-Fluorobiphenyl	176.2		199.0	ug/Kg	89%		30-120	1
Terphenyl-d14	191.1		199.0	ug/Kg	96%		33-155	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1001522	Batch: 293258
Matrix (Source ID): Soil (465695-011)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1001522 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	157.4	5.126	199.0	ug/Kg	77%		25-130	1	35	1
2-Methylnaphthalene	189.8	6.730	199.0	ug/Kg	92%		32-133	2	35	1
Naphthalene	178.5	5.581	199.0	ug/Kg	87%		33-130	2	35	1
Acenaphthylene	176.4	ND	199.0	ug/Kg	89%		14-157	4	35	1
Acenaphthene	171.7	ND	199.0	ug/Kg	86%		28-134	4	35	1
Fluorene	180.2	ND	199.0	ug/Kg	91%		27-140	5	35	1
Phenanthrene	209.0	24.48	199.0	ug/Kg	93%		29-147	0	35	1
Anthracene	174.9	3.070	199.0	ug/Kg	86%		24-156	5	35	1
Fluoranthene	204.8	35.97	199.0	ug/Kg	85%		28-160	4	35	1
Pyrene	201.3	41.15	199.0	ug/Kg	80%		26-153	3	35	1
Benzo(a)anthracene	197.4	18.09	199.0	ug/Kg	90%		26-174	2	35	1
Chrysene	160.4	21.81	199.0	ug/Kg	70%		40-139	3	35	1
Benzo(b)fluoranthene	215.9	24.30	199.0	ug/Kg	96%		36-164	2	35	1
Benzo(k)fluoranthene	169.4	20.19	199.0	ug/Kg	75%		36-161	7	35	1
Benzo(a)pyrene	173.1	28.22	199.0	ug/Kg	73%		18-173	2	35	1
Indeno(1,2,3-cd)pyrene	223.9	27.66	199.0	ug/Kg	99%		26-154	0	35	1
Dibenz(a,h)anthracene	202.4	4.436	199.0	ug/Kg	99%		38-132	4	35	1
Benzo(g,h,i)perylene	180.2	25.36	199.0	ug/Kg	78%		36-130	2	35	1
Surrogates										
Nitrobenzene-d5	198.6		199.0	ug/Kg	100%		27-125			1
2-Fluorobiphenyl	176.9		199.0	ug/Kg	89%		30-120			1
Terphenyl-d14	198.3		199.0	ug/Kg	100%		33-155			1

Batch QC

Type: Blank	Lab ID: QC1001523	Batch: 293258
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1001523 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10		07/19/22	07/20/22
2-Methylnaphthalene	ND		ug/Kg	10		07/19/22	07/20/22
Naphthalene	ND		ug/Kg	10		07/19/22	07/20/22
Acenaphthylene	ND		ug/Kg	10		07/19/22	07/20/22
Acenaphthene	ND		ug/Kg	10		07/19/22	07/20/22
Fluorene	ND		ug/Kg	10		07/19/22	07/20/22
Phenanthrene	ND		ug/Kg	10		07/19/22	07/20/22
Anthracene	ND		ug/Kg	10		07/19/22	07/20/22
Fluoranthene	ND		ug/Kg	10		07/19/22	07/20/22
Pyrene	ND		ug/Kg	10		07/19/22	07/20/22
Benzo(a)anthracene	ND		ug/Kg	10		07/19/22	07/20/22
Chrysene	ND		ug/Kg	10		07/19/22	07/20/22
Benzo(b)fluoranthene	ND		ug/Kg	10		07/19/22	07/20/22
Benzo(k)fluoranthene	ND		ug/Kg	10		07/19/22	07/20/22
Benzo(a)pyrene	ND		ug/Kg	10		07/19/22	07/20/22
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10		07/19/22	07/20/22
Dibenz(a,h)anthracene	ND		ug/Kg	10	4.4	07/19/22	07/20/22
Benzo(g,h,i)perylene	ND		ug/Kg	10		07/19/22	07/20/22
Surrogates				Limits			
Nitrobenzene-d5	112%		%REC	27-125		07/19/22	07/20/22
2-Fluorobiphenyl	92%		%REC	30-120		07/19/22	07/20/22
Terphenyl-d14	101%		%REC	33-155		07/19/22	07/20/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1001524	Batch: 293258
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1001524 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	156.7	201.0	ug/Kg	78%		28-130
2-Methylnaphthalene	183.8	201.0	ug/Kg	91%		33-130
Naphthalene	176.8	201.0	ug/Kg	88%		25-130
Acenaphthylene	171.4	201.0	ug/Kg	85%		28-130
Acenaphthene	171.5	201.0	ug/Kg	85%		32-130
Fluorene	176.1	201.0	ug/Kg	88%		35-130
Phenanthrene	180.4	201.0	ug/Kg	90%		35-132
Anthracene	172.2	201.0	ug/Kg	86%		34-136
Fluoranthene	174.7	201.0	ug/Kg	87%		34-139
Pyrene	169.2	201.0	ug/Kg	84%		35-134
Benzo(a)anthracene	188.5	201.0	ug/Kg	94%		30-132
Chrysene	158.4	201.0	ug/Kg	79%		29-130
Benzo(b)fluoranthene	202.9	201.0	ug/Kg	101%		32-137
Benzo(k)fluoranthene	173.2	201.0	ug/Kg	86%		32-130
Benzo(a)pyrene	177.6	201.0	ug/Kg	88%		10-138
Indeno(1,2,3-cd)pyrene	204.9	201.0	ug/Kg	102%		34-132
Dibenz(a,h)anthracene	200.3	201.0	ug/Kg	100%		32-130
Benzo(g,h,i)perylene	164.7	201.0	ug/Kg	82%		27-130
Surrogates						
Nitrobenzene-d5	203.6	201.0	ug/Kg	101%		27-125
2-Fluorobiphenyl	176.2	201.0	ug/Kg	88%		30-120
Terphenyl-d14	192.9	201.0	ug/Kg	96%		33-155

Batch QC

Type: Blank	Lab ID: QC1002114	Batch: 293479
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1002114 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10		07/21/22	07/22/22
2-Methylnaphthalene	ND		ug/Kg	10		07/21/22	07/22/22
Naphthalene	ND		ug/Kg	10		07/21/22	07/22/22
Acenaphthylene	ND		ug/Kg	10		07/21/22	07/22/22
Acenaphthene	ND		ug/Kg	10		07/21/22	07/22/22
Fluorene	ND		ug/Kg	10		07/21/22	07/22/22
Phenanthrene	ND		ug/Kg	10		07/21/22	07/22/22
Anthracene	ND		ug/Kg	10		07/21/22	07/22/22
Fluoranthene	ND		ug/Kg	10		07/21/22	07/22/22
Pyrene	ND		ug/Kg	10		07/21/22	07/22/22
Benzo(a)anthracene	ND		ug/Kg	10		07/21/22	07/22/22
Chrysene	ND		ug/Kg	10		07/21/22	07/22/22
Benzo(b)fluoranthene	ND		ug/Kg	10		07/21/22	07/22/22
Benzo(k)fluoranthene	ND		ug/Kg	10		07/21/22	07/22/22
Benzo(a)pyrene	ND		ug/Kg	10		07/21/22	07/22/22
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10		07/21/22	07/22/22
Dibenz(a,h)anthracene	ND		ug/Kg	10	3.7	07/21/22	07/22/22
Benzo(g,h,i)perylene	ND		ug/Kg	10		07/21/22	07/22/22
Surrogates				Limits			
Nitrobenzene-d5	70%		%REC	27-125		07/21/22	07/22/22
2-Fluorobiphenyl	78%		%REC	30-120		07/21/22	07/22/22
Terphenyl-d14	86%		%REC	33-155		07/21/22	07/22/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1002115	Batch: 293479
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1002115 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	137.2	199.0	ug/Kg	69%		28-130
2-Methylnaphthalene	146.6	199.0	ug/Kg	74%		33-130
Naphthalene	155.1	199.0	ug/Kg	78%		25-130
Acenaphthylene	135.3	199.0	ug/Kg	68%		28-130
Acenaphthene	147.2	199.0	ug/Kg	74%		32-130
Fluorene	146.9	199.0	ug/Kg	74%		35-130
Phenanthrene	151.0	199.0	ug/Kg	76%		35-132
Anthracene	148.9	199.0	ug/Kg	75%		34-136
Fluoranthene	137.9	199.0	ug/Kg	69%		34-139
Pyrene	132.2	199.0	ug/Kg	66%		35-134
Benzo(a)anthracene	124.9	199.0	ug/Kg	63%		30-132
Chrysene	151.0	199.0	ug/Kg	76%		29-130
Benzo(b)fluoranthene	141.7	199.0	ug/Kg	71%		32-137
Benzo(k)fluoranthene	175.9	199.0	ug/Kg	88%		32-130
Benzo(a)pyrene	130.0	199.0	ug/Kg	65%		10-138
Indeno(1,2,3-cd)pyrene	135.5	199.0	ug/Kg	68%		34-132
Dibenz(a,h)anthracene	159.9	199.0	ug/Kg	80%		32-130
Benzo(g,h,i)perylene	160.4	199.0	ug/Kg	81%		27-130
Surrogates						
Nitrobenzene-d5	146.1	199.0	ug/Kg	73%		27-125
2-Fluorobiphenyl	150.1	199.0	ug/Kg	75%		30-120
Terphenyl-d14	141.1	199.0	ug/Kg	71%		33-155

Batch QC

Type: Matrix Spike	Lab ID: QC1002116	Batch: 293479
Matrix (Source ID): Soil (465695-019)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1002116 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	209.5	26.29	202.0	ug/Kg	91%		25-130	10
2-Methylnaphthalene	234.2	ND	202.0	ug/Kg	116%		32-133	10
Naphthalene	229.1	ND	202.0	ug/Kg	113%		33-130	10
Acenaphthylene	213.0	ND	202.0	ug/Kg	105%		14-157	10
Acenaphthene	185.0	ND	202.0	ug/Kg	92%		28-134	10
Fluorene	171.1	ND	202.0	ug/Kg	85%		27-140	10
Phenanthrene	239.2	34.74	202.0	ug/Kg	101%		29-147	10
Anthracene	207.6	29.38	202.0	ug/Kg	88%		24-156	10
Fluoranthene	265.1	60.15	202.0	ug/Kg	101%		28-160	10
Pyrene	273.8	71.94	202.0	ug/Kg	100%		26-153	10
Benzo(a)anthracene	273.3	52.34	202.0	ug/Kg	109%		26-174	10
Chrysene	250.2	64.37	202.0	ug/Kg	92%		40-139	10
Benzo(b)fluoranthene	303.0	56.78	202.0	ug/Kg	122%	b	36-164	10
Benzo(k)fluoranthene	259.0	63.67	202.0	ug/Kg	97%		36-161	10
Benzo(a)pyrene	274.6	66.55	202.0	ug/Kg	103%		18-173	10
Indeno(1,2,3-cd)pyrene	322.4	79.43	202.0	ug/Kg	120%	b	26-154	10
Dibenz(a,h)anthracene	218.7	ND	202.0	ug/Kg	108%	b	38-132	10
Benzo(g,h,i)perylene	277.3	79.17	202.0	ug/Kg	98%		36-130	10
Surrogates								
Nitrobenzene-d5	199.7		202.0	ug/Kg	99%		27-125	10
2-Fluorobiphenyl	188.4		202.0	ug/Kg	93%		30-120	10
Terphenyl-d14	161.4		202.0	ug/Kg	80%		33-155	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1002117	Batch: 293479
Matrix (Source ID): Soil (465695-019)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1002117 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	230.0	26.29	201.0	ug/Kg	101%		25-130	10	35	10
2-Methylnaphthalene	272.2	ND	201.0	ug/Kg	135%	*	32-133	16	35	10
Naphthalene	263.1	ND	201.0	ug/Kg	131%	*	33-130	14	35	10
Acenaphthylene	222.4	ND	201.0	ug/Kg	111%		14-157	5	35	10
Acenaphthene	204.1	ND	201.0	ug/Kg	102%		28-134	10	35	10
Fluorene	196.9	ND	201.0	ug/Kg	98%		27-140	15	35	10
Phenanthrene	261.6	34.74	201.0	ug/Kg	113%		29-147	9	35	10
Anthracene	246.1	29.38	201.0	ug/Kg	108%		24-156	17	35	10
Fluoranthene	268.1	60.15	201.0	ug/Kg	103%		28-160	2	35	10
Pyrene	274.5	71.94	201.0	ug/Kg	101%		26-153	1	35	10
Benzo(a)anthracene	287.4	52.34	201.0	ug/Kg	117%		26-174	5	35	10
Chrysene	260.5	64.37	201.0	ug/Kg	98%		40-139	4	35	10
Benzo(b)fluoranthene	331.1	56.78	201.0	ug/Kg	136%	b	36-164	9	35	10
Benzo(k)fluoranthene	254.9	63.67	201.0	ug/Kg	95%		36-161	1	35	10
Benzo(a)pyrene	268.3	66.55	201.0	ug/Kg	100%		18-173	2	35	10
Indeno(1,2,3-cd)pyrene	330.6	79.43	201.0	ug/Kg	125%	b	26-154	3	35	10
Dibenz(a,h)anthracene	248.3	ND	201.0	ug/Kg	124%	b	38-132	13	35	10
Benzo(g,h,i)perylene	281.7	79.17	201.0	ug/Kg	101%		36-130	2	35	10
Surrogates										
Nitrobenzene-d5	214.7		201.0	ug/Kg	107%		27-125			10
2-Fluorobiphenyl	205.8		201.0	ug/Kg	102%		30-120			10
Terphenyl-d14	186.7		201.0	ug/Kg	93%		33-155			10

CCV drift outside limits; average CCV drift within limits per method requirements
 * Value is outside QC limits
 ND Not Detected
 b See narrative

Laboratory Job Number 465695

Subcontracted Products

McCampbell Analytical, Inc.



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2207882

Report Created for: Enthalpy Analytical

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Orange, CA 92868

Project Contact: Sophia Baughman

Project P.O.: 030864

Project: EO-465695

Project Received: 07/15/2022

Analytical Report reviewed & approved for release on 07/21/2022 by:

Yen Cao

Project Manager

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Glossary of Terms & Qualifier Definitions

Client: Enthalpy Analytical

WorkOrder: 2207882

Project: EO-465695

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PI-1-1.0	2207882-001A	Soil	07/13/2022 10:10	ICP-MS5 158SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.91	0.50	1	07/19/2022 11:17
Arsenic	9.3	0.50	1	07/19/2022 11:17
Barium	180	5.0	1	07/19/2022 11:17
Beryllium	0.56	0.50	1	07/19/2022 11:17
Cadmium	ND	0.50	1	07/19/2022 11:17
Chromium	62	0.50	1	07/19/2022 11:17
Cobalt	15	0.50	1	07/19/2022 11:17
Copper	37	0.50	1	07/19/2022 11:17
Lead	34	0.50	1	07/19/2022 11:17
Mercury	0.30	0.050	1	07/19/2022 11:17
Molybdenum	0.78	0.50	1	07/19/2022 11:17
Nickel	57	0.50	1	07/19/2022 11:17
Selenium	1.2	0.50	1	07/19/2022 11:17
Silver	ND	0.50	1	07/19/2022 11:17
Thallium	ND	0.50	1	07/19/2022 11:17
Vanadium	72	0.50	1	07/19/2022 11:17
Zinc	100	5.0	1	07/19/2022 11:17

Surrogates	REC (%)	Limits	
Terbium	110	70-130	07/19/2022 11:17

Analyst(s): WV

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PI-1-2.5	2207882-002A	Soil	07/13/2022 10:15	ICP-MS5 159SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	07/19/2022 11:20
Arsenic	8.4	0.50	1	07/19/2022 11:20
Barium	200	5.0	1	07/19/2022 11:20
Beryllium	0.65	0.50	1	07/19/2022 11:20
Cadmium	ND	0.50	1	07/19/2022 11:20
Chromium	69	0.50	1	07/19/2022 11:20
Cobalt	17	0.50	1	07/19/2022 11:20
Copper	33	0.50	1	07/19/2022 11:20
Lead	9.0	0.50	1	07/19/2022 11:20
Mercury	ND	0.050	1	07/19/2022 11:20
Molybdenum	0.90	0.50	1	07/19/2022 11:20
Nickel	67	0.50	1	07/19/2022 11:20
Selenium	1.3	0.50	1	07/19/2022 11:20
Silver	ND	0.50	1	07/19/2022 11:20
Thallium	ND	0.50	1	07/19/2022 11:20
Vanadium	74	0.50	1	07/19/2022 11:20
Zinc	72	5.0	1	07/19/2022 11:20

Surrogates	REC (%)	Limits	
Terbium	107	70-130	07/19/2022 11:20

Analyst(s): WV

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PI-1-4.0	2207882-003A	Soil	07/13/2022 10:20	ICP-MS5 160SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	07/19/2022 11:23
Arsenic	6.1	0.50	1	07/19/2022 11:23
Barium	180	5.0	1	07/19/2022 11:23
Beryllium	0.63	0.50	1	07/19/2022 11:23
Cadmium	ND	0.50	1	07/19/2022 11:23
Chromium	70	0.50	1	07/19/2022 11:23
Cobalt	12	0.50	1	07/19/2022 11:23
Copper	29	0.50	1	07/19/2022 11:23
Lead	6.8	0.50	1	07/19/2022 11:23
Mercury	ND	0.050	1	07/19/2022 11:23
Molybdenum	ND	0.50	1	07/19/2022 11:23
Nickel	58	0.50	1	07/19/2022 11:23
Selenium	1.2	0.50	1	07/19/2022 11:23
Silver	ND	0.50	1	07/19/2022 11:23
Thallium	ND	0.50	1	07/19/2022 11:23
Vanadium	71	0.50	1	07/19/2022 11:23
Zinc	59	5.0	1	07/19/2022 11:23

Surrogates	REC (%)	Limits	
Terbium	107	70-130	07/19/2022 11:23

Analyst(s): WV



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P1-2-2.5	2207882-004A	Soil	07/13/2022 10:45	ICP-MS5 161SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	1.3	0.50	1	07/19/2022 11:27
Arsenic	12	0.50	1	07/19/2022 11:27
Barium	300	5.0	1	07/19/2022 11:27
Beryllium	0.73	0.50	1	07/19/2022 11:27
Cadmium	ND	0.50	1	07/19/2022 11:27
Chromium	37	0.50	1	07/19/2022 11:27
Cobalt	16	0.50	1	07/19/2022 11:27
Copper	28	0.50	1	07/19/2022 11:27
Lead	13	0.50	1	07/19/2022 11:27
Mercury	0.079	0.050	1	07/19/2022 11:27
Molybdenum	1.3	0.50	1	07/19/2022 11:27
Nickel	53	0.50	1	07/19/2022 11:27
Selenium	1.3	0.50	1	07/19/2022 11:27
Silver	ND	0.50	1	07/19/2022 11:27
Thallium	ND	0.50	1	07/19/2022 11:27
Vanadium	40	0.50	1	07/19/2022 11:27
Zinc	66	5.0	1	07/19/2022 11:27

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	122	70-130	07/19/2022 11:27

Analyst(s): WV



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P1-3-1.0	2207882-005A	Soil	07/13/2022 11:15	ICP-MS5 162SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	2.7	0.50	1	07/19/2022 11:30
Arsenic	83	0.50	1	07/19/2022 11:30
Barium	190	5.0	1	07/19/2022 11:30
Beryllium	0.50	0.50	1	07/19/2022 11:30
Cadmium	ND	0.50	1	07/19/2022 11:30
Chromium	33	0.50	1	07/19/2022 11:30
Cobalt	19	0.50	1	07/19/2022 11:30
Copper	32	0.50	1	07/19/2022 11:30
Lead	34	0.50	1	07/19/2022 11:30
Mercury	0.23	0.050	1	07/19/2022 11:30
Molybdenum	1.0	0.50	1	07/19/2022 11:30
Nickel	48	0.50	1	07/19/2022 11:30
Selenium	1.1	0.50	1	07/19/2022 11:30
Silver	ND	0.50	1	07/19/2022 11:30
Thallium	ND	0.50	1	07/19/2022 11:30
Vanadium	42	0.50	1	07/19/2022 11:30
Zinc	74	5.0	1	07/19/2022 11:30

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	112	70-130	07/19/2022 11:30

Analyst(s): WV

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P2-1-2.5	2207882-006A	Soil	07/13/2022 13:30	ICP-MS5 165SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	1.4	0.50	1	07/19/2022 11:41
Arsenic	26	0.50	1	07/19/2022 11:41
Barium	150	5.0	1	07/19/2022 11:41
Beryllium	ND	0.50	1	07/19/2022 11:41
Cadmium	ND	0.50	1	07/19/2022 11:41
Chromium	46	0.50	1	07/19/2022 11:41
Cobalt	12	0.50	1	07/19/2022 11:41
Copper	29	0.50	1	07/19/2022 11:41
Lead	63	0.50	1	07/19/2022 11:41
Mercury	0.65	0.050	1	07/19/2022 11:41
Molybdenum	ND	0.50	1	07/19/2022 11:41
Nickel	37	0.50	1	07/19/2022 11:41
Selenium	0.93	0.50	1	07/19/2022 11:41
Silver	ND	0.50	1	07/19/2022 11:41
Thallium	ND	0.50	1	07/19/2022 11:41
Vanadium	55	0.50	1	07/19/2022 11:41
Zinc	180	5.0	1	07/19/2022 11:41

Surrogates	REC (%)	Limits	
Terbium	107	70-130	07/19/2022 11:41

Analyst(s): AL

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P2-2-1.0	2207882-007A	Soil	07/13/2022 13:55	ICP-MS5 166SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	1.8	0.50	1	07/19/2022 11:44
Arsenic	37	0.50	1	07/19/2022 11:44
Barium	170	5.0	1	07/19/2022 11:44
Beryllium	ND	0.50	1	07/19/2022 11:44
Cadmium	ND	0.50	1	07/19/2022 11:44
Chromium	34	0.50	1	07/19/2022 11:44
Cobalt	12	0.50	1	07/19/2022 11:44
Copper	42	0.50	1	07/19/2022 11:44
Lead	200	0.50	1	07/19/2022 11:44
Mercury	0.43	0.050	1	07/19/2022 11:44
Molybdenum	ND	0.50	1	07/19/2022 11:44
Nickel	38	0.50	1	07/19/2022 11:44
Selenium	1.6	0.50	1	07/19/2022 11:44
Silver	ND	0.50	1	07/19/2022 11:44
Thallium	ND	0.50	1	07/19/2022 11:44
Vanadium	73	0.50	1	07/19/2022 11:44
Zinc	150	5.0	1	07/19/2022 11:44

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	07/19/2022 11:44

Analyst(s): AL



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P2-3-1.0	2207882-008A	Soil	07/13/2022 14:45	ICP-MS5 167SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	1.5	0.50	1	07/19/2022 11:48
Arsenic	32	0.50	1	07/19/2022 11:48
Barium	180	5.0	1	07/19/2022 11:48
Beryllium	ND	0.50	1	07/19/2022 11:48
Cadmium	ND	0.50	1	07/19/2022 11:48
Chromium	59	0.50	1	07/19/2022 11:48
Cobalt	14	0.50	1	07/19/2022 11:48
Copper	81	0.50	1	07/19/2022 11:48
Lead	140	0.50	1	07/19/2022 11:48
Mercury	0.48	0.050	1	07/19/2022 11:48
Molybdenum	0.72	0.50	1	07/19/2022 11:48
Nickel	61	0.50	1	07/19/2022 11:48
Selenium	1.1	0.50	1	07/19/2022 11:48
Silver	ND	0.50	1	07/19/2022 11:48
Thallium	ND	0.50	1	07/19/2022 11:48
Vanadium	53	0.50	1	07/19/2022 11:48
Zinc	190	5.0	1	07/19/2022 11:48

Surrogates	REC (%)	Limits	
Terbium	109	70-130	07/19/2022 11:48

Analyst(s): AL

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P2-3-2.5	2207882-009A	Soil	07/13/2022 14:50	ICP-MS5 168SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	07/19/2022 11:51
Arsenic	6.7	0.50	1	07/19/2022 11:51
Barium	190	5.0	1	07/19/2022 11:51
Beryllium	0.73	0.50	1	07/19/2022 11:51
Cadmium	ND	0.50	1	07/19/2022 11:51
Chromium	73	0.50	1	07/19/2022 11:51
Cobalt	13	0.50	1	07/19/2022 11:51
Copper	32	0.50	1	07/19/2022 11:51
Lead	7.6	0.50	1	07/19/2022 11:51
Mercury	ND	0.050	1	07/19/2022 11:51
Molybdenum	ND	0.50	1	07/19/2022 11:51
Nickel	55	0.50	1	07/19/2022 11:51
Selenium	1.2	0.50	1	07/19/2022 11:51
Silver	ND	0.50	1	07/19/2022 11:51
Thallium	ND	0.50	1	07/19/2022 11:51
Vanadium	71	0.50	1	07/19/2022 11:51
Zinc	61	5.0	1	07/19/2022 11:51

Surrogates	REC (%)	Limits	
Terbium	109	70-130	07/19/2022 11:51

Analyst(s): AL

(Cont.)



Analytical Report

Client: Enthalpy Analytical
Date Received: 07/15/2022 14:05
Date Prepared: 07/18/2022
Project: EO-465695

WorkOrder: 2207882
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P2-4-1.0	2207882-010A	Soil	07/13/2022 15:15	ICP-MS5 169SMPL.d	249695

Analytes	Result	RL	DF	Date Analyzed
Antimony	3.6	0.50	1	07/19/2022 11:55
Arsenic	220	0.50	1	07/19/2022 11:55
Barium	280	5.0	1	07/19/2022 11:55
Beryllium	0.57	0.50	1	07/19/2022 11:55
Cadmium	ND	0.50	1	07/19/2022 11:55
Chromium	46	0.50	1	07/19/2022 11:55
Cobalt	9.8	0.50	1	07/19/2022 11:55
Copper	60	0.50	1	07/19/2022 11:55
Lead	56	0.50	1	07/19/2022 11:55
Mercury	2.1	0.050	1	07/19/2022 11:55
Molybdenum	ND	0.50	1	07/19/2022 11:55
Nickel	83	0.50	1	07/19/2022 11:55
Selenium	0.91	0.50	1	07/19/2022 11:55
Silver	ND	0.50	1	07/19/2022 11:55
Thallium	ND	0.50	1	07/19/2022 11:55
Vanadium	34	0.50	1	07/19/2022 11:55
Zinc	62	5.0	1	07/19/2022 11:55

Surrogates	REC (%)	Limits	
Terbium	105	70-130	07/19/2022 11:55

Analyst(s): AL



Quality Control Report

Client: Enthalpy Analytical
Date Prepared: 07/18/2022
Date Analyzed: 07/18/2022
Instrument: ICP-MS4
Matrix: Soil
Project: EO-465695

WorkOrder: 2207882
BatchID: 249695
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-249695

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.16	0.50	-	-	-
Arsenic	ND	0.14	0.50	-	-	-
Barium	ND	0.68	5.0	-	-	-
Beryllium	ND	0.083	0.50	-	-	-
Cadmium	ND	0.094	0.50	-	-	-
Chromium	ND	0.13	0.50	-	-	-
Cobalt	ND	0.069	0.50	-	-	-
Copper	ND	0.23	0.50	-	-	-
Lead	ND	0.069	0.50	-	-	-
Mercury	ND	0.038	0.050	-	-	-
Molybdenum	ND	0.14	0.50	-	-	-
Nickel	ND	0.081	0.50	-	-	-
Selenium	ND	0.32	0.50	-	-	-
Silver	ND	0.11	0.50	-	-	-
Thallium	ND	0.072	0.50	-	-	-
Vanadium	ND	0.15	0.50	-	-	-
Zinc	ND	3.2	5.0	-	-	-
Surrogate Recovery						
Terbium	520			500	104	70-130



Quality Control Report

Client: Enthalpy Analytical
Date Prepared: 07/18/2022
Date Analyzed: 07/18/2022
Instrument: ICP-MS4
Matrix: Soil
Project: EO-465695

WorkOrder: 2207882
BatchID: 249695
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-249695

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	50	49	50	99	99	75-125	0.520	20
Arsenic	49	48	50	97	97	75-125	0.545	20
Barium	490	490	500	98	98	75-125	0.152	20
Beryllium	50	49	50	100	99	75-125	1.35	20
Cadmium	48	49	50	95	98	75-125	3.21	20
Chromium	51	50	50	101	100	75-125	1.31	20
Cobalt	49	49	50	99	99	75-125	0.00203	20
Copper	49	49	50	98	99	75-125	0.526	20
Lead	47	48	50	94	96	75-125	1.67	20
Mercury	1.3	1.2	1.25	100	98	75-125	2.75	20
Molybdenum	49	49	50	98	99	75-125	0.386	20
Nickel	49	49	50	98	98	75-125	0.265	20
Selenium	48	48	50	97	97	75-125	0.211	20
Silver	50	49	50	99	99	75-125	0.513	20
Thallium	47	50	50	94	99	75-125	5.30	20
Vanadium	50	49	50	100	98	75-125	1.98	20
Zinc	500	490	500	99	99	75-125	0.157	20
Surrogate Recovery								
Terbium	520	510	500	103	102	70-130	1.74	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

WaterTrax CLIP EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2207882 **ClientCode: ENO** **QuoteID: 222322**
 EQuIS Dry-Weight Email HardCopy ThirdParty J-flag
 Detection Summary Excel [A1_w/QC_noMDL (Hist)]

Report to:

Sophia Baughman
Enthalpy Analytical
931 West Barkley Avenue
Orange, CA 92868
(714) 264-8209 FAX:

Email: sophia.baughman@enthalpy.com
cc/3rd Party: incomingreports@enthalpy.com;
PO: 030864
Project: EO-465695

Bill to:

Accounts Payable/Enthalpy SoCal
Montrose Environmental Group
PO Box 842165
Boston, MA 02284-2165
003EL_ap@montrose-env.com

Requested TAT: 5 days;

Date Received: 07/15/2022
Date Logged: 07/15/2022

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2207882-001	PI-1-1.0	Soil	7/13/2022 10:10	<input type="checkbox"/>	A	A											
2207882-002	PI-1-2.5	Soil	7/13/2022 10:15	<input type="checkbox"/>	A	A											
2207882-003	PI-1-4.0	Soil	7/13/2022 10:20	<input type="checkbox"/>	A	A											
2207882-004	P1-2-2.5	Soil	7/13/2022 10:45	<input type="checkbox"/>	A	A											
2207882-005	P1-3-1.0	Soil	7/13/2022 11:15	<input type="checkbox"/>	A	A											
2207882-006	P2-1-2.5	Soil	7/13/2022 13:30	<input type="checkbox"/>	A	A											
2207882-007	P2-2-1.0	Soil	7/13/2022 13:55	<input type="checkbox"/>	A	A											
2207882-008	P2-3-1.0	Soil	7/13/2022 14:45	<input type="checkbox"/>	A	A											
2207882-009	P2-3-2.5	Soil	7/13/2022 14:50	<input type="checkbox"/>	A	A											
2207882-010	P2-4-1.0	Soil	7/13/2022 15:15	<input type="checkbox"/>	A	A											

Test Legend:

1	CAM17MS_TTLC_S	2	PRDisposal Fee	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Cassandra Gallegos

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: ENTHALPY ANALYTICAL

Project: EO-465695

Work Order: 2207882

Client Contact: Sophia Baughman

QC Level: LEVEL 2

Contact's Email: sophia.baughman@enthalpy.com

Comments:

Date Logged: 7/15/2022

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PI-1-1.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 10:10	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PI-1-2.5	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 10:15	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
003A	PI-1-4.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 10:20	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
004A	P1-2-2.5	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 10:45	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
005A	P1-3-1.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 11:15	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
006A	P2-1-2.5	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 13:30	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
007A	P2-2-1.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 13:55	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
008A	P2-3-1.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 14:45	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
009A	P2-3-2.5	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 14:50	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>
010A	P2-4-1.0	Soil	SW6020 (CAM 17)	1	2OZ GJ, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/13/2022 15:15	5 days	7/22/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.

Subcontract Laboratory:

McCampbell Analytical, Inc.
 1534 Willow Pass Rd.
 Pittsburg, CA 94565
 ATTN: Angela Rydelius
 PO #: Required, to be sent via email

Enthalpy Order: EO-465695

PM: Sophia Baughman
 Email: sophia.baughman@enthalpy.com
 CC: incomingreports@enthalpy.com
 Phone: (714) 771-6900

Results Due: Standard TAT

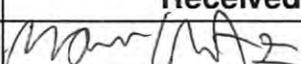
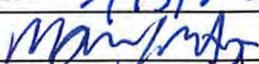
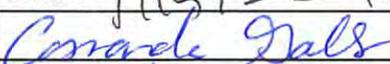
Report Level: II

Report To: RL

EDDs: Standard Excel EDD

Notes:

Sample ID	Collected	Lab ID	# Cont.	Matrix	Analysis Requested	Comment
PI-1-1.0	13-JUL-2022 10:10	465695-001	1	Soil	Metals by ICPMS	T22
PI-1-2.5	13-JUL-2022 10:15	465695-002	1	Soil	Metals by ICPMS	T22
PI-1-4.0	13-JUL-2022 10:20	465695-003	1	Soil	Metals by ICPMS	T22
P1-2-2.5	13-JUL-2022 10:45	465695-005	1	Soil	Metals by ICPMS	T22
P1-3-1.0	13-JUL-2022 11:15	465695-007	1	Soil	Metals by ICPMS	T22
P2-1-2.5	13-JUL-2022 13:30	465695-011	1	Soil	Metals by ICPMS	T22
P2-2-1.0	13-JUL-2022 13:55	465695-013	1	Soil	Metals by ICPMS	T22
P2-3-1.0	13-JUL-2022 14:45	465695-016	1	Soil	Metals by ICPMS	T22
P2-3-2.5	13-JUL-2022 14:50	465695-017	1	Soil	Metals by ICPMS	T22
P2-4-1.0	13-JUL-2022 15:15	465695-019	1	Soil	Metals by ICPMS	T22

Notes:	Relinquished By:	Received By:
2.5" wet		
	Date: 7/15/22 11:35	Date: 7/15/22 11:35
		
	Date: 7/15/22 1405	Date: 7/15/22 1405
	Date:	Date:



Sample Receipt Checklist

Client Name: **Enthalpy Analytical**
 Project: **EO-465695**

Date and Time Received: **7/15/2022 14:05**
 Date Logged: **7/15/2022**
 Received by: **Cassandra Gallegos**
 Logged by: **Cassandra Gallegos**

WorkOrder No: **2207882** Matrix: Soil
 Carrier: Antonio Mason (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
COC agrees with Quote?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 2.5°C		NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments:



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 465763
Report Level: II
Report Date: 07/27/2022

Analytical Report *prepared for:*

Jennifer Duffield
GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612

Project: 6272 - Berkeley Santa Fe Row

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Jennifer Duffield
GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612

Lab Job #: 465763
Project No: 6272
Location: Berkeley Santa Fe Row
Date Received: 07/14/22

Sample ID	Lab ID	Collected	Matrix
P3-1-1.0	465763-001	07/14/22 08:10	Soil
P3-1-2.5	465763-002	07/14/22 08:25	Soil
P3-1-4.0	465763-003	07/14/22 08:32	Soil
P3-2-1.0	465763-004	07/14/22 08:42	Soil
P3-2-2.5	465763-005	07/14/22 09:00	Soil
P3-2-4.0	465763-006	07/14/22 09:05	Soil
P3-3-1.0	465763-007	07/14/22 09:15	Soil
P3-3-2.5	465763-008	07/14/22 09:20	Soil
P3-3-4.0	465763-009	07/14/22 09:30	Soil
P3-4-1.0	465763-010	07/14/22 09:55	Soil
P3-4-2.5	465763-011	07/14/22 10:10	Soil
P3-4-4.0	465763-012	07/14/22 10:25	Soil
P4-1-1.0	465763-013	07/14/22 11:05	Soil
P4-1-2.5	465763-014	07/14/22 11:16	Soil
P4-1-4.0	465763-015	07/14/22 11:25	Soil
P4-2-1.0	465763-016	07/14/22 11:35	Soil
P4-2-2.5	465763-017	07/14/22 11:40	Soil
P4-2-4.0	465763-018	07/14/22 11:45	Soil
P4-3-1.0	465763-019	07/14/22 12:45	Soil
P4-3-2.5	465763-020	07/14/22 13:00	Soil
P4-3-4.0	465763-021	07/14/22 13:11	Soil
P4-4-1.0	465763-022	07/14/22 13:25	Soil
P4-4-2.5	465763-023	07/14/22 13:35	Soil
P4-4-4.0	465763-024	07/14/22 13:40	Soil

Case Narrative

GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612
Jennifer Duffield

Lab Job Number: 465763
Project No: 6272
Location: Berkeley Santa Fe Row
Date Received: 07/14/22

This data package contains sample and QC results for twelve soil samples, requested for the above referenced project on 07/14/22. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):

- A number of samples were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- Many samples were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

Pesticides (EPA 8081A):

- Many samples were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- High response was observed for beryllium in the CCV analyzed 07/19/22 16:49; affected data was qualified with "b".
- Low recovery was observed for mercury in the MS of P3-2-2.5 (lab # 465763-005); the associated RPD was within limits.
- Low recoveries were observed for copper and antimony in the MS/MSD for batch 293123; the parent sample was not a project sample, and the LCS was within limits. High recoveries were observed for barium and copper in the MS for batch 293123; the LCS was within limits. High RPD was observed for copper in the MS/MSD for batch 293123.
- Low recoveries were observed for antimony in the MS/MSD of P3-2-2.5 (lab # 465763-005); the LCS was within limits, and the associated RPD was within limits. High recovery was observed for barium in the MS of P3-2-2.5 (lab # 465763-005); the LCS was within limits, and the associated RPD was within limits.
- Low recoveries were observed for antimony in the MS/MSD of P3-3-2.5 (lab # 465763-008); the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for barium, nickel, and zinc in the MSD of P3-3-2.5 (lab # 465763-008); the LCS was within limits. High RPD was observed for barium and nickel in the MS/MSD of P3-3-2.5 (lab # 465763-008).
- No other analytical problems were encountered.

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley
 2323 5th Street, Berkeley, CA 94710
 Phone 510-486-0900

Chain of Custody Record
 Lab No: 465763
 Page: 1 of 3

Turn Around Time (rush by advanced notice only)
 Standard: X
 5 Day:
 1 Day:
 3 Day:
 Custom TAT:
 Sample Receipt Temp: (lab use only)

Matrix: A = Air S = Soil/Solid
 W = Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

CUSTOMER INFORMATION			PROJECT INFORMATION			Analysis Request			Test Instructions / Comments					
Company:	Name:	Report To:	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request	Test Instructions / Comments				
GSI Environmental	Berkeley Santa Fe Row	Jennifer Duffield, Tiffany Kitzke	P3-1-1.0	7/14/22	0810	SO	8 oz. Jar	-						
			P3-1-2.5		0825									
			P3-1-4.0		0832									
			P3-2-1.0		0842									
			P3-2-2.5		0900									
			P3-2-4.0		0905									
			P3-3-1.0		0915									
			P3-3-2.5		0920									
			P3-3-4.0		0930									
			P3-4-1.0		0955									
Relinquished By: <i>[Signature]</i> Received By: <i>[Signature]</i> Relinquished By: <i>[Signature]</i> Received By: <i>[Signature]</i> Relinquished By: <i>[Signature]</i> Received By: <i>[Signature]</i>			Signature: <i>[Signature]</i> Signature: <i>[Signature]</i> Signature: <i>[Signature]</i> Signature: <i>[Signature]</i> Signature: <i>[Signature]</i>			Print Name: Tiffany Kitzke Print Name: Miguel Gomez Print Name: <i>[Signature]</i> Print Name: <i>[Signature]</i> Print Name: <i>[Signature]</i>			Company / Title: GSI / Senior Scientist Company / Title: EA Company / Title: EA Company / Title: EA Company / Title: EA			Date / Time: 7/14/22 1545 Date / Time: 7/14/22 1545 Date / Time: 7/14/22 1711 Date / Time: 7/15/22 0830		

If metals are ready early, please send draft results.

*OCs by GSI
 TPTD & TPTMs by JLS
 PAKS & 8070C GIM
 HOLD*

The 22 metals by (601017471)

*NA
 T. Kitzke*

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 465763 Client: CSI
 Date Received: 7/14/22 Project: _____

Section 2: Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A
 Samples received in a cooler? Yes, how many? 2 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # B, or C
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 7/14/22 (print) me (sign) _____

Section 3: *Important: Notify PM if temperature exceeds 6°C or arrive frozen.*
 Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Cooler Temp (°C): #1: _____, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?		/	
If YES, what time were they transferred to freezer?	/		
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/	/	
Are sample labels present, in good condition and complete?	/	/	
Does the container count match the COC?	/	/	
Do the sample labels agree with custody papers?	/	/	
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted concerning this sample delivery?			
If YES, who was called? _____ By _____ Date: _____			

Section 5: YES NO N/A
 Are the samples appropriately preserved? (if N/A, skip the rest of section 5)
 Did you check preservatives for all bottles for each sample?
 Did you document your preservative check?
 pH strip lot# _____, pH strip lot# _____, pH strip lot# _____
 Preservative added:
 H2SO4 lot# _____ added to samples _____ on/at _____
 HCL lot# _____ added to samples _____ on/at _____
 HNO3 lot# _____ added to samples _____ on/at _____
 NaOH lot# _____ added to samples _____ on/at _____

Section 6:
 Explanations/Comments: _____

Date Logged in 7/14/22 By (print) LEP for MK (sign) [Signature]
 Date Labeled 7/14/22 By (print) USP (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Santa Fe Row
 Date Received: 07/15/22 Sampler's Name Present: Yes No

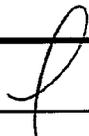
Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 4.2 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen [for Microbiology samples, acceptance range is < 10°C but not frozen]. It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Grayhound

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 1.4 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: 7/15/22



**PACKAGE
EXPRESS**



A8648595B

LBLBC-GPX (REV 11/19)

W LABEL

1.4 / 4.2

Analysis Results for 465763

Jennifer Duffield
 GSI Environmental, Inc.
 155 Grand Ave
 Suite 704
 Oakland, CA 94612

Lab Job #: 465763
 Project No: 6272
 Location: Berkeley Santa Fe Row
 Date Received: 07/14/22

Sample ID: P3-1-2.5 Lab ID: 465763-002 Collected: 07/14/22 08:25
Matrix: Soil

465763-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.7	0.91	293123	07/16/22	07/20/22	KLN
Arsenic	6.5		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Barium	190		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Beryllium	0.56		mg/Kg	0.45	0.91	293123	07/16/22	07/20/22	KLN
Cadmium	0.59		mg/Kg	0.45	0.91	293123	07/16/22	07/20/22	KLN
Chromium	46		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Cobalt	10		mg/Kg	0.45	0.91	293123	07/16/22	07/20/22	KLN
Copper	26		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Lead	11		mg/Kg	0.91	0.91	293123	07/16/22	07/27/22	KLN
Molybdenum	ND		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Nickel	45		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Selenium	ND		mg/Kg	2.7	0.91	293123	07/16/22	07/20/22	KLN
Silver	ND		mg/Kg	0.45	0.91	293123	07/16/22	07/20/22	KLN
Thallium	ND		mg/Kg	2.7	0.91	293123	07/16/22	07/20/22	KLN
Vanadium	43		mg/Kg	0.91	0.91	293123	07/16/22	07/20/22	KLN
Zinc	56		mg/Kg	4.5	0.91	293123	07/16/22	07/20/22	KLN
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.17	1.2	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	76%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Endosulfan I	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDD	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	10	1	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	100	1	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	51	1	293639	07/23/22	07/25/22	TJW

Surrogates			Limits						
TCMX	74%	%REC	23-120	1	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	70%	%REC	24-120	1	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM
 Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW

Surrogates			Limits						
Nitrobenzene-d5	81%	%REC	27-125	1	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	66%	%REC	30-120	1	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	79%	%REC	33-155	1	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P3-2-1.0
Lab ID: 465763-004
Collected: 07/14/22 08:42
Matrix: Soil

465763-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.8	0.94	293123	07/16/22	07/20/22	KLN
Arsenic	120		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Barium	66		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Beryllium	ND		mg/Kg	0.47	0.94	293123	07/16/22	07/20/22	KLN
Cadmium	0.65		mg/Kg	0.47	0.94	293123	07/16/22	07/20/22	KLN
Chromium	35		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Cobalt	7.3		mg/Kg	0.47	0.94	293123	07/16/22	07/20/22	KLN
Copper	42		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Lead	66		mg/Kg	0.94	0.94	293123	07/16/22	07/18/22	KLN
Molybdenum	ND		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Nickel	41		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Selenium	ND		mg/Kg	2.8	0.94	293123	07/16/22	07/20/22	KLN
Silver	ND		mg/Kg	0.47	0.94	293123	07/16/22	07/20/22	KLN
Thallium	ND		mg/Kg	2.8	0.94	293123	07/16/22	07/20/22	KLN
Vanadium	35		mg/Kg	0.94	0.94	293123	07/16/22	07/20/22	KLN
Zinc	96		mg/Kg	4.7	0.94	293123	07/16/22	07/20/22	KLN
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	1.7		mg/Kg	0.16	1.2	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	50	5	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	100	5	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	86%		%REC	70-130	5	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	11	C	ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	40		ug/Kg	9.8	2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20	2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200	2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	98	2	293639	07/23/22	07/25/22	TJW

Surrogates			Limits						
TCMX	63%	%REC	23-120	2	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	118%	%REC	24-120	2	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Fluoranthene	160		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Pyrene	190		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	160		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Chrysene	220		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	280		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	240		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	280		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	270		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	220		ug/Kg	100	10	293055	07/15/22	07/18/22	TJW

Surrogates			Limits						
Nitrobenzene-d5	78%	%REC	27-125	10	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	68%	%REC	30-120	10	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	78%	%REC	33-155	10	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P3-2-2.5	Lab ID: 465763-005	Collected: 07/14/22 09:00
Matrix: Soil		

465763-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/19/22	SBW
Arsenic	67		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Barium	130		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Beryllium	ND		mg/Kg	0.45	0.89	293124	07/16/22	07/19/22	SBW
Cadmium	0.57		mg/Kg	0.45	0.89	293124	07/16/22	07/19/22	SBW
Chromium	56		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Cobalt	13		mg/Kg	0.45	0.89	293124	07/16/22	07/19/22	SBW
Copper	60		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Lead	22		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Molybdenum	ND		mg/Kg	0.89	0.89	293124	07/16/22	07/26/22	SBW
Nickel	65		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Selenium	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/19/22	SBW
Silver	ND		mg/Kg	0.45	0.89	293124	07/16/22	07/19/22	SBW
Thallium	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/19/22	SBW
Vanadium	39		mg/Kg	0.89	0.89	293124	07/16/22	07/19/22	SBW
Zinc	110		mg/Kg	4.5	0.89	293124	07/16/22	07/19/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	0.96		mg/Kg	0.16	1.1	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	80%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
beta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
gamma-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
delta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Heptachlor	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Aldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endosulfan I	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Dieldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
4,4'-DDE	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endosulfan II	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW

Analysis Results for 465763

465763-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Endrin ketone	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
4,4'-DDT	ND		ug/Kg	5.1	1	293639	07/23/22	07/24/22	TJW
Methoxychlor	ND		ug/Kg	10	1	293639	07/23/22	07/24/22	TJW
Toxaphene	ND		ug/Kg	100	1	293639	07/23/22	07/24/22	TJW
Chlordane (Technical)	ND		ug/Kg	51	1	293639	07/23/22	07/24/22	TJW

Surrogates				Limits					
TCMX	78%		%REC	23-120	1	293639	07/23/22	07/24/22	TJW
Decachlorobiphenyl	83%		%REC	24-120	1	293639	07/23/22	07/24/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	20	2	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	70%		%REC	27-125	2	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	63%		%REC	30-120	2	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	76%		%REC	33-155	2	293055	07/15/22	07/18/22	TJW

Analysis Results for 465763

Sample ID: P3-3-1.0
Lab ID: 465763-007
Collected: 07/14/22 09:15
Matrix: Soil

465763-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.7	0.88	293124	07/16/22	07/26/22	SBW
Arsenic	12		mg/Kg	0.88	0.88	293124	07/16/22	07/27/22	SBW
Barium	180		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.44	0.88	293124	07/16/22	07/27/22	SBW
Cadmium	0.72		mg/Kg	0.44	0.88	293124	07/16/22	07/26/22	SBW
Chromium	41		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Cobalt	9.5		mg/Kg	0.44	0.88	293124	07/16/22	07/26/22	SBW
Copper	32		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Lead	84		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.88	0.88	293124	07/16/22	07/27/22	SBW
Nickel	39		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	2.7	0.88	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.44	0.88	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.7	0.88	293124	07/16/22	07/26/22	SBW
Vanadium	41		mg/Kg	0.88	0.88	293124	07/16/22	07/26/22	SBW
Zinc	150		mg/Kg	4.4	0.88	293124	07/16/22	07/26/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	0.21		mg/Kg	0.16	1.2	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	120		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	87		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	78%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Dieldrin	10		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	9.9	2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20	2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200	2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	99	2	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	75%	%REC	23-120	2	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	64%	%REC	24-120	2	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	99	9.9	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	61%	%REC	27-125	9.9	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	56%	%REC	30-120	9.9	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	66%	%REC	33-155	9.9	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P3-3-2.5
Lab ID: 465763-008
Collected: 07/14/22 09:20
Matrix: Soil

465763-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	0.99	293433	07/21/22	07/25/22	SBW
Arsenic	7.8		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Barium	160		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Beryllium	ND		mg/Kg	0.50	0.99	293433	07/21/22	07/25/22	SBW
Cadmium	0.69		mg/Kg	0.50	0.99	293433	07/21/22	07/25/22	SBW
Chromium	37		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Cobalt	12		mg/Kg	0.50	0.99	293433	07/21/22	07/25/22	SBW
Copper	30		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Lead	68		mg/Kg	0.99	0.99	293433	07/21/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Nickel	40		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Selenium	ND		mg/Kg	3.0	0.99	293433	07/21/22	07/25/22	SBW
Silver	0.56		mg/Kg	0.50	0.99	293433	07/21/22	07/25/22	SBW
Thallium	ND		mg/Kg	3.0	0.99	293433	07/21/22	07/25/22	SBW
Vanadium	36		mg/Kg	0.99	0.99	293433	07/21/22	07/25/22	SBW
Zinc	140		mg/Kg	5.0	0.99	293433	07/21/22	07/25/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	0.20		mg/Kg	0.14	1	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	160		mg/Kg	100	10	293535	07/22/22	07/22/22	MES
ORO C28-C44	490		mg/Kg	200	10	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	90%		%REC	70-130	10	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	25	4.9	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	49	4.9	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	490	4.9	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	250	4.9	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	92%		%REC	23-120	4.9	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	71%		%REC	24-120	4.9	293639	07/23/22	07/25/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	57%		%REC	27-125	25	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	57%		%REC	30-120	25	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	67%		%REC	33-155	25	293055	07/15/22	07/18/22	TJW

Analysis Results for 465763

Sample ID: P3-4-1.0	Lab ID: 465763-010	Collected: 07/14/22 09:55
Matrix: Soil		

465763-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.8	0.94	293124	07/16/22	07/18/22	SBW
Arsenic	13		mg/Kg	0.94	0.94	293124	07/16/22	07/27/22	SBW
Barium	130		mg/Kg	0.94	0.94	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.47	0.94	293124	07/16/22	07/27/22	SBW
Cadmium	0.57		mg/Kg	0.47	0.94	293124	07/16/22	07/26/22	SBW
Chromium	45		mg/Kg	0.94	0.94	293124	07/16/22	07/18/22	SBW
Cobalt	15		mg/Kg	0.47	0.94	293124	07/16/22	07/26/22	SBW
Copper	34		mg/Kg	0.94	0.94	293124	07/16/22	07/18/22	SBW
Lead	43		mg/Kg	0.94	0.94	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.94	0.94	293124	07/16/22	07/18/22	SBW
Nickel	45		mg/Kg	0.94	0.94	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	2.8	0.94	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.47	0.94	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.8	0.94	293124	07/16/22	07/26/22	SBW
Vanadium	50		mg/Kg	0.94	0.94	293124	07/16/22	07/18/22	SBW
Zinc	73		mg/Kg	4.7	0.94	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	293144	07/17/22	07/18/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	65		mg/Kg	50	5	293535	07/22/22	07/22/22	MES
ORO C28-C44	210		mg/Kg	100	5	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	89%		%REC	70-130	5	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	50	5	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	500	5	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	250	5	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	90%	%REC		23-120	5	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	80%	%REC		24-120	5	293639	07/23/22	07/25/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	45%	%REC		27-125	20	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	44%	%REC		30-120	20	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	50%	%REC		33-155	20	293055	07/15/22	07/18/22	TJW

Analysis Results for 465763

Sample ID: P4-1-1.0	Lab ID: 465763-013	Collected: 07/14/22 11:05
Matrix: Soil		

465763-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	293124	07/16/22	07/18/22	SBW
Arsenic	140		mg/Kg	1.0	1	293124	07/16/22	07/27/22	SBW
Barium	190		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.50	1	293124	07/16/22	07/18/22	SBW
Cadmium	1.9		mg/Kg	0.50	1	293124	07/16/22	07/26/22	SBW
Chromium	75		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Cobalt	14		mg/Kg	0.50	1	293124	07/16/22	07/26/22	SBW
Copper	81		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Lead	280		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Nickel	120		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	3.0	1	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.50	1	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	3.0	1	293124	07/16/22	07/26/22	SBW
Vanadium	37		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Zinc	440		mg/Kg	5.0	1	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	2.1		mg/Kg	0.33	2.4	293144	07/17/22	07/18/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	50	5	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	100	5	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	86%		%REC	70-130	5	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
4,4'-DDE	37		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
4,4'-DDT	140		ug/Kg	25	5	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	50	5	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	500	5	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	250	5	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	86%		%REC	23-120	5	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	80%		%REC	24-120	5	293639	07/23/22	07/25/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Pyrene	260		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Chrysene	260		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	290		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	270		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	310		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	290		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	250		ug/Kg	250	25	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	78%		%REC	27-125	25	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	76%		%REC	30-120	25	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	88%		%REC	33-155	25	293055	07/15/22	07/18/22	TJW

Analysis Results for 465763

Sample ID: P4-1-2.5	Lab ID: 465763-014	Collected: 07/14/22 11:16
Matrix: Soil		

465763-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.8	0.93	293124	07/16/22	07/18/22	SBW
Arsenic	88		mg/Kg	0.93	0.93	293124	07/16/22	07/27/22	SBW
Barium	160		mg/Kg	0.93	0.93	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.47	0.93	293124	07/16/22	07/27/22	SBW
Cadmium	0.47		mg/Kg	0.47	0.93	293124	07/16/22	07/26/22	SBW
Chromium	26		mg/Kg	0.93	0.93	293124	07/16/22	07/18/22	SBW
Cobalt	17		mg/Kg	0.47	0.93	293124	07/16/22	07/26/22	SBW
Copper	28		mg/Kg	0.93	0.93	293124	07/16/22	07/18/22	SBW
Lead	21		mg/Kg	0.93	0.93	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.93	0.93	293124	07/16/22	07/18/22	SBW
Nickel	47		mg/Kg	0.93	0.93	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	2.8	0.93	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.47	0.93	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.8	0.93	293124	07/16/22	07/26/22	SBW
Vanadium	24		mg/Kg	0.93	0.93	293124	07/16/22	07/18/22	SBW
Zinc	60		mg/Kg	4.7	0.93	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	0.25		mg/Kg	0.15	1.1	293144	07/17/22	07/18/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	78%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	5.0	0.99	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	9.9	0.99	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	99	0.99	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	50	0.99	293639	07/23/22	07/25/22	TJW

Surrogates	Limits								
TCMX	85%	%REC	23-120	0.99	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	83%	%REC	24-120	0.99	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW

Surrogates	Limits								
Nitrobenzene-d5	89%	%REC	27-125	1	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	76%	%REC	30-120	1	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	86%	%REC	33-155	1	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P4-2-1.0
Lab ID: 465763-016
Collected: 07/14/22 11:35
Matrix: Soil

465763-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.8	0.92	293124	07/16/22	07/18/22	SBW
Arsenic	23		mg/Kg	0.92	0.92	293124	07/16/22	07/27/22	SBW
Barium	100		mg/Kg	0.92	0.92	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.46	0.92	293124	07/16/22	07/26/22	SBW
Cadmium	ND		mg/Kg	0.46	0.92	293124	07/16/22	07/26/22	SBW
Chromium	19		mg/Kg	0.92	0.92	293124	07/16/22	07/26/22	SBW
Cobalt	9.6		mg/Kg	0.46	0.92	293124	07/16/22	07/26/22	SBW
Copper	23		mg/Kg	0.92	0.92	293124	07/16/22	07/18/22	SBW
Lead	13		mg/Kg	0.92	0.92	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.92	0.92	293124	07/16/22	07/18/22	SBW
Nickel	31		mg/Kg	0.92	0.92	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	2.8	0.92	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.46	0.92	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.8	0.92	293124	07/16/22	07/26/22	SBW
Vanadium	23		mg/Kg	0.92	0.92	293124	07/16/22	07/18/22	SBW
Zinc	44		mg/Kg	4.6	0.92	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	79%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	10	1	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	100	1	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	51	1	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	80%	%REC	23-120	1	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	78%	%REC	24-120	1	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	66%	%REC	27-125	1	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	61%	%REC	30-120	1	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	68%	%REC	33-155	1	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P4-2-2.5	Lab ID: 465763-017	Collected: 07/14/22 11:40
Matrix: Soil		

465763-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.1	1	293124	07/16/22	07/18/22	SBW
Arsenic	4.2		mg/Kg	1.0	1	293124	07/16/22	07/27/22	SBW
Barium	200		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.52	1	293124	07/16/22	07/27/22	SBW
Cadmium	0.55		mg/Kg	0.52	1	293124	07/16/22	07/26/22	SBW
Chromium	44		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Cobalt	14		mg/Kg	0.52	1	293124	07/16/22	07/26/22	SBW
Copper	27		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Lead	11		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Nickel	41		mg/Kg	1.0	1	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	3.1	1	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.52	1	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	3.1	1	293124	07/16/22	07/26/22	SBW
Vanadium	42		mg/Kg	1.0	1	293124	07/16/22	07/18/22	SBW
Zinc	44		mg/Kg	5.2	1	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	81%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	5.0	1	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	10	1	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	100	1	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	50	1	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	88%		%REC	23-120	1	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	87%		%REC	24-120	1	293639	07/23/22	07/25/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Phenanthrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Chrysene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	74%		%REC	27-125	1	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	61%		%REC	30-120	1	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	68%		%REC	33-155	1	293055	07/15/22	07/18/22	TJW

Analysis Results for 465763

Sample ID: P4-3-2.5	Lab ID: 465763-020	Collected: 07/14/22 13:00
Matrix: Soil		

465763-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.7	0.91	293124	07/16/22	07/18/22	SBW
Arsenic	8.2		mg/Kg	0.91	0.91	293124	07/16/22	07/27/22	SBW
Barium	180		mg/Kg	0.91	0.91	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.45	0.91	293124	07/16/22	07/27/22	SBW
Cadmium	ND		mg/Kg	0.45	0.91	293124	07/16/22	07/26/22	SBW
Chromium	25		mg/Kg	0.91	0.91	293124	07/16/22	07/18/22	SBW
Cobalt	9.8		mg/Kg	0.45	0.91	293124	07/16/22	07/26/22	SBW
Copper	21		mg/Kg	0.91	0.91	293124	07/16/22	07/18/22	SBW
Lead	12		mg/Kg	0.91	0.91	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.91	0.91	293124	07/16/22	07/18/22	SBW
Nickel	34		mg/Kg	0.91	0.91	293124	07/16/22	07/26/22	SBW
Selenium	ND		mg/Kg	2.7	0.91	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.45	0.91	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.7	0.91	293124	07/16/22	07/26/22	SBW
Vanadium	26		mg/Kg	0.91	0.91	293124	07/16/22	07/18/22	SBW
Zinc	62		mg/Kg	4.5	0.91	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	ND		mg/Kg	10	1	293535	07/22/22	07/22/22	MES
ORO C28-C44	ND		mg/Kg	20	1	293535	07/22/22	07/22/22	MES
Surrogates				Limits					
n-Triacontane	81%		%REC	70-130	1	293535	07/22/22	07/22/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	5.1	1	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	10	1	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	100	1	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	51	1	293639	07/23/22	07/25/22	TJW

Surrogates			Limits						
TCMX	99%	%REC	23-120	1	293639	07/23/22	07/25/22	TJW	
Decachlorobiphenyl	101%	%REC	24-120	1	293639	07/23/22	07/25/22	TJW	

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	11		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	11		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Acenaphthene	12		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluorene	21		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Phenanthrene	210		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Anthracene	48		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Fluoranthene	170		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Pyrene	160		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	79		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Chrysene	64		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	49		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	49		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	66		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	42		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	33		ug/Kg	10	1	293055	07/15/22	07/18/22	TJW

Surrogates			Limits						
Nitrobenzene-d5	70%	%REC	27-125	1	293055	07/15/22	07/18/22	TJW	
2-Fluorobiphenyl	65%	%REC	30-120	1	293055	07/15/22	07/18/22	TJW	
Terphenyl-d14	72%	%REC	33-155	1	293055	07/15/22	07/18/22	TJW	

Analysis Results for 465763

Sample ID: P4-4-1.0	Lab ID: 465763-022	Collected: 07/14/22 13:25
Matrix: Soil		

465763-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/18/22	SBW
Arsenic	51		mg/Kg	0.89	0.89	293124	07/16/22	07/27/22	SBW
Barium	85		mg/Kg	0.89	0.89	293124	07/16/22	07/26/22	SBW
Beryllium	ND		mg/Kg	0.45	0.89	293124	07/16/22	07/18/22	SBW
Cadmium	ND		mg/Kg	0.45	0.89	293124	07/16/22	07/26/22	SBW
Chromium	16		mg/Kg	0.89	0.89	293124	07/16/22	07/26/22	SBW
Cobalt	5.3		mg/Kg	0.45	0.89	293124	07/16/22	07/26/22	SBW
Copper	36		mg/Kg	0.89	0.89	293124	07/16/22	07/18/22	SBW
Lead	42		mg/Kg	0.89	0.89	293124	07/16/22	07/26/22	SBW
Molybdenum	ND		mg/Kg	0.89	0.89	293124	07/16/22	07/18/22	SBW
Nickel	20		mg/Kg	0.89	0.89	293124	07/16/22	07/27/22	SBW
Selenium	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/26/22	SBW
Silver	ND		mg/Kg	0.45	0.89	293124	07/16/22	07/27/22	SBW
Thallium	ND		mg/Kg	2.7	0.89	293124	07/16/22	07/26/22	SBW
Vanadium	24		mg/Kg	0.89	0.89	293124	07/16/22	07/18/22	SBW
Zinc	190		mg/Kg	4.5	0.89	293124	07/16/22	07/18/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	0.81		mg/Kg	0.16	1.1	293144	07/17/22	07/17/22	SBW
Method: EPA 8015M									
Prep Method: EPA 3580									
DRO C10-C28	45		mg/Kg	20	2	293535	07/22/22	07/23/22	MES
ORO C28-C44	76		mg/Kg	40	2	293535	07/22/22	07/23/22	MES
Surrogates				Limits					
n-Triacontane	111%		%REC	70-130	2	293535	07/22/22	07/23/22	MES
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
beta-BHC	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
gamma-BHC	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
delta-BHC	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Heptachlor	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Aldrin	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Heptachlor epoxide	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endosulfan I	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Dieldrin	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
4,4'-DDE	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endrin	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endosulfan II	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endosulfan sulfate	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW

Analysis Results for 465763

465763-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4,4'-DDD	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endrin aldehyde	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Endrin ketone	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
4,4'-DDT	ND		ug/Kg	10	2	293639	07/23/22	07/25/22	TJW
Methoxychlor	ND		ug/Kg	20	2	293639	07/23/22	07/25/22	TJW
Toxaphene	ND		ug/Kg	200	2	293639	07/23/22	07/25/22	TJW
Chlordane (Technical)	ND		ug/Kg	100	2	293639	07/23/22	07/25/22	TJW

Surrogates				Limits					
TCMX	95%		%REC	23-120	2	293639	07/23/22	07/25/22	TJW
Decachlorobiphenyl	96%		%REC	24-120	2	293639	07/23/22	07/25/22	TJW

Method: EPA 8270C-SIM

Prep Method: EPA 3546

1-Methylnaphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
2-Methylnaphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Naphthalene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Acenaphthylene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Acenaphthene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Fluorene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Phenanthrene	260		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Anthracene	ND		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Fluoranthene	1,100		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Pyrene	1,500		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(a)anthracene	1,700		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Chrysene	1,800		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(b)fluoranthene	2,400		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(k)fluoranthene	2,400		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(a)pyrene	3,500		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Indeno(1,2,3-cd)pyrene	3,100		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Dibenz(a,h)anthracene	540		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW
Benzo(g,h,i)perylene	2,300		ug/Kg	200	20	293055	07/15/22	07/18/22	TJW

Surrogates				Limits					
Nitrobenzene-d5	58%		%REC	27-125	20	293055	07/15/22	07/18/22	TJW
2-Fluorobiphenyl	61%		%REC	30-120	20	293055	07/15/22	07/18/22	TJW
Terphenyl-d14	71%		%REC	33-155	20	293055	07/15/22	07/18/22	TJW

C Presence confirmed, but RPD between columns exceeds 40%

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1000908	Batch: 293123
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000908 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	07/16/22	07/20/22
Arsenic	ND		mg/Kg	1.0	07/16/22	07/20/22
Barium	ND		mg/Kg	1.0	07/16/22	07/20/22
Beryllium	ND		mg/Kg	0.50	07/16/22	07/20/22
Cadmium	ND		mg/Kg	0.50	07/16/22	07/20/22
Chromium	ND		mg/Kg	1.0	07/16/22	07/20/22
Cobalt	ND		mg/Kg	0.50	07/16/22	07/20/22
Copper	ND		mg/Kg	1.0	07/16/22	07/18/22
Lead	ND		mg/Kg	1.0	07/16/22	07/18/22
Molybdenum	ND		mg/Kg	1.0	07/16/22	07/20/22
Nickel	ND		mg/Kg	1.0	07/16/22	07/20/22
Selenium	ND		mg/Kg	3.0	07/16/22	07/20/22
Silver	ND		mg/Kg	0.50	07/16/22	07/20/22
Thallium	ND		mg/Kg	3.0	07/16/22	07/20/22
Vanadium	ND		mg/Kg	1.0	07/16/22	07/20/22
Zinc	ND		mg/Kg	5.0	07/16/22	07/20/22

Type: Lab Control Sample	Lab ID: QC1000909	Batch: 293123
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000909 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	109.9	100.0	mg/Kg	110%		80-120
Arsenic	96.08	100.0	mg/Kg	96%		80-120
Barium	102.8	100.0	mg/Kg	103%		80-120
Beryllium	104.3	100.0	mg/Kg	104%		80-120
Cadmium	105.5	100.0	mg/Kg	106%		80-120
Chromium	102.5	100.0	mg/Kg	103%		80-120
Cobalt	104.3	100.0	mg/Kg	104%		80-120
Copper	110.6	100.0	mg/Kg	111%		80-120
Lead	103.6	100.0	mg/Kg	104%		80-120
Molybdenum	101.0	100.0	mg/Kg	101%		80-120
Nickel	105.1	100.0	mg/Kg	105%		80-120
Selenium	111.1	100.0	mg/Kg	111%		80-120
Silver	50.56	50.00	mg/Kg	101%		80-120
Thallium	103.2	100.0	mg/Kg	103%		80-120
Vanadium	103.9	100.0	mg/Kg	104%		80-120
Zinc	110.4	100.0	mg/Kg	110%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1000910	Batch: 293123
Matrix (Source ID): Soil (464984-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000910 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	35.33	ND	107.5	mg/Kg	33%	*	75-125	1.1
Arsenic	112.9	12.52	107.5	mg/Kg	93%		75-125	1.1
Barium	261.9	112.7	107.5	mg/Kg	139%	*	75-125	1.1
Beryllium	111.0	0.5417	107.5	mg/Kg	103%		75-125	1.1
Cadmium	104.4	2.500	107.5	mg/Kg	95%		75-125	1.1
Chromium	130.8	23.01	107.5	mg/Kg	100%		75-125	1.1
Cobalt	114.1	6.698	107.5	mg/Kg	100%		75-125	1.1
Copper	1,503	114.6	107.5	mg/Kg	1291%	*	75-125	1.1
Lead	161.6	48.57	107.5	mg/Kg	105%		75-125	1.1
Molybdenum	108.8	6.705	107.5	mg/Kg	95%		75-125	1.1
Nickel	118.3	14.82	107.5	mg/Kg	96%		75-125	1.1
Selenium	115.3	0.1458	107.5	mg/Kg	107%		75-125	1.1
Silver	52.85	0.3727	53.76	mg/Kg	98%		75-125	1.1
Thallium	98.14	ND	107.5	mg/Kg	91%		75-125	1.1
Vanadium	152.4	36.82	107.5	mg/Kg	107%		75-125	1.1
Zinc	241.7	114.1	107.5	mg/Kg	119%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC1000911	Batch: 293123
Matrix (Source ID): Soil (464984-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000911 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Antimony	30.47	ND	98.04	mg/Kg	31%	*	75-125	6	41	0.98
Arsenic	103.3	12.52	98.04	mg/Kg	93%		75-125	1	35	0.98
Barium	221.1	112.7	98.04	mg/Kg	111%		75-125	13	20	0.98
Beryllium	102.0	0.5417	98.04	mg/Kg	103%		75-125	1	20	0.98
Cadmium	99.90	2.500	98.04	mg/Kg	99%		75-125	5	20	0.98
Chromium	126.0	23.01	98.04	mg/Kg	105%		75-125	4	20	0.98
Cobalt	103.5	6.698	98.04	mg/Kg	99%		75-125	1	20	0.98
Copper	183.9	114.6	98.04	mg/Kg	71%	*	75-125	155*	20	0.98
Lead	142.9	48.57	98.04	mg/Kg	96%		75-125	6	20	0.98
Molybdenum	100.1	6.705	98.04	mg/Kg	95%		75-125	0	20	0.98
Nickel	107.6	14.82	98.04	mg/Kg	95%		75-125	1	20	0.98
Selenium	104.5	0.1458	98.04	mg/Kg	106%		75-125	1	20	0.98
Silver	47.34	0.3727	49.02	mg/Kg	96%		75-125	2	20	0.98
Thallium	88.00	ND	98.04	mg/Kg	90%		75-125	2	20	0.98
Vanadium	147.8	36.82	98.04	mg/Kg	113%		75-125	4	20	0.98
Zinc	210.7	114.1	98.04	mg/Kg	99%		75-125	9	20	0.98

Batch QC

Type: Blank	Lab ID: QC1000913	Batch: 293124
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000913 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	07/16/22	07/19/22
Arsenic	ND		mg/Kg	1.0	07/16/22	07/19/22
Barium	ND		mg/Kg	1.0	07/16/22	07/19/22
Beryllium	ND		mg/Kg	0.50	07/16/22	07/19/22
Cadmium	ND		mg/Kg	0.50	07/16/22	07/19/22
Chromium	ND		mg/Kg	1.0	07/16/22	07/19/22
Cobalt	ND		mg/Kg	0.50	07/16/22	07/19/22
Copper	ND		mg/Kg	1.0	07/16/22	07/19/22
Lead	ND		mg/Kg	1.0	07/16/22	07/19/22
Molybdenum	ND		mg/Kg	1.0	07/16/22	07/18/22
Nickel	ND		mg/Kg	1.0	07/16/22	07/19/22
Selenium	ND		mg/Kg	3.0	07/16/22	07/19/22
Silver	ND		mg/Kg	0.50	07/16/22	07/19/22
Thallium	ND		mg/Kg	3.0	07/16/22	07/19/22
Vanadium	ND		mg/Kg	1.0	07/16/22	07/19/22
Zinc	ND		mg/Kg	5.0	07/16/22	07/19/22

Type: Lab Control Sample	Lab ID: QC1000914	Batch: 293124
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000914 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	100.7	100.0	mg/Kg	101%		80-120
Arsenic	96.17	100.0	mg/Kg	96%		80-120
Barium	106.4	100.0	mg/Kg	106%		80-120
Beryllium	94.27	100.0	mg/Kg	94%		80-120
Cadmium	106.5	100.0	mg/Kg	107%		80-120
Chromium	103.8	100.0	mg/Kg	104%		80-120
Cobalt	108.6	100.0	mg/Kg	109%		80-120
Copper	101.8	100.0	mg/Kg	102%		80-120
Lead	101.4	100.0	mg/Kg	101%		80-120
Molybdenum	94.81	100.0	mg/Kg	95%		80-120
Nickel	98.91	100.0	mg/Kg	99%		80-120
Selenium	98.02	100.0	mg/Kg	98%		80-120
Silver	47.04	50.00	mg/Kg	94%		80-120
Thallium	98.79	100.0	mg/Kg	99%		80-120
Vanadium	103.8	100.0	mg/Kg	104%		80-120
Zinc	108.7	100.0	mg/Kg	109%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1000915	Batch: 293124
Matrix (Source ID): Soil (465763-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000915 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	23.92	ND	91.74	mg/Kg	26%	*	75-125	0.92
Arsenic	163.3	67.27	91.74	mg/Kg	105%		75-125	0.92
Barium	246.6	125.4	91.74	mg/Kg	132%	*	75-125	0.92
Beryllium	101.5	0.4196	91.74	mg/Kg	110%	b	75-125	0.92
Cadmium	98.07	0.5714	91.74	mg/Kg	106%		75-125	0.92
Chromium	138.0	56.18	91.74	mg/Kg	89%		75-125	0.92
Cobalt	110.6	13.42	91.74	mg/Kg	106%		75-125	0.92
Copper	161.7	59.93	91.74	mg/Kg	111%		75-125	0.92
Lead	111.3	21.79	91.74	mg/Kg	98%		75-125	0.92
Molybdenum	83.54	ND	91.74	mg/Kg	91%		75-125	0.92
Nickel	144.5	65.45	91.74	mg/Kg	86%		75-125	0.92
Selenium	93.58	ND	91.74	mg/Kg	102%		75-125	0.92
Silver	42.54	ND	45.87	mg/Kg	93%		75-125	0.92
Thallium	83.89	ND	91.74	mg/Kg	91%		75-125	0.92
Vanadium	135.6	38.54	91.74	mg/Kg	106%		75-125	0.92
Zinc	209.4	114.6	91.74	mg/Kg	103%		75-125	0.92

Type: Matrix Spike Duplicate	Lab ID: QC1000916	Batch: 293124
Matrix (Source ID): Soil (465763-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1000916 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Antimony	27.16	ND	86.21	mg/Kg	32%	*	75-125	19	41	0.86
Arsenic	153.7	67.27	86.21	mg/Kg	100%		75-125	3	35	0.86
Barium	221.1	125.4	86.21	mg/Kg	111%		75-125	8	20	0.86
Beryllium	101.0	0.4196	86.21	mg/Kg	117%	b	75-125	6	20	0.86
Cadmium	92.76	0.5714	86.21	mg/Kg	107%		75-125	1	20	0.86
Chromium	128.3	56.18	86.21	mg/Kg	84%		75-125	3	20	0.86
Cobalt	105.6	13.42	86.21	mg/Kg	107%		75-125	1	20	0.86
Copper	161.1	59.93	86.21	mg/Kg	117%		75-125	3	20	0.86
Lead	109.9	21.79	86.21	mg/Kg	102%		75-125	4	20	0.86
Molybdenum	86.81	ND	86.21	mg/Kg	101%		75-125	10	20	0.86
Nickel	139.6	65.45	86.21	mg/Kg	86%		75-125	0	20	0.86
Selenium	92.84	ND	86.21	mg/Kg	108%		75-125	5	20	0.86
Silver	41.09	ND	43.10	mg/Kg	95%		75-125	3	20	0.86
Thallium	84.96	ND	86.21	mg/Kg	99%		75-125	7	20	0.86
Vanadium	127.3	38.54	86.21	mg/Kg	103%		75-125	2	20	0.86
Zinc	210.6	114.6	86.21	mg/Kg	111%		75-125	3	20	0.86

Batch QC

Type: Blank	Lab ID: QC1001882	Batch: 293433
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1001882 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	07/21/22	07/25/22
Arsenic	ND		mg/Kg	1.0	07/21/22	07/25/22
Barium	ND		mg/Kg	1.0	07/21/22	07/25/22
Beryllium	ND		mg/Kg	0.50	07/21/22	07/25/22
Cadmium	ND		mg/Kg	0.50	07/21/22	07/25/22
Chromium	ND		mg/Kg	1.0	07/21/22	07/25/22
Cobalt	ND		mg/Kg	0.50	07/21/22	07/25/22
Copper	ND		mg/Kg	1.0	07/21/22	07/25/22
Lead	ND	b	mg/Kg	1.0	07/21/22	07/25/22
Molybdenum	ND		mg/Kg	1.0	07/21/22	07/25/22
Nickel	ND		mg/Kg	1.0	07/21/22	07/25/22
Selenium	ND		mg/Kg	3.0	07/21/22	07/25/22
Silver	ND		mg/Kg	0.50	07/21/22	07/25/22
Thallium	ND		mg/Kg	3.0	07/21/22	07/25/22
Vanadium	ND		mg/Kg	1.0	07/21/22	07/25/22
Zinc	ND		mg/Kg	5.0	07/21/22	07/25/22

Type: Lab Control Sample	Lab ID: QC1001883	Batch: 293433
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1001883 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	98.78	100.0	mg/Kg	99%		80-120
Arsenic	100.9	100.0	mg/Kg	101%		80-120
Barium	100.1	100.0	mg/Kg	100%		80-120
Beryllium	100.8	100.0	mg/Kg	101%		80-120
Cadmium	103.7	100.0	mg/Kg	104%		80-120
Chromium	100.0	100.0	mg/Kg	100%		80-120
Cobalt	103.7	100.0	mg/Kg	104%		80-120
Copper	95.42	100.0	mg/Kg	95%		80-120
Lead	103.2	100.0	mg/Kg	103%	b	80-120
Molybdenum	100.3	100.0	mg/Kg	100%		80-120
Nickel	101.1	100.0	mg/Kg	101%		80-120
Selenium	98.94	100.0	mg/Kg	99%		80-120
Silver	49.70	50.00	mg/Kg	99%		80-120
Thallium	99.98	100.0	mg/Kg	100%		80-120
Vanadium	99.24	100.0	mg/Kg	99%		80-120
Zinc	107.7	100.0	mg/Kg	108%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1001884	Batch: 293433
Matrix (Source ID): Soil (465763-008)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1001884 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	34.54	0.1533	100.0	mg/Kg	34%	*	75-125	1
Arsenic	110.3	7.847	100.0	mg/Kg	102%		75-125	1
Barium	285.0	164.2	100.0	mg/Kg	121%		75-125	1
Beryllium	103.5	0.3927	100.0	mg/Kg	103%		75-125	1
Cadmium	105.0	0.6901	100.0	mg/Kg	104%		75-125	1
Chromium	141.5	36.85	100.0	mg/Kg	105%		75-125	1
Cobalt	114.2	12.03	100.0	mg/Kg	102%		75-125	1
Copper	130.1	29.60	100.0	mg/Kg	101%		75-125	1
Lead	163.2	68.46	100.0	mg/Kg	95%	b	75-125	1
Molybdenum	96.16	0.6289	100.0	mg/Kg	96%		75-125	1
Nickel	135.8	39.91	100.0	mg/Kg	96%		75-125	1
Selenium	100.2	ND	100.0	mg/Kg	100%		75-125	1
Silver	50.58	0.5644	50.00	mg/Kg	100%		75-125	1
Thallium	99.12	ND	100.0	mg/Kg	99%		75-125	1
Vanadium	151.8	36.33	100.0	mg/Kg	115%		75-125	1
Zinc	228.8	140.6	100.0	mg/Kg	88%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1001885	Batch: 293433
Matrix (Source ID): Soil (465763-008)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1001885 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Antimony	28.39	0.1533	100.0	mg/Kg	28%	*	75-125	20	41	1
Arsenic	106.8	7.847	100.0	mg/Kg	99%		75-125	3	35	1
Barium	371.3	164.2	100.0	mg/Kg	207%	*	75-125	26*	20	1
Beryllium	99.14	0.3927	100.0	mg/Kg	99%		75-125	4	20	1
Cadmium	100.4	0.6901	100.0	mg/Kg	100%		75-125	5	20	1
Chromium	139.1	36.85	100.0	mg/Kg	102%		75-125	2	20	1
Cobalt	126.4	12.03	100.0	mg/Kg	114%		75-125	10	20	1
Copper	128.9	29.60	100.0	mg/Kg	99%		75-125	1	20	1
Lead	184.0	68.46	100.0	mg/Kg	116%	b	75-125	12	20	1
Molybdenum	89.78	0.6289	100.0	mg/Kg	89%		75-125	7	20	1
Nickel	185.2	39.91	100.0	mg/Kg	145%	*	75-125	31*	20	1
Selenium	97.03	ND	100.0	mg/Kg	97%		75-125	3	20	1
Silver	47.88	0.5644	50.00	mg/Kg	95%		75-125	5	20	1
Thallium	97.09	ND	100.0	mg/Kg	97%		75-125	2	20	1
Vanadium	150.1	36.33	100.0	mg/Kg	114%		75-125	1	20	1
Zinc	273.9	140.6	100.0	mg/Kg	133%	*	75-125	18	20	1

Batch QC

Type: Blank	Lab ID: QC1000980	Batch: 293144
Matrix: Miscell.	Method: EPA 7471A	Prep Method: METHOD

QC1000980 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	07/17/22	07/17/22

Type: Lab Control Sample	Lab ID: QC1000981	Batch: 293144
Matrix: Miscell.	Method: EPA 7471A	Prep Method: METHOD

QC1000981 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8676	0.8333	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1000982	Batch: 293144
Matrix (Source ID): Soil (465763-005)	Method: EPA 7471A	Prep Method: METHOD

QC1000982 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.582	0.9620	0.8475	mg/Kg	73%	*	75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1000983	Batch: 293144
Matrix (Source ID): Soil (465763-005)	Method: EPA 7471A	Prep Method: METHOD

QC1000983 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.687	0.9620	0.8621	mg/Kg	84%		75-125	6	20	1

Type: Blank	Lab ID: QC1002104	Batch: 293535
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC1002104 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	10	07/22/22	07/22/22
ORO C28-C44	ND		mg/Kg	20	07/22/22	07/22/22
Surrogates				Limits		
n-Triacontane	82%		%REC	70-130	07/22/22	07/22/22

Batch QC

Type: Matrix Spike	Lab ID: QC1002105	Batch: 293535
Matrix (Source ID): Soil (465778-001)	Method: EPA 8015M	Prep Method: EPA 3580

QC1002105 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	234.4	19.39	248.8	mg/Kg	86%		62-126	2
Surrogates								
n-Triacontane	7.471		9.950	mg/Kg	75%		70-130	2

Type: Matrix Spike Duplicate	Lab ID: QC1002106	Batch: 293535
Matrix (Source ID): Soil (465778-001)	Method: EPA 8015M	Prep Method: EPA 3580

QC1002106 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	228.0	19.39	251.3	mg/Kg	83%		62-126	4	35	2
Surrogates										
n-Triacontane	8.336		10.05	mg/Kg	83%		70-130			2

Type: Lab Control Sample	Lab ID: QC1002192	Batch: 293535
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC1002192 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	239.8	248.8	mg/Kg	96%		76-122
Surrogates						
n-Triacontane	8.185	9.950	mg/Kg	82%		70-130

Batch QC

Type: Blank	Lab ID: QC1002408	Batch: 293639
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002408 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
alpha-BHC	ND		ug/Kg	5.0	07/23/22	07/24/22
beta-BHC	ND		ug/Kg	5.0	07/23/22	07/24/22
gamma-BHC	ND		ug/Kg	5.0	07/23/22	07/24/22
delta-BHC	ND		ug/Kg	5.0	07/23/22	07/24/22
Heptachlor	ND		ug/Kg	5.0	07/23/22	07/24/22
Aldrin	ND		ug/Kg	5.0	07/23/22	07/24/22
Heptachlor epoxide	ND		ug/Kg	5.0	07/23/22	07/24/22
Endosulfan I	ND		ug/Kg	5.0	07/23/22	07/24/22
Dieldrin	ND		ug/Kg	5.0	07/23/22	07/24/22
4,4'-DDE	ND		ug/Kg	5.0	07/23/22	07/24/22
Endrin	ND		ug/Kg	5.0	07/23/22	07/24/22
Endosulfan II	ND		ug/Kg	5.0	07/23/22	07/24/22
Endosulfan sulfate	ND		ug/Kg	5.0	07/23/22	07/24/22
4,4'-DDD	ND		ug/Kg	5.0	07/23/22	07/24/22
Endrin aldehyde	ND		ug/Kg	5.0	07/23/22	07/24/22
Endrin ketone	ND		ug/Kg	5.0	07/23/22	07/24/22
4,4'-DDT	ND		ug/Kg	5.0	07/23/22	07/24/22
Methoxychlor	ND		ug/Kg	10	07/23/22	07/24/22
Toxaphene	ND		ug/Kg	100	07/23/22	07/24/22
Chlordane (Technical)	ND		ug/Kg	50	07/23/22	07/24/22
Surrogates				Limits		
TCMX	83%		%REC	23-120	07/23/22	07/24/22
Decachlorobiphenyl	88%		%REC	24-120	07/23/22	07/24/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1002409	Batch: 293639
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1002409 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	43.56	49.50	ug/Kg	88%		22-129
beta-BHC	43.46	49.50	ug/Kg	88%		28-125
gamma-BHC	42.95	49.50	ug/Kg	87%		22-128
delta-BHC	45.97	49.50	ug/Kg	93%		24-131
Heptachlor	46.85	49.50	ug/Kg	95%		18-124
Aldrin	40.44	49.50	ug/Kg	82%		23-120
Heptachlor epoxide	44.62	49.50	ug/Kg	90%		26-120
Endosulfan I	48.84	49.50	ug/Kg	99%		25-126
Dieldrin	45.47	49.50	ug/Kg	92%		23-124
4,4'-DDE	47.42	49.50	ug/Kg	96%		28-121
Endrin	49.73	49.50	ug/Kg	100%		25-127
Endosulfan II	49.08	49.50	ug/Kg	99%		29-121
Endosulfan sulfate	44.07	49.50	ug/Kg	89%		30-121
4,4'-DDD	52.54	49.50	ug/Kg	106%	#	26-120
Endrin aldehyde	40.22	49.50	ug/Kg	81%		10-120
Endrin ketone	45.69	49.50	ug/Kg	92%		28-125
4,4'-DDT	46.07	49.50	ug/Kg	93%		22-125
Methoxychlor	55.03	49.50	ug/Kg	111%		28-130
Surrogates						
TCMX	38.55	49.50	ug/Kg	78%		23-120
Decachlorobiphenyl	42.79	49.50	ug/Kg	86%		24-120

Batch QC

Type: Matrix Spike	Lab ID: QC1002410	Batch: 293639
Matrix (Source ID): Soil (465763-005)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002410 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
alpha-BHC	42.82	ND	50.51	ug/Kg	85%		46-120	1
beta-BHC	42.51	ND	50.51	ug/Kg	84%		41-120	1
gamma-BHC	42.59	ND	50.51	ug/Kg	84%		41-120	1
delta-BHC	46.24	ND	50.51	ug/Kg	92%		38-123	1
Heptachlor	46.73	ND	50.51	ug/Kg	93%		39-120	1
Aldrin	41.25	ND	50.51	ug/Kg	82%		34-120	1
Heptachlor epoxide	44.09	ND	50.51	ug/Kg	87%		43-120	1
Endosulfan I	47.48	ND	50.51	ug/Kg	94%		45-120	1
Dieldrin	45.31	ND	50.51	ug/Kg	90%		45-120	1
4,4'-DDE	46.77	ND	50.51	ug/Kg	93%		34-120	1
Endrin	48.88	ND	50.51	ug/Kg	97%		40-120	1
Endosulfan II	47.38	ND	50.51	ug/Kg	94%		41-120	1
Endosulfan sulfate	42.46	ND	50.51	ug/Kg	84%		42-120	1
4,4'-DDD	50.00	ND	50.51	ug/Kg	99%	#	41-120	1
Endrin aldehyde	41.44	ND	50.51	ug/Kg	82%		30-120	1
Endrin ketone	44.07	ND	50.51	ug/Kg	87%		45-120	1
4,4'-DDT	47.64	ND	50.51	ug/Kg	94%		35-127	1
Methoxychlor	50.07	ND	50.51	ug/Kg	99%		42-136	1
Surrogates								
TCMX	36.00		50.51	ug/Kg	71%		23-120	1
Decachlorobiphenyl	38.76		50.51	ug/Kg	77%		24-120	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1002411	Batch: 293639
Matrix (Source ID): Soil (465763-005)	Method: EPA 8081A	Prep Method: EPA 3546

QC1002411 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
alpha-BHC	44.70	ND	50.51	ug/Kg	89%		46-120	4	30	1
beta-BHC	43.31	ND	50.51	ug/Kg	86%		41-120	2	30	1
gamma-BHC	44.22	ND	50.51	ug/Kg	88%		41-120	4	30	1
delta-BHC	49.12	ND	50.51	ug/Kg	97%		38-123	6	30	1
Heptachlor	48.41	ND	50.51	ug/Kg	96%		39-120	4	30	1
Aldrin	42.43	ND	50.51	ug/Kg	84%		34-120	3	30	1
Heptachlor epoxide	44.74	ND	50.51	ug/Kg	89%		43-120	1	30	1
Endosulfan I	48.62	ND	50.51	ug/Kg	96%		45-120	2	30	1
Dieldrin	46.15	ND	50.51	ug/Kg	91%		45-120	2	30	1
4,4'-DDE	47.99	ND	50.51	ug/Kg	95%		34-120	3	30	1
Endrin	49.56	ND	50.51	ug/Kg	98%		40-120	1	30	1
Endosulfan II	47.97	ND	50.51	ug/Kg	95%		41-120	1	30	1
Endosulfan sulfate	41.48	ND	50.51	ug/Kg	82%		42-120	2	30	1
4,4'-DDD	50.15	ND	50.51	ug/Kg	99%	#	41-120	0	30	1
Endrin aldehyde	40.48	ND	50.51	ug/Kg	80%		30-120	2	30	1
Endrin ketone	44.57	ND	50.51	ug/Kg	88%		45-120	1	30	1
4,4'-DDT	47.47	ND	50.51	ug/Kg	94%		35-127	0	30	1
Methoxychlor	49.43	ND	50.51	ug/Kg	98%		42-136	1	30	1
Surrogates										
TCMX	37.57		50.51	ug/Kg	74%		23-120			1
Decachlorobiphenyl	38.59		50.51	ug/Kg	76%		24-120			1

Batch QC

Type: Matrix Spike	Lab ID: QC1000856	Batch: 293055
Matrix (Source ID): Soil (465763-016)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1000856 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	123.2	ND	198.8	ug/Kg	62%		25-130	0.99
2-Methylnaphthalene	141.4	ND	198.8	ug/Kg	71%		32-133	0.99
Naphthalene	136.7	ND	198.8	ug/Kg	69%		33-130	0.99
Acenaphthylene	136.9	ND	198.8	ug/Kg	69%		14-157	0.99
Acenaphthene	134.3	ND	198.8	ug/Kg	68%		28-134	0.99
Fluorene	136.6	ND	198.8	ug/Kg	69%		27-140	0.99
Phenanthrene	147.4	ND	198.8	ug/Kg	74%		29-147	0.99
Anthracene	128.4	ND	198.8	ug/Kg	65%		24-156	0.99
Fluoranthene	143.6	7.025	198.8	ug/Kg	69%		28-160	0.99
Pyrene	140.6	8.364	198.8	ug/Kg	67%		26-153	0.99
Benzo(a)anthracene	154.5	5.651	198.8	ug/Kg	75%		26-174	0.99
Chrysene	126.7	6.961	198.8	ug/Kg	60%		40-139	0.99
Benzo(b)fluoranthene	162.4	7.191	198.8	ug/Kg	78%		36-164	0.99
Benzo(k)fluoranthene	143.4	7.039	198.8	ug/Kg	69%		36-161	0.99
Benzo(a)pyrene	133.2	8.021	198.8	ug/Kg	63%		18-173	0.99
Indeno(1,2,3-cd)pyrene	164.7	8.976	198.8	ug/Kg	78%		26-154	0.99
Dibenz(a,h)anthracene	150.9	ND	198.8	ug/Kg	76%		38-132	0.99
Benzo(g,h,i)perylene	132.2	8.558	198.8	ug/Kg	62%		36-130	0.99
Surrogates								
Nitrobenzene-d5	159.1		198.8	ug/Kg	80%		27-125	0.99
2-Fluorobiphenyl	135.0		198.8	ug/Kg	68%		30-120	0.99
Terphenyl-d14	148.3		198.8	ug/Kg	75%		33-155	0.99

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1000857	Batch: 293055
Matrix (Source ID): Soil (465763-016)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1000857 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	119.4	ND	200.6	ug/Kg	60%		25-130	4	35	1
2-Methylnaphthalene	140.1	ND	200.6	ug/Kg	70%		32-133	2	35	1
Naphthalene	135.2	ND	200.6	ug/Kg	67%		33-130	2	35	1
Acenaphthylene	134.1	ND	200.6	ug/Kg	67%		14-157	3	35	1
Acenaphthene	130.1	ND	200.6	ug/Kg	65%		28-134	4	35	1
Fluorene	134.0	ND	200.6	ug/Kg	67%		27-140	3	35	1
Phenanthrene	141.6	ND	200.6	ug/Kg	71%		29-147	5	35	1
Anthracene	127.7	ND	200.6	ug/Kg	64%		24-156	1	35	1
Fluoranthene	139.2	7.025	200.6	ug/Kg	66%		28-160	4	35	1
Pyrene	135.8	8.364	200.6	ug/Kg	64%		26-153	4	35	1
Benzo(a)anthracene	151.3	5.651	200.6	ug/Kg	73%		26-174	3	35	1
Chrysene	120.5	6.961	200.6	ug/Kg	57%		40-139	6	35	1
Benzo(b)fluoranthene	165.4	7.191	200.6	ug/Kg	79%		36-164	1	35	1
Benzo(k)fluoranthene	132.6	7.039	200.6	ug/Kg	63%		36-161	9	35	1
Benzo(a)pyrene	134.0	8.021	200.6	ug/Kg	63%		18-173	0	35	1
Indeno(1,2,3-cd)pyrene	161.7	8.976	200.6	ug/Kg	76%		26-154	3	35	1
Dibenz(a,h)anthracene	148.0	ND	200.6	ug/Kg	74%		38-132	3	35	1
Benzo(g,h,i)perylene	130.4	8.558	200.6	ug/Kg	61%		36-130	2	35	1
Surrogates										
Nitrobenzene-d5	155.1		200.6	ug/Kg	77%		27-125			1
2-Fluorobiphenyl	132.4		200.6	ug/Kg	66%		30-120			1
Terphenyl-d14	143.1		200.6	ug/Kg	71%		33-155			1

Batch QC

Type: Lab Control Sample	Lab ID: QC1000858	Batch: 293055
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1000858 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	138.7	201.1	ug/Kg	69%		28-130
2-Methylnaphthalene	161.8	201.1	ug/Kg	80%		33-130
Naphthalene	158.7	201.1	ug/Kg	79%		25-130
Acenaphthylene	153.2	201.1	ug/Kg	76%		28-130
Acenaphthene	151.3	201.1	ug/Kg	75%		32-130
Fluorene	152.0	201.1	ug/Kg	76%		35-130
Phenanthrene	156.2	201.1	ug/Kg	78%		35-132
Anthracene	143.6	201.1	ug/Kg	71%		34-136
Fluoranthene	144.4	201.1	ug/Kg	72%		34-139
Pyrene	140.7	201.1	ug/Kg	70%		35-134
Benzo(a)anthracene	152.8	201.1	ug/Kg	76%		30-132
Chrysene	135.2	201.1	ug/Kg	67%		29-130
Benzo(b)fluoranthene	156.4	201.1	ug/Kg	78%		32-137
Benzo(k)fluoranthene	152.1	201.1	ug/Kg	76%		32-130
Benzo(a)pyrene	144.3	201.1	ug/Kg	72%		10-138
Indeno(1,2,3-cd)pyrene	169.4	201.1	ug/Kg	84%		34-132
Dibenz(a,h)anthracene	169.0	201.1	ug/Kg	84%		32-130
Benzo(g,h,i)perylene	146.1	201.1	ug/Kg	73%		27-130
Surrogates						
Nitrobenzene-d5	183.2	201.1	ug/Kg	91%		27-125
2-Fluorobiphenyl	157.5	201.1	ug/Kg	78%		30-120
Terphenyl-d14	157.4	201.1	ug/Kg	78%		33-155

Batch QC

Type: Blank	Lab ID: QC1000859	Batch: 293055
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1000859 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	07/15/22	07/18/22
2-Methylnaphthalene	ND		ug/Kg	10	07/15/22	07/18/22
Naphthalene	ND		ug/Kg	10	07/15/22	07/18/22
Acenaphthylene	ND		ug/Kg	10	07/15/22	07/18/22
Acenaphthene	ND		ug/Kg	10	07/15/22	07/18/22
Fluorene	ND		ug/Kg	10	07/15/22	07/18/22
Phenanthrene	ND		ug/Kg	10	07/15/22	07/18/22
Anthracene	ND		ug/Kg	10	07/15/22	07/18/22
Fluoranthene	ND		ug/Kg	10	07/15/22	07/18/22
Pyrene	ND		ug/Kg	10	07/15/22	07/18/22
Benzo(a)anthracene	ND		ug/Kg	10	07/15/22	07/18/22
Chrysene	ND		ug/Kg	10	07/15/22	07/18/22
Benzo(b)fluoranthene	ND		ug/Kg	10	07/15/22	07/18/22
Benzo(k)fluoranthene	ND		ug/Kg	10	07/15/22	07/18/22
Benzo(a)pyrene	ND		ug/Kg	10	07/15/22	07/18/22
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	07/15/22	07/18/22
Dibenz(a,h)anthracene	ND		ug/Kg	10	07/15/22	07/18/22
Benzo(g,h,i)perylene	ND		ug/Kg	10	07/15/22	07/18/22
Surrogates				Limits		
Nitrobenzene-d5	83%		%REC	27-125	07/15/22	07/18/22
2-Fluorobiphenyl	74%		%REC	30-120	07/15/22	07/18/22
Terphenyl-d14	88%		%REC	33-155	07/15/22	07/18/22

CCV drift outside limits; average CCV drift within limits per method requirements

* Value is outside QC limits

ND Not Detected

b See narrative



Enthalpy Analytical
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Lab Job Number: 467345
Report Level: II
Report Date: 08/17/2022

Analytical Report *prepared for:*

Jennifer Duffield
GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612

Project: 6272 - Berkeley Santa Fe Row

Authorized for release by:

John Goyette, Service Center Manager
(510) 204-2233 Ext 13112
john.goyette@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Jennifer Duffield GSI Environmental, Inc. 155 Grand Ave Suite 704 Oakland, CA 94612	Lab Job #: 467345 Project No: 6272 Location: Berkeley Santa Fe Row Dates Received: 07/13/22,07/14/22
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Sample ID	Lab ID	Collected	Matrix
P3-2-4.0	467345-001	07/14/22 09:05	Soil
P3-4-2.5	467345-002	07/14/22 10:10	Soil
P3-4-4.0	467345-003	07/14/22 10:25	Soil
P4-1-4.0	467345-004	07/14/22 11:25	Soil
P4-4-2.5	467345-005	07/14/22 13:35	Soil
P4-4-4.0	467345-006	07/14/22 13:40	Soil
P1-2-1.0	467345-007	07/13/22 10:40	Soil
P1-2-4.0	467345-008	07/13/22 10:50	Soil
P1-3-2.5	467345-009	07/13/22 11:40	Soil
P1-3-4.0	467345-010	07/13/22 11:55	Soil
P2-1-1.0	467345-011	07/13/22 13:20	Soil
P2-2-2.5	467345-012	07/13/22 14:00	Soil
P2-4-2.5	467345-013	07/13/22 15:25	Soil
P2-1-4.0	467345-014	07/13/22 13:35	Soil

Case Narrative

GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612
Jennifer Duffield

Lab Job Number: 467345
Project No: 6272
Location: Berkeley Santa Fe Row
Dates Received: 07/13/22, 07/14/22

This data package contains sample and QC results for fourteen soil samples, requested for the above referenced project on 08/12/22.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- Low recoveries were observed for benzo(a)pyrene, benzo(k)fluoranthene, and chrysene in the MSD of P4-4-2.5 (lab # 467345-005); the LCS was within limits.
- Responses exceeding the instrument's linear range were observed for benzo(a)pyrene and indeno(1,2,3-cd)pyrene in the MS of P4-4-2.5 (lab # 467345-005); affected data was qualified with "E".
- 467345-005 and 467345-006 were prepared outside of hold time; affected data was qualified with "H".
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- Mercury was analyzed outside of hold time; affected data was qualified with "H".
- No other analytical problems were encountered.

----- Forwarded message -----

From: **Jennifer P Duffield** <JPDuffield@gsi-net.com>

Date: Fri, Aug 12, 2022 at 1:17 PM

Subject: [EXTERNAL] RE: 6272 - Enthalpy Data (465763)

To: Tiffany R Klitzke <TRKlitzke@gsi-net.com>, sophia.baughman@enthalpy.com <sophia.baughman@enthalpy.com>
, miguel.gamboa@enthalpy.com <miguel.gamboa@enthalpy.com>

Cc: Max L Williams <MLWilliams@gsi-net.com>

Hi Miguel-

It was nice speaking with you. Thank you for helping us out in Sophia's absence. I believe there was a miscommunication regarding some additional analyses were requested. For Job number 465763, we had requested the following and I don't believe that we have received this data. I think possibly when I indicated that we wanted to cancel the WET and TCLP that it was interpreted that we wanted to cancel all additional requested tests. Can you please check to see if the additional analyses indicated here were run, and if not, can you please run them on a rush turnaround?

Arsenic analyses for the following samples:

P3-2-4.0

P3-4-2.5

P3-4-4.0

P4-1-4.0

P4-4-2.5

P4-4-4.0

PAHs by 8270 SIM for the following samples:

P4-4-2.5

P4-4-4.0

Please let me know if you have any questions and when we can expect results. Thank you.

Jennifer P Duffield, PE *(she/her/hers)*

Senior Associate

GSI Environmental Inc.

☎ [510.858.0702](tel:510.858.0702) | 📠 [510.821.8925](tel:510.821.8925)

On Fri, Aug 12, 2022 at 1:20 PM Jennifer P Duffield <JPDuffield@gsi-net.com> wrote:

Miguel-

Again, thank you for helping us out in Sophia's absence. I believe there was a miscommunication regarding some additional analyses were requested. For Job number 465695, we had requested the following and I don't believe that we have received this data. I think possibly when I indicated that we wanted to cancel the WET and TCLP that it was interpreted that we wanted to cancel all additional requested tests. Can you please check to see if the additional analyses indicated here were run, and if not, can you please run them on a rush turnaround?

Arsenic analyses on the following samples:

P1-2-1.0

P1-2-4.0

P1-3-2.5

P1-3-4.0

P2-1-1.0

P2-2-2.5

P2-4-2.5

P2-1-4.0

Lead analysis for the following samples:

P2-1-1.0

P2-2-2.5

P2-4-2.5

Mercury analysis for P2-4-2.5.

Please let me know if you have any questions and when we can expect results. Thank you

Jennifer P Duffield, PE *(she/her/hers)*

Senior Associate

GSI Environmental Inc.

O [510.858.0702](tel:510.858.0702) | **C** [510.821.8925](tel:510.821.8925)

Analysis Results for 467345

Jennifer Duffield
 GSI Environmental, Inc.
 155 Grand Ave
 Suite 704
 Oakland, CA 94612

Lab Job #: 467345
 Project No: 6272
 Location: Berkeley Santa Fe Row
 Dates Received: 07/13/22,07/14/22

Sample ID: P3-2-4.0 Lab ID: 467345-001 Collected: 07/14/22 09:05
Matrix: Soil

467345-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.5		mg/Kg	0.88	0.88	295008	08/13/22	08/15/22	SBW

Sample ID: P3-4-2.5 Lab ID: 467345-002 Collected: 07/14/22 10:10
Matrix: Soil

467345-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	47		mg/Kg	0.95	0.95	295008	08/13/22	08/15/22	SBW

Sample ID: P3-4-4.0 Lab ID: 467345-003 Collected: 07/14/22 10:25
Matrix: Soil

467345-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	52		mg/Kg	1.0	1	295008	08/13/22	08/15/22	SBW

Sample ID: P4-1-4.0 Lab ID: 467345-004 Collected: 07/14/22 11:25
Matrix: Soil

467345-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	1.0	1	295008	08/13/22	08/15/22	SBW

Analysis Results for 467345

Sample ID: P4-4-2.5	Lab ID: 467345-005	Collected: 07/14/22 13:35
Matrix: Soil		

467345-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	12		mg/Kg	0.89	0.89	295008	08/13/22	08/15/22	SBW
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
2-Methylnaphthalene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Naphthalene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Acenaphthylene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Acenaphthene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Fluorene	ND	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Phenanthrene	46	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Anthracene	13	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Fluoranthene	140	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Pyrene	180	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Benzo(a)anthracene	200	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Chrysene	190	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Benzo(b)fluoranthene	260	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Benzo(k)fluoranthene	270	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Benzo(a)pyrene	390	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Indeno(1,2,3-cd)pyrene	350	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Dibenz(a,h)anthracene	79	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Benzo(g,h,i)perylene	250	H	ug/Kg	10	1	295056	08/15/22	08/17/22	TJW
Surrogates				Limits					
Nitrobenzene-d5	72%	H	%REC	27-125	1	295056	08/15/22	08/17/22	TJW
2-Fluorobiphenyl	71%	H	%REC	30-120	1	295056	08/15/22	08/17/22	TJW
Terphenyl-d14	89%	H	%REC	33-155	1	295056	08/15/22	08/17/22	TJW

Analysis Results for 467345

Sample ID: P4-4-4.0	Lab ID: 467345-006	Collected: 07/14/22 13:40
	Matrix: Soil	

467345-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.4		mg/Kg	0.97	0.97	295008	08/13/22	08/15/22	SBW
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
2-Methylnaphthalene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Naphthalene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Acenaphthylene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Acenaphthene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Fluorene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Phenanthrene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Anthracene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Fluoranthene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Pyrene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Benzo(a)anthracene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Chrysene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Benzo(b)fluoranthene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Benzo(k)fluoranthene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Benzo(a)pyrene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Indeno(1,2,3-cd)pyrene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Dibenz(a,h)anthracene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Benzo(g,h,i)perylene	ND	H	ug/Kg	9.9	0.99	295056	08/15/22	08/17/22	TJW
Surrogates				Limits					
Nitrobenzene-d5	83%	H	%REC	27-125	0.99	295056	08/15/22	08/17/22	TJW
2-Fluorobiphenyl	77%	H	%REC	30-120	0.99	295056	08/15/22	08/17/22	TJW
Terphenyl-d14	111%	H	%REC	33-155	0.99	295056	08/15/22	08/17/22	TJW

Sample ID: P1-2-1.0	Lab ID: 467345-007	Collected: 07/13/22 10:40
	Matrix: Soil	

467345-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	62		mg/Kg	0.93	0.93	295008	08/13/22	08/15/22	SBW

Analysis Results for 467345

Sample ID: P1-2-4.0	Lab ID: 467345-008	Collected: 07/13/22 10:50
	Matrix: Soil	

467345-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.7		mg/Kg	1.0	1	295008	08/13/22	08/15/22	SBW

Sample ID: P1-3-2.5	Lab ID: 467345-009	Collected: 07/13/22 11:40
	Matrix: Soil	

467345-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	35		mg/Kg	0.89	0.89	295008	08/13/22	08/15/22	SBW

Sample ID: P1-3-4.0	Lab ID: 467345-010	Collected: 07/13/22 11:55
	Matrix: Soil	

467345-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	10		mg/Kg	1.0	1	295008	08/13/22	08/15/22	SBW

Sample ID: P2-1-1.0	Lab ID: 467345-011	Collected: 07/13/22 13:20
	Matrix: Soil	

467345-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	28		mg/Kg	1.1	1.1	295008	08/13/22	08/15/22	SBW
Lead	210		mg/Kg	1.1	1.1	295008	08/13/22	08/16/22	SBW

Sample ID: P2-2-2.5	Lab ID: 467345-012	Collected: 07/13/22 14:00
	Matrix: Soil	

467345-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	41		mg/Kg	1.0	1	295008	08/13/22	08/15/22	SBW
Lead	10		mg/Kg	1.0	1	295008	08/13/22	08/16/22	SBW

Analysis Results for 467345

Sample ID: P2-4-2.5	Lab ID: 467345-013	Collected: 07/13/22 15:25
	Matrix: Soil	

467345-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	8.9		mg/Kg	0.92	0.92	295008	08/13/22	08/15/22	SBW
Lead	12		mg/Kg	0.92	0.92	295008	08/13/22	08/16/22	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND	H	mg/Kg	0.16	1.2	295022	08/13/22	08/13/22	TNN

Sample ID: P2-1-4.0	Lab ID: 467345-014	Collected: 07/13/22 13:35
	Matrix: Soil	

467345-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	24		mg/Kg	0.89	0.89	295008	08/13/22	08/15/22	SBW

H Holding time was exceeded
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1006508	Batch: 295008
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1006508 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	08/13/22	08/15/22
Lead	ND		mg/Kg	1.0	08/13/22	08/15/22

Type: Lab Control Sample	Lab ID: QC1006509	Batch: 295008
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1006509 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	103.9	100.0	mg/Kg	104%		80-120
Lead	101.5	100.0	mg/Kg	101%		80-120

Type: Matrix Spike	Lab ID: QC1006510	Batch: 295008
Matrix (Source ID): Soil (467345-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1006510 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	90.41	6.523	86.96	mg/Kg	96%		75-125	0.87
Lead	89.29	7.595	86.96	mg/Kg	94%		75-125	0.87

Type: Matrix Spike Duplicate	Lab ID: QC1006511	Batch: 295008
Matrix (Source ID): Soil (467345-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1006511 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	94.44	6.523	85.47	mg/Kg	103%		75-125	6	35	0.85
Lead	91.71	7.595	85.47	mg/Kg	98%		75-125	4	20	0.85

Type: Blank	Lab ID: QC1006560	Batch: 295022
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1006560 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	08/13/22	08/13/22

Type: Lab Control Sample	Lab ID: QC1006561	Batch: 295022
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1006561 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.7684	0.8333	mg/Kg	92%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1006562	Batch: 295022
Matrix (Source ID): Miscell. (467227-021)	Method: EPA 7471A	Prep Method: METHOD

QC1006562 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.021	0.08532	0.9804	mg/Kg	95%		75-125	1.2

Type: Matrix Spike Duplicate	Lab ID: QC1006563	Batch: 295022
Matrix (Source ID): Miscell. (467227-021)	Method: EPA 7471A	Prep Method: METHOD

QC1006563 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Mercury	0.9270	0.08532	0.9804	mg/Kg	86%		75-125	10	20	1.2

Type: Matrix Spike	Lab ID: QC1006696	Batch: 295056
Matrix (Source ID): Soil (467345-005)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1006696 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	139.6	ND	201.1	ug/Kg	69%		25-130	1
2-Methylnaphthalene	166.2	ND	201.1	ug/Kg	83%		32-133	1
Naphthalene	156.8	ND	201.1	ug/Kg	78%		33-130	1
Acenaphthylene	159.0	ND	201.1	ug/Kg	79%		14-157	1
Acenaphthene	160.9	4.907	201.1	ug/Kg	78%		28-134	1
Fluorene	168.7	ND	201.1	ug/Kg	84%		27-140	1
Phenanthrene	221.1	45.62	201.1	ug/Kg	87%		29-147	1
Anthracene	160.4	12.81	201.1	ug/Kg	73%		24-156	1
Fluoranthene	278.7	139.4	201.1	ug/Kg	69%		28-160	1
Pyrene	304.7	178.4	201.1	ug/Kg	63%		26-153	1
Benzo(a)anthracene	363.8	200.8	201.1	ug/Kg	81%		26-174	1
Chrysene	311.8	191.6	201.1	ug/Kg	60%		40-139	1
Benzo(b)fluoranthene	447.3	260.4	201.1	ug/Kg	93%		36-164	1
Benzo(k)fluoranthene	394.9	266.3	201.1	ug/Kg	64%		36-161	1
Benzo(a)pyrene	533.0	388.7	201.1	ug/Kg	72%	E	18-173	1
Indeno(1,2,3-cd)pyrene	534.4	347.0	201.1	ug/Kg	93%	E	26-154	1
Dibenz(a,h)anthracene	257.9	79.09	201.1	ug/Kg	89%		38-132	1
Benzo(g,h,i)perylene	392.5	245.6	201.1	ug/Kg	73%		36-130	1
Surrogates								
Nitrobenzene-d5	175.3		201.1	ug/Kg	87%		27-125	1
2-Fluorobiphenyl	160.2		201.1	ug/Kg	80%		30-120	1
Terphenyl-d14	213.3		201.1	ug/Kg	106%		33-155	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1006697	Batch: 295056
Matrix (Source ID): Soil (467345-005)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1006697 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	136.1	ND	200.9	ug/Kg	68%		25-130	2	35	1
2-Methylnaphthalene	165.0	ND	200.9	ug/Kg	82%		32-133	1	35	1
Naphthalene	154.6	ND	200.9	ug/Kg	77%		33-130	1	35	1
Acenaphthylene	162.9	ND	200.9	ug/Kg	81%		14-157	3	35	1
Acenaphthene	154.7	4.907	200.9	ug/Kg	75%		28-134	4	35	1
Fluorene	163.5	ND	200.9	ug/Kg	81%		27-140	3	35	1
Phenanthrene	224.3	45.62	200.9	ug/Kg	89%		29-147	2	35	1
Anthracene	160.6	12.81	200.9	ug/Kg	74%		24-156	0	35	1
Fluoranthene	257.8	139.4	200.9	ug/Kg	59%		28-160	8	35	1
Pyrene	277.4	178.4	200.9	ug/Kg	49%		26-153	9	35	1
Benzo(a)anthracene	310.2	200.8	200.9	ug/Kg	54%		26-174	16	35	1
Chrysene	263.4	191.6	200.9	ug/Kg	36%	*	40-139	17	35	1
Benzo(b)fluoranthene	390.0	260.4	200.9	ug/Kg	65%		36-164	14	35	1
Benzo(k)fluoranthene	304.7	266.3	200.9	ug/Kg	19%	*	36-161	26	35	1
Benzo(a)pyrene	416.9	388.7	200.9	ug/Kg	14%	*	18-173		35	1
Indeno(1,2,3-cd)pyrene	431.2	347.0	200.9	ug/Kg	42%		26-154		35	1
Dibenz(a,h)anthracene	226.4	79.09	200.9	ug/Kg	73%		38-132	13	35	1
Benzo(g,h,i)perylene	317.1	245.6	200.9	ug/Kg	36%		36-130	21	35	1
Surrogates										
Nitrobenzene-d5	171.7		200.9	ug/Kg	85%		27-125			1
2-Fluorobiphenyl	153.6		200.9	ug/Kg	76%		30-120			1
Terphenyl-d14	207.8		200.9	ug/Kg	103%		33-155			1

Batch QC

Type: Blank	Lab ID: QC1006698	Batch: 295056
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1006698 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	08/15/22	08/17/22
2-Methylnaphthalene	ND		ug/Kg	10	08/15/22	08/17/22
Naphthalene	ND		ug/Kg	10	08/15/22	08/17/22
Acenaphthylene	ND		ug/Kg	10	08/15/22	08/17/22
Acenaphthene	ND		ug/Kg	10	08/15/22	08/17/22
Fluorene	ND		ug/Kg	10	08/15/22	08/17/22
Phenanthrene	ND		ug/Kg	10	08/15/22	08/17/22
Anthracene	ND		ug/Kg	10	08/15/22	08/17/22
Fluoranthene	ND		ug/Kg	10	08/15/22	08/17/22
Pyrene	ND		ug/Kg	10	08/15/22	08/17/22
Benzo(a)anthracene	ND		ug/Kg	10	08/15/22	08/17/22
Chrysene	ND		ug/Kg	10	08/15/22	08/17/22
Benzo(b)fluoranthene	ND		ug/Kg	10	08/15/22	08/17/22
Benzo(k)fluoranthene	ND		ug/Kg	10	08/15/22	08/17/22
Benzo(a)pyrene	ND		ug/Kg	10	08/15/22	08/17/22
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	08/15/22	08/17/22
Dibenz(a,h)anthracene	ND		ug/Kg	10	08/15/22	08/17/22
Benzo(g,h,i)perylene	ND		ug/Kg	10	08/15/22	08/17/22
Surrogates				Limits		
Nitrobenzene-d5	80%		%REC	27-125	08/15/22	08/17/22
2-Fluorobiphenyl	80%		%REC	30-120	08/15/22	08/17/22
Terphenyl-d14	115%		%REC	33-155	08/15/22	08/17/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1006699	Batch: 295056
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1006699 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	138.8	200.5	ug/Kg	69%		28-130
2-Methylnaphthalene	165.6	200.5	ug/Kg	83%		33-130
Naphthalene	156.0	200.5	ug/Kg	78%		25-130
Acenaphthylene	160.2	200.5	ug/Kg	80%		28-130
Acenaphthene	152.8	200.5	ug/Kg	76%		32-130
Fluorene	159.6	200.5	ug/Kg	80%		35-130
Phenanthrene	172.5	200.5	ug/Kg	86%		35-132
Anthracene	147.4	200.5	ug/Kg	74%		34-136
Fluoranthene	158.5	200.5	ug/Kg	79%		34-139
Pyrene	155.2	200.5	ug/Kg	77%		35-134
Benzo(a)anthracene	162.1	200.5	ug/Kg	81%		30-132
Chrysene	129.6	200.5	ug/Kg	65%		29-130
Benzo(b)fluoranthene	174.2	200.5	ug/Kg	87%		32-137
Benzo(k)fluoranthene	145.8	200.5	ug/Kg	73%		32-130
Benzo(a)pyrene	144.6	200.5	ug/Kg	72%		10-138
Indeno(1,2,3-cd)pyrene	177.5	200.5	ug/Kg	89%		34-132
Dibenz(a,h)anthracene	168.4	200.5	ug/Kg	84%		32-130
Benzo(g,h,i)perylene	141.1	200.5	ug/Kg	70%		27-130
Surrogates						
Nitrobenzene-d5	174.1	200.5	ug/Kg	87%		27-125
2-Fluorobiphenyl	165.2	200.5	ug/Kg	82%		30-120
Terphenyl-d14	224.4	200.5	ug/Kg	112%		33-155

* Value is outside QC limits
 E Response exceeds instrument's linear range
 ND Not Detected



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Lab Job Number: 468980
Report Level: II
Report Date: 09/21/2022

Analytical Report *prepared for:*

Jennifer Duffield
GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612

Project: 6272 - Berkeley Santa Fe Row

Authorized for release by:

Sophia Baughman, Project Manager
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This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Jennifer Duffield
GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612

Lab Job #: 468980
Project No: 6272
Location: Berkeley Santa Fe Row
Date Received: 07/14/22

Sample ID	Lab ID	Collected	Matrix
P3-1-1.0	468980-001	07/14/22 08:10	Soil
P4-3-1.0	468980-002	07/14/22 12:45	Soil

Case Narrative

GSI Environmental, Inc.
155 Grand Ave
Suite 704
Oakland, CA 94612
Jennifer Duffield

Lab Job Number: 468980
Project No: 6272
Location: Berkeley Santa Fe Row
Date Received: 07/14/22

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 09/13/22. The samples were received cold and intact.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- High RPD was observed for 1-methylnaphthalene in the MS/MSD for batch 297037; the parent sample was not a project sample, and this analyte was not detected at or above the RL in the associated sample.
- 468980-002 was prepared outside of hold time; affected data was qualified with "H".
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- Mercury was analyzed outside of hold time; affected data was qualified with "H".
- No other analytical problems were encountered.



Sophia Baughman <sophia.baughman@enthalpy.com>

[EXTERNAL] Additional Analyses Request for Job #465763

Tiffany R Klitzke <TRKlitzke@gsi-net.com>
To: Sophia Baughman <sophia.baughman@enthalpy.com>
Cc: Jennifer P Duffield <JPDuffield@gsi-net.com>

Tue, Sep 13, 2022 at 9:58 AM

Hi Sophia,

We'd like to request additional analyses for two samples from Job #465763.

Will you please run sample P3-1-1.0 (Lab Sample ID 465763-001) for arsenic, lead, and mercury?

We'd also like to run sample P4-3-1.0 (Lab Sample ID 465763-019) for arsenic, lead, mercury, and PAHs. We understand this sample is past the hold time for PAHs. We would still like to proceed with the analysis.

Given the lab's current workload, how quickly do you think we could see these results? Somewhere in the 3-5 day range would be ideal for us if that works for Enthalpy.

Thank you!

Tiffany R Klitzke

Senior Scientist



GSI Environmental Inc.

155 Grand Avenue, Suite 704 | Oakland, California 94612

☎ 510.858.0102 | ☎ 831.227.5144

✉ trklitzke@gsienv.com | www.gsienv.com |  

Analysis Results for 468980

Jennifer Duffield
 GSI Environmental, Inc.
 155 Grand Ave
 Suite 704
 Oakland, CA 94612

Lab Job #: 468980
 Project No: 6272
 Location: Berkeley Santa Fe Row
 Date Received: 07/14/22

Sample ID: P3-1-1.0 Lab ID: 468980-001 Collected: 07/14/22 08:10
Matrix: Soil

468980-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	63		mg/Kg	0.97	0.97	297018	09/15/22	09/15/22	KLN
Lead	15		mg/Kg	0.97	0.97	297018	09/15/22	09/15/22	KLN
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND	H	mg/Kg	0.15	1.1	297047	09/15/22	09/15/22	ECM

Analysis Results for 468980

Sample ID: P4-3-1.0	Lab ID: 468980-002	Collected: 07/14/22 12:45
Matrix: Soil		

468980-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	29		mg/Kg	0.96	0.96	297018	09/15/22	09/15/22	KLN
Lead	22		mg/Kg	0.96	0.96	297018	09/15/22	09/15/22	KLN
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND	H	mg/Kg	0.16	1.2	297047	09/15/22	09/15/22	ECM
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
2-Methylnaphthalene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Naphthalene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Acenaphthylene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Acenaphthene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Fluorene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Phenanthrene	19	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Anthracene	14	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Fluoranthene	40	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Pyrene	48	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Benzo(a)anthracene	36	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Chrysene	45	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Benzo(b)fluoranthene	42	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Benzo(k)fluoranthene	47	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Benzo(a)pyrene	66	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Indeno(1,2,3-cd)pyrene	39	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Dibenz(a,h)anthracene	ND	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Benzo(g,h,i)perylene	36	H	ug/Kg	10	1	297037	09/15/22	09/16/22	HQN
Surrogates				Limits					
Nitrobenzene-d5	82%	H	%REC	27-125	1	297037	09/15/22	09/16/22	HQN
2-Fluorobiphenyl	63%	H	%REC	30-120	1	297037	09/15/22	09/16/22	HQN
Terphenyl-d14	82%	H	%REC	33-155	1	297037	09/15/22	09/16/22	HQN

H Holding time was exceeded
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1013037	Batch: 297018
Matrix: Miscell.	Method: EPA 6010B	Prep Method: EPA 3050B

QC1013037 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	09/15/22	09/15/22
Lead	ND		mg/Kg	1.0	09/15/22	09/15/22

Type: Lab Control Sample	Lab ID: QC1013038	Batch: 297018
Matrix: Miscell.	Method: EPA 6010B	Prep Method: EPA 3050B

QC1013038 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	104.9	100.0	mg/Kg	105%		80-120
Lead	109.6	100.0	mg/Kg	110%		80-120

Type: Matrix Spike	Lab ID: QC1013039	Batch: 297018
Matrix (Source ID): Soil (468897-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1013039 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	96.23	2.920	96.15	mg/Kg	97%		75-125	0.96
Lead	107.6	5.690	96.15	mg/Kg	106%		75-125	0.96

Type: Matrix Spike Duplicate	Lab ID: QC1013040	Batch: 297018
Matrix (Source ID): Soil (468897-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1013040 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	101.0	2.920	96.15	mg/Kg	102%		75-125	5	35	0.96
Lead	112.1	5.690	96.15	mg/Kg	111%		75-125	4	20	0.96

Type: Blank	Lab ID: QC1013145	Batch: 297047
Matrix: Miscell.	Method: EPA 7471A	Prep Method: METHOD

QC1013145 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	09/15/22	09/15/22

Type: Lab Control Sample	Lab ID: QC1013146	Batch: 297047
Matrix: Miscell.	Method: EPA 7471A	Prep Method: METHOD

QC1013146 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8098	0.8333	mg/Kg	97%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1013149	Batch: 297047
Matrix (Source ID): Soil (468897-001)	Method: EPA 7471A	Prep Method: METHOD

QC1013149 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.8980	0.02437	0.9091	mg/Kg	96%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC1013150	Batch: 297047
Matrix (Source ID): Soil (468897-001)	Method: EPA 7471A	Prep Method: METHOD

QC1013150 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Mercury	0.9003	0.02437	0.9091	mg/Kg	96%		75-125	0	20	1.1

Type: Blank	Lab ID: QC1013306	Batch: 297037
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1013306 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	9.9	09/15/22	09/16/22
2-Methylnaphthalene	ND		ug/Kg	9.9	09/15/22	09/16/22
Naphthalene	ND		ug/Kg	9.9	09/15/22	09/16/22
Acenaphthylene	ND		ug/Kg	9.9	09/15/22	09/16/22
Acenaphthene	ND		ug/Kg	9.9	09/15/22	09/16/22
Fluorene	ND		ug/Kg	9.9	09/15/22	09/16/22
Phenanthrene	ND		ug/Kg	9.9	09/15/22	09/16/22
Anthracene	ND		ug/Kg	9.9	09/15/22	09/16/22
Fluoranthene	ND		ug/Kg	9.9	09/15/22	09/16/22
Pyrene	ND		ug/Kg	9.9	09/15/22	09/16/22
Benzo(a)anthracene	ND		ug/Kg	9.9	09/15/22	09/16/22
Chrysene	ND		ug/Kg	9.9	09/15/22	09/16/22
Benzo(b)fluoranthene	ND		ug/Kg	9.9	09/15/22	09/16/22
Benzo(k)fluoranthene	ND		ug/Kg	9.9	09/15/22	09/16/22
Benzo(a)pyrene	ND		ug/Kg	9.9	09/15/22	09/16/22
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	9.9	09/15/22	09/16/22
Dibenz(a,h)anthracene	ND		ug/Kg	9.9	09/15/22	09/16/22
Benzo(g,h,i)perylene	ND		ug/Kg	9.9	09/15/22	09/16/22
Surrogates	Limits					
Nitrobenzene-d5	91%		%REC	27-125	09/15/22	09/16/22
2-Fluorobiphenyl	68%		%REC	30-120	09/15/22	09/16/22
Terphenyl-d14	91%		%REC	33-155	09/15/22	09/16/22

Batch QC

Type: Lab Control Sample	Lab ID: QC1013307	Batch: 297037
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1013307 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	138.3	200.5	ug/Kg	69%		28-130
2-Methylnaphthalene	150.1	200.5	ug/Kg	75%		33-130
Naphthalene	148.6	200.5	ug/Kg	74%		25-130
Acenaphthylene	160.7	200.5	ug/Kg	80%		28-130
Acenaphthene	152.3	200.5	ug/Kg	76%		32-130
Fluorene	156.6	200.5	ug/Kg	78%		35-130
Phenanthrene	159.0	200.5	ug/Kg	79%		35-132
Anthracene	159.8	200.5	ug/Kg	80%		34-136
Fluoranthene	156.8	200.5	ug/Kg	78%		34-139
Pyrene	148.1	200.5	ug/Kg	74%		35-134
Benzo(a)anthracene	179.8	200.5	ug/Kg	90%		30-132
Chrysene	155.4	200.5	ug/Kg	78%		29-130
Benzo(b)fluoranthene	172.0	200.5	ug/Kg	86%		32-137
Benzo(k)fluoranthene	173.5	200.5	ug/Kg	87%		32-130
Benzo(a)pyrene	174.4	200.5	ug/Kg	87%		10-138
Indeno(1,2,3-cd)pyrene	151.8	200.5	ug/Kg	76%		34-132
Dibenz(a,h)anthracene	138.0	200.5	ug/Kg	69%		32-130
Benzo(g,h,i)perylene	126.3	200.5	ug/Kg	63%		27-130
Surrogates						
Nitrobenzene-d5	184.1	200.5	ug/Kg	92%		27-125
2-Fluorobiphenyl	144.9	200.5	ug/Kg	72%		30-120
Terphenyl-d14	181.1	200.5	ug/Kg	90%		33-155

Batch QC

Type: Matrix Spike	Lab ID: QC1013308	Batch: 297037
Matrix (Source ID): Soil (468937-001)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1013308 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	123.5	ND	201.0	ug/Kg	61%		25-130	5
2-Methylnaphthalene	137.8	ND	201.0	ug/Kg	69%		32-133	5
Naphthalene	134.4	ND	201.0	ug/Kg	67%		33-130	5
Acenaphthylene	135.5	ND	201.0	ug/Kg	67%		14-157	5
Acenaphthene	136.4	ND	201.0	ug/Kg	68%		28-134	5
Fluorene	137.2	ND	201.0	ug/Kg	68%		27-140	5
Phenanthrene	144.0	40.06	201.0	ug/Kg	52%		29-147	5
Anthracene	147.4	ND	201.0	ug/Kg	73%		24-156	5
Fluoranthene	153.7	82.80	201.0	ug/Kg	35%		28-160	5
Pyrene	144.3	64.38	201.0	ug/Kg	40%		26-153	5
Benzo(a)anthracene	170.4	38.61	201.0	ug/Kg	66%		26-174	5
Chrysene	147.0	32.67	201.0	ug/Kg	57%		40-139	5
Benzo(b)fluoranthene	164.0	24.54	201.0	ug/Kg	69%		36-164	5
Benzo(k)fluoranthene	165.5	24.86	201.0	ug/Kg	70%		36-161	5
Benzo(a)pyrene	167.2	35.02	201.0	ug/Kg	66%		18-173	5
Indeno(1,2,3-cd)pyrene	132.1	15.02	201.0	ug/Kg	58%		26-154	5
Dibenz(a,h)anthracene	114.2	ND	201.0	ug/Kg	57%		38-132	5
Benzo(g,h,i)perylene	110.6	14.35	201.0	ug/Kg	48%		36-130	5
Surrogates								
Nitrobenzene-d5	152.9		201.0	ug/Kg	76%		27-125	5
2-Fluorobiphenyl	121.5		201.0	ug/Kg	60%		30-120	5
Terphenyl-d14	160.0		201.0	ug/Kg	80%		33-155	5

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1013309	Batch: 297037
Matrix (Source ID): Soil (468937-001)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1013309 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	62.47	ND	200.4	ug/Kg	31%		25-130	65*	35	5
2-Methylnaphthalene	113.3	ND	200.4	ug/Kg	57%		32-133	19	35	5
Naphthalene	124.1	ND	200.4	ug/Kg	62%		33-130	8	35	5
Acenaphthylene	131.9	ND	200.4	ug/Kg	66%		14-157	2	35	5
Acenaphthene	136.5	ND	200.4	ug/Kg	68%		28-134	0	35	5
Fluorene	137.4	ND	200.4	ug/Kg	69%		27-140	0	35	5
Phenanthrene	147.2	40.06	200.4	ug/Kg	53%		29-147	2	35	5
Anthracene	152.3	ND	200.4	ug/Kg	76%		24-156	4	35	5
Fluoranthene	157.0	82.80	200.4	ug/Kg	37%		28-160	2	35	5
Pyrene	150.0	64.38	200.4	ug/Kg	43%		26-153	4	35	5
Benzo(a)anthracene	172.0	38.61	200.4	ug/Kg	67%		26-174	1	35	5
Chrysene	147.9	32.67	200.4	ug/Kg	58%		40-139	1	35	5
Benzo(b)fluoranthene	154.8	24.54	200.4	ug/Kg	65%		36-164	6	35	5
Benzo(k)fluoranthene	155.7	24.86	200.4	ug/Kg	65%		36-161	6	35	5
Benzo(a)pyrene	171.3	35.02	200.4	ug/Kg	68%		18-173	3	35	5
Indeno(1,2,3-cd)pyrene	126.4	15.02	200.4	ug/Kg	56%		26-154	4	35	5
Dibenz(a,h)anthracene	104.0	ND	200.4	ug/Kg	52%		38-132	9	35	5
Benzo(g,h,i)perylene	112.0	14.35	200.4	ug/Kg	49%		36-130	2	35	5
Surrogates										
Nitrobenzene-d5	152.5		200.4	ug/Kg	76%		27-125			5
2-Fluorobiphenyl	116.8		200.4	ug/Kg	58%		30-120			5
Terphenyl-d14	164.8		200.4	ug/Kg	82%		33-155			5

* Value is outside QC limits

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499551
Report Level: II
Report Date: 02/02/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499551
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/08/24

Sample ID	Lab ID	Collected	Matrix
P2-B10-2.0	499551-001	01/08/24 08:57	Soil
P2-B10-3.0	499551-002	01/08/24 09:04	Soil
P2-B10-4.0	499551-003	01/08/24 09:12	Soil
P2-B9-2.0	499551-004	01/08/24 09:54	Soil
P2-B9-3.0	499551-005	01/08/24 10:02	Soil
P2-B9-4.0	499551-006	01/08/24 10:13	Soil
P2-B8-2.0	499551-007	01/08/24 10:26	Soil
P2-B8-3.0	499551-008	01/08/24 10:33	Soil
P2-B8-4.0	499551-009	01/08/24 10:37	Soil
P2-B7-2.0	499551-010	01/08/24 11:22	Soil
P2-B7-3.0	499551-011	01/08/24 11:35	Soil
P2-B7-4.0	499551-012	01/08/24 11:49	Soil
P2-B6-2.0	499551-013	01/08/24 12:00	Soil
P2-B6-3.0	499551-014	01/08/24 12:04	Soil
P2-B6-4.0	499551-015	01/08/24 12:12	Soil
DUP-02-01082024	499551-016	01/08/24 00:00	Soil
P2-B5-2.0	499551-017	01/08/24 13:18	Soil
P2-B5-3.0	499551-018	01/08/24 13:22	Soil
P2-B5-4.0	499551-019	01/08/24 13:33	Soil
P2-B4-2.0	499551-020	01/08/24 13:47	Soil
P2-B4-3.0	499551-021	01/08/24 13:52	Soil
P2-B4-4.0	499551-022	01/08/24 13:59	Soil
P2-B3-2.0	499551-023	01/08/24 14:22	Soil
P2-B3-3.0	499551-024	01/08/24 14:30	Soil
P2-B3-4.0	499551-025	01/08/24 14:35	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499551
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 01/08/24

- This data package contains sample and QC results for twenty four soil samples, requested for the above referenced project on 01/08/24. The samples were received cold and intact.
- Report reissued 2-2-2024 to include additional analysis data.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.



499551

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272													
PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Emails: TRKlitze@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		LAB CONTACT: Sophia Baughman		SAMPLER(S): Allison Cleary & Gabrielle Fredericks (PRINT)													
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.															
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																	
SPECIAL INSTRUCTIONS:																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Tite 22 Metals (6010B/7471A)	OCPs (6081A)	TPH/dm (6015M)	HOLD	
		DATE	TIME														
	P2-B10-2.0	1/8/24	0857	Soil	1	X			X	X	X						
	P2-B10-3.0		0904		1	X			X	X	X						
	P2-B10-4.0		0912		1	X			X	X	X						
	P2-B9-2.0		0954		1	X			X	X	X						
	P2-B9-3.0		1002		1	X			X	X	X						
	P2-B9-4.0		1013		1	X			X	X	X						
	P2-B8-2.0		1026		1	X			X	X	X						
	P2-B8-3.0		1033		1	X			X	X	X						
	P2-B8-4.0		1037		1	X			X	X	X						
	P2-B7-2.0		1122		1	X			X	X	X						
	P2-B7-3.0		1135		1	X			X	X	X						
	P2-B7-4.0		1149		1	X			X	X	X						
	P2-B6-2.0		1200		1	X			X	X	X						
	P2-B6-3.0		1204		1	X			X	X	X						
	P2-B6-4.0		1212		1	X			X	X	X						
Relinquished by: (Signature)		Allison Cleary		1/8/24		Received by: (Signature)										Date: 1/8/24 Time: 1654	
Relinquished by: (Signature)		Tiffany George		1/8/24		Received by: (Signature)										Date: 1/9/24 Time: 9:30	
Relinquished by: (Signature)		Tiffany George		17:58		Received by: (Signature)										Date: 1/9/24 Time: 17:58	



499551

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272												
PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Emails: TRKlitzke@gsienv.com; A.Cleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		LAB CONTACT: Sophia Baughman		SAMPLER(S): Allison Cleary & Gabrielle Fredericks (PRINT)												
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.														
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																
SPECIAL INSTRUCTIONS:																
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (6061A)	TPHd/mo (6015M)	HOLD
		DATE	TIME													
	DUP-02-01082024	1/8/24		Soil	1	X			X	X	X					X
	P2-B5-2.0		1318		1	X			X	X	X					
	P2-B5-3.0		1322		1	X			X	X	X					
	P2-B5-4.0		1333		1	X			X	X	X					
	P2-B4-2.0		1347		1	X			X	X	X					
	P2-B4-3.0		1352		1	X			X	X	X					
	P2-B4-4.0		1359		1	X			X	X	X					
	P2-B3-2.0		1422		1	X			X	X	X					
	P2-B3-3.0		1430		1	X			X	X	X					
	P2-B3-4.0		1435		1	X			X	X	X					
<i>ABC</i>																
Relinquished by: (Signature) <i>Alan C...</i>		Date: <u>1/8/24</u>		Received by: (Signature) <i>[Signature]</i>		Date: <u>1/8/24</u>		Time: <u>1654</u>								
Relinquished by: (Signature)		Date: <u>1/9/24</u>		Received by: (Signature) <i>[Signature]</i>		Date: <u>1/9/24</u>		Time: <u>9:30</u>								
Relinquished by: (Signature)		Date: <u>1/9/24</u>		Received by: (Signature)		Date: <u>1/9/24</u>		Time: <u> </u>								

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1.8.24 Login # 499551 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify Analyst if temperature exceeds 6°C or arrive frozen

Date Opened 1.8.24 By (print) Jedz Peterson (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	<input checked="" type="checkbox"/>		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		<input checked="" type="checkbox"/>	
Did all containers arrive unbroken/unopened?	<input checked="" type="checkbox"/>		
Are there any missing / extra samples?	<input checked="" type="checkbox"/>		
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>		
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>		
Does the container count match the COC?	<input checked="" type="checkbox"/>		
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for unpreserved VOAs?			<input checked="" type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?			<input checked="" type="checkbox"/>
Are bubbles > 6mm present in VOA samples?			<input checked="" type="checkbox"/>
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____			

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)	<input checked="" type="checkbox"/>		
Did any samples / containers require preservation upon receipt?			<input checked="" type="checkbox"/>
Did you document your preservative check in the bench book?			<input checked="" type="checkbox"/>

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI-Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Date Logged 1.8.24 By (print) JJP FOR MAY (sign) [Signature]
 Date Labeled 1.8.24 By (print) Jedz Peterson (sign) [Signature]



SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/09/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) _____
 (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 4.2 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.1 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?	✓		
If custody seals are present, were they intact?	✓		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments
499551

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: [Signature] Date: JAN 09 2024

SOUTHWEST AIRLINES



526 OAK 9756 0120

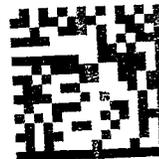
Printed on:
08 JAN 19:29

SNA

PC#	DG	LOT WT
8 OF 9	G	362 LB (164.1 KG)

OAK WN 352 09 JAN 07:15

STN	FLT	DATE	ETD	LOT 01
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PC-ID: 0008
PC-WT: 40LB

526 97560120 0008

4.7/2.1 PC

S

[External] - RE: 6272 - Enthalpy Data (499551)

Allison J Cleary <ajcleary@gsi-net.com>

Tue 1/16/2024 1:16 PM

To: Sophia Baughman <sophia.baughman@enthalpy.com>

Cc: Tiffany R. George <TRKlitzke@gsi-net.com>; Jennifer P. Duffield <JPDuffield@gsi-net.com>

You don't often get email from ajcleary@gsi-net.com. [Learn why this is important](#)

Hi Sophia,

We would like a few of the samples on hold analyzed.

Samples On Hold:	Analyze for:	Report Number:
P2-B10-4.0	Arsenic & Lead	499551
P2-B9-4.0	Arsenic Only	499551
P2-B8-4.0	Arsenic Only	499551
P2-B7-4.0	Arsenic Only	499551
P2-B6-4.0	Arsenic Only	499551
P2-B5-4.0	Arsenic Only	499551
P2-B4-4.0	Arsenic Only	499551
P2-B3-4.0	Arsenic Only	499551

Thanks!

Allison J Cleary

GSI Environmental Inc.

☎ [510.858.0923](tel:510.858.0923) | 📠 [510.789.9638](tel:510.789.9638)

From: Sophia Baughman <sophia.baughman@enthalpy.com>

Sent: Monday, January 15, 2024 9:17 AM

To: Allison J Cleary <ajcleary@gsi-net.com>

Subject: 6272 - Enthalpy Data (499551)

Hi Allison,

Please find attached the following files:

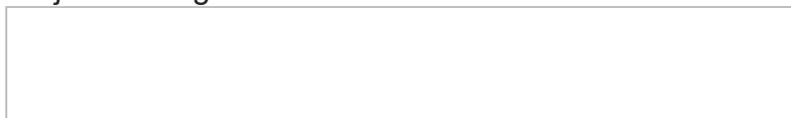
- PDF Deliverable
- Standard Format EDD (499551_standard.zip)

You may also access this data at <https://labline-orange.enthalpy.com/>

Email was also sent to: MLWilliams@gsi-net.com, TRKlitzke@gsi-net.com, jpduffield@gsienv.com

Sophia Baughman

Project Manager



2323 Fifth St., Berkeley, CA 94710

O: (510)204-2227

Sophia.Baughman@enthalpy.com

Analysis Results for 499551

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499551
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/08/24

Sample ID: P2-B10-2.0 Lab ID: 499551-001 Collected: 01/08/24 08:57
Matrix: Soil

499551-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	130		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Lead	140		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.39		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B10-3.0 Lab ID: 499551-002 Collected: 01/08/24 09:04
Matrix: Soil

499551-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	46		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	87		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.36		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B10-4.0 Lab ID: 499551-003 Collected: 01/08/24 09:12
Matrix: Soil

499551-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	33		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS
Lead	14		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS

Sample ID: P2-B9-2.0 Lab ID: 499551-004 Collected: 01/08/24 09:54
Matrix: Soil

499551-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	19		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	24		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.24		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Analysis Results for 499551

Sample ID: P2-B9-3.0	Lab ID: 499551-005	Collected: 01/08/24 10:02
	Matrix: Soil	

499551-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	59		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	25		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.18		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B9-4.0	Lab ID: 499551-006	Collected: 01/08/24 10:13
	Matrix: Soil	

499551-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	29		mg/Kg	0.95	0.95	330676	01/17/24	01/17/24	RPS

Sample ID: P2-B8-2.0	Lab ID: 499551-007	Collected: 01/08/24 10:26
	Matrix: Soil	

499551-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	100		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Lead	68		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.50		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B8-3.0	Lab ID: 499551-008	Collected: 01/08/24 10:33
	Matrix: Soil	

499551-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	91		mg/Kg	0.96	0.96	330237	01/10/24	01/11/24	RPS
Lead	16		mg/Kg	0.96	0.96	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Analysis Results for 499551

Sample ID: P2-B8-4.0	Lab ID: 499551-009	Collected: 01/08/24 10:37
	Matrix: Soil	

499551-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	10		mg/Kg	1.0	1	330676	01/17/24	01/17/24	RPS

Sample ID: P2-B7-2.0	Lab ID: 499551-010	Collected: 01/08/24 11:22
	Matrix: Soil	

499551-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	210		mg/Kg	0.96	0.96	330237	01/10/24	01/11/24	RPS
Lead	78		mg/Kg	0.96	0.96	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	11		mg/Kg	1.4	10	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B7-3.0	Lab ID: 499551-011	Collected: 01/08/24 11:35
	Matrix: Soil	

499551-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	72		mg/Kg	0.97	0.97	330237	01/10/24	01/11/24	RPS
Lead	14		mg/Kg	0.97	0.97	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.32		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B7-4.0	Lab ID: 499551-012	Collected: 01/08/24 11:49
	Matrix: Soil	

499551-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	38		mg/Kg	0.99	0.99	330676	01/17/24	01/17/24	RPS

Analysis Results for 499551

Sample ID: P2-B6-2.0	Lab ID: 499551-013	Collected: 01/08/24 12:00
	Matrix: Soil	

499551-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	310		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Lead	66		mg/Kg	0.98	0.98	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.49		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B6-3.0	Lab ID: 499551-014	Collected: 01/08/24 12:04
	Matrix: Soil	

499551-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	53		mg/Kg	1.0	1	330237	01/10/24	01/11/24	RPS
Lead	14		mg/Kg	1.0	1	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B6-4.0	Lab ID: 499551-015	Collected: 01/08/24 12:12
	Matrix: Soil	

499551-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	27		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS

Sample ID: DUP-02-01082024	Lab ID: 499551-016	Collected: 01/08/24
	Matrix: Soil	

499551-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	15		mg/Kg	1.0	1	331603	01/29/24	01/29/24	SBW

Analysis Results for 499551

Sample ID: P2-B5-2.0	Lab ID: 499551-017	Collected: 01/08/24 13:18
	Matrix: Soil	

499551-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	120		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	24		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.27		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B5-3.0	Lab ID: 499551-018	Collected: 01/08/24 13:22
	Matrix: Soil	

499551-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	23		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	10		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B5-4.0	Lab ID: 499551-019	Collected: 01/08/24 13:33
	Matrix: Soil	

499551-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.2		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS

Sample ID: P2-B4-2.0	Lab ID: 499551-020	Collected: 01/08/24 13:47
	Matrix: Soil	

499551-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	24		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	51		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.27		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Analysis Results for 499551

Sample ID: P2-B4-3.0	Lab ID: 499551-021	Collected: 01/08/24 13:52
	Matrix: Soil	

499551-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	53		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	7.3		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B4-4.0	Lab ID: 499551-022	Collected: 01/08/24 13:59
	Matrix: Soil	

499551-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	74		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS

Sample ID: P2-B3-2.0	Lab ID: 499551-023	Collected: 01/08/24 14:22
	Matrix: Soil	

499551-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	21		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	6.2		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Sample ID: P2-B3-3.0	Lab ID: 499551-024	Collected: 01/08/24 14:30
	Matrix: Soil	

499551-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	13		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Lead	13		mg/Kg	0.95	0.95	330237	01/10/24	01/11/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330316	01/11/24	01/12/24	KAM

Analysis Results for 499551

Sample ID: P2-B3-4.0	Lab ID: 499551-025	Collected: 01/08/24 14:35
	Matrix: Soil	

499551-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.3		mg/Kg	0.97	0.97	330676	01/17/24	01/17/24	RPS

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119252	Batch: 330237
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119252 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/10/24	01/11/24
Lead	ND		mg/Kg	1.0	01/10/24	01/11/24

Type: Lab Control Sample	Lab ID: QC1119253	Batch: 330237
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119253 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	97.11	100.0	mg/Kg	97%		80-120
Lead	106.7	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1119254	Batch: 330237
Matrix (Source ID): Soil (499551-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119254 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	223.3	129.2	95.24	mg/Kg	99%		75-125	0.95
Lead	241.3	144.8	95.24	mg/Kg	101%		75-125	0.95

Type: Matrix Spike Duplicate	Lab ID: QC1119255	Batch: 330237
Matrix (Source ID): Soil (499551-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119255 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	212.3	129.2	96.15	mg/Kg	86%		75-125	5	35	0.96
Lead	248.3	144.8	96.15	mg/Kg	108%		75-125	2	20	0.96

Type: Post Digest Spike	Lab ID: QC1119270	Batch: 330237
Matrix (Source ID): Soil (499551-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119270 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	216.2	129.2	98.04	mg/Kg	89%		75-125	0.98
Lead	226.1	144.8	98.04	mg/Kg	83%		75-125	0.98

Type: Blank	Lab ID: QC1120774	Batch: 330676
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120774 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/17/24	01/17/24
Lead	ND		mg/Kg	1.0	01/17/24	01/17/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1120775	Batch: 330676
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120775 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	94.13	100.0	mg/Kg	94%		80-120
Lead	103.8	100.0	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1120776	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120776 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	128.0	27.71	97.09	mg/Kg	103%		75-125	0.97
Lead	140.1	55.40	97.09	mg/Kg	87%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1120777	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120777 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	125.2	27.71	100.0	mg/Kg	98%		75-125	5	35	1
Lead	139.0	55.40	100.0	mg/Kg	84%		75-125	3	20	1

Type: Post Digest Spike	Lab ID: QC1120778	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120778 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	119.3	27.71	96.15	mg/Kg	95%		75-125	0.96
Lead	147.9	55.40	96.15	mg/Kg	96%		75-125	0.96

Type: Blank	Lab ID: QC1123667	Batch: 331603
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1123667 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/29/24	01/29/24

Type: Lab Control Sample	Lab ID: QC1123668	Batch: 331603
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1123668 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	88.84	100.0	mg/Kg	89%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1123669	Batch: 331603
Matrix (Source ID): Soil (500850-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1123669 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	98.99	7.495	98.04	mg/Kg	93%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1123670	Batch: 331603
Matrix (Source ID): Soil (500850-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1123670 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	99.26	7.495	99.01	mg/Kg	93%		75-125	1	35	0.99

Type: Post Digest Spike	Lab ID: QC1123671	Batch: 331603
Matrix (Source ID): Soil (500850-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1123671 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.4	7.495	99.01	mg/Kg	94%		75-125	0.99

Type: Blank	Lab ID: QC1119496	Batch: 330316
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119496 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/11/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119497	Batch: 330316
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119497 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9344	0.8333	mg/Kg	112%		80-120

Type: Matrix Spike	Lab ID: QC1119498	Batch: 330316
Matrix (Source ID): Soil (499551-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119498 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.268	0.3876	0.8475	mg/Kg	104%		75-125	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1119499	Batch: 330316
Matrix (Source ID): Soil (499551-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119499 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.277	0.3876	0.8475	mg/Kg	105%		75-125	1	20	1

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499553
Report Level: II
Report Date: 01/23/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

<p>Tiffany George GSI Environmental, Inc. 2000 Powell Street Suite 820 Emeryville, CA 94608</p>	<p>Lab Job #: 499553 Project No: 6272 Location: Berkeley Trackbed to Park Date Received: 01/08/24</p>
---	--

Sample ID	Lab ID	Collected	Matrix
P2-A10-4.0	499553-001	01/08/24 09:10	Soil
P2-A10-3.0	499553-002	01/08/24 09:00	Soil
P2-A10-2.0	499553-003	01/08/24 08:55	Soil
P2-A9-2.0	499553-004	01/08/24 09:40	Soil
DUP-01-01082024	499553-005	01/08/24 00:00	Soil
P2-A9-3.0	499553-006	01/08/24 09:45	Soil
P2-A9-4.0	499553-007	01/08/24 09:50	Soil
P2-A8-2.0	499553-008	01/08/24 10:13	Soil
P2-A8-3.0	499553-009	01/08/24 10:17	Soil
P2-A8-4.0	499553-010	01/08/24 10:23	Soil
P2-A7-2.0	499553-011	01/08/24 11:12	Soil
P2-A7-3.0	499553-012	01/08/24 11:19	Soil
P2-A7-4.0	499553-013	01/08/24 11:26	Soil
P2-A6-2.0	499553-014	01/08/24 11:42	Soil
P2-A6-3.0	499553-015	01/08/24 11:51	Soil
P2-A6-4.0	499553-016	01/08/24 11:56	Soil
P2-A5-2.0	499553-017	01/08/24 13:15	Soil
P2-A5-3.0	499553-018	01/08/24 13:20	Soil
P2-A5-4.0	499553-019	01/08/24 13:25	Soil
P2-A4-2.0	499553-020	01/08/24 13:42	Soil
P2-A4-3.0	499553-021	01/08/24 13:49	Soil
P2-A4-4.0	499553-022	01/08/24 13:54	Soil
P2-B1-2.0	499553-023	01/08/24 14:18	Soil
P2-B1-3.0	499553-024	01/08/24 14:24	Soil
DUP-03-01082024	499553-025	01/08/24 00:00	Soil
P2-B1-4.0	499553-026	01/08/24 14:37	Soil

Sample Summary

Tiffany George	Lab Job #:	499553
GSI Environmental, Inc.	Project No:	6272
2000 Powell Street	Location:	Berkeley Trackbed to Park
Suite 820	Date Received:	01/08/24
Emeryville, CA 94608		

Sample ID	Lab ID	Collected	Matrix
P2-1D-5.0	499553-027	01/08/24 15:07	Soil
P2-1D-6.0	499553-028	01/08/24 15:17	Soil
P2-1D-7.0	499553-029	01/08/24 00:00	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499553
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 01/08/24

- This data package contains sample and QC results for twenty one soil samples, requested for the above referenced project on 01/08/24. The samples were received cold and intact.
- Report reissued 01.23.2024 to include additionally requested metals results.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.



499553

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park PROJECT NO.: 6272																																																																																																																																																																																																																																																																																																		
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TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<table border="1"> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th rowspan="2">Field Filtered</th> <th rowspan="2">Preserved</th> <th rowspan="2">Unpreserved</th> <th rowspan="2">Arsenic only (6010B)</th> <th rowspan="2">Lead (6010B)</th> <th rowspan="2">Mercury (7471A)</th> <th rowspan="2">PAHs (8270C SIM)</th> <th rowspan="2">Title 22 Metals (6010B/7471A)</th> <th rowspan="2">OCs (8081A)</th> <th rowspan="2">TPH/d/mo (8015M)</th> <th rowspan="2">HOLD</th> </tr> <tr> <th>DATE</th> <th>TIME</th> </tr> <tr> <td></td> <td>P2-A10-4.0</td> <td>01/08/24</td> <td>0910</td> <td>Soil</td> <td>1</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>P2-A10-3.0</td> <td></td> <td>0900</td> <td></td> </tr> <tr> <td></td> <td>P2-A10-2.0</td> <td></td> <td>0855</td> <td></td> </tr> <tr> <td></td> <td>P2-A9-2.0</td> <td></td> <td>0940</td> <td></td> </tr> <tr> <td></td> <td>DUP-01-01082024</td> <td></td> </tr> <tr> <td></td> <td>P2-A9-3.0</td> <td></td> <td>0945</td> <td></td> </tr> <tr> <td></td> <td>P2-A9-4.0</td> <td></td> <td>0945 0950</td> <td></td> </tr> <tr> <td></td> <td>P2-A8-2.0</td> <td></td> <td>1013</td> <td></td> </tr> <tr> <td></td> <td>P2-A8-3.0</td> <td></td> <td>1017</td> <td></td> </tr> <tr> <td></td> <td>P2-A8-4.0</td> <td></td> <td>1023</td> <td></td> </tr> <tr> <td></td> <td>P2-A7-2.0</td> <td></td> <td>1112</td> <td></td> </tr> <tr> <td></td> <td>P2-A7-3.0</td> <td></td> <td>1119</td> <td></td> </tr> <tr> <td></td> <td>P2-A7-4.0</td> <td></td> <td>1126</td> <td></td> </tr> <tr> <td></td> <td>P2-A6-2.0</td> <td></td> <td>1142</td> <td></td> </tr> <tr> <td></td> <td>P2-A6-3.0</td> <td></td> <td>1151</td> <td></td> </tr> </table>		LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCs (8081A)	TPH/d/mo (8015M)	HOLD	DATE	TIME		P2-A10-4.0	01/08/24	0910	Soil	1				X	X	X								P2-A10-3.0		0900																P2-A10-2.0		0855																P2-A9-2.0		0940																DUP-01-01082024																		P2-A9-3.0		0945																P2-A9-4.0		0945 0950																P2-A8-2.0		1013																P2-A8-3.0		1017																P2-A8-4.0		1023																P2-A7-2.0		1112																P2-A7-3.0		1119																P2-A7-4.0		1126																P2-A6-2.0		1142																P2-A6-3.0		1151														
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RELIQUISHED BY (SIGNATURE): <i>Gabrielle Fredericks</i> 1.8.24 17:40		RECEIVED BY (SIGNATURE): <i>[Signature]</i> Date: 01/08/24 Time: 1654																																																																																																																																																																																																																																																																																																		
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499553

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272												
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman												
GLOBAL ID: N/A		Emails: TRKlitzke@ggsienv.com; AJCleary@ggsienv.com; GFredricks@ggsienv.com; JPDuffield@ggsienv.com		SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks												
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.														
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 72 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																
SPECIAL INSTRUCTIONS:																
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		DATE	TIME													
	P2-A6-4.0	01/08/24	1156	Soil	1				X	X	X					X
	P2-A5-2.0		1315						X	X	X					X
	P2-A5-3.0		1320						X	X	X					X
	P2-A5-4.0		1325						X	X	X					X
	P2-A4-2.0		1342						X	X	X					X
	P2-A4-3.0		1349						X	X	X					X
	P2-A4-4.0		1354						X	X	X					X
	P2-B1-2.0		1418						X	X	X					X
	P2-B1-3.0		1424						X	X	X					X
	DUP-03-01082024								X	X	X					X
	P2-B1-4.0		1437						X	X	X					X
	P2-1d-5.0		1507						X	X	X					X
	P2-1d-6.0		1517						X	X	X					X
	P2-1d-7.0								X	X	X					X
Relinquished by: (Signature) <i>Gabrielle Fredericks</i>		Received by: (Signature)		Date: 01/08/24		Time: 1:05 PM										
Relinquished by: (Signature)		Received by: (Signature)		Date: 1/9/24		Time: 0930										
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:										

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1-8-24 Login # 499553 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify us if temperature exceeds 6°C or arrive frozen

Date Opened 1-8-24 By (print) Jedz Peterson (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (If checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____	/		
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?	/		
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?	/		
Did you change the hold time in LIMS for preserved terracores?	/		
Are bubbles > 6mm present in VOA samples?	/		
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____	/		

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (If yes, skip the rest of section 5)	/		
Did any samples / containers require preservation upon receipt?	/		
Did you document your preservative check in the bench book?	/		

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Label for -029 sample time of 19:22 not on COC.

Date Logged 1-8-24 By (print) JJP for MAY (sign) [Signature]
 Date Labeled 1-8-24 By (print) Jedz Peterson (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/09/24 Sampler's Name Present: Yes No

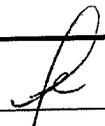
Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 3.7 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.4 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
499553

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: JAN 09 2024

SOUTHWEST AIRLINES

Printed on:
08 JAN 19:29

526 OAK 9756 0120



SNA				PC#	7
				OF	9
				DG	G
				LOT WT	362 LB
				(164.1 KG)	
OAK	WN 352	09 JAN	07:15		
STN	FLT	DATE	ETD	LOT 01	



PC ID: 0007
PC WT: 40LB

526 97560120 0007

S

2.4/3.8

[External] - RE: 6272 - Enthalpy Data (499553)

Allison J Cleary <ajccleary@gsi-net.com>

Tue 1/16/2024 1:18 PM

To: Sophia Baughman <sophia.baughman@enthalpy.com>

Cc: Tiffany R. George <TRKlitzke@gsi-net.com>; Jennifer P. Duffield <JPDuffield@gsi-net.com>

You don't often get email from ajccleary@gsi-net.com. [Learn why this is important](#)

Hi Sophia,

We'd like to have one hold sample from this report analyzed as well:

Samples On Hold:	Analyze for:	Report Number:
P2-B1-4.0	Arsenic Only	499553

Thanks!

Allison J Cleary

GSI Environmental Inc.

O [510.858.0923](tel:510.858.0923) | C [510.789.9638](tel:510.789.9638)

From: Sophia Baughman <sophia.baughman@enthalpy.com>

Sent: Monday, January 15, 2024 9:53 AM

To: Allison J Cleary <ajccleary@gsi-net.com>

Subject: 6272 - Enthalpy Data (499553)

Hi Allison,

Please find attached the following files:

- PDF Deliverable
- Standard Format EDD (499553_standard.zip)

You may also access this data at <https://labline-orange.enthalpy.com/>

Email was also sent to: MLWilliams@gsi-net.com, TRKlitzke@gsi-net.com, acct.pay@gsi-net.com, jpduffield@gsienv.com

Sophia Baughman
Project Manager



2323 Fifth St., Berkeley, CA 94710

O: (510)204-2227

Sophia.Baughman@enthalpy.com

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<https://enthalpy.com/news-events/>

Analysis Results for 499553

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499553
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/08/24

Sample ID: P2-A10-3.0 Lab ID: 499553-002 Collected: 01/08/24 09:00
Matrix: Soil

499553-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.4		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Lead	5.3		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330293	01/11/24	01/11/24	KAM

Sample ID: P2-A10-2.0 Lab ID: 499553-003 Collected: 01/08/24 08:55
Matrix: Soil

499553-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.2		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Lead	35		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.46		mg/Kg	0.16	1.2	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A9-2.0 Lab ID: 499553-004 Collected: 01/08/24 09:40
Matrix: Soil

499553-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	9.9		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Lead	44		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330293	01/11/24	01/12/24	KAM

Analysis Results for 499553

Sample ID: DUP-01-01082024	Lab ID: 499553-005	Collected: 01/08/24
	Matrix: Soil	

499553-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	11		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Lead	94		mg/Kg	0.99	0.99	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A9-3.0	Lab ID: 499553-006	Collected: 01/08/24 09:45
	Matrix: Soil	

499553-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	1.0	1	330167	01/09/24	01/10/24	SBW
Lead	5.3		mg/Kg	1.0	1	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A8-2.0	Lab ID: 499553-008	Collected: 01/08/24 10:13
	Matrix: Soil	

499553-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	9.6		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Lead	110		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A8-3.0	Lab ID: 499553-009	Collected: 01/08/24 10:17
	Matrix: Soil	

499553-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Lead	5.3		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Analysis Results for 499553

Sample ID: P2-A7-2.0	Lab ID: 499553-011	Collected: 01/08/24 11:12
	Matrix: Soil	

499553-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.9		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Lead	12		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A7-3.0	Lab ID: 499553-012	Collected: 01/08/24 11:19
	Matrix: Soil	

499553-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.2		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Lead	6.3		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A6-2.0	Lab ID: 499553-014	Collected: 01/08/24 11:42
	Matrix: Soil	

499553-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.1		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Lead	71		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A6-3.0	Lab ID: 499553-015	Collected: 01/08/24 11:51
	Matrix: Soil	

499553-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.1		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Lead	12		mg/Kg	0.98	0.98	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330293	01/11/24	01/12/24	KAM

Analysis Results for 499553

Sample ID: P2-A5-2.0	Lab ID: 499553-017	Collected: 01/08/24 13:15
	Matrix: Soil	

499553-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.4		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Lead	6.0		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A5-3.0	Lab ID: 499553-018	Collected: 01/08/24 13:20
	Matrix: Soil	

499553-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.1		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Lead	8.3		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A4-2.0	Lab ID: 499553-020	Collected: 01/08/24 13:42
	Matrix: Soil	

499553-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.7		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Lead	6.6		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330293	01/11/24	01/12/24	KAM

Sample ID: P2-A4-3.0	Lab ID: 499553-021	Collected: 01/08/24 13:49
	Matrix: Soil	

499553-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.0		mg/Kg	1.0	1	330167	01/09/24	01/10/24	SBW
Lead	5.6		mg/Kg	1.0	1	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Analysis Results for 499553

Sample ID: P2-B1-2.0	Lab ID: 499553-023	Collected: 01/08/24 14:18
	Matrix: Soil	

499553-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	36		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Lead	180		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.42		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-B1-3.0	Lab ID: 499553-024	Collected: 01/08/24 14:24
	Matrix: Soil	

499553-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	33		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Lead	9.2		mg/Kg	0.96	0.96	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: DUP-03-01082024	Lab ID: 499553-025	Collected: 01/08/24
	Matrix: Soil	

499553-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	20		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Lead	7.3		mg/Kg	0.95	0.95	330167	01/09/24	01/10/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330293	01/11/24	01/12/24	KAM

Sample ID: P2-B1-4.0	Lab ID: 499553-026	Collected: 01/08/24 14:37
	Matrix: Soil	

499553-026 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	18		mg/Kg	0.95	0.95	330676	01/17/24	01/17/24	RPS

Analysis Results for 499553

Sample ID: P2-1D-5.0	Lab ID: 499553-027	Collected: 01/08/24 15:07
	Matrix: Soil	

499553-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	14		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW

Sample ID: P2-1D-6.0	Lab ID: 499553-028	Collected: 01/08/24 15:17
	Matrix: Soil	

499553-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.8		mg/Kg	0.97	0.97	330167	01/09/24	01/10/24	SBW

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119003	Batch: 330167
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119003 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/09/24	01/10/24
Lead	ND		mg/Kg	1.0	01/09/24	01/10/24

Type: Lab Control Sample	Lab ID: QC1119004	Batch: 330167
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119004 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	93.94	100.0	mg/Kg	94%		80-120
Lead	108.0	100.0	mg/Kg	108%		80-120

Type: Matrix Spike	Lab ID: QC1119005	Batch: 330167
Matrix (Source ID): Soil (499553-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119005 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	92.62	4.438	95.24	mg/Kg	93%		75-125	0.95
Lead	103.7	5.305	95.24	mg/Kg	103%		75-125	0.95

Type: Matrix Spike Duplicate	Lab ID: QC1119006	Batch: 330167
Matrix (Source ID): Soil (499553-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119006 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	96.38	4.438	97.09	mg/Kg	95%		75-125	2	35	0.97
Lead	105.0	5.305	97.09	mg/Kg	103%		75-125	1	20	0.97

Type: Post Digest Spike	Lab ID: QC1119007	Batch: 330167
Matrix (Source ID): Soil (499553-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119007 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	95.96	4.438	99.01	mg/Kg	92%		75-125	0.99
Lead	103.8	5.305	99.01	mg/Kg	99%		75-125	0.99

Type: Blank	Lab ID: QC1120774	Batch: 330676
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120774 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/17/24	01/17/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1120775	Batch: 330676
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120775 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	94.13	100.0	mg/Kg	94%		80-120

Type: Matrix Spike	Lab ID: QC1120776	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120776 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	128.0	27.71	97.09	mg/Kg	103%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1120777	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120777 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	125.2	27.71	100.0	mg/Kg	98%		75-125	5	35	1

Type: Post Digest Spike	Lab ID: QC1120778	Batch: 330676
Matrix (Source ID): Soil (499884-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120778 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	119.3	27.71	96.15	mg/Kg	95%		75-125	0.96

Type: Blank	Lab ID: QC1119432	Batch: 330293
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119432 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/11/24	01/11/24

Type: Lab Control Sample	Lab ID: QC1119433	Batch: 330293
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119433 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8904	0.8333	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1119434	Batch: 330293
Matrix (Source ID): Soil (499553-002)	Method: EPA 7471A	Prep Method: METHOD

QC1119434 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.059	0.1112	0.8772	mg/Kg	108%		75-125	1.1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1119435	Batch: 330293
Matrix (Source ID): Soil (499553-002)	Method: EPA 7471A	Prep Method: METHOD

QC1119435 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.146	0.1112	0.9259	mg/Kg	112%		75-125	3	20	1.1

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499646
Report Level: II
Report Date: 01/29/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499646
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/09/24

Sample ID	Lab ID	Collected	Matrix
P3-A1-2.0	499646-001	01/09/24 08:53	Soil
P3-A1-3.0	499646-002	01/09/24 08:56	Soil
P3-A1-4.0	499646-003	01/09/24 09:00	Soil
P3-A2-2.0	499646-004	01/09/24 09:15	Soil
P3-A2-3.0	499646-005	01/09/24 09:25	Soil
P3-A2-4.0	499646-006	01/09/24 09:32	Soil
P3-A3-2.0	499646-007	01/09/24 09:44	Soil
P3-A3-3.0	499646-008	01/09/24 09:48	Soil
P3-A3-4.0	499646-009	01/09/24 09:52	Soil
P3-A4-2.0	499646-010	01/09/24 10:10	Soil
P3-A4-3.0	499646-011	01/09/24 10:14	Soil
P3-A4-4.0	499646-012	01/09/24 10:21	Soil
P3-A5-2.0	499646-013	01/09/24 11:04	Soil
P3-A5-3.0	499646-014	01/09/24 11:09	Soil
P3-A5-4.0	499646-015	01/09/24 11:14	Soil
P3-A6-2.0	499646-016	01/09/24 11:33	Soil
P3-A6-3.0	499646-017	01/09/24 11:38	Soil
P3-A6-4.0	499646-018	01/09/24 11:43	Soil
P3-A7-2.0	499646-019	01/09/24 13:16	Soil
P3-A7-3.0	499646-020	01/09/24 13:20	Soil
P3-A7-4.0	499646-021	01/09/24 13:26	Soil
DUP-02-01092024	499646-022	01/09/24 00:00	Soil
P3-A8-2.0	499646-023	01/09/24 13:44	Soil
P3-A8-3.0	499646-024	01/09/24 13:49	Soil
P3-A8-4.0	499646-025	01/09/24 13:54	Soil
P3-A9-2.0	499646-026	01/09/24 14:25	Soil



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499646
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/09/24

Sample ID	Lab ID	Collected	Matrix
DUP-03-01092024	499646-027	01/09/24 00:00	Soil
P3-A9-3.0	499646-028	01/09/24 14:45	Soil
P3-A9-4.0	499646-029	01/09/24 14:57	Soil
P3-A10-2.0	499646-030	01/09/24 15:09	Soil
P3-A10-3.0	499646-031	01/09/24 15:15	Soil
P3-A10-4.0	499646-032	01/09/24 15:23	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499646
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 01/09/24

- This data package contains sample and QC results for twenty five soil samples, requested for the above referenced project on 01/09/24. The samples were received cold and intact.
- Report reissued 01.29.2024 with additional metals results included.

Metals (EPA 6010B and EPA 7471A):

- High RPD was observed for mercury in the MS/MSD of P3-A1-2.0 (lab # 499646-001).
- No other analytical problems were encountered.

499646

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608	PROJECT NAME: Berkeley Trackbed to Park	PROJECT NO.: 6272
	PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield	LAB CONTACT: Sophia Baughman
	Emails: TRKlitzke@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com	SAMPLER(S): (PRINT) Allison Cleary & Gabrielle Fredericks

TEL: (510) 463-8484	GLOBAL ID: N/A	REQUESTED ANALYSES Please check box or fill in blank as needed.
LABORATORY: Enthalpy Analytical, Berkeley, CA		

TURNAROUND TIME:	<input type="checkbox"/> SAME DAY	<input type="checkbox"/> 24 HR	<input type="checkbox"/> 48 HR
	<input type="checkbox"/> 72 HR	<input type="checkbox"/> 5 DAYS	<input checked="" type="checkbox"/> STANDARD

SPECIAL INSTRUCTIONS:

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPHd/mo (6015M)	HOLD
		DATE	TIME													
	P3-A1-2.0	01/09/24	0853	Soil	1	X			X	X	X					
	P3-A1-3.0		0856						X	X	X					
	P3-A1-4.0		0900													X
	P3-A2-2.0		0915						X	X	X					
	P3-A2-3.0		0925						X	X	X					
	P3-A2-4.0		0932													X
	P3-A3-2.0		0944						X	X	X					
	P3-A3-3.0		0948						X	X	X					
	P3-A3-4.0		0952													X
	P3-A4-2.0		1010						X	X	X					
	P3-A4-3.0		1014						X	X	X					
	P3-A4-4.0		1021													X
	P3-A5-2.0		1104						X	X	X					
	P3-A5-3.0		1109						X	X	X					
	P3-A5-4.0		1114													X

Relinquished by: (Signature) <i>Gabrielle Fredericks</i>	Received by: (Signature) <i>[Signature]</i>	Date: 1/9/24	Time: 12:27
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

499646
~~499646~~

Date: 01/09/2024

Page 3 of 3

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Trackbed to Park				PROJECT NO.: 6272												
		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield				LAB CONTACT: Sophia Baughman												
		Emails: TRKlitzke@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com				SAMPLER(S): (PRINT) Allison Cleary & Gabrielle Fredericks												
TEL: (510) 463-8484		GLOBAL ID: N/A		REQUESTED ANALYSES Please check box or fill in blank as needed.														
LABORATORY: Enthalpy Analytical, Berkeley, CA																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD				<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Unpreserved</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Preserved</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Arsenic only (6010B)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Lead (6010B)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Mercury (7471A)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">PAHs (8270C SIM)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Title 22 Metals (6010B/7471A)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">OCPs (8081A)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd/mo (8015M)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">HOLD</td> </tr> </table>				Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPHd/mo (8015M)	HOLD
Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)					Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPHd/mo (8015M)	HOLD				
SPECIAL INSTRUCTIONS:																		
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPHd/mo (8015M)	HOLD		
		DATE	TIME															
	P3-A10-3.0	1/9/24	1515	Soil	1	X			X	X	X							
	P3-A10-4.0	1/9/24	1523	Soil	1	X			X			GF					X	
Relinquished by: (Signature)						Received by: (Signature)						Date: <u>1/7/24</u>		Time: <u>17:33</u>				
Relinquished by: (Signature)						Received by: (Signature)						Date:		Time:				
Relinquished by: (Signature)						Received by: (Signature)						Date:		Time:				

Allison Cleary GSI

GF
GF

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1/9/24 Login # 499646 Client: GSF

Section 2: Shipping / Custody

Shipping Info: _____
 Are custody seals present? No Yes If yes, where? on cooler, on samples, on package
 Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1/9/24 By (print) my (sign) _____
 Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____
 How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____
 Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?			
Are there any missing / extra samples?			
Are samples in the appropriate containers for indicated tests?			
Are sample labels present, in good condition and complete?			
Does the container count match the COC?			
Do the sample labels agree with custody papers?			
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?			
Did you change the hold time in LIMS for preserved terracores?			
Are bubbles > 6mm present in VOA samples?			
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____			

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)			
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> CrVI Buffer lot# _____ added to samples _____ Date/Time _____			

Section 6: Explanations / Comments

Date Logged 1/9/24 By (print) my (sign) _____
 Date Labeled _____ By (print) _____ (sign) _____

Analysis Results for 499646

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499646
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/09/24

Sample ID: P3-A1-2.0 Lab ID: 499646-001 Collected: 01/09/24 08:53
Matrix: Soil

499646-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	12		mg/Kg	0.95	0.95	330368	01/11/24	01/12/24	RPS
Lead	94		mg/Kg	0.95	0.95	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	16		mg/Kg	3.0	21	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A1-3.0 Lab ID: 499646-002 Collected: 01/09/24 08:56
Matrix: Soil

499646-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.8		mg/Kg	0.98	0.98	330368	01/11/24	01/12/24	RPS
Lead	22		mg/Kg	0.98	0.98	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	4.5		mg/Kg	1.6	11	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A1-4.0 Lab ID: 499646-003 Collected: 01/09/24 09:00
Matrix: Soil

499646-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	0.96	0.96	331323	01/24/24	01/25/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.52		mg/Kg	0.15	1.1	331352	01/25/24	01/25/24	KAM

Analysis Results for 499646

Sample ID: P3-A2-2.0	Lab ID: 499646-004	Collected: 01/09/24 09:15
	Matrix: Soil	

499646-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.7		mg/Kg	1.0	1	330368	01/11/24	01/12/24	RPS
Lead	17		mg/Kg	1.0	1	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.21		mg/Kg	0.14	1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A2-3.0	Lab ID: 499646-005	Collected: 01/09/24 09:25
	Matrix: Soil	

499646-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	13		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Lead	46		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.47		mg/Kg	0.16	1.2	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A2-4.0	Lab ID: 499646-006	Collected: 01/09/24 09:32
	Matrix: Soil	

499646-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.6		mg/Kg	0.97	0.97	331323	01/24/24	01/25/24	RPS

Sample ID: P3-A3-2.0	Lab ID: 499646-007	Collected: 01/09/24 09:44
	Matrix: Soil	

499646-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.8		mg/Kg	0.99	0.99	330368	01/11/24	01/12/24	RPS
Lead	21		mg/Kg	0.99	0.99	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Analysis Results for 499646

Sample ID: P3-A3-3.0	Lab ID: 499646-008	Collected: 01/09/24 09:48
	Matrix: Soil	

499646-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.6		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Lead	18		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A4-2.0	Lab ID: 499646-010	Collected: 01/09/24 10:10
	Matrix: Soil	

499646-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	21		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Lead	92		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.32		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A4-3.0	Lab ID: 499646-011	Collected: 01/09/24 10:14
	Matrix: Soil	

499646-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.1		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Lead	6.4		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A5-2.0	Lab ID: 499646-013	Collected: 01/09/24 11:04
	Matrix: Soil	

499646-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	15		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Lead	32		mg/Kg	0.97	0.97	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.17		mg/Kg	0.14	1	330383	01/12/24	01/12/24	KAM

Analysis Results for 499646

Sample ID: P3-A5-3.0	Lab ID: 499646-014	Collected: 01/09/24 11:09
	Matrix: Soil	

499646-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	8.6		mg/Kg	0.98	0.98	330368	01/11/24	01/12/24	RPS
Lead	60		mg/Kg	0.98	0.98	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A6-2.0	Lab ID: 499646-016	Collected: 01/09/24 11:33
	Matrix: Soil	

499646-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.1		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Lead	22		mg/Kg	0.96	0.96	330368	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A6-3.0	Lab ID: 499646-017	Collected: 01/09/24 11:38
	Matrix: Soil	

499646-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.8		mg/Kg	0.99	0.99	330368	01/11/24	01/16/24	RPS
Lead	6.7		mg/Kg	0.99	0.99	330368	01/11/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-A7-2.0	Lab ID: 499646-019	Collected: 01/09/24 13:16
	Matrix: Soil	

499646-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	33		mg/Kg	0.98	0.98	330368	01/11/24	01/16/24	RPS
Lead	99		mg/Kg	0.98	0.98	330368	01/11/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.65		mg/Kg	0.14	1	330382	01/12/24	01/12/24	KAM

Analysis Results for 499646

Sample ID: P3-A7-3.0	Lab ID: 499646-020	Collected: 01/09/24 13:20
	Matrix: Soil	

499646-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	35		mg/Kg	0.97	0.97	330368	01/11/24	01/16/24	RPS
Lead	78		mg/Kg	0.97	0.97	330368	01/11/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.36		mg/Kg	0.15	1.1	330382	01/12/24	01/12/24	KAM

Sample ID: P3-A7-4.0	Lab ID: 499646-021	Collected: 01/09/24 13:26
	Matrix: Soil	

499646-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.6		mg/Kg	0.95	0.95	331323	01/24/24	01/25/24	RPS

Sample ID: DUP-02-01092024	Lab ID: 499646-022	Collected: 01/09/24
	Matrix: Soil	

499646-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.0		mg/Kg	0.95	0.95	331323	01/24/24	01/25/24	RPS

Sample ID: P3-A8-2.0	Lab ID: 499646-023	Collected: 01/09/24 13:44
	Matrix: Soil	

499646-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.6		mg/Kg	0.98	0.98	330368	01/11/24	01/15/24	RPS
Lead	9.0		mg/Kg	0.98	0.98	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330382	01/12/24	01/12/24	KAM

Analysis Results for 499646

Sample ID: P3-A8-3.0	Lab ID: 499646-024	Collected: 01/09/24 13:49
	Matrix: Soil	

499646-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	10		mg/Kg	0.97	0.97	330368	01/11/24	01/15/24	RPS
Lead	16		mg/Kg	0.97	0.97	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330382	01/12/24	01/12/24	KAM

Sample ID: P3-A9-2.0	Lab ID: 499646-026	Collected: 01/09/24 14:25
	Matrix: Soil	

499646-026 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	15		mg/Kg	1.0	1	330368	01/11/24	01/15/24	RPS
Lead	88		mg/Kg	1.0	1	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330382	01/12/24	01/12/24	KAM

Sample ID: DUP-03-01092024	Lab ID: 499646-027	Collected: 01/09/24
	Matrix: Soil	

499646-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.1		mg/Kg	0.97	0.97	330368	01/11/24	01/15/24	RPS
Lead	44		mg/Kg	0.97	0.97	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330382	01/12/24	01/12/24	KAM

Sample ID: P3-A9-3.0	Lab ID: 499646-028	Collected: 01/09/24 14:45
	Matrix: Soil	

499646-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.6		mg/Kg	0.95	0.95	330368	01/11/24	01/15/24	RPS
Lead	7.2		mg/Kg	0.95	0.95	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330382	01/12/24	01/12/24	KAM

Analysis Results for 499646

Sample ID: P3-A10-2.0	Lab ID: 499646-030	Collected: 01/09/24 15:09
	Matrix: Soil	

499646-030 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	10		mg/Kg	0.95	0.95	330368	01/11/24	01/15/24	RPS
Lead	25		mg/Kg	0.95	0.95	330368	01/11/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330382	01/12/24	01/12/24	KAM

Sample ID: P3-A10-3.0	Lab ID: 499646-031	Collected: 01/09/24 15:15
	Matrix: Soil	

499646-031 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	11		mg/Kg	0.99	0.99	330373	01/12/24	01/15/24	RPS
Lead	32		mg/Kg	0.99	0.99	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.17	1.2	330382	01/12/24	01/12/24	KAM

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119689	Batch: 330368
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119689 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/11/24	01/12/24
Lead	ND		mg/Kg	1.0	01/11/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119690	Batch: 330368
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119690 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	93.10	100.0	mg/Kg	93%		80-120
Lead	108.2	100.0	mg/Kg	108%		80-120

Type: Matrix Spike	Lab ID: QC1119691	Batch: 330368
Matrix (Source ID): Soil (499646-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119691 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	108.0	12.24	99.01	mg/Kg	97%		75-125	0.99
Lead	198.8	93.53	99.01	mg/Kg	106%		75-125	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1119692	Batch: 330368
Matrix (Source ID): Soil (499646-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119692 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	105.7	12.24	98.04	mg/Kg	95%		75-125	1	35	0.98
Lead	194.0	93.53	98.04	mg/Kg	102%		75-125	2	20	0.98

Type: Post Digest Spike	Lab ID: QC1119693	Batch: 330368
Matrix (Source ID): Soil (499646-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119693 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.1	12.24	95.24	mg/Kg	92%		75-125	0.95
Lead	183.6	93.53	95.24	mg/Kg	95%		75-125	0.95

Type: Blank	Lab ID: QC1119718	Batch: 330373
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119718 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/12/24	01/15/24
Lead	ND		mg/Kg	1.0	01/12/24	01/15/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1119719	Batch: 330373
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119719 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	98.49	100.0	mg/Kg	98%		80-120
Lead	111.4	100.0	mg/Kg	111%		80-120

Type: Matrix Spike	Lab ID: QC1119720	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119720 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	114.2	11.10	100.0	mg/Kg	103%		75-125	1
Lead	135.0	31.99	100.0	mg/Kg	103%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1119721	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119721 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	119.7	11.10	98.04	mg/Kg	111%		75-125	7	35	0.98
Lead	148.7	31.99	98.04	mg/Kg	119%		75-125	11	20	0.98

Type: Post Digest Spike	Lab ID: QC1119722	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119722 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	116.5	11.10	99.01	mg/Kg	106%		75-125	0.99
Lead	146.1	31.99	99.01	mg/Kg	115%		75-125	0.99

Type: Blank	Lab ID: QC1122755	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122755 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/24/24	01/25/24

Type: Lab Control Sample	Lab ID: QC1122756	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122756 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	102.2	100.0	mg/Kg	102%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1122757	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122757 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	104.2	4.674	98.04	mg/Kg	102%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1122758	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122758 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	104.0	4.674	97.09	mg/Kg	102%		75-125	1	35	0.97

Type: Post Digest Spike	Lab ID: QC1122759	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	106.3	4.674	97.09	mg/Kg	105%		75-125	0.97

Type: Blank	Lab ID: QC1119753	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119753 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119754	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119754 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9049	0.8333	mg/Kg	109%		80-120

Type: Matrix Spike	Lab ID: QC1119755	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119755 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.067	0.03654	0.9434	mg/Kg	109%		75-125	1.1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1119756	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119756 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.078	0.03654	0.9434	mg/Kg	110%		75-125	1	20	1.1

Type: Blank	Lab ID: QC1119757	Batch: 330383
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119757 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119758	Batch: 330383
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119758 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8395	0.8333	mg/Kg	101%		80-120

Type: Matrix Spike	Lab ID: QC1119759	Batch: 330383
Matrix (Source ID): Soil (499646-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	14.49	15.98	0.9615	mg/Kg	-155%	NM	75-125	23

Type: Matrix Spike Duplicate	Lab ID: QC1119760	Batch: 330383
Matrix (Source ID): Soil (499646-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119760 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	18.50	15.98	0.9615	mg/Kg	262%	NM	75-125	24*	20	23

Type: Blank	Lab ID: QC1122860	Batch: 331352
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1122860 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/25/24	01/25/24

Type: Lab Control Sample	Lab ID: QC1122861	Batch: 331352
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1122861 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8332	0.8333	mg/Kg	100%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1122862	Batch: 331352
Matrix (Source ID): Soil (500608-019)	Method: EPA 7471A	Prep Method: METHOD

QC1122862 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.9823	0.03388	0.9615	mg/Kg	99%		75-125	1.2

Type: Matrix Spike Duplicate	Lab ID: QC1122863	Batch: 331352
Matrix (Source ID): Soil (500608-019)	Method: EPA 7471A	Prep Method: METHOD

QC1122863 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.9760	0.03388	0.9434	mg/Kg	100%		75-125	1	20	1.1

* Value is outside QC limits
 ND Not Detected
 NM Not Meaningful



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499647
Report Level: II
Report Date: 01/29/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499647
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/09/24

Sample ID	Lab ID	Collected	Matrix
P3-B1-2.0	499647-001	01/09/24 08:53	Soil
P3-B1-3.0	499647-002	01/09/24 08:57	Soil
P3-B1-4.0	499647-003	01/09/24 09:01	Soil
P3-B2-2.0	499647-004	01/09/24 09:21	Soil
P3-B2-3.0	499647-005	01/09/24 09:26	Soil
DUP-01-01092024	499647-006	01/09/24 00:00	Soil
P3-B2-4.0	499647-007	01/09/24 09:46	Soil
P3-B3-2.0	499647-008	01/09/24 10:03	Soil
P3-B3-3.0	499647-009	01/09/24 10:08	Soil
P3-B3-4.0	499647-010	01/09/24 10:13	Soil
P3-B4-2.0	499647-011	01/09/24 10:20	Soil
P3-B4-3.0	499647-012	01/09/24 10:23	Soil
P3-B4-4.0	499647-013	01/09/24 10:41	Soil
P3-B5-2.0	499647-014	01/09/24 11:11	Soil
P3-B5-3.0	499647-015	01/09/24 11:55	Soil
P3-B5-4.0	499647-016	01/09/24 12:00	Soil
P3-B6-2.0	499647-017	01/09/24 13:18	Soil
P3-B6-3.0	499647-018	01/09/24 13:23	Soil
P3-B6-4.0	499647-019	01/09/24 13:27	Soil
P3-B7-2.0	499647-020	01/09/24 13:45	Soil
P3-B7-3.0	499647-021	01/09/24 13:48	Soil
P3-B7-4.0	499647-022	01/09/24 13:53	Soil
P3-B8-2.0	499647-023	01/09/24 14:04	Soil
P3-B8-3.0	499647-024	01/09/24 14:09	Soil
P3-B8-4.0	499647-025	01/09/24 14:13	Soil
P3-B9-2.0	499647-026	01/09/24 14:23	Soil

Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499647
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/09/24

Sample ID	Lab ID	Collected	Matrix
P3-B9-3.0	499647-027	01/09/24 14:27	Soil
P3-B9-4.0	499647-028	01/09/24 14:37	Soil
P3-B10-2.0	499647-029	01/09/24 14:48	Soil
P3-B10-3.0	499647-030	01/09/24 14:54	Soil
P3-B10-4.0	499647-031	01/09/24 14:58	Soil
P3-4D-5.0	499647-032	01/09/24 15:36	Soil
P3-4D-6.0	499647-033	01/09/24 15:43	Soil
P3-4D-7.0	499647-034	01/09/24 15:50	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499647
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 01/09/24

- This data package contains sample and QC results for thirty three soil samples, requested for the above referenced project on 01/09/24. The samples were received cold and intact.
- Report reissued 01.29.2024 to include additionally requested metals.

Metals (EPA 6010B and EPA 7471A):

- High RPD was observed for mercury in the MS/MSD of P3-A1-2.0 (lab # 499646-001).
- No other analytical problems were encountered.



499647

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272													
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman													
GLOBAL ID: N/A		Emails: TRKlitzke@gstenv.com; AJCleary@gstenv.com; GFredricks@gstenv.com; JPDuffield@gstenv.com		SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks													
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.															
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																	
SPECIAL INSTRUCTIONS:																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCs (8081A)	TPHd/mo (8015M)	HOLD	
		DATE	TIME														
	P3-B5-2.0	1/9/24	1111	Soil	1	X			X	X	X						
	P3-B5-3.0	1/9/24	1155		1	X			X	X	X						
	P3-B5-4.0																
	P3-B5-4.0	1/9/24	1200	Soil	1	X			X	X	X						
	P3-B6-2.0		1318		1	X			X	X	X						
	P3-B6-3.0		1323		1	X			X	X	X						
	P3-B6-4.0		1327		1	X			X	X	X						
	P3-B7-2.0		1345		1	X			X	X	X						
	P3-B7-3.0		1348		1	X			X	X	X						
	P3-B7-4.0		1353		1	X			X	X	X						
	P3-B8-2.0		1404		1	X			X	X	X						
	P3-B8-3.0		1409		1	X			X	X	X						
	P3-B8-4.0		1413		1	X			X	X	X						
Relinquished by (Signature): <i>Allison Cleary</i>		Received by (Signature): <i>Jennifer Duffield</i>		Date: 1/10/24		Date: 1/17/24		Date: 1/17/24		Date: 1/17/24		Date: 1/17/24		Date: 1/17/24		Date: 1/17/24	
Relinquished by (Signature):		Received by (Signature):		Date: 10:40		Date:		Date:		Date:		Date:		Date:		Date:	
Relinquished by (Signature):		Received by (Signature):		Date:		Date:		Date:		Date:		Date:		Date:		Date:	

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1/9/24 Login # 499647 Client: LSF

Section 2: Shipping / Custody

Shipping Info: _____
 Are custody seals present? No Yes If yes, where? on cooler, on samples, on package
 Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1/9/24 By (print) m (sign) _____
 Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)
 If no cooler: Sample Temp (°C): _____
 How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?		/	
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____		/	

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)			
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			

Preservative added:

H2SO4 lot# _____ added to samples _____ Date/Time _____
 HCL lot# _____ added to samples _____ Date/Time _____
 HNO3 lot# _____ added to samples _____ Date/Time _____
 CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Sample label for 028 does not match the COC.

Date Logged 1/9/24 By (print) m (sign) _____
 Date Labeled 1/10/24 By (print) m (sign) _____



SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/11/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 2 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 1.6 #2: 2.3 #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 0.3 #2: 1.4 #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
499647

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time: _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: *Oliver Sphertman* Date: JAN 11 2024

Analysis Results for 499647

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499647
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/09/24

Sample ID: P3-B1-2.0 Lab ID: 499647-001 Collected: 01/09/24 08:53
Matrix: Soil

499647-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	69		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	98		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.50		mg/Kg	0.15	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B1-3.0 Lab ID: 499647-002 Collected: 01/09/24 08:57
Matrix: Soil

499647-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	39		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	75		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.32		mg/Kg	0.14	1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B1-4.0 Lab ID: 499647-003 Collected: 01/09/24 09:01
Matrix: Soil

499647-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	16		mg/Kg	0.95	0.95	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B2-2.0 Lab ID: 499647-004 Collected: 01/09/24 09:21
Matrix: Soil

499647-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	44		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Lead	50		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.38		mg/Kg	0.16	1.2	330385	01/12/24	01/15/24	KAM

Analysis Results for 499647

Sample ID: P3-B2-3.0	Lab ID: 499647-005	Collected: 01/09/24 09:26
	Matrix: Soil	

499647-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	14		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	44		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.35		mg/Kg	0.16	1.2	330385	01/12/24	01/15/24	KAM

Sample ID: DUP-01-01092024	Lab ID: 499647-006	Collected: 01/09/24
	Matrix: Soil	

499647-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	12		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	56		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.29		mg/Kg	0.16	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B2-4.0	Lab ID: 499647-007	Collected: 01/09/24 09:46
	Matrix: Soil	

499647-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	12		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B3-2.0	Lab ID: 499647-008	Collected: 01/09/24 10:03
	Matrix: Soil	

499647-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	32		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	59		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.25		mg/Kg	0.16	1.1	330385	01/12/24	01/15/24	KAM

Analysis Results for 499647

Sample ID: P3-B3-3.0	Lab ID: 499647-009	Collected: 01/09/24 10:08
	Matrix: Soil	

499647-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	18		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	38		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.28		mg/Kg	0.16	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B3-4.0	Lab ID: 499647-010	Collected: 01/09/24 10:13
	Matrix: Soil	

499647-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	20		mg/Kg	0.97	0.97	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B4-2.0	Lab ID: 499647-011	Collected: 01/09/24 10:20
	Matrix: Soil	

499647-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	35		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	72		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.85		mg/Kg	0.15	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B4-3.0	Lab ID: 499647-012	Collected: 01/09/24 10:23
	Matrix: Soil	

499647-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	88		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	140		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.32		mg/Kg	0.14	1	330385	01/12/24	01/15/24	KAM

Analysis Results for 499647

Sample ID: P3-B4-4.0	Lab ID: 499647-013	Collected: 01/09/24 10:41
	Matrix: Soil	

499647-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	38		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW
Lead	45		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B5-2.0	Lab ID: 499647-014	Collected: 01/09/24 11:11
	Matrix: Soil	

499647-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	85		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	71		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.48		mg/Kg	0.14	1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B5-3.0	Lab ID: 499647-015	Collected: 01/09/24 11:55
	Matrix: Soil	

499647-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	120		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Lead	27		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.17		mg/Kg	0.15	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B5-4.0	Lab ID: 499647-016	Collected: 01/09/24 12:00
	Matrix: Soil	

499647-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	120		mg/Kg	0.99	0.99	331347	01/25/24	01/25/24	SBW

Analysis Results for 499647

Sample ID: P3-B6-2.0	Lab ID: 499647-017	Collected: 01/09/24 13:18
	Matrix: Soil	

499647-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	79		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	94		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.44		mg/Kg	0.14	1	330385	01/12/24	01/15/24	KAM

Sample ID: P3-B6-3.0	Lab ID: 499647-018	Collected: 01/09/24 13:23
	Matrix: Soil	

499647-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	28		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	64		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.27		mg/Kg	0.16	1.2	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B6-4.0	Lab ID: 499647-019	Collected: 01/09/24 13:27
	Matrix: Soil	

499647-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	20		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B7-2.0	Lab ID: 499647-020	Collected: 01/09/24 13:45
	Matrix: Soil	

499647-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	73		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	98		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.40		mg/Kg	0.16	1.1	330383	01/12/24	01/12/24	KAM

Analysis Results for 499647

Sample ID: P3-B7-3.0	Lab ID: 499647-021	Collected: 01/09/24 13:48
	Matrix: Soil	

499647-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	38		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	52		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.68		mg/Kg	0.16	1.2	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B7-4.0	Lab ID: 499647-022	Collected: 01/09/24 13:53
	Matrix: Soil	

499647-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	21		mg/Kg	0.95	0.95	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B8-2.0	Lab ID: 499647-023	Collected: 01/09/24 14:04
	Matrix: Soil	

499647-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	23		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Lead	94		mg/Kg	0.98	0.98	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.38		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B8-3.0	Lab ID: 499647-024	Collected: 01/09/24 14:09
	Matrix: Soil	

499647-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	57		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	120		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.80		mg/Kg	0.14	1	330383	01/12/24	01/12/24	KAM

Analysis Results for 499647

Sample ID: P3-B8-4.0	Lab ID: 499647-025	Collected: 01/09/24 14:13
	Matrix: Soil	

499647-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	120		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW
Lead	19		mg/Kg	0.98	0.98	331347	01/25/24	01/25/24	SBW

Sample ID: P3-B9-2.0	Lab ID: 499647-026	Collected: 01/09/24 14:23
	Matrix: Soil	

499647-026 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	67		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	94		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.59		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B9-3.0	Lab ID: 499647-027	Collected: 01/09/24 14:27
	Matrix: Soil	

499647-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	53		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Lead	77		mg/Kg	0.97	0.97	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.45		mg/Kg	0.14	1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B9-4.0	Lab ID: 499647-028	Collected: 01/09/24 14:37
	Matrix: Soil	

499647-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	17		mg/Kg	0.96	0.96	331347	01/25/24	01/25/24	SBW

Analysis Results for 499647

Sample ID: P3-B10-2.0	Lab ID: 499647-029	Collected: 01/09/24 14:48
Matrix: Soil		

499647-029 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	13		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Lead	33		mg/Kg	0.96	0.96	330358	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330383	01/12/24	01/12/24	KAM

Sample ID: P3-B10-3.0	Lab ID: 499647-030	Collected: 01/09/24 14:54
Matrix: Soil		

499647-030 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	23		mg/Kg	0.95	0.95	330360	01/11/24	01/12/24	RPS
Lead	45		mg/Kg	0.95	0.95	330360	01/11/24	01/12/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330382	01/12/24	01/12/24	KAM

Sample ID: P3-B10-4.0	Lab ID: 499647-031	Collected: 01/09/24 14:58
Matrix: Soil		

499647-031 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.5		mg/Kg	0.96	0.96	331347	01/25/24	01/25/24	SBW

Sample ID: P3-4D-5.0	Lab ID: 499647-032	Collected: 01/09/24 15:36
Matrix: Soil		

499647-032 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.9		mg/Kg	0.98	0.98	330360	01/11/24	01/12/24	RPS

Sample ID: P3-4D-6.0	Lab ID: 499647-033	Collected: 01/09/24 15:43
Matrix: Soil		

499647-033 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.8		mg/Kg	0.98	0.98	330360	01/11/24	01/12/24	RPS

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119650	Batch: 330358
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119650 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/11/24	01/12/24
Lead	ND		mg/Kg	1.0	01/11/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119651	Batch: 330358
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119651 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	88.05	100.0	mg/Kg	88%		80-120
Lead	102.3	100.0	mg/Kg	102%		80-120

Type: Matrix Spike	Lab ID: QC1119652	Batch: 330358
Matrix (Source ID): Soil (499647-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119652 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	146.6	68.58	99.01	mg/Kg	79%		75-125	0.99
Lead	211.9	98.44	99.01	mg/Kg	115%		75-125	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1119653	Batch: 330358
Matrix (Source ID): Soil (499647-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119653 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	151.9	68.58	99.01	mg/Kg	84%		75-125	4	35	0.99
Lead	219.0	98.44	99.01	mg/Kg	122%		75-125	3	20	0.99

Type: Post Digest Spike	Lab ID: QC1119654	Batch: 330358
Matrix (Source ID): Soil (499647-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119654 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	155.3	68.58	97.09	mg/Kg	89%		75-125	0.97
Lead	187.6	98.44	97.09	mg/Kg	92%		75-125	0.97

Type: Blank	Lab ID: QC1119664	Batch: 330360
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119664 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/11/24	01/12/24
Lead	ND		mg/Kg	1.0	01/11/24	01/12/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1119665	Batch: 330360
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119665 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	92.68	100.0	mg/Kg	93%		80-120
Lead	106.9	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1119666	Batch: 330360
Matrix (Source ID): Soil (499716-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119666 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	96.21	8.876	96.15	mg/Kg	91%		75-125	0.96
Lead	107.6	14.70	96.15	mg/Kg	97%		75-125	0.96

Type: Matrix Spike Duplicate	Lab ID: QC1119667	Batch: 330360
Matrix (Source ID): Soil (499716-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119667 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	101.0	8.876	98.04	mg/Kg	94%		75-125	3	35	0.98
Lead	107.9	14.70	98.04	mg/Kg	95%		75-125	1	20	0.98

Type: Post Digest Spike	Lab ID: QC1119668	Batch: 330360
Matrix (Source ID): Soil (499716-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119668 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	98.65	8.876	96.15	mg/Kg	93%		75-125	0.96
Lead	109.6	14.70	96.15	mg/Kg	99%		75-125	0.96

Type: Blank	Lab ID: QC1122844	Batch: 331347
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122844 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/25/24	01/25/24
Lead	ND		mg/Kg	1.0	01/25/24	01/25/24

Type: Lab Control Sample	Lab ID: QC1122845	Batch: 331347
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122845 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	96.51	100.0	mg/Kg	97%		80-120
Lead	106.1	100.0	mg/Kg	106%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1122846	Batch: 331347
Matrix (Source ID): Soil (499647-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122846 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	110.7	15.91	98.04	mg/Kg	97%		75-125	0.98
Lead	144.2	44.59	98.04	mg/Kg	102%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1122847	Batch: 331347
Matrix (Source ID): Soil (499647-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122847 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	108.9	15.91	95.24	mg/Kg	98%		75-125	1	35	0.95
Lead	134.1	44.59	95.24	mg/Kg	94%		75-125	5	20	0.95

Type: Post Digest Spike	Lab ID: QC1122848	Batch: 331347
Matrix (Source ID): Soil (499647-003)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122848 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	116.8	15.91	95.24	mg/Kg	106%		75-125	0.95
Lead	146.5	44.59	95.24	mg/Kg	107%		75-125	0.95

Type: Blank	Lab ID: QC1119753	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119753 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119754	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119754 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9049	0.8333	mg/Kg	109%		80-120

Type: Matrix Spike	Lab ID: QC1119755	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119755 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.067	0.03654	0.9434	mg/Kg	109%		75-125	1.1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1119756	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119756 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.078	0.03654	0.9434	mg/Kg	110%		75-125	1	20	1.1

Type: Blank	Lab ID: QC1119757	Batch: 330383
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119757 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119758	Batch: 330383
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119758 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8395	0.8333	mg/Kg	101%		80-120

Type: Matrix Spike	Lab ID: QC1119759	Batch: 330383
Matrix (Source ID): Soil (499646-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	14.49	15.98	0.9615	mg/Kg	-155%	NM	75-125	23

Type: Matrix Spike Duplicate	Lab ID: QC1119760	Batch: 330383
Matrix (Source ID): Soil (499646-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119760 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	18.50	15.98	0.9615	mg/Kg	262%	NM	75-125	24*	20	23

Type: Blank	Lab ID: QC1119762	Batch: 330385
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119762 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119763	Batch: 330385
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119763 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8352	0.8333	mg/Kg	100%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1119764	Batch: 330385
Matrix (Source ID): Soil (499647-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119764 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.216	0.4982	0.8475	mg/Kg	85%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1119765	Batch: 330385
Matrix (Source ID): Soil (499647-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119765 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.191	0.4982	0.8475	mg/Kg	82%		75-125	2	20	1

* Value is outside QC limits
 ND Not Detected
 NM Not Meaningful



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499700
Report Level: II
Report Date: 01/17/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499700
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/10/24

Sample ID	Lab ID	Collected	Matrix
P4-A1-2.0	499700-001	01/10/24 09:25	Soil
P4-A1-3.0	499700-002	01/10/24 09:29	Soil
P4-A1-4.0	499700-003	01/10/24 09:35	Soil
P4-A2-2.0	499700-004	01/10/24 10:21	Soil
P4-A2-3.0	499700-005	01/10/24 10:40	Soil
P4-A2-4.0	499700-006	01/10/24 10:48	Soil
P4-A3-2.0	499700-007	01/10/24 11:02	Soil
P4-A3-3.0	499700-008	01/10/24 11:09	Soil
P4-A3-4.0	499700-009	01/10/24 11:12	Soil
P4-A4-2.0	499700-010	01/10/24 11:32	Soil
P4-A4-3.0	499700-011	01/10/24 11:37	Soil
P4-A4-4.0	499700-012	01/10/24 11:42	Soil
P4-A5-2.0	499700-013	01/10/24 15:16	Soil
P4-A5-3.0	499700-014	01/10/24 15:22	Soil
P4-A5-4.0	499700-015	01/10/24 15:28	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499700
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park

Date Received: 01/10/24

This data package contains sample and QC results for eight soil samples, requested for the above referenced project on 01/10/24. The samples were received cold and intact.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1/10/24 Login # 449700 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 5°C or arrive frozen

Date Opened 1/10/24 By (print) AM (sign) _____

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 1 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?	/		
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?		/	
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____		/	

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)			
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

sample -002 time does not agree w/ COC - Missing samples -004, -005, -006. Received samples that were crossed off COC "P4-A5-(2.0, 3.0, 4.0)"

Date Logged 1/10/24 By (print) AM (sign) _____

Date Labeled 1/10/24 By (print) LEF (sign) _____



SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Tracked to Park
 Date Received: 01/11/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 3.7 #2: _____ #3: _____ #4: _____
 (Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 3.7 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
 499700 * See Berkeley checklist for details *
 - G.I.E.S. 1/11/24

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: [Signature] Date: JAN 11 2024

SOUTHWEST AIRLINES

Printed on:
10 JAN 19:10

526 OAK 9769 **5813** 

SNA	PC#	4
	OF	10
	DG	G
	LOT WT	471 LB
OAK WN 2593 10 JAN 20:45	(213.7 KG)	
STN	FLT	DATE
		ETD
		LOT 01



PC ID: 0004
PC WT: 52LB

S

526 97695813 0004

Analysis Results for 499700

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499700
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/10/24

Sample ID: P4-A1-2.0 Lab ID: 499700-001 Collected: 01/10/24 09:25
Matrix: Soil

499700-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	21		mg/Kg	0.98	0.98	330373	01/12/24	01/15/24	RPS
Lead	53		mg/Kg	0.98	0.98	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.19		mg/Kg	0.16	1.2	330382	01/12/24	01/12/24	KAM

Sample ID: P4-A1-3.0 Lab ID: 499700-002 Collected: 01/10/24 09:29
Matrix: Soil

499700-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	0.96	0.96	330373	01/12/24	01/15/24	RPS
Lead	6.4		mg/Kg	0.96	0.96	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330430	01/12/24	01/15/24	KAM

Sample ID: P4-A3-2.0 Lab ID: 499700-007 Collected: 01/10/24 11:02
Matrix: Soil

499700-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.1		mg/Kg	0.95	0.95	330373	01/12/24	01/15/24	RPS
Lead	5.7		mg/Kg	0.95	0.95	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330385	01/12/24	01/15/24	KAM

Analysis Results for 499700

Sample ID: P4-A3-3.0	Lab ID: 499700-008	Collected: 01/10/24 11:09
	Matrix: Soil	

499700-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	0.98	0.98	330373	01/12/24	01/15/24	RPS
Lead	7.3		mg/Kg	0.98	0.98	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P4-A4-2.0	Lab ID: 499700-010	Collected: 01/10/24 11:32
	Matrix: Soil	

499700-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.0		mg/Kg	1.0	1	330373	01/12/24	01/15/24	RPS
Lead	7.5		mg/Kg	1.0	1	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330385	01/12/24	01/15/24	KAM

Sample ID: P4-A4-3.0	Lab ID: 499700-011	Collected: 01/10/24 11:37
	Matrix: Soil	

499700-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	2.8		mg/Kg	0.95	0.95	330373	01/12/24	01/15/24	RPS
Lead	5.8		mg/Kg	0.95	0.95	330373	01/12/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330385	01/12/24	01/15/24	KAM

Sample ID: P4-A5-2.0	Lab ID: 499700-013	Collected: 01/10/24 15:16
	Matrix: Soil	

499700-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.9		mg/Kg	0.95	0.95	330644	01/16/24	01/17/24	RPS
Lead	9.1		mg/Kg	0.95	0.95	330644	01/16/24	01/17/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	330579	01/16/24	01/16/24	KAM

Analysis Results for 499700

Sample ID: P4-A5-3.0	Lab ID: 499700-014	Collected: 01/10/24 15:22
	Matrix: Soil	

499700-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	0.99	0.99	330644	01/16/24	01/17/24	RPS
Lead	7.6		mg/Kg	0.99	0.99	330644	01/16/24	01/17/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330579	01/16/24	01/16/24	KAM

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119718	Batch: 330373
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119718 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/12/24	01/15/24
Lead	ND		mg/Kg	1.0	01/12/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1119719	Batch: 330373
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119719 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	98.49	100.0	mg/Kg	98%		80-120
Lead	111.4	100.0	mg/Kg	111%		80-120

Type: Matrix Spike	Lab ID: QC1119720	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119720 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	114.2	11.10	100.0	mg/Kg	103%		75-125	1
Lead	135.0	31.99	100.0	mg/Kg	103%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1119721	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119721 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	119.7	11.10	98.04	mg/Kg	111%		75-125	7	35	0.98
Lead	148.7	31.99	98.04	mg/Kg	119%		75-125	11	20	0.98

Type: Post Digest Spike	Lab ID: QC1119722	Batch: 330373
Matrix (Source ID): Soil (499646-031)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119722 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	116.5	11.10	99.01	mg/Kg	106%		75-125	0.99
Lead	146.1	31.99	99.01	mg/Kg	115%		75-125	0.99

Type: Blank	Lab ID: QC1120666	Batch: 330644
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120666 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/16/24	01/17/24
Lead	ND		mg/Kg	1.0	01/16/24	01/17/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1120667	Batch: 330644
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120667 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	88.04	100.0	mg/Kg	88%		80-120
Lead	97.19	100.0	mg/Kg	97%		80-120

Type: Matrix Spike	Lab ID: QC1120668	Batch: 330644
Matrix (Source ID): Soil (499951-026)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120668 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.6	4.751	99.01	mg/Kg	97%		75-125	0.99
Lead	120.8	16.36	99.01	mg/Kg	106%		75-125	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1120669	Batch: 330644
Matrix (Source ID): Soil (499951-026)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120669 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	99.17	4.751	99.01	mg/Kg	95%		75-125	1	35	0.99
Lead	113.7	16.36	99.01	mg/Kg	98%		75-125	6	20	0.99

Type: Post Digest Spike	Lab ID: QC1120670	Batch: 330644
Matrix (Source ID): Soil (499951-026)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120670 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	102.3	4.751	95.24	mg/Kg	102%		75-125	0.95
Lead	117.4	16.36	95.24	mg/Kg	106%		75-125	0.95

Type: Blank	Lab ID: QC1119753	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119753 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119754	Batch: 330382
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119754 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9049	0.8333	mg/Kg	109%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1119755	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119755 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.067	0.03654	0.9434	mg/Kg	109%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC1119756	Batch: 330382
Matrix (Source ID): Soil (499507-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119756 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.078	0.03654	0.9434	mg/Kg	110%		75-125	1	20	1.1

Type: Blank	Lab ID: QC1119762	Batch: 330385
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119762 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119763	Batch: 330385
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119763 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8352	0.8333	mg/Kg	100%		80-120

Type: Matrix Spike	Lab ID: QC1119764	Batch: 330385
Matrix (Source ID): Soil (499647-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119764 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.216	0.4982	0.8475	mg/Kg	85%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1119765	Batch: 330385
Matrix (Source ID): Soil (499647-001)	Method: EPA 7471A	Prep Method: METHOD

QC1119765 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.191	0.4982	0.8475	mg/Kg	82%		75-125	2	20	1

Type: Blank	Lab ID: QC1119919	Batch: 330430
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119919 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/12/24	01/15/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1119920	Batch: 330430
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1119920 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8633	0.8333	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1119921	Batch: 330430
Matrix (Source ID): Soil (499700-002)	Method: EPA 7471A	Prep Method: METHOD

QC1119921 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.041	0.03212	0.9804	mg/Kg	103%		75-125	1.2

Type: Matrix Spike Duplicate	Lab ID: QC1119922	Batch: 330430
Matrix (Source ID): Soil (499700-002)	Method: EPA 7471A	Prep Method: METHOD

QC1119922 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.9870	0.03212	0.9259	mg/Kg	103%		75-125	0	20	1.1

Type: Blank	Lab ID: QC1120485	Batch: 330579
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120485 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/16/24	01/16/24

Type: Lab Control Sample	Lab ID: QC1120486	Batch: 330579
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120486 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8581	0.8333	mg/Kg	103%		80-120

Type: Matrix Spike	Lab ID: QC1120487	Batch: 330579
Matrix (Source ID): Soil (499883-021)	Method: EPA 7471A	Prep Method: METHOD

QC1120487 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.165	0.1077	0.8621	mg/Kg	123%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1120488	Batch: 330579
Matrix (Source ID): Soil (499883-021)	Method: EPA 7471A	Prep Method: METHOD

QC1120488 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.051	0.1077	0.8621	mg/Kg	109%		75-125	10	20	1

Batch QC

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499723
Report Level: II
Report Date: 01/30/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499723
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/10/24

Sample ID	Lab ID	Collected	Matrix
P4-B2-2.0	499723-001	01/10/24 09:58	Soil
P4-B2-3.0	499723-002	01/10/24 10:06	Soil
P4-B2-4.0	499723-003	01/10/24 10:12	Soil
DUP-01-01102024	499723-004	01/10/24 00:00	Soil
P4-B3-2.0	499723-005	01/10/24 10:27	Soil
P4-B3-3.0	499723-006	01/10/24 10:34	Soil
P4-B3-4.0	499723-007	01/10/24 10:40	Soil
P4-B4-2.0	499723-008	01/10/24 10:54	Soil
P4-B4-3.0	499723-009	01/10/24 10:57	Soil
P4-B4-4.0	499723-010	01/10/24 11:02	Soil
P4-B5-2.0	499723-011	01/10/24 11:34	Soil
DUP-02-01102024	499723-012	01/10/24 00:00	Soil
P4-B5-3.0	499723-013	01/10/24 11:38	Soil
P4-B5-4.0	499723-014	01/10/24 11:44	Soil
P4-B6-2.0	499723-015	01/10/24 13:24	Soil
P4-B6-3.0	499723-016	01/10/24 13:50	Soil
P4-B6-4.0	499723-017	01/10/24 13:56	Soil
P4-B7-2.0	499723-018	01/10/24 13:38	Soil
P4-B7-3.0	499723-019	01/10/24 13:48	Soil
P4-B7-4.0	499723-020	01/10/24 13:58	Soil
P4-B8-2.0	499723-021	01/10/24 14:34	Soil
P4-B8-3.0	499723-022	01/10/24 14:48	Soil
P4-B8-4.0	499723-023	01/10/24 14:56	Soil
P4-B9-2.0	499723-024	01/10/24 14:20	Soil
P4-B9-3.0	499723-025	01/10/24 14:27	Soil
P4-B9-4.0	499723-026	01/10/24 14:30	Soil

Sample Summary

Tiffany George	Lab Job #:	499723
GSI Environmental, Inc.	Project No:	6272
2000 Powell Street	Location:	Berkeley Trackbed to Park
Suite 820	Date Received:	01/10/24
Emeryville, CA 94608		

Sample ID	Lab ID	Collected	Matrix
P4-B10-2.0	499723-027	01/10/24 15:03	Soil
P4-B10-3.0	499723-028	01/10/24 15:18	Soil
P4-B10-4.0	499723-029	01/10/24 15:23	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499723
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park

Date Received: 01/10/24

- This data package contains sample and QC results for twenty soil samples, requested for the above referenced project on 01/10/24. The samples were received cold and intact.
- Report reissued with MDLs added for 8270SVOCs.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- High response was observed for benzo(g,h,i)perylene in the CCV analyzed 01/12/24 18:35; affected data was qualified with "b".
- P4-B10-2.0 (lab # 499723-027) was diluted due to the dark and viscous nature of the sample extract.
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.



499723

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484		PROJECT NAME: Berkeley Trackbed to Park PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Email: TRKtgr@gsienv.com; ALCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		PROJECT NO.: 6272 LAB CONTACT: Sophia Baughman SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks																																																																																																																																																																																																																																																					
LABORATORY: Enthelphy Analytical, Berkeley, CA GLOBAL ID: N/A TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.																																																																																																																																																																																																																																																							
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499723



FROM: GSI Environmental Inc., 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272																				
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman																				
GLOBAL ID: N/A		Emails: TRKlitzke@gsienv.com; AJCleary@gsienv.com; GFredricks@gsienv.com; JPDuffield@gsienv.com		SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks																				
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.																						
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																								
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	P4-B6-3.0		1350		1	X			X	X	X													
	P4-B6-4.0		1356		1	X			X	X	X													
	P4-B7-2.0		1338		1	X			X	X	X													
	P4-B7-3.0		1348		1	X			X	X	X													
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	P4-B9-2.0		1420		1	X			X	X	X													
	P4-B9-3.0		1427		1	X			X	X	X													
	P4-B9-4.0		1430		1	X			X	X	X													
	P4-B10-2.0		1503		1	X			X	X	X													
	P4-B10-3.0		1518		1	X			X	X	X													
	P4-B10-4.0		1523		1	X			X	X	X													
Relinquished by: (Signature) <i>Ann [Signature]</i>		Date: 1/10/24		Time: 1:44		Received by: (Signature) <i>[Signature]</i>		Date: 1/10/24		Time: 1:44		Received by: (Signature) <i>[Signature]</i>		Date: 1/10/24		Time: 1:44		Received by: (Signature) <i>[Signature]</i>		Date: 1/10/24		Time: 1:44		

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1/10/24 Login # 499723 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package
 Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1/10/24 By (print) UEF FURMY (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 1 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____	/		

Section 5: Preservatives

Are the samples appropriately preserved? (if yes, skip the rest of section 5)

Did any samples / containers require preservation upon receipt?

Did you document your preservative check in the bench book?

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Date Logged 1/10/24 By (print) UEF FURMY (sign) [Signature]
 Date Labeled 1/10/24 By (print) UEF (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/11/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 3 No (skip section 2) Sample Temp (°C) (No Cooler): _____
 Sample Temp (°C), One from each cooler: #1: 4.0 #2: 3.7 #3: 3.5 #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.9 #2: 3.7 #3: 3.5 #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?	✓		
If custody seals are present, were they intact?	✓		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments
499723

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: [Signature] Date: JAN 11 2024

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.
 931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209
 www.enthalpy.com/social
 Sample Acceptance Checklist – Rev 4, 8/8/2017

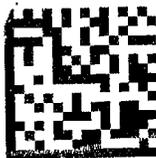
SOUTHWEST AIRLINES

Printed on:
10 JAN 19:10

526 OAK 9769 5813



SNA	Puff	2	OF	
	DG	10	G	
	LOT WT	471	LB	
		(213.7	KG)	
OAK	WN 2593	10 JAN	20:45	
STN	FLT	DATE	ETD	LOT 01



PC ID: 0002
PC WT: 53LB

526 97695813 0002

2.9 / 4.6

SOUTHWEST AIRLINES

Printed on:
10 JAN 19:10

526 OAK 9769 5813



SNA

SS

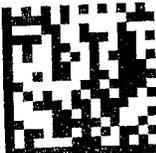
OAK WN 2593 10 JAN 20:45

PC#
4 OF

10 DG
G

LOT WT
471 LB
(213.7 KG)

STN FLT DATE ETD LOT 01



PC ID: 0004
PC WT: 52LB

S

526 97695813 0004

151986 100

15199c 11

SOUTHWEST AIRLINES

Printed on:
10 JAN 19:10

526 OAK 9769 5813



SNA

PC#
3 OF

10 | G DG

LOT WT
471 LB
(213.7 KG)

OAK WN 2593 10 JAN 20:45

STN FLT DATE ETD LOT 01



PC ID: 0003
PC WT: 53LB

S

526 97695813 0003

Analysis Results for 499723

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499723
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/10/24

Sample ID: P4-B2-2.0 Lab ID: 499723-001 Collected: 01/10/24 09:58
Matrix: Soil

499723-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	63		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Lead	15		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.16		1.2	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B2-3.0 Lab ID: 499723-002 Collected: 01/10/24 10:06
Matrix: Soil

499723-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	11		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Lead	7.2		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B3-2.0 Lab ID: 499723-005 Collected: 01/10/24 10:27
Matrix: Soil

499723-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	68		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Lead	10		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Analysis Results for 499723

Sample ID: P4-B3-3.0	Lab ID: 499723-006	Collected: 01/10/24 10:34
Matrix: Soil		

499723-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	8.1		mg/Kg	0.98		0.98	330397	01/12/24	01/12/24	SBW
Lead	6.3		mg/Kg	0.98		0.98	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.14		1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B4-2.0	Lab ID: 499723-008	Collected: 01/10/24 10:54
Matrix: Soil		

499723-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	120		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Lead	14		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B4-3.0	Lab ID: 499723-009	Collected: 01/10/24 10:57
Matrix: Soil		

499723-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	5.0		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Lead	6.6		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	0.44		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B5-2.0	Lab ID: 499723-011	Collected: 01/10/24 11:34
Matrix: Soil		

499723-011 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	130		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Lead	18		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	0.28		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Analysis Results for 499723

Sample ID: DUP-02-01102024	Lab ID: 499723-012	Collected: 01/10/24
Matrix: Soil		

499723-012 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	89		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Lead	12		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	0.29		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B5-3.0	Lab ID: 499723-013	Collected: 01/10/24 11:38
Matrix: Soil		

499723-013 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	2.2		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Lead	5.4		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.14		1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B6-2.0	Lab ID: 499723-015	Collected: 01/10/24 13:24
Matrix: Soil		

499723-015 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	75		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Lead	13		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B6-3.0	Lab ID: 499723-016	Collected: 01/10/24 13:50
Matrix: Soil		

499723-016 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	30		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Lead	9.4		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Analysis Results for 499723

Sample ID: P4-B6-4.0	Lab ID: 499723-017	Collected: 01/10/24 13:56
	Matrix: Soil	

499723-017 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	4.6		mg/Kg	0.97		0.97	331323	01/24/24	01/25/24	RPS

Sample ID: P4-B7-2.0	Lab ID: 499723-018	Collected: 01/10/24 13:38
	Matrix: Soil	

499723-018 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	73		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Lead	9.5		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B7-3.0	Lab ID: 499723-019	Collected: 01/10/24 13:48
	Matrix: Soil	

499723-019 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	6.1		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Lead	6.0		mg/Kg	0.97		0.97	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	0.18		mg/Kg	0.16		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B8-2.0	Lab ID: 499723-021	Collected: 01/10/24 14:34
	Matrix: Soil	

499723-021 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	38		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Lead	12		mg/Kg	0.99		0.99	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Analysis Results for 499723

Sample ID: P4-B8-3.0	Lab ID: 499723-022	Collected: 01/10/24 14:48
Matrix: Soil		

499723-022 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	8.7		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Lead	7.3		mg/Kg	0.95		0.95	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM

Sample ID: P4-B9-2.0	Lab ID: 499723-024	Collected: 01/10/24 14:20
Matrix: Soil		

499723-024 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	16		mg/Kg	0.98		0.98	330397	01/12/24	01/12/24	SBW
Lead	13		mg/Kg	0.98		0.98	330397	01/12/24	01/12/24	SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.16		1.2	330483	01/13/24	01/15/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10	3.0	1	330401	01/12/24	01/13/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	3.0	1	330401	01/12/24	01/13/24	TJW
Naphthalene	ND		ug/Kg	10	3.1	1	330401	01/12/24	01/13/24	TJW
Acenaphthylene	ND		ug/Kg	10	2.5	1	330401	01/12/24	01/13/24	TJW
Acenaphthene	ND		ug/Kg	10	2.7	1	330401	01/12/24	01/13/24	TJW
Fluorene	ND		ug/Kg	10	2.6	1	330401	01/12/24	01/13/24	TJW
Phenanthrene	ND		ug/Kg	10	2.3	1	330401	01/12/24	01/13/24	TJW
Anthracene	ND		ug/Kg	10	1.8	1	330401	01/12/24	01/13/24	TJW
Fluoranthene	ND		ug/Kg	10	1.0	1	330401	01/12/24	01/13/24	TJW
Pyrene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/13/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	0.95	1	330401	01/12/24	01/13/24	TJW
Chrysene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/13/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/13/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1.9	1	330401	01/12/24	01/13/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	2.0	1	330401	01/12/24	01/13/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1.1	1	330401	01/12/24	01/13/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1.3	1	330401	01/12/24	01/13/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1.4	1	330401	01/12/24	01/13/24	TJW
Surrogates				Limits						
Nitrobenzene-d5	90%		%REC	27-125		1	330401	01/12/24	01/13/24	TJW
2-Fluorobiphenyl	77%		%REC	30-120		1	330401	01/12/24	01/13/24	TJW
Terphenyl-d14	87%		%REC	33-155		1	330401	01/12/24	01/13/24	TJW

Analysis Results for 499723

Sample ID: P4-B9-3.0	Lab ID: 499723-025	Collected: 01/10/24 14:27
Matrix: Soil		

499723-025 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	5.4		mg/Kg	0.96	0.96	330397	01/12/24	01/12/24		SBW
Lead	6.4		mg/Kg	0.96	0.96	330397	01/12/24	01/12/24		SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	ND		mg/Kg	0.15		1.1	330483	01/13/24	01/15/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10	3.0	1	330401	01/12/24	01/15/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	3.0	1	330401	01/12/24	01/15/24	TJW
Naphthalene	ND		ug/Kg	10	3.2	1	330401	01/12/24	01/15/24	TJW
Acenaphthylene	ND		ug/Kg	10	2.5	1	330401	01/12/24	01/15/24	TJW
Acenaphthene	ND		ug/Kg	10	2.7	1	330401	01/12/24	01/15/24	TJW
Fluorene	ND		ug/Kg	10	2.7	1	330401	01/12/24	01/15/24	TJW
Phenanthrene	ND		ug/Kg	10	2.3	1	330401	01/12/24	01/15/24	TJW
Anthracene	ND		ug/Kg	10	1.8	1	330401	01/12/24	01/15/24	TJW
Fluoranthene	ND		ug/Kg	10	1.0	1	330401	01/12/24	01/15/24	TJW
Pyrene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/15/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	0.95	1	330401	01/12/24	01/15/24	TJW
Chrysene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/15/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1.2	1	330401	01/12/24	01/15/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1.9	1	330401	01/12/24	01/15/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	2.0	1	330401	01/12/24	01/15/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1.1	1	330401	01/12/24	01/15/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1.3	1	330401	01/12/24	01/15/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1.4	1	330401	01/12/24	01/15/24	TJW
Surrogates				Limits						
Nitrobenzene-d5	65%		%REC	27-125		1	330401	01/12/24	01/15/24	TJW
2-Fluorobiphenyl	58%		%REC	30-120		1	330401	01/12/24	01/15/24	TJW
Terphenyl-d14	72%		%REC	33-155		1	330401	01/12/24	01/15/24	TJW

Analysis Results for 499723

Sample ID: P4-B10-2.0	Lab ID: 499723-027	Collected: 01/10/24 15:03
Matrix: Soil		

499723-027 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist	
Method: EPA 6010B											
Prep Method: EPA 3050B											
Arsenic	21		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW	
Lead	180		mg/Kg	0.96		0.96	330397	01/12/24	01/12/24	SBW	
Method: EPA 7471A											
Prep Method: METHOD											
Mercury	4.8		mg/Kg	1.6		11	330483	01/13/24	01/15/24	KAM	
Method: EPA 8270C-SIM											
Prep Method: EPA 3546											
1-Methylnaphthalene	ND		ug/Kg	250	92	25	330401	01/12/24	01/13/24	TJW	
2-Methylnaphthalene	ND		ug/Kg	250	92	25	330401	01/12/24	01/13/24	TJW	
Naphthalene	ND		ug/Kg	250	91	25	330401	01/12/24	01/13/24	TJW	
Acenaphthylene	ND		ug/Kg	250	82	25	330401	01/12/24	01/13/24	TJW	
Acenaphthene	ND		ug/Kg	250	85	25	330401	01/12/24	01/13/24	TJW	
Fluorene	ND		ug/Kg	250	96	25	330401	01/12/24	01/13/24	TJW	
Phenanthrene	110	J	ug/Kg	250	98	25	330401	01/12/24	01/13/24	TJW	
Anthracene	ND		ug/Kg	250	56	25	330401	01/12/24	01/13/24	TJW	
Fluoranthene	280		ug/Kg	250	85	25	330401	01/12/24	01/13/24	TJW	
Pyrene	340		ug/Kg	250	88	25	330401	01/12/24	01/13/24	TJW	
Benzo(a)anthracene	140	J	ug/Kg	250	88	25	330401	01/12/24	01/13/24	TJW	
Chrysene	180	J	ug/Kg	250	72	25	330401	01/12/24	01/13/24	TJW	
Benzo(b)fluoranthene	260		ug/Kg	250	110	25	330401	01/12/24	01/13/24	TJW	
Benzo(k)fluoranthene	93	J	ug/Kg	250	66	25	330401	01/12/24	01/13/24	TJW	
Benzo(a)pyrene	270		ug/Kg	250	68	25	330401	01/12/24	01/13/24	TJW	
Indeno(1,2,3-cd)pyrene	220	J	ug/Kg	250	130	25	330401	01/12/24	01/13/24	TJW	
Dibenz(a,h)anthracene	ND		ug/Kg	250	130	25	330401	01/12/24	01/13/24	TJW	
Benzo(g,h,i)perylene	220	J	ug/Kg	250	110	25	330401	01/12/24	01/13/24	TJW	
Surrogates				Limits							
Nitrobenzene-d5	68%		%REC	27-125			25	330401	01/12/24	01/13/24	TJW
2-Fluorobiphenyl	72%		%REC	30-120			25	330401	01/12/24	01/13/24	TJW
Terphenyl-d14	68%		%REC	33-155			25	330401	01/12/24	01/13/24	TJW

Analysis Results for 499723

Sample ID: P4-B10-3.0	Lab ID: 499723-028	Collected: 01/10/24 15:18
Matrix: Soil		

499723-028 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	6.1		mg/Kg	0.95	0.95	330397	01/12/24	01/12/24		SBW
Lead	7.2		mg/Kg	0.95	0.95	330397	01/12/24	01/12/24		SBW
Method: EPA 7471A Prep Method: METHOD										
Mercury	0.41		mg/Kg	0.14		1	330483	01/13/24	01/15/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10	3.7	1	330401	01/12/24	01/13/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	3.8	1	330401	01/12/24	01/13/24	TJW
Naphthalene	ND		ug/Kg	10	3.7	1	330401	01/12/24	01/13/24	TJW
Acenaphthylene	ND		ug/Kg	10	3.3	1	330401	01/12/24	01/13/24	TJW
Acenaphthene	ND		ug/Kg	10	3.5	1	330401	01/12/24	01/13/24	TJW
Fluorene	ND		ug/Kg	10	3.9	1	330401	01/12/24	01/13/24	TJW
Phenanthrene	ND		ug/Kg	10	4.0	1	330401	01/12/24	01/13/24	TJW
Anthracene	ND		ug/Kg	10	2.3	1	330401	01/12/24	01/13/24	TJW
Fluoranthene	ND		ug/Kg	10	3.4	1	330401	01/12/24	01/13/24	TJW
Pyrene	ND		ug/Kg	10	3.6	1	330401	01/12/24	01/13/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	3.6	1	330401	01/12/24	01/13/24	TJW
Chrysene	ND		ug/Kg	10	2.9	1	330401	01/12/24	01/13/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	4.5	1	330401	01/12/24	01/13/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	2.7	1	330401	01/12/24	01/13/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	2.8	1	330401	01/12/24	01/13/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	5.4	1	330401	01/12/24	01/13/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	5.3	1	330401	01/12/24	01/13/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	4.3	1	330401	01/12/24	01/13/24	TJW
Surrogates				Limits						
Nitrobenzene-d5	79%		%REC	27-125		1	330401	01/12/24	01/13/24	TJW
2-Fluorobiphenyl	71%		%REC	30-120		1	330401	01/12/24	01/13/24	TJW
Terphenyl-d14	64%		%REC	33-155		1	330401	01/12/24	01/13/24	TJW

J Estimated value
ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1119792	Batch: 330397
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119792 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0		01/12/24	01/12/24
Lead	ND		mg/Kg	1.0		01/12/24	01/12/24

Type: Lab Control Sample	Lab ID: QC1119793	Batch: 330397
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119793 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	90.41	100.0	mg/Kg	90%		80-120
Lead	104.4	100.0	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1119794	Batch: 330397
Matrix (Source ID): Soil (499723-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119794 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	151.3	63.19	97.09	mg/Kg	91%		75-125	0.97
Lead	110.0	14.63	97.09	mg/Kg	98%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1119795	Batch: 330397
Matrix (Source ID): Soil (499723-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119795 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	146.8	63.19	96.15	mg/Kg	87%		75-125	2	35	0.96
Lead	108.7	14.63	96.15	mg/Kg	98%		75-125	0	20	0.96

Type: Post Digest Spike	Lab ID: QC1119796	Batch: 330397
Matrix (Source ID): Soil (499723-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1119796 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	156.0	63.19	99.01	mg/Kg	94%		75-125	0.99
Lead	117.6	14.63	99.01	mg/Kg	104%		75-125	0.99

Type: Blank	Lab ID: QC1122755	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122755 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0		01/24/24	01/25/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1122756	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122756 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	102.2	100.0	mg/Kg	102%		80-120

Type: Matrix Spike	Lab ID: QC1122757	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122757 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	104.2	4.674	98.04	mg/Kg	102%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1122758	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122758 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	104.0	4.674	97.09	mg/Kg	102%		75-125	1	35	0.97

Type: Post Digest Spike	Lab ID: QC1122759	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	106.3	4.674	97.09	mg/Kg	105%		75-125	0.97

Type: Blank	Lab ID: QC1120114	Batch: 330483
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120114 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14		01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120115	Batch: 330483
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120115 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9009	0.8333	mg/Kg	108%		80-120

Type: Matrix Spike	Lab ID: QC1120116	Batch: 330483
Matrix (Source ID): Soil (499723-001)	Method: EPA 7471A	Prep Method: METHOD

QC1120116 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.195	0.1469	0.9259	mg/Kg	113%		75-125	1.1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1120117	Batch: 330483
Matrix (Source ID): Soil (499723-001)	Method: EPA 7471A	Prep Method: METHOD

QC1120117 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.216	0.1469	0.9804	mg/Kg	109%		75-125	3	20	1.2

Type: Lab Control Sample	Lab ID: QC1119821	Batch: 330401
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1119821 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	145.4	200.0	ug/Kg	73%		28-130
2-Methylnaphthalene	148.8	200.0	ug/Kg	74%		33-130
Naphthalene	155.6	200.0	ug/Kg	78%		25-130
Acenaphthylene	141.4	200.0	ug/Kg	71%		28-130
Acenaphthene	147.0	200.0	ug/Kg	73%		32-130
Fluorene	153.8	200.0	ug/Kg	77%		35-130
Phenanthrene	158.0	200.0	ug/Kg	79%		35-132
Anthracene	159.4	200.0	ug/Kg	80%		34-136
Fluoranthene	149.3	200.0	ug/Kg	75%		34-139
Pyrene	146.5	200.0	ug/Kg	73%		35-134
Benzo(a)anthracene	161.4	200.0	ug/Kg	81%		30-132
Chrysene	156.7	200.0	ug/Kg	78%		29-130
Benzo(b)fluoranthene	172.3	200.0	ug/Kg	86%		32-137
Benzo(k)fluoranthene	180.4	200.0	ug/Kg	90%		32-130
Benzo(a)pyrene	162.1	200.0	ug/Kg	81%		10-138
Indeno(1,2,3-cd)pyrene	205.9	200.0	ug/Kg	103%		34-132
Dibenz(a,h)anthracene	181.9	200.0	ug/Kg	91%		32-130
Benzo(g,h,i)perylene	192.0	200.0	ug/Kg	96%	b	27-130
Surrogates						
Nitrobenzene-d5	171.7	200.0	ug/Kg	86%		27-125
2-Fluorobiphenyl	153.2	200.0	ug/Kg	77%		30-120
Terphenyl-d14	156.4	200.0	ug/Kg	78%		33-155

Batch QC

Type: Matrix Spike	Lab ID: QC1119822	Batch: 330401
Matrix (Source ID): Soil (499723-024)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1119822 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	136.3	ND	202.0	ug/Kg	67%		25-130	1
2-Methylnaphthalene	139.2	ND	202.0	ug/Kg	69%		32-133	1
Naphthalene	142.7	ND	202.0	ug/Kg	71%		33-130	1
Acenaphthylene	132.8	ND	202.0	ug/Kg	66%		14-157	1
Acenaphthene	137.7	ND	202.0	ug/Kg	68%		28-134	1
Fluorene	146.4	ND	202.0	ug/Kg	72%		27-140	1
Phenanthrene	148.1	ND	202.0	ug/Kg	73%		29-147	1
Anthracene	149.5	ND	202.0	ug/Kg	74%		24-156	1
Fluoranthene	141.9	ND	202.0	ug/Kg	70%		28-160	1
Pyrene	139.5	ND	202.0	ug/Kg	69%		26-153	1
Benzo(a)anthracene	153.6	ND	202.0	ug/Kg	76%		26-174	1
Chrysene	146.8	ND	202.0	ug/Kg	73%		40-139	1
Benzo(b)fluoranthene	151.3	ND	202.0	ug/Kg	75%		36-164	1
Benzo(k)fluoranthene	160.4	ND	202.0	ug/Kg	79%		36-161	1
Benzo(a)pyrene	139.3	ND	202.0	ug/Kg	69%		18-173	1
Indeno(1,2,3-cd)pyrene	170.7	ND	202.0	ug/Kg	84%		26-154	1
Dibenz(a,h)anthracene	152.4	ND	202.0	ug/Kg	75%		38-132	1
Benzo(g,h,i)perylene	155.6	ND	202.0	ug/Kg	77%		36-130	1
Surrogates								
Nitrobenzene-d5	168.8		202.0	ug/Kg	84%		27-125	1
2-Fluorobiphenyl	144.0		202.0	ug/Kg	71%		30-120	1
Terphenyl-d14	165.0		202.0	ug/Kg	82%		33-155	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1119823	Batch: 330401
Matrix (Source ID): Soil (499723-024)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1119823 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	146.3	ND	201.0	ug/Kg	73%		25-130	8	35	1
2-Methylnaphthalene	149.6	ND	201.0	ug/Kg	74%		32-133	8	35	1
Naphthalene	152.5	ND	201.0	ug/Kg	76%		33-130	7	35	1
Acenaphthylene	142.6	ND	201.0	ug/Kg	71%		14-157	8	35	1
Acenaphthene	147.1	ND	201.0	ug/Kg	73%		28-134	7	35	1
Fluorene	157.0	ND	201.0	ug/Kg	78%		27-140	7	35	1
Phenanthrene	156.8	ND	201.0	ug/Kg	78%		29-147	6	35	1
Anthracene	157.5	ND	201.0	ug/Kg	78%		24-156	6	35	1
Fluoranthene	151.1	ND	201.0	ug/Kg	75%		28-160	7	35	1
Pyrene	147.5	ND	201.0	ug/Kg	73%		26-153	6	35	1
Benzo(a)anthracene	158.4	ND	201.0	ug/Kg	79%		26-174	4	35	1
Chrysene	151.7	ND	201.0	ug/Kg	75%		40-139	4	35	1
Benzo(b)fluoranthene	159.3	ND	201.0	ug/Kg	79%		36-164	6	35	1
Benzo(k)fluoranthene	162.3	ND	201.0	ug/Kg	81%		36-161	2	35	1
Benzo(a)pyrene	143.6	ND	201.0	ug/Kg	71%		18-173	4	35	1
Indeno(1,2,3-cd)pyrene	180.5	ND	201.0	ug/Kg	90%		26-154	6	35	1
Dibenz(a,h)anthracene	162.4	ND	201.0	ug/Kg	81%		38-132	7	35	1
Benzo(g,h,i)perylene	165.0	ND	201.0	ug/Kg	82%		36-130	6	35	1
Surrogates										
Nitrobenzene-d5	182.6		201.0	ug/Kg	91%		27-125			1
2-Fluorobiphenyl	155.9		201.0	ug/Kg	78%		30-120			1
Terphenyl-d14	175.6		201.0	ug/Kg	87%		33-155			1

Batch QC

Type: Blank	Lab ID: QC1119953	Batch: 330401
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1119953 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	3.0	01/12/24	01/12/24
2-Methylnaphthalene	ND		ug/Kg	10	2.9	01/12/24	01/12/24
Naphthalene	ND		ug/Kg	10	3.1	01/12/24	01/12/24
Acenaphthylene	ND		ug/Kg	10	2.5	01/12/24	01/12/24
Acenaphthene	ND		ug/Kg	10	2.7	01/12/24	01/12/24
Fluorene	ND		ug/Kg	10	2.6	01/12/24	01/12/24
Phenanthrene	ND		ug/Kg	10	2.3	01/12/24	01/12/24
Anthracene	ND		ug/Kg	10	1.8	01/12/24	01/12/24
Fluoranthene	ND		ug/Kg	10	0.99	01/12/24	01/12/24
Pyrene	ND		ug/Kg	10	1.2	01/12/24	01/12/24
Benzo(a)anthracene	ND		ug/Kg	10	0.94	01/12/24	01/12/24
Chrysene	ND		ug/Kg	10	1.2	01/12/24	01/12/24
Benzo(b)fluoranthene	ND		ug/Kg	10	1.2	01/12/24	01/12/24
Benzo(k)fluoranthene	ND		ug/Kg	10	1.9	01/12/24	01/12/24
Benzo(a)pyrene	ND		ug/Kg	10	2.0	01/12/24	01/12/24
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1.1	01/12/24	01/12/24
Dibenz(a,h)anthracene	ND		ug/Kg	10	1.3	01/12/24	01/12/24
Benzo(g,h,i)perylene	ND		ug/Kg	10	1.4	01/12/24	01/12/24
Surrogates				Limits			
Nitrobenzene-d5	76%		%REC	27-125		01/12/24	01/12/24
2-Fluorobiphenyl	68%		%REC	30-120		01/12/24	01/12/24
Terphenyl-d14	68%		%REC	33-155		01/12/24	01/12/24

ND Not Detected
b See narrative



Enthalpy Analytical
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enthalpy.com

Lab Job Number: 499746
Report Level: II
Report Date: 01/29/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499746
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/11/24

Sample ID	Lab ID	Collected	Matrix
P1-B2-2.0	499746-001	01/11/24 08:58	Soil
P1-B2-3.0	499746-002	01/11/24 09:10	Soil
P1-B2-4.0	499746-003	01/11/24 09:24	Soil
P1-B3-2.0	499746-004	01/11/24 09:37	Soil
P1-B3-3.0	499746-005	01/11/24 10:14	Soil
P1-B3-4.0	499746-006	01/11/24 10:20	Soil
P1-B4-2.0	499746-007	01/11/24 10:29	Soil
P1-B4-3.0	499746-008	01/11/24 10:33	Soil
P1-B4-4.0	499746-009	01/11/24 10:45	Soil
P1-B5-2.0	499746-010	01/11/24 11:30	Soil
P1-B5-3.0	499746-011	01/11/24 11:34	Soil
P1-B5-4.0	499746-012	01/11/24 11:46	Soil
P1-B6-2.0	499746-013	01/11/24 11:57	Soil
P1-B6-3.0	499746-014	01/11/24 12:03	Soil
P1-B6-4.0	499746-015	01/11/24 12:05	Soil
P1-B7-2.0	499746-016	01/11/24 13:27	Soil
P1-B7-3.0	499746-017	01/11/24 13:34	Soil
P1-B7-4.0	499746-018	01/11/24 13:40	Soil
P1-A10-2.0	499746-019	01/11/24 13:53	Soil
P1-A10-3.0	499746-020	01/11/24 13:59	Soil
P1-A10-4.0	499746-021	01/11/24 14:06	Soil
P1-A9-2.0	499746-022	01/11/24 14:15	Soil
P1-A9-3.0	499746-023	01/11/24 14:20	Soil
P1-A9-4.0	499746-024	01/11/24 14:23	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499746
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 01/11/24

- This data package contains sample and QC results for twenty soil samples, requested for the above referenced project on 01/11/24. The samples were received cold and intact.
- Report reissued 01.29.2024 to include additional metals results.

Metals (EPA 6010B):

No analytical problems were encountered.



4991746

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Tracked to Park		PROJECT NO.: 6272													
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman													
GLOBAL ID: N/A		Emails: TRK@gsienv.com; AJCleary@gsienv.com; GF.federicks@gsienv.com; JPDuffield@gsienv.com		SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks													
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.															
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR																	
<input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																	
SPECIAL INSTRUCTIONS:																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPH/d/mo (6015M)	HOLD	
		DATE	TIME														
	P1-B2-2.0	1/11/24	0858	Soil	1	X			X								
	P1-B2-3.0		0910		1	X			X								X
	P1-B2-4.0		0924		1	X			X								
	P1-B3-2.0		0937		1	X			X								
	P1-B3-3.0		1014		1	X			X								X
	P1-B3-4.0		1020		1	X			X								
	P1-B4-2.0		1029		1	X			X								
	P1-B4-3.0		1033		1	X			X								X
	P1-B4-4.0		1045		1	X			X								
	P1-B5-2.0		1130		1	X			X								
	P1-B5-3.0		1134		1	X			X								
	P1-B5-4.0		1146		1	X			X								X
	P1-B6-2.0		1157		1	X			X								
	P1-B6-3.0		1203		1	X			X								
	P1-B6-4.0		1205		1	X			X								X
Relinquished by: (Signature) <i>[Signature]</i>		DATE: 1.11.24		TIME: 17:12		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940	
Relinquished by: (Signature) <i>[Signature]</i>		DATE: 1.11.24		TIME: 17:12		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940	
Relinquished by: (Signature) <i>[Signature]</i>		DATE: 1.11.24		TIME: 17:12		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940		Received by: (Signature) <i>[Signature]</i>		DATE: 1/12/24		TIME: 0940	



499746

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94508		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272																
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman																
GLOBAL ID: N/A		Emails: TRKlitzke@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		SAMPLER(S): Allison Cleary & Gabrielle Fredericks (PRINT)																
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																				
SPECIAL INSTRUCTIONS:																				
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPH/d/mo (8015M)	HOLD				
		DATE	TIME																	
	P1-B7-2.0	1/11/23	1327	Soil	1	X			X											
	P1-B7-3.0		1334		1	X			X								X			
	P1-B7-4.0		1340		1	X			X											
	P1-A10-2.0		1353		1	X			X											
	P1-A10-3.0		1359		1	X			X											
	P1-A10-4.0		1406		1	X			X								X			
	P1-A9-2.0		1415		1	X			X											
	P1-A9-3.0		1420		1	X			X								X			
	P1-A9-4.0		1423		1	X			X								X			
AFC																				
Relinquished by: (Signature) <i>[Signature]</i>		Date: 1/11/24		Time: 3:30		Received by: (Signature) <i>[Signature]</i>											Date: 1/11/24		Time: 3:30	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 1/11/24		Time: 17:10		Received by: (Signature) <i>[Signature]</i>											Date: 1/12/24		Time: 0940	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 1/11/24		Time: 17:10		Received by: (Signature) <i>[Signature]</i>											Date: 1/12/24		Time: 0940	

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1.11.24 Login # 499746 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____
 Are custody seals present? No Yes If yes, where? on cooler, on samples, on package
 Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1.11.24 By (print) Jade Peterson (sign) [Signature]
 Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)
 If no cooler: Sample Temp (°C): _____
 How many coolers? 20 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were Method 5035 sampling containers present? Transferred to freezer @: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all containers arrive unbroken/unopened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any missing / extra samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the container count match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for unpreserved VOAs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are bubbles > 6mm present in VOA samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did any samples / containers require preservation upon receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you document your preservative check in the bench book?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preservative added:

H2SO4 lot# _____ added to samples _____ Date/Time _____
 HCL lot# _____ added to samples _____ Date/Time _____
 HNO3 lot# _____ added to samples _____ Date/Time _____
 CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Sample times on -016 and -017 are swapped.

Date Logged 1.11.24 By (print) Jade Peterson (sign) [Signature]
 Date Labeled 1-11-24 By (print) Jade Peterson (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/12/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 4.0 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.4 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
499746

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: JAN 12 2024

SOUTHWEST AIRLINES

Printed on:
11 JAN 19:14

526 OAK 9774 0366



SNA

PC#
1 OF 7

DG
G

LOT WT
328 LB
(148.8 KG)

OAK WN 2652 12 JAN 07:30

STN FLT DATE ETD LOT 01



PC ID: 0001
PC WT: 47LB

S

526 97740366 0001

2.4 / 4.0

Analysis Results for 499746

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499746
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/11/24

Sample ID: P1-B2-2.0 **Lab ID: 499746-001** **Collected: 01/11/24 08:58**
Matrix: Soil

499746-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	40		mg/Kg	0.98	0.98	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B2-3.0 **Lab ID: 499746-002** **Collected: 01/11/24 09:10**
Matrix: Soil

499746-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.9		mg/Kg	0.99	0.99	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B3-2.0 **Lab ID: 499746-004** **Collected: 01/11/24 09:37**
Matrix: Soil

499746-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	18		mg/Kg	0.98	0.98	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B3-3.0 **Lab ID: 499746-005** **Collected: 01/11/24 10:14**
Matrix: Soil

499746-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.4		mg/Kg	0.97	0.97	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B4-2.0 **Lab ID: 499746-007** **Collected: 01/11/24 10:29**
Matrix: Soil

499746-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	62		mg/Kg	0.99	0.99	330468	01/13/24	01/15/24	RPS

Analysis Results for 499746

Sample ID: P1-B4-3.0	Lab ID: 499746-008	Collected: 01/11/24 10:33
	Matrix: Soil	

499746-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	52		mg/Kg	0.95	0.95	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B4-4.0	Lab ID: 499746-009	Collected: 01/11/24 10:45
	Matrix: Soil	

499746-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	9.1		mg/Kg	0.97	0.97	331323	01/24/24	01/25/24	RPS

Sample ID: P1-B5-2.0	Lab ID: 499746-010	Collected: 01/11/24 11:30
	Matrix: Soil	

499746-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.2		mg/Kg	1.0	1	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B5-3.0	Lab ID: 499746-011	Collected: 01/11/24 11:34
	Matrix: Soil	

499746-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	150		mg/Kg	0.97	0.97	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B5-4.0	Lab ID: 499746-012	Collected: 01/11/24 11:46
	Matrix: Soil	

499746-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	130		mg/Kg	0.99	0.99	331323	01/24/24	01/25/24	RPS

Sample ID: P1-B6-2.0	Lab ID: 499746-013	Collected: 01/11/24 11:57
	Matrix: Soil	

499746-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	41		mg/Kg	0.98	0.98	330468	01/13/24	01/15/24	RPS

Analysis Results for 499746

Sample ID: P1-B6-3.0	Lab ID: 499746-014	Collected: 01/11/24 12:03
	Matrix: Soil	

499746-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	110		mg/Kg	1.0	1	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B6-4.0	Lab ID: 499746-015	Collected: 01/11/24 12:05
	Matrix: Soil	

499746-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	100		mg/Kg	0.97	0.97	331323	01/24/24	01/25/24	RPS

Sample ID: P1-B7-2.0	Lab ID: 499746-016	Collected: 01/11/24 13:27
	Matrix: Soil	

499746-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	32		mg/Kg	0.98	0.98	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B7-3.0	Lab ID: 499746-017	Collected: 01/11/24 13:34
	Matrix: Soil	

499746-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	16		mg/Kg	0.96	0.96	330468	01/13/24	01/15/24	RPS

Sample ID: P1-B7-4.0	Lab ID: 499746-018	Collected: 01/11/24 13:40
	Matrix: Soil	

499746-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	10		mg/Kg	0.99	0.99	331323	01/24/24	01/25/24	RPS

Sample ID: P1-A10-2.0	Lab ID: 499746-019	Collected: 01/11/24 13:53
	Matrix: Soil	

499746-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	0.97	0.97	330468	01/13/24	01/15/24	RPS

Analysis Results for 499746

Sample ID: P1-A10-3.0	Lab ID: 499746-020	Collected: 01/11/24 13:59
	Matrix: Soil	

499746-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	0.99	0.99	330468	01/13/24	01/15/24	RPS

Sample ID: P1-A9-2.0	Lab ID: 499746-022	Collected: 01/11/24 14:15
	Matrix: Soil	

499746-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.2		mg/Kg	0.95	0.95	330468	01/13/24	01/15/24	RPS

Sample ID: P1-A9-3.0	Lab ID: 499746-023	Collected: 01/11/24 14:20
	Matrix: Soil	

499746-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	0.97	0.97	330468	01/13/24	01/15/24	RPS

Batch QC

Type: Blank	Lab ID: QC1120045	Batch: 330468
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120045 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120046	Batch: 330468
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120046 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	88.20	100.0	mg/Kg	88%		80-120

Type: Matrix Spike	Lab ID: QC1120047	Batch: 330468
Matrix (Source ID): Soil (499746-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120047 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	138.9	39.76	97.09	mg/Kg	102%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1120048	Batch: 330468
Matrix (Source ID): Soil (499746-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120048 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	133.8	39.76	96.15	mg/Kg	98%		75-125	3	35	0.96

Type: Post Digest Spike	Lab ID: QC1120049	Batch: 330468
Matrix (Source ID): Soil (499746-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120049 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	141.5	39.76	98.04	mg/Kg	104%		75-125	0.98

Type: Blank	Lab ID: QC1122755	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122755 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/24/24	01/25/24

Type: Lab Control Sample	Lab ID: QC1122756	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122756 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	102.2	100.0	mg/Kg	102%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1122757	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122757 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	104.2	4.674	98.04	mg/Kg	102%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1122758	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122758 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	104.0	4.674	97.09	mg/Kg	102%		75-125	1	35	0.97

Type: Post Digest Spike	Lab ID: QC1122759	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	106.3	4.674	97.09	mg/Kg	105%		75-125	0.97

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 499748
Report Level: II
Report Date: 01/18/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499748
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/11/24

Sample ID	Lab ID	Collected	Matrix
P1-A2-2.0	499748-001	01/11/24 08:52	Soil
P1-A2-3.0	499748-002	01/11/24 09:00	Soil
P1-A2-4.0	499748-003	01/11/24 09:07	Soil
DUP-01-01112024	499748-004	01/11/24 00:00	Soil
P1-A3-2.0	499748-005	01/11/24 09:23	Soil
P1-A3-3.0	499748-006	01/11/24 09:32	Soil
P1-A3-4.0	499748-007	01/11/24 09:35	Soil
P1-A4-2.0	499748-008	01/11/24 10:36	Soil
P1-A4-3.0	499748-009	01/11/24 10:42	Soil
P1-A4-4.0	499748-010	01/11/24 10:48	Soil
P1-A5-2.0	499748-011	01/11/24 11:27	Soil
P1-A5-3.0	499748-012	01/11/24 11:31	Soil
P1-A5-4.0	499748-013	01/11/24 11:36	Soil
P4-A2-2.0	499748-014	01/10/24 10:21	Soil
P4-A2-3.0	499748-015	01/10/24 10:40	Soil
P4-A2-4.0	499748-016	01/10/24 10:48	Soil
P1-A6-2.0	499748-017	01/11/24 11:52	Soil
P1-A6-3.0	499748-018	01/11/24 11:57	Soil
P1-A6-4.0	499748-019	01/11/24 12:02	Soil
P1-A7-1.0	499748-020	01/11/24 13:25	Soil
P1-A7-2.5	499748-021	01/11/24 13:30	Soil
P1-A7-4.0	499748-022	01/11/24 13:38	Soil
P1-A7-5.5	499748-023	01/11/24 13:42	Soil
P1-A8-1.0	499748-024	01/11/24 13:53	Soil
P1-A8-2.5	499748-025	01/11/24 14:00	Soil
P1-A8-4.0	499748-026	01/11/24 14:08	Soil

Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499748
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/11/24

Sample ID	Lab ID	Collected	Matrix
P1-A8-5.5	499748-027	01/11/24 14:13	Soil
DUP-02-01112024	499748-028	01/11/24 00:00	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499748
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park

Date Received: 01/11/24

This data package contains sample and QC results for seventeen soil samples, requested for the above referenced project on 01/11/24. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):

- Low recovery was observed for diesel C10-C28 in the MSD for batch 330497; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and the low recovery was not associated with any reported results.
- No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- High responses were observed for acenaphthylene and benzo(a)pyrene in the CCV analyzed 01/14/24 17:49; affected data was qualified with "b".
- No other analytical problems were encountered.

Pesticides (EPA 8081A):

No analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- Low recovery was observed for mercury in the MS for batch 330473; the parent sample was not a project sample, and the LCS was within limits. High RPD was also observed for mercury in the MS/MSD for batch 330473; this analyte was not detected at or above the RL in the associated samples.
- Low recoveries were observed for antimony in the MS/MSD of P1-A3-2.0 (lab # 499748-005); the LCS was within limits, and the associated RPD was within limits.
- No other analytical problems were encountered.



4999748

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Email: TRKlitzke@gslenv.com; AJCleary@gslenv.com; GFredricks@gslenv.com; JPDuffield@gslenv.com		PROJECT NO.: 6272 LAB CONTACT: Sophia Baughman SAMPLER(S): Allison Cleary & Gabrielle Fredericks	
LABORATORY: Enthalpy Analytical, Berkeley, CA TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.			
SPECIAL INSTRUCTIONS:		Unpreserved Preserved Field Filtered			
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
	P4 AS - 2.0	1/10/24	1516	Soil	1
	P4 AS - 3.0	1/10/24	1520		
	P4 AS - 4.0	1/10/24	1526		
	P1-AE - 2.0	1/11/24	0852	Soil	1
	P1-A2 - 3.0		0900		
	P1-A2 - 4.0		0907		
	DUP-01-011/2024				
	P1-A3 - 2.0		0923		
	P1-A3 - 3.0		0932		
	P1-A3 - 4.0		0935		
	P1-A4 - 2.0		1036		
	P1-A4 - 3.0		1042		
	P1-A4 - 4.0		1048		
	P1-AS - 2.0	1/11/24	1127		
	P1-AS - 3.0	1/11/24	1131	Soil	1
Relinquished by: (Signature) <i>Gabrielle Fredericks</i>		Received by: (Signature) <i>[Signature]</i>		Date: 1-11-24 Time: 1537	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 1/22/24 Time: 0940	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 1/22/24 Time: 0940	



499748

FROM: GSI Environmental Inc. 2000 Powell St, Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272									
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman									
GLOBAL ID: N/A		Emails: TRKlitzke@gstenv.com; AJCleary@gstenv.com; GFredericks@gstenv.com; JPDuffield@gstenv.com		SAMPLER(S) (PRINT): Allison Cleary & Gabrielle Fredericks									
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES											
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Please check box or fill in blank as needed.											
SPECIAL INSTRUCTIONS:		Field Filtered	Preserved	Unpreserved									
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPH/d/mo (8015M)	HOLD
	P1-A5-4.0	1/11/24	1136	Soil	1	X	X	X					X
	P4-A2-2.0	1/10/24	1021			X	X	X					X
	P4-A2-3.0	1/10/24	1040			X	X	X					X
	P4-A2-4.0	1/10/24	1048			X	X	X					X
	P1-A6-2.0	1/11/24	1152			X							X
	P1-A6-3.0	1/11/24	1157			X							X
	P1-A6-4.0	1/11/24	1202							X	X	X	
	P1-A7-1.0	1/11/24	1325							X	X	X	
	P1-A7-2.5	1/11/24	1330							X	X	X	
	P1-A7-4.0	1/11/24	1338							X	X	X	
	P1-A7-5.5	1/11/24	1342							X	X	X	
	P1-A8-1.0	1/11/24	1353							X	X	X	
	P1-A8-2.5	1/11/24	1400							X	X	X	
	P1-A8-4.0	1/11/24	1408							X	X	X	
	P1-A8-5.5	1/11/24	1413							X	X	X	
Relinquished by: (Signature) Gabrielle Fredericks		Date: 1-11-24		Time: 17:14		Received by: (Signature)		Date: 1-11-24		Time: 15:37			
Relinquished by: (Signature)		Date: 1-11-24		Time: 09:40		Received by: (Signature)		Date: 1-12-24		Time: 09:40			
Relinquished by: (Signature)		Date: 1-11-24		Time: 17:14		Received by: (Signature)		Date: 1-12-24		Time: 09:40			

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1.11.24 Login # 499748 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1.11.24 By (print) Jade Peterson (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 2 Temp (°C): #1: 3.8 #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____			/
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?			/
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____			/

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)	/		
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Date Logged 1.11.24 By (print) Jade Peterson (sign) [Signature]
 Date Labeled 1-11-24 By (print) Jade Peterson (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: GSI Environmental, Inc. Project: Berkeley Trackbed to Park
 Date Received: 01/12/24 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 3.9 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: Southwest Airlines

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.1 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
499748

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: JAN 12 2024

SOUTHWEST AIRLINES

Printed on:
17 JAN 19:14

526 OAK 9774 0366



SNA				PC#	3
				OF	7
				DG	G
				LOT WT	328 LB
				(148.8 KG)	
OAK	WN 2652	12 JAN	07:30		
STN	FLT	DATE	ETD	LOT 01	



PC ID: 0003
PC WT: 47LB

526 97740366 0003

S

2.1 / 3.9

Analysis Results for 499748

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499748
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/11/24

Sample ID: P1-A2-2.0 **Lab ID: 499748-001** **Collected: 01/11/24 08:52**
Matrix: Soil

499748-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	8.0		mg/Kg	0.99	0.99	330471	01/13/24	01/15/24	RPS

Sample ID: P1-A2-3.0 **Lab ID: 499748-002** **Collected: 01/11/24 09:00**
Matrix: Soil

499748-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.5		mg/Kg	0.97	0.97	330471	01/13/24	01/15/24	RPS

Sample ID: P1-A3-2.0 **Lab ID: 499748-005** **Collected: 01/11/24 09:23**
Matrix: Soil

499748-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.1		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW

Sample ID: P1-A3-3.0 **Lab ID: 499748-006** **Collected: 01/11/24 09:32**
Matrix: Soil

499748-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.5		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW

Sample ID: P1-A4-2.0 **Lab ID: 499748-008** **Collected: 01/11/24 10:36**
Matrix: Soil

499748-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.7		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW

Analysis Results for 499748

Sample ID: P1-A4-3.0	Lab ID: 499748-009	Collected: 01/11/24 10:42
	Matrix: Soil	

499748-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.1		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW

Sample ID: P1-A5-2.0	Lab ID: 499748-011	Collected: 01/11/24 11:27
	Matrix: Soil	

499748-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.8		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW

Sample ID: P1-A5-3.0	Lab ID: 499748-012	Collected: 01/11/24 11:31
	Matrix: Soil	

499748-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.3		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW

Sample ID: P4-A2-2.0	Lab ID: 499748-014	Collected: 01/10/24 10:21
	Matrix: Soil	

499748-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	16		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Lead	46		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW

Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330473	01/13/24	01/15/24	KAM

Sample ID: P4-A2-3.0	Lab ID: 499748-015	Collected: 01/10/24 10:40
	Matrix: Soil	

499748-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.3		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Lead	6.4		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW

Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330473	01/13/24	01/15/24	KAM

Analysis Results for 499748

Sample ID: P1-A6-2.0	Lab ID: 499748-017	Collected: 01/11/24 11:52
	Matrix: Soil	

499748-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.9		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW

Sample ID: P1-A6-3.0	Lab ID: 499748-018	Collected: 01/11/24 11:57
	Matrix: Soil	

499748-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.0		mg/Kg	0.99	0.99	330484	01/13/24	01/16/24	SBW

Analysis Results for 499748

Sample ID: P1-A7-1.0	Lab ID: 499748-020	Collected: 01/11/24 13:25
Matrix: Soil		

499748-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.96	330484	01/13/24	01/16/24	SBW
Arsenic	8.0		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Barium	160		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Beryllium	ND		mg/Kg	0.48	0.96	330484	01/13/24	01/16/24	SBW
Cadmium	ND		mg/Kg	0.48	0.96	330484	01/13/24	01/16/24	SBW
Chromium	50		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Cobalt	12		mg/Kg	0.48	0.96	330484	01/13/24	01/16/24	SBW
Copper	31		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Lead	34		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Molybdenum	ND		mg/Kg	1.1	0.96	330484	01/13/24	01/16/24	SBW
Nickel	45		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Selenium	ND		mg/Kg	2.9	0.96	330484	01/13/24	01/16/24	SBW
Silver	ND		mg/Kg	0.48	0.96	330484	01/13/24	01/16/24	SBW
Thallium	ND		mg/Kg	2.9	0.96	330484	01/13/24	01/16/24	SBW
Vanadium	58		mg/Kg	0.96	0.96	330484	01/13/24	01/16/24	SBW
Zinc	81		mg/Kg	4.8	0.96	330484	01/13/24	01/16/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330473	01/13/24	01/15/24	KAM
Method: EPA 8015M Prep Method: EPA 3580M									
DRO C10-C28	ND		mg/Kg	10	1	330497	01/14/24	01/15/24	SME
ORO C28-C44	ND		mg/Kg	20	1	330497	01/14/24	01/15/24	SME
Surrogates				Limits					
n-Triacontane	105%		%REC	70-130	1	330497	01/14/24	01/15/24	SME
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
beta-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
gamma-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
delta-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Heptachlor	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Aldrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Heptachlor epoxide	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan I	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Diieldrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDE	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan II	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan sulfate	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDD	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin aldehyde	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin ketone	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDT	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Methoxychlor	ND		ug/Kg	9.9	0.99	330495	01/14/24	01/16/24	MES

Analysis Results for 499748

499748-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Toxaphene	ND		ug/Kg	99	0.99	330495	01/14/24	01/16/24	MES
Chlordane (Technical)	ND		ug/Kg	50	0.99	330495	01/14/24	01/16/24	MES
Surrogates				Limits					
TCMX	83%		%REC	23-120	0.99	330495	01/14/24	01/16/24	MES
Decachlorobiphenyl	70%		%REC	24-120	0.99	330495	01/14/24	01/16/24	MES
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Naphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluorene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Phenanthrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Chrysene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Surrogates				Limits					
Nitrobenzene-d5	90%		%REC	27-125	1	330476	01/13/24	01/14/24	TJW
2-Fluorobiphenyl	77%		%REC	30-120	1	330476	01/13/24	01/14/24	TJW
Terphenyl-d14	92%		%REC	33-155	1	330476	01/13/24	01/14/24	TJW

Analysis Results for 499748

Sample ID: P1-A7-2.5	Lab ID: 499748-021	Collected: 01/11/24 13:30
Matrix: Soil		

499748-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.98	330484	01/13/24	01/16/24	SBW
Arsenic	4.1		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Barium	130		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Beryllium	ND		mg/Kg	0.49	0.98	330484	01/13/24	01/16/24	SBW
Cadmium	ND		mg/Kg	0.49	0.98	330484	01/13/24	01/16/24	SBW
Chromium	46		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Cobalt	11		mg/Kg	0.49	0.98	330484	01/13/24	01/16/24	SBW
Copper	20		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Lead	6.0		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Molybdenum	ND		mg/Kg	1.1	0.98	330484	01/13/24	01/16/24	SBW
Nickel	41		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Selenium	ND		mg/Kg	2.9	0.98	330484	01/13/24	01/16/24	SBW
Silver	ND		mg/Kg	0.49	0.98	330484	01/13/24	01/16/24	SBW
Thallium	ND		mg/Kg	2.9	0.98	330484	01/13/24	01/16/24	SBW
Vanadium	55		mg/Kg	0.98	0.98	330484	01/13/24	01/16/24	SBW
Zinc	40		mg/Kg	4.9	0.98	330484	01/13/24	01/16/24	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330473	01/13/24	01/15/24	KAM
Method: EPA 8015M									
Prep Method: EPA 3580M									
DRO C10-C28	ND		mg/Kg	10	1	330497	01/14/24	01/15/24	SME
ORO C28-C44	ND		mg/Kg	20	1	330497	01/14/24	01/15/24	SME
Surrogates				Limits					
n-Triacontane	113%		%REC	70-130	1	330497	01/14/24	01/15/24	SME
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
beta-BHC	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
gamma-BHC	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
delta-BHC	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Heptachlor	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Aldrin	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Heptachlor epoxide	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endosulfan I	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Diieldrin	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
4,4'-DDE	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endrin	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endosulfan II	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endosulfan sulfate	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
4,4'-DDD	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endrin aldehyde	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Endrin ketone	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
4,4'-DDT	ND		ug/Kg	5.0	1	330495	01/14/24	01/16/24	MES
Methoxychlor	ND		ug/Kg	10	1	330495	01/14/24	01/16/24	MES

Analysis Results for 499748

499748-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Toxaphene	ND		ug/Kg	100	1	330495	01/14/24	01/16/24	MES
Chlordane (Technical)	ND		ug/Kg	50	1	330495	01/14/24	01/16/24	MES
Surrogates				Limits					
TCMX	80%		%REC	23-120	1	330495	01/14/24	01/16/24	MES
Decachlorobiphenyl	67%		%REC	24-120	1	330495	01/14/24	01/16/24	MES
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Naphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluorene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Phenanthrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Chrysene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Surrogates				Limits					
Nitrobenzene-d5	106%		%REC	27-125	1	330476	01/13/24	01/14/24	TJW
2-Fluorobiphenyl	91%		%REC	30-120	1	330476	01/13/24	01/14/24	TJW
Terphenyl-d14	109%		%REC	33-155	1	330476	01/13/24	01/14/24	TJW

Analysis Results for 499748

Sample ID: P1-A8-1.0	Lab ID: 499748-024	Collected: 01/11/24 13:53
Matrix: Soil		

499748-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/16/24	SBW
Arsenic	7.5		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Barium	200		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Beryllium	0.49		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Cadmium	0.71		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Chromium	47		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Cobalt	23		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Copper	35		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Lead	54		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Molybdenum	ND		mg/Kg	1.0	0.95	330484	01/13/24	01/16/24	SBW
Nickel	52		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Selenium	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/18/24	SBW
Silver	ND		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Thallium	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/16/24	SBW
Vanadium	63		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Zinc	100		mg/Kg	4.8	0.95	330484	01/13/24	01/16/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330526	01/15/24	01/16/24	KAM
Method: EPA 8015M Prep Method: EPA 3580M									
DRO C10-C28	ND		mg/Kg	10	1	330497	01/14/24	01/15/24	SME
ORO C28-C44	ND		mg/Kg	20	1	330497	01/14/24	01/15/24	SME
Surrogates				Limits					
n-Triacontane	116%		%REC	70-130	1	330497	01/14/24	01/15/24	SME
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
beta-BHC	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
gamma-BHC	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
delta-BHC	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Heptachlor	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Aldrin	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Heptachlor epoxide	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endosulfan I	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Diieldrin	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
4,4'-DDE	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endrin	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endosulfan II	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endosulfan sulfate	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
4,4'-DDD	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endrin aldehyde	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Endrin ketone	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
4,4'-DDT	ND		ug/Kg	4.9	0.98	330495	01/14/24	01/16/24	TRN
Methoxychlor	ND		ug/Kg	9.8	0.98	330495	01/14/24	01/16/24	TRN

Analysis Results for 499748

499748-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Toxaphene	ND		ug/Kg	98	0.98	330495	01/14/24	01/16/24	TRN
Chlordane (Technical)	57		ug/Kg	49	0.98	330495	01/14/24	01/16/24	TRN
Surrogates				Limits					
TCMX	83%		%REC	23-120	0.98	330495	01/14/24	01/16/24	TRN
Decachlorobiphenyl	82%		%REC	24-120	0.98	330495	01/14/24	01/16/24	TRN
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Naphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluorene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Phenanthrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Chrysene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Surrogates				Limits					
Nitrobenzene-d5	89%		%REC	27-125	1	330476	01/13/24	01/14/24	TJW
2-Fluorobiphenyl	83%		%REC	30-120	1	330476	01/13/24	01/14/24	TJW
Terphenyl-d14	96%		%REC	33-155	1	330476	01/13/24	01/14/24	TJW

Analysis Results for 499748

Sample ID: P1-A8-2.5	Lab ID: 499748-025	Collected: 01/11/24 14:00
Matrix: Soil		

499748-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.97	330484	01/13/24	01/16/24	SBW
Arsenic	5.5		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Barium	140		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Beryllium	ND		mg/Kg	0.49	0.97	330484	01/13/24	01/16/24	SBW
Cadmium	ND		mg/Kg	0.49	0.97	330484	01/13/24	01/16/24	SBW
Chromium	40		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Cobalt	11		mg/Kg	0.49	0.97	330484	01/13/24	01/16/24	SBW
Copper	21		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Lead	9.5		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Molybdenum	1.5		mg/Kg	1.1	0.97	330484	01/13/24	01/16/24	SBW
Nickel	40		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Selenium	ND		mg/Kg	2.9	0.97	330484	01/13/24	01/16/24	SBW
Silver	0.51		mg/Kg	0.49	0.97	330484	01/13/24	01/16/24	SBW
Thallium	ND		mg/Kg	2.9	0.97	330484	01/13/24	01/16/24	SBW
Vanadium	57		mg/Kg	0.97	0.97	330484	01/13/24	01/16/24	SBW
Zinc	41		mg/Kg	4.9	0.97	330484	01/13/24	01/16/24	SBW
Method: EPA 7471A									
Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330526	01/15/24	01/16/24	KAM
Method: EPA 8015M									
Prep Method: EPA 3580M									
DRO C10-C28	ND		mg/Kg	9.9	0.99	330497	01/14/24	01/15/24	SME
ORO C28-C44	ND		mg/Kg	20	0.99	330497	01/14/24	01/15/24	SME
Surrogates				Limits					
n-Triacontane	113%		%REC	70-130	0.99	330497	01/14/24	01/15/24	SME
Method: EPA 8081A									
Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
beta-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
gamma-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
delta-BHC	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Heptachlor	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Aldrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Heptachlor epoxide	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan I	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Diieldrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDE	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan II	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endosulfan sulfate	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDD	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin aldehyde	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Endrin ketone	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
4,4'-DDT	ND		ug/Kg	5.0	0.99	330495	01/14/24	01/16/24	MES
Methoxychlor	ND		ug/Kg	9.9	0.99	330495	01/14/24	01/16/24	MES

Analysis Results for 499748

499748-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Toxaphene	ND		ug/Kg	99	0.99	330495	01/14/24	01/16/24	MES
Chlordane (Technical)	ND		ug/Kg	50	0.99	330495	01/14/24	01/16/24	MES
Surrogates				Limits					
TCMX	78%		%REC	23-120	0.99	330495	01/14/24	01/16/24	MES
Decachlorobiphenyl	64%		%REC	24-120	0.99	330495	01/14/24	01/16/24	MES
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Naphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluorene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Phenanthrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Chrysene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Surrogates				Limits					
Nitrobenzene-d5	95%		%REC	27-125	1	330476	01/13/24	01/14/24	TJW
2-Fluorobiphenyl	83%		%REC	30-120	1	330476	01/13/24	01/14/24	TJW
Terphenyl-d14	101%		%REC	33-155	1	330476	01/13/24	01/14/24	TJW

Analysis Results for 499748

Sample ID: DUP-02-01112024

Lab ID: 499748-028

Collected: 01/11/24

Matrix: Soil

499748-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/16/24	SBW
Arsenic	6.1		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Barium	170		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Beryllium	ND		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Cadmium	ND		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Chromium	48		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Cobalt	14		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Copper	33		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Lead	47		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Molybdenum	ND		mg/Kg	1.0	0.95	330484	01/13/24	01/16/24	SBW
Nickel	46		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Selenium	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/16/24	SBW
Silver	ND		mg/Kg	0.48	0.95	330484	01/13/24	01/16/24	SBW
Thallium	ND		mg/Kg	2.9	0.95	330484	01/13/24	01/16/24	SBW
Vanadium	58		mg/Kg	0.95	0.95	330484	01/13/24	01/16/24	SBW
Zinc	95		mg/Kg	4.8	0.95	330484	01/13/24	01/16/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	330526	01/15/24	01/16/24	KAM
Method: EPA 8015M Prep Method: EPA 3580M									
DRO C10-C28	11		mg/Kg	9.9	0.99	330497	01/14/24	01/16/24	SME
ORO C28-C44	ND		mg/Kg	20	0.99	330497	01/14/24	01/16/24	SME
Surrogates				Limits					
n-Triacontane	124%		%REC	70-130	0.99	330497	01/14/24	01/16/24	SME
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
beta-BHC	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
gamma-BHC	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
delta-BHC	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Heptachlor	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Aldrin	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Heptachlor epoxide	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endosulfan I	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Diieldrin	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
4,4'-DDE	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endrin	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endosulfan II	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endosulfan sulfate	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
4,4'-DDD	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endrin aldehyde	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Endrin ketone	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
4,4'-DDT	ND		ug/Kg	5.1	1	330495	01/14/24	01/16/24	MES
Methoxychlor	ND		ug/Kg	10	1	330495	01/14/24	01/16/24	MES

Analysis Results for 499748

499748-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Toxaphene	ND		ug/Kg	100	1	330495	01/14/24	01/16/24	MES
Chlordane (Technical)	ND		ug/Kg	51	1	330495	01/14/24	01/16/24	MES
Surrogates				Limits					
TCMX	81%		%REC	23-120	1	330495	01/14/24	01/16/24	MES
Decachlorobiphenyl	66%		%REC	24-120	1	330495	01/14/24	01/16/24	MES
Method: EPA 8270C-SIM									
Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
2-Methylnaphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Naphthalene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Acenaphthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluorene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Phenanthrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Fluoranthene	13		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Pyrene	13		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Chrysene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(b)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(k)fluoranthene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(a)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	330476	01/13/24	01/14/24	TJW
Surrogates				Limits					
Nitrobenzene-d5	89%		%REC	27-125	1	330476	01/13/24	01/14/24	TJW
2-Fluorobiphenyl	79%		%REC	30-120	1	330476	01/13/24	01/14/24	TJW
Terphenyl-d14	97%		%REC	33-155	1	330476	01/13/24	01/14/24	TJW

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1120057	Batch: 330471
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120057 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120058	Batch: 330471
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120058 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	90.57	100.0	mg/Kg	91%		80-120

Type: Matrix Spike	Lab ID: QC1120059	Batch: 330471
Matrix (Source ID): Soil (499680-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120059 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	95.76	2.160	99.01	mg/Kg	95%		75-125	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1120060	Batch: 330471
Matrix (Source ID): Soil (499680-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120060 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	96.97	2.160	97.09	mg/Kg	98%		75-125	3	35	0.97

Type: Post Digest Spike	Lab ID: QC1120061	Batch: 330471
Matrix (Source ID): Soil (499680-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120061 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	108.3	2.160	95.24	mg/Kg	111%		75-125	0.95

Batch QC

Type: Blank	Lab ID: QC1120118	Batch: 330484
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120118 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	01/13/24	01/15/24
Arsenic	ND		mg/Kg	1.0	01/13/24	01/15/24
Barium	ND		mg/Kg	1.0	01/13/24	01/15/24
Beryllium	ND		mg/Kg	0.50	01/13/24	01/15/24
Cadmium	ND		mg/Kg	0.50	01/13/24	01/15/24
Chromium	ND		mg/Kg	1.0	01/13/24	01/15/24
Cobalt	ND		mg/Kg	0.50	01/13/24	01/15/24
Copper	ND		mg/Kg	1.0	01/13/24	01/15/24
Lead	ND		mg/Kg	1.0	01/13/24	01/15/24
Molybdenum	ND		mg/Kg	1.1	01/13/24	01/15/24
Nickel	ND		mg/Kg	1.0	01/13/24	01/15/24
Selenium	ND		mg/Kg	3.0	01/13/24	01/15/24
Silver	ND		mg/Kg	0.50	01/13/24	01/15/24
Thallium	ND		mg/Kg	3.0	01/13/24	01/15/24
Vanadium	ND		mg/Kg	1.0	01/13/24	01/15/24
Zinc	ND		mg/Kg	5.0	01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120119	Batch: 330484
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120119 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	100.6	100.0	mg/Kg	101%		80-120
Arsenic	95.48	100.0	mg/Kg	95%		80-120
Barium	96.64	100.0	mg/Kg	97%		80-120
Beryllium	96.65	100.0	mg/Kg	97%		80-120
Cadmium	97.44	100.0	mg/Kg	97%		80-120
Chromium	95.58	100.0	mg/Kg	96%		80-120
Cobalt	101.1	100.0	mg/Kg	101%		80-120
Copper	99.31	100.0	mg/Kg	99%		80-120
Lead	100.7	100.0	mg/Kg	101%		80-120
Molybdenum	105.0	100.0	mg/Kg	105%		80-120
Nickel	100.3	100.0	mg/Kg	100%		80-120
Selenium	91.40	100.0	mg/Kg	91%		80-120
Silver	46.94	50.00	mg/Kg	94%		80-120
Thallium	96.67	100.0	mg/Kg	97%		80-120
Vanadium	96.98	100.0	mg/Kg	97%		80-120
Zinc	93.15	100.0	mg/Kg	93%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1120120	Batch: 330484
Matrix (Source ID): Soil (499748-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120120 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	39.47	ND	98.04	mg/Kg	40%	*	75-125	0.98
Arsenic	96.96	5.097	98.04	mg/Kg	94%		75-125	0.98
Barium	245.4	147.4	98.04	mg/Kg	100%		75-125	0.98
Beryllium	95.78	0.5413	98.04	mg/Kg	97%		75-125	0.98
Cadmium	93.73	0.3548	98.04	mg/Kg	95%		75-125	0.98
Chromium	152.3	54.07	98.04	mg/Kg	100%		75-125	0.98
Cobalt	107.5	15.58	98.04	mg/Kg	94%		75-125	0.98
Copper	128.0	27.94	98.04	mg/Kg	102%		75-125	0.98
Lead	103.0	10.29	98.04	mg/Kg	95%		75-125	0.98
Molybdenum	98.59	ND	98.04	mg/Kg	101%		75-125	0.98
Nickel	152.4	60.96	98.04	mg/Kg	93%		75-125	0.98
Selenium	90.86	2.842	98.04	mg/Kg	90%		75-125	0.98
Silver	47.94	0.4009	49.02	mg/Kg	97%		75-125	0.98
Thallium	93.09	ND	98.04	mg/Kg	95%		75-125	0.98
Vanadium	164.2	61.48	98.04	mg/Kg	105%		75-125	0.98
Zinc	139.9	51.08	98.04	mg/Kg	91%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1120121	Batch: 330484
Matrix (Source ID): Soil (499748-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120121 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Antimony	40.41	ND	99.01	mg/Kg	41%	*	75-125	1	41	0.99
Arsenic	99.70	5.097	99.01	mg/Kg	96%		75-125	2	35	0.99
Barium	241.3	147.4	99.01	mg/Kg	95%		75-125	2	20	0.99
Beryllium	98.95	0.5413	99.01	mg/Kg	99%		75-125	2	20	0.99
Cadmium	96.85	0.3548	99.01	mg/Kg	97%		75-125	2	20	0.99
Chromium	158.0	54.07	99.01	mg/Kg	105%		75-125	3	20	0.99
Cobalt	109.3	15.58	99.01	mg/Kg	95%		75-125	1	20	0.99
Copper	132.1	27.94	99.01	mg/Kg	105%		75-125	2	20	0.99
Lead	105.8	10.29	99.01	mg/Kg	96%		75-125	2	20	0.99
Molybdenum	102.4	ND	99.01	mg/Kg	103%		75-125	3	20	0.99
Nickel	150.8	60.96	99.01	mg/Kg	91%		75-125	2	20	0.99
Selenium	93.72	2.842	99.01	mg/Kg	92%		75-125	2	20	0.99
Silver	49.55	0.4009	49.50	mg/Kg	99%		75-125	2	20	0.99
Thallium	95.80	ND	99.01	mg/Kg	97%		75-125	2	20	0.99
Vanadium	167.0	61.48	99.01	mg/Kg	107%		75-125	1	20	0.99
Zinc	143.4	51.08	99.01	mg/Kg	93%		75-125	2	20	0.99

Batch QC

Type: Post Digest Spike	Lab ID: QC1120122	Batch: 330484
Matrix (Source ID): Soil (499748-005)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120122 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	100.9	ND	95.24	mg/Kg	106%		75-125	0.95
Arsenic	103.3	5.097	95.24	mg/Kg	103%		75-125	0.95
Barium	242.8	147.4	95.24	mg/Kg	100%		75-125	0.95
Beryllium	100.5	0.5413	95.24	mg/Kg	105%		75-125	0.95
Cadmium	99.23	0.3548	95.24	mg/Kg	104%		75-125	0.95
Chromium	150.4	54.07	95.24	mg/Kg	101%		75-125	0.95
Cobalt	116.2	15.58	95.24	mg/Kg	106%		75-125	0.95
Copper	133.8	27.94	95.24	mg/Kg	111%		75-125	0.95
Lead	110.7	10.29	95.24	mg/Kg	105%		75-125	0.95
Molybdenum	111.8	ND	95.24	mg/Kg	117%		75-125	0.95
Nickel	158.9	60.96	95.24	mg/Kg	103%		75-125	0.95
Selenium	97.79	2.842	95.24	mg/Kg	100%		75-125	0.95
Silver	50.99	0.4009	47.62	mg/Kg	106%		75-125	0.95
Thallium	102.3	ND	95.24	mg/Kg	107%		75-125	0.95
Vanadium	160.0	61.48	95.24	mg/Kg	103%		75-125	0.95
Zinc	143.9	51.08	95.24	mg/Kg	97%		75-125	0.95

Type: Blank	Lab ID: QC1120071	Batch: 330473
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120071 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120072	Batch: 330473
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120072 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9044	0.8333	mg/Kg	109%		80-120

Type: Matrix Spike	Lab ID: QC1120073	Batch: 330473
Matrix (Source ID): Soil (499680-004)	Method: EPA 7471A	Prep Method: METHOD

QC1120073 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.768	1.102	0.9091	mg/Kg	73%	*	75-125	2.2

Type: Matrix Spike Duplicate	Lab ID: QC1120074	Batch: 330473
Matrix (Source ID): Soil (499680-004)	Method: EPA 7471A	Prep Method: METHOD

QC1120074 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	2.218	1.102	0.9434	mg/Kg	118%		75-125	21*	20	2.3

Batch QC

Type: Blank	Lab ID: QC1120296	Batch: 330526
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120296 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/15/24	01/16/24

Type: Lab Control Sample	Lab ID: QC1120297	Batch: 330526
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120297 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9156	0.8333	mg/Kg	110%		80-120

Type: Matrix Spike	Lab ID: QC1120298	Batch: 330526
Matrix (Source ID): Soil (499748-024)	Method: EPA 7471A	Prep Method: METHOD

QC1120298 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.079	0.05024	0.9091	mg/Kg	113%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC1120299	Batch: 330526
Matrix (Source ID): Soil (499748-024)	Method: EPA 7471A	Prep Method: METHOD

QC1120299 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.038	0.05024	0.8772	mg/Kg	113%		75-125	0	20	1.1

Type: Blank	Lab ID: QC1120170	Batch: 330497
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580M

QC1120170 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	9.9	01/14/24	01/15/24
ORO C28-C44	ND		mg/Kg	20	01/14/24	01/15/24
Surrogates				Limits		
n-Triacontane	73%		%REC	70-130	01/14/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120171	Batch: 330497
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580M

QC1120171 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	278.9	248.8	mg/Kg	112%		76-122
Surrogates						
n-Triacontane	9.090	9.950	mg/Kg	91%		70-130

Batch QC

Type: Matrix Spike	Lab ID: QC1120172	Batch: 330497
Matrix (Source ID): Soil (499772-001)	Method: EPA 8015M	Prep Method: EPA 3580M

QC1120172 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	632.0	441.1	249.0	mg/Kg	77%		62-126	50
Surrogates								
n-Triacontane	20.41		9.960	mg/Kg		DO	70-130	50

Type: Matrix Spike Duplicate	Lab ID: QC1120173	Batch: 330497
Matrix (Source ID): Soil (499772-001)	Method: EPA 8015M	Prep Method: EPA 3580M

QC1120173 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	593.0	441.1	248.1	mg/Kg	61%	*	62-126	6	35	50
Surrogates										
n-Triacontane	20.17		9.926	mg/Kg		DO	70-130			50

Type: Blank	Lab ID: QC1120166	Batch: 330495
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1120166 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
alpha-BHC	ND		ug/Kg	5.0	01/14/24	01/16/24
beta-BHC	ND		ug/Kg	5.0	01/14/24	01/16/24
gamma-BHC	ND		ug/Kg	5.0	01/14/24	01/16/24
delta-BHC	ND		ug/Kg	5.0	01/14/24	01/16/24
Heptachlor	ND		ug/Kg	5.0	01/14/24	01/16/24
Aldrin	ND		ug/Kg	5.0	01/14/24	01/16/24
Heptachlor epoxide	ND		ug/Kg	5.0	01/14/24	01/16/24
Endosulfan I	ND		ug/Kg	5.0	01/14/24	01/16/24
Dieldrin	ND		ug/Kg	5.0	01/14/24	01/16/24
4,4'-DDE	ND		ug/Kg	5.0	01/14/24	01/16/24
Endrin	ND		ug/Kg	5.0	01/14/24	01/16/24
Endosulfan II	ND		ug/Kg	5.0	01/14/24	01/16/24
Endosulfan sulfate	ND		ug/Kg	5.0	01/14/24	01/16/24
4,4'-DDD	ND		ug/Kg	5.0	01/14/24	01/16/24
Endrin aldehyde	ND		ug/Kg	5.0	01/14/24	01/16/24
Endrin ketone	ND		ug/Kg	5.0	01/14/24	01/16/24
4,4'-DDT	ND		ug/Kg	5.0	01/14/24	01/16/24
Methoxychlor	ND		ug/Kg	10	01/14/24	01/16/24
Toxaphene	ND		ug/Kg	100	01/14/24	01/16/24
Chlordane (Technical)	ND		ug/Kg	50	01/14/24	01/16/24
Surrogates				Limits		
TCMX	82%		%REC	23-120	01/14/24	01/16/24
Decachlorobiphenyl	72%		%REC	24-120	01/14/24	01/16/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1120167	Batch: 330495
Matrix: Soil	Method: EPA 8081A	Prep Method: EPA 3546

QC1120167 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	44.01	50.51	ug/Kg	87%		22-129
beta-BHC	44.97	50.51	ug/Kg	89%		28-125
gamma-BHC	46.03	50.51	ug/Kg	91%		22-128
delta-BHC	47.13	50.51	ug/Kg	93%		24-131
Heptachlor	43.83	50.51	ug/Kg	87%		18-124
Aldrin	40.25	50.51	ug/Kg	80%		23-120
Heptachlor epoxide	41.67	50.51	ug/Kg	83%		26-120
Endosulfan I	43.27	50.51	ug/Kg	86%		25-126
Dieldrin	41.04	50.51	ug/Kg	81%		23-124
4,4'-DDE	43.51	50.51	ug/Kg	86%		28-121
Endrin	47.52	50.51	ug/Kg	94%		25-127
Endosulfan II	45.18	50.51	ug/Kg	89%		29-121
Endosulfan sulfate	40.64	50.51	ug/Kg	80%		30-121
4,4'-DDD	42.56	50.51	ug/Kg	84%		26-120
Endrin aldehyde	31.85	50.51	ug/Kg	63%		10-120
Endrin ketone	41.59	50.51	ug/Kg	82%	#	28-125
4,4'-DDT	44.39	50.51	ug/Kg	88%		22-125
Methoxychlor	47.92	50.51	ug/Kg	95%		28-130
Surrogates						
TCMX	42.05	50.51	ug/Kg	83%		23-120
Decachlorobiphenyl	36.59	50.51	ug/Kg	72%		24-120

Batch QC

Type: Matrix Spike	Lab ID: QC1120180	Batch: 330495
Matrix (Source ID): Soil (499748-024)	Method: EPA 8081A	Prep Method: EPA 3546

QC1120180 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
alpha-BHC	41.33	ND	51.02	ug/Kg	81%		46-120	1
beta-BHC	48.03	ND	51.02	ug/Kg	94%		41-120	1
gamma-BHC	42.75	ND	51.02	ug/Kg	84%		41-120	1
delta-BHC	43.92	ND	51.02	ug/Kg	86%		38-123	1
Heptachlor	40.25	ND	51.02	ug/Kg	79%		39-120	1
Aldrin	36.99	ND	51.02	ug/Kg	73%		34-120	1
Heptachlor epoxide	37.85	ND	51.02	ug/Kg	74%		43-120	1
Endosulfan I	39.38	ND	51.02	ug/Kg	77%		45-120	1
Dieldrin	38.63	ND	51.02	ug/Kg	76%		45-120	1
4,4'-DDE	41.42	ND	51.02	ug/Kg	74%		34-120	1
Endrin	45.09	ND	51.02	ug/Kg	88%		40-120	1
Endosulfan II	42.17	ND	51.02	ug/Kg	77%		41-120	1
Endosulfan sulfate	39.30	ND	51.02	ug/Kg	77%		42-120	1
4,4'-DDD	43.37	ND	51.02	ug/Kg	85%		41-120	1
Endrin aldehyde	34.77	ND	51.02	ug/Kg	68%		30-120	1
Endrin ketone	39.48	ND	51.02	ug/Kg	77%	#	45-120	1
4,4'-DDT	42.76	ND	51.02	ug/Kg	70%		35-127	1
Methoxychlor	47.20	ND	51.02	ug/Kg	93%		42-136	1
Surrogates								
TCMX	40.32		51.02	ug/Kg	79%		23-120	1
Decachlorobiphenyl	31.93		51.02	ug/Kg	63%		24-120	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1120181	Batch: 330495
Matrix (Source ID): Soil (499748-024)	Method: EPA 8081A	Prep Method: EPA 3546

QC1120181 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
alpha-BHC	40.52	ND	51.02	ug/Kg	79%		46-120	2	30	1
beta-BHC	44.39	ND	51.02	ug/Kg	87%		41-120	8	30	1
gamma-BHC	41.64	ND	51.02	ug/Kg	82%		41-120	3	30	1
delta-BHC	42.69	ND	51.02	ug/Kg	84%		38-123	3	30	1
Heptachlor	39.57	ND	51.02	ug/Kg	78%		39-120	2	30	1
Aldrin	36.43	ND	51.02	ug/Kg	71%		34-120	2	30	1
Heptachlor epoxide	36.61	ND	51.02	ug/Kg	72%		43-120	3	30	1
Endosulfan I	38.15	ND	51.02	ug/Kg	75%		45-120	3	30	1
Dieldrin	36.74	ND	51.02	ug/Kg	72%		45-120	5	30	1
4,4'-DDE	39.18	ND	51.02	ug/Kg	69%		34-120	6	30	1
Endrin	37.87	ND	51.02	ug/Kg	74%		40-120	17	30	1
Endosulfan II	38.81	ND	51.02	ug/Kg	71%		41-120	8	30	1
Endosulfan sulfate	37.23	ND	51.02	ug/Kg	73%		42-120	5	30	1
4,4'-DDD	34.73	ND	51.02	ug/Kg	68%		41-120	22	30	1
Endrin aldehyde	29.97	ND	51.02	ug/Kg	59%		30-120	15	30	1
Endrin ketone	36.64	ND	51.02	ug/Kg	72%	#	45-120	7	30	1
4,4'-DDT	39.76	ND	51.02	ug/Kg	64%		35-127	7	30	1
Methoxychlor	43.27	ND	51.02	ug/Kg	85%		42-136	9	30	1
Surrogates										
TCMX	40.00		51.02	ug/Kg	78%		23-120			1
Decachlorobiphenyl	30.14		51.02	ug/Kg	59%		24-120			1

Batch QC

Type: Blank	Lab ID: QC1120079	Batch: 330476
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1120079 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	01/13/24	01/14/24
2-Methylnaphthalene	ND		ug/Kg	10	01/13/24	01/14/24
Naphthalene	ND		ug/Kg	10	01/13/24	01/14/24
Acenaphthylene	ND		ug/Kg	10	01/13/24	01/14/24
Acenaphthene	ND		ug/Kg	10	01/13/24	01/14/24
Fluorene	ND		ug/Kg	10	01/13/24	01/14/24
Phenanthrene	ND		ug/Kg	10	01/13/24	01/14/24
Anthracene	ND		ug/Kg	10	01/13/24	01/14/24
Fluoranthene	ND		ug/Kg	10	01/13/24	01/14/24
Pyrene	ND		ug/Kg	10	01/13/24	01/14/24
Benzo(a)anthracene	ND		ug/Kg	10	01/13/24	01/14/24
Chrysene	ND		ug/Kg	10	01/13/24	01/14/24
Benzo(b)fluoranthene	ND		ug/Kg	10	01/13/24	01/14/24
Benzo(k)fluoranthene	ND		ug/Kg	10	01/13/24	01/14/24
Benzo(a)pyrene	ND		ug/Kg	10	01/13/24	01/14/24
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	01/13/24	01/14/24
Dibenz(a,h)anthracene	ND		ug/Kg	10	01/13/24	01/14/24
Benzo(g,h,i)perylene	ND		ug/Kg	10	01/13/24	01/14/24
Surrogates				Limits		
Nitrobenzene-d5	98%		%REC	27-125	01/13/24	01/14/24
2-Fluorobiphenyl	93%		%REC	30-120	01/13/24	01/14/24
Terphenyl-d14	98%		%REC	33-155	01/13/24	01/14/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1120080	Batch: 330476
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1120080 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	129.6	199.0	ug/Kg	65%		28-130
2-Methylnaphthalene	150.9	199.0	ug/Kg	76%		33-130
Naphthalene	145.0	199.0	ug/Kg	73%		25-130
Acenaphthylene	148.9	199.0	ug/Kg	75%	b	28-130
Acenaphthene	137.9	199.0	ug/Kg	69%		32-130
Fluorene	148.1	199.0	ug/Kg	74%		35-130
Phenanthrene	153.0	199.0	ug/Kg	77%		35-132
Anthracene	151.0	199.0	ug/Kg	76%		34-136
Fluoranthene	153.7	199.0	ug/Kg	77%		34-139
Pyrene	149.8	199.0	ug/Kg	75%		35-134
Benzo(a)anthracene	168.0	199.0	ug/Kg	84%		30-132
Chrysene	139.5	199.0	ug/Kg	70%		29-130
Benzo(b)fluoranthene	165.1	199.0	ug/Kg	83%		32-137
Benzo(k)fluoranthene	165.6	199.0	ug/Kg	83%		32-130
Benzo(a)pyrene	150.3	199.0	ug/Kg	76%	b	10-138
Indeno(1,2,3-cd)pyrene	182.3	199.0	ug/Kg	92%		34-132
Dibenz(a,h)anthracene	164.0	199.0	ug/Kg	82%		32-130
Benzo(g,h,i)perylene	144.9	199.0	ug/Kg	73%		27-130
Surrogates						
Nitrobenzene-d5	186.7	199.0	ug/Kg	94%		27-125
2-Fluorobiphenyl	148.2	199.0	ug/Kg	74%		30-120
Terphenyl-d14	157.7	199.0	ug/Kg	79%		33-155

Batch QC

Type: Matrix Spike	Lab ID: QC1120081	Batch: 330476
Matrix (Source ID): Soil (499748-024)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1120081 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	148.6	ND	200.0	ug/Kg	74%		25-130	1
2-Methylnaphthalene	171.3	ND	200.0	ug/Kg	86%		32-133	1
Naphthalene	165.9	ND	200.0	ug/Kg	83%		33-130	1
Acenaphthylene	172.5	ND	200.0	ug/Kg	86%	b	14-157	1
Acenaphthene	153.2	ND	200.0	ug/Kg	77%		28-134	1
Fluorene	168.2	ND	200.0	ug/Kg	84%		27-140	1
Phenanthrene	180.4	5.227	200.0	ug/Kg	88%		29-147	1
Anthracene	171.2	ND	200.0	ug/Kg	86%		24-156	1
Fluoranthene	194.4	6.702	200.0	ug/Kg	94%		28-160	1
Pyrene	189.2	6.939	200.0	ug/Kg	91%		26-153	1
Benzo(a)anthracene	208.9	ND	200.0	ug/Kg	104%		26-174	1
Chrysene	159.2	4.617	200.0	ug/Kg	77%		40-139	1
Benzo(b)fluoranthene	206.8	7.010	200.0	ug/Kg	100%		36-164	1
Benzo(k)fluoranthene	190.1	ND	200.0	ug/Kg	95%		36-161	1
Benzo(a)pyrene	183.9	6.411	200.0	ug/Kg	89%	b	18-173	1
Indeno(1,2,3-cd)pyrene	209.0	ND	200.0	ug/Kg	105%		26-154	1
Dibenz(a,h)anthracene	179.3	ND	200.0	ug/Kg	90%		38-132	1
Benzo(g,h,i)perylene	162.8	5.968	200.0	ug/Kg	78%		36-130	1
Surrogates								
Nitrobenzene-d5	208.6		200.0	ug/Kg	104%		27-125	1
2-Fluorobiphenyl	165.6		200.0	ug/Kg	83%		30-120	1
Terphenyl-d14	189.2		200.0	ug/Kg	95%		33-155	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1120082	Batch: 330476
Matrix (Source ID): Soil (499748-024)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1120082 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	137.9	ND	199.0	ug/Kg	69%		25-130	7	35	1
2-Methylnaphthalene	160.1	ND	199.0	ug/Kg	80%		32-133	6	35	1
Naphthalene	149.1	ND	199.0	ug/Kg	75%		33-130	10	35	1
Acenaphthylene	160.3	ND	199.0	ug/Kg	81%	b	14-157	7	35	1
Acenaphthene	111.7	ND	199.0	ug/Kg	56%		28-134	31	35	1
Fluorene	124.0	ND	199.0	ug/Kg	62%		27-140	30	35	1
Phenanthrene	174.3	5.227	199.0	ug/Kg	85%		29-147	3	35	1
Anthracene	163.6	ND	199.0	ug/Kg	82%		24-156	4	35	1
Fluoranthene	188.8	6.702	199.0	ug/Kg	92%		28-160	2	35	1
Pyrene	184.0	6.939	199.0	ug/Kg	89%		26-153	2	35	1
Benzo(a)anthracene	201.0	ND	199.0	ug/Kg	101%		26-174	3	35	1
Chrysene	151.4	4.617	199.0	ug/Kg	74%		40-139	5	35	1
Benzo(b)fluoranthene	194.7	7.010	199.0	ug/Kg	94%		36-164	6	35	1
Benzo(k)fluoranthene	181.0	ND	199.0	ug/Kg	91%		36-161	4	35	1
Benzo(a)pyrene	174.0	6.411	199.0	ug/Kg	84%	b	18-173	5	35	1
Indeno(1,2,3-cd)pyrene	200.2	ND	199.0	ug/Kg	101%		26-154	4	35	1
Dibenz(a,h)anthracene	171.8	ND	199.0	ug/Kg	86%		38-132	4	35	1
Benzo(g,h,i)perylene	155.5	5.968	199.0	ug/Kg	75%		36-130	4	35	1
Surrogates										
Nitrobenzene-d5	201.9		199.0	ug/Kg	101%		27-125			1
2-Fluorobiphenyl	152.1		199.0	ug/Kg	76%		30-120			1
Terphenyl-d14	178.8		199.0	ug/Kg	90%		33-155			1

CCV drift outside limits; average CCV drift within limits per method requirements
 * Value is outside QC limits
 DO Diluted Out
 ND Not Detected
 b See narrative



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
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enthalpy.com

Lab Job Number: 499887
Report Level: II
Report Date: 01/29/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 499887
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 01/12/24

Sample ID	Lab ID	Collected	Matrix
P4-A6-2.0	499887-001	01/12/24 08:37	Soil
P4-A6-3.0	499887-002	01/12/24 08:45	Soil
P4-A6-4.0	499887-003	01/12/24 08:55	Soil
P4-A7-2.0	499887-004	01/12/24 08:49	Soil
P4-A7-3.0	499887-005	01/12/24 09:00	Soil
P4-A7-4.0	499887-006	01/12/24 09:08	Soil
P4-A8-2.0	499887-007	01/12/24 09:54	Soil
P4-A8-3.0	499887-008	01/12/24 10:04	Soil
P4-A8-4.0	499887-009	01/12/24 10:10	Soil
P4-A9-2.0	499887-010	01/12/24 09:12	Soil
P4-A9-3.0	499887-011	01/12/24 09:18	Soil
P4-A9-4.0	499887-012	01/12/24 09:23	Soil
DUP-01-01122024	499887-013	01/12/24 00:00	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 499887
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park

Date Received: 01/12/24

This data package contains sample and QC results for nine soil samples, requested for the above referenced project on 01/12/24. The samples were received cold and intact.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.



499887

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park		PROJECT NO.: 6272												
PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Emails: TRKtiff@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		LAB CONTACT: Sophia Baughman		SAMPLER(S): Allison Cleary & Gabrielle Fredericks												
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check, box or fill in blank as needed.														
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																
SPECIAL INSTRUCTIONS:																
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic only (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	Title 22 Metals (6010B/7471A)	OCPs (8081A)	TPH/dm (8015M)	HOLD
		DATE	TIME													
	P4-A6-2.0	1/12/24	0837	Soil	1	X			X	X	X					
	P4-A6-3.0		0845		1	X			X	X	X					
	P4-A6-4.0		0855		1	X			X	X	X					
	P4-A7-2.0		0849		1	X			X	X	X					
	P4-A7-3.0		0900		1	X			X	X	X					
	P4-A7-4.0		0908		1	X			X	X	X					
	P4-A8-2.0		0954		1	X			X	X	X					
	P4-A8-3.0		1004		1	X			X	X	X					
	P4-A8-4.0		1010		1	X			X	X	X					
	P4-A9-2.0		0912		1	X			X	X	X					
	P4-A9-3.0		0918		1	X			X	X	X					
	P4-A9-4.0		0923		1	X			X	X	X					
	DUP-01-01122024				1	X			X	X	X					
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 1/12/24		Date: 1/12/24		Time: 4PM								
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 1/12/24		Date: 1/13/24		Time: 0935								
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date:		Date:		Time:								

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 1.12.24 Login # 499887 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____
 Are custody seals present? No Yes If yes, where? on cooler, on samples, on package
 Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 1.12.24 By (print) Jade Peterson (sign) [Signature]
 Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)
 If no cooler: Sample Temp (°C): _____
 How many coolers? 1 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were Method 5035 sampling containers present? Transferred to freezer @: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all containers arrive unbroken/unopened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any missing / extra samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the container count match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for unpreserved VOAs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are bubbles > 6mm present in VOA samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did any samples / containers require preservation upon receipt?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you document your preservative check in the bench book?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preservative added:
 H2SO4 lot# _____ added to samples _____ Date/Time _____
 HCL lot# _____ added to samples _____ Date/Time _____
 HNO3 lot# _____ added to samples _____ Date/Time _____
 CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

-001 container has no sample time.

Date Logged 1.12.24 By (print) Jade Peterson (sign) [Signature]
 Date Labeled 1.12.24 By (print) Jade Peterson (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: GSI Environmental, Inc.

Project: Berkeley Trackbed to Park

Date Received: 1/13/24

Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 4.7 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____

Cooler Temp (°C): #1: 2.4 #2: _____ #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?	<input checked="" type="checkbox"/>		
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>		
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times) <u>ICW 1/13/24</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

499887

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: [Signature]

Date: JAN 13 2024

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.
931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209

www.enthalpy.com/socal

Sample Acceptance Checklist - Rev 4, 8/8/2017

C2

4.7/2.4

SOUTHWEST AIRLINES

Printed on:
12 JAN 18:57

526 OAK 9778 8810



ONT	PC#	2 OF 5	DG	LOT WT
			G	185 LB (83.9 KG)
OAK	WN 2109	13 JAN	07:15	
STN	FLT	DATE	ETD	LOT 01



PC ID: 0002
PC WT: 37LB

526 97788810 0002

S

Analysis Results for 499887

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 499887
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 01/12/24

Sample ID: P4-A6-2.0 Lab ID: 499887-001 Collected: 01/12/24 08:37
Matrix: Soil

499887-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	8.3		mg/Kg	1.0	1	330485	01/13/24	01/15/24	RPS
Lead	23		mg/Kg	1.0	1	330485	01/13/24	01/15/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A6-3.0 Lab ID: 499887-002 Collected: 01/12/24 08:45
Matrix: Soil

499887-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Lead	5.3		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.14	1	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A7-2.0 Lab ID: 499887-004 Collected: 01/12/24 08:49
Matrix: Soil

499887-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	78		mg/Kg	0.98	0.98	330485	01/13/24	01/16/24	RPS
Lead	31		mg/Kg	0.98	0.98	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.37		mg/Kg	0.14	1	330526	01/15/24	01/16/24	KAM

Analysis Results for 499887

Sample ID: P4-A7-3.0	Lab ID: 499887-005	Collected: 01/12/24 09:00
	Matrix: Soil	

499887-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	8.1		mg/Kg	0.97	0.97	330485	01/13/24	01/16/24	RPS
Lead	5.3		mg/Kg	0.97	0.97	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.17	1.2	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A8-2.0	Lab ID: 499887-007	Collected: 01/12/24 09:54
	Matrix: Soil	

499887-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	110		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Lead	17		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A8-3.0	Lab ID: 499887-008	Collected: 01/12/24 10:04
	Matrix: Soil	

499887-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	85		mg/Kg	0.99	0.99	330485	01/13/24	01/16/24	RPS
Lead	23		mg/Kg	0.99	0.99	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.22		mg/Kg	0.16	1.2	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A8-4.0	Lab ID: 499887-009	Collected: 01/12/24 10:10
	Matrix: Soil	

499887-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.8		mg/Kg	1.0	1	331323	01/24/24	01/25/24	RPS

Analysis Results for 499887

Sample ID: P4-A9-2.0	Lab ID: 499887-010	Collected: 01/12/24 09:12
	Matrix: Soil	

499887-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.0		mg/Kg	0.96	0.96	330485	01/13/24	01/16/24	RPS
Lead	6.1		mg/Kg	0.96	0.96	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330526	01/15/24	01/16/24	KAM

Sample ID: P4-A9-3.0	Lab ID: 499887-011	Collected: 01/12/24 09:18
	Matrix: Soil	

499887-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.0		mg/Kg	0.96	0.96	330485	01/13/24	01/16/24	RPS
Lead	5.8		mg/Kg	0.96	0.96	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.2	330526	01/15/24	01/16/24	KAM

Sample ID: DUP-01-01122024	Lab ID: 499887-013	Collected: 01/12/24
	Matrix: Soil	

499887-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	69		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Lead	20		mg/Kg	1.0	1	330485	01/13/24	01/16/24	RPS
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.18		mg/Kg	0.15	1.1	330526	01/15/24	01/16/24	KAM

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1120123	Batch: 330485
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120123 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/13/24	01/15/24
Lead	ND		mg/Kg	1.0	01/13/24	01/15/24

Type: Lab Control Sample	Lab ID: QC1120124	Batch: 330485
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120124 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	92.75	100.0	mg/Kg	93%		80-120
Lead	103.9	100.0	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1120125	Batch: 330485
Matrix (Source ID): Soil (499887-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120125 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	99.83	8.267	98.04	mg/Kg	93%		75-125	0.98
Lead	110.8	22.51	98.04	mg/Kg	90%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1120126	Batch: 330485
Matrix (Source ID): Soil (499887-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120126 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	100.1	8.267	98.04	mg/Kg	94%		75-125	0	35	0.98
Lead	127.5	22.51	98.04	mg/Kg	107%		75-125	14	20	0.98

Type: Post Digest Spike	Lab ID: QC1120127	Batch: 330485
Matrix (Source ID): Soil (499887-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1120127 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	109.7	8.267	100.0	mg/Kg	101%		75-125	1
Lead	129.7	22.51	100.0	mg/Kg	107%		75-125	1

Type: Blank	Lab ID: QC1122755	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122755 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	01/24/24	01/25/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1122756	Batch: 331323
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122756 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	102.2	100.0	mg/Kg	102%		80-120

Type: Matrix Spike	Lab ID: QC1122757	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122757 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	104.2	4.674	98.04	mg/Kg	102%		75-125	0.98

Type: Matrix Spike Duplicate	Lab ID: QC1122758	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122758 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	104.0	4.674	97.09	mg/Kg	102%		75-125	1	35	0.97

Type: Post Digest Spike	Lab ID: QC1122759	Batch: 331323
Matrix (Source ID): Soil (500608-018)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1122759 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	106.3	4.674	97.09	mg/Kg	105%		75-125	0.97

Type: Blank	Lab ID: QC1120296	Batch: 330526
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120296 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	01/15/24	01/16/24

Type: Lab Control Sample	Lab ID: QC1120297	Batch: 330526
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1120297 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.9156	0.8333	mg/Kg	110%		80-120

Type: Matrix Spike	Lab ID: QC1120298	Batch: 330526
Matrix (Source ID): Soil (499748-024)	Method: EPA 7471A	Prep Method: METHOD

QC1120298 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.079	0.05024	0.9091	mg/Kg	113%		75-125	1.1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1120299	Batch: 330526
Matrix (Source ID): Soil (499748-024)	Method: EPA 7471A	Prep Method: METHOD

QC1120299 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.038	0.05024	0.8772	mg/Kg	113%		75-125	0	20	1.1

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number : 506694
Report Level : II
Report Date : 05/09/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 506694
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 04/18/24

Sample ID	Lab ID	Collected	Matrix
P3-B1D-5.0	506694-001	04/18/24 09:25	Soil
P3-B1D-6.0	506694-002	04/18/24 09:27	Soil
P3-B1D-7.0	506694-003	04/18/24 10:00	Soil
P3-B1D-8.0	506694-004	04/18/24 10:03	Soil
P3-B1D-10.0	506694-005	04/18/24 10:05	Soil
P3-B2D-5.0	506694-006	04/18/24 10:22	Soil
P3-B2D-6.0	506694-007	04/18/24 10:30	Soil
P3-B2D-7.0	506694-008	04/18/24 10:31	Soil
P3-B2D-8.0	506694-009	04/18/24 10:32	Soil
P3-B2D-10.0	506694-010	04/18/24 10:33	Soil
P3-B3D-5.0	506694-011	04/18/24 10:49	Soil
P3-B3D-6.0	506694-012	04/18/24 10:59	Soil
P3-B3D-7.0	506694-013	04/18/24 11:00	Soil
P3-B3D-8.0	506694-014	04/18/24 11:01	Soil
P3-B3D-10.0	506694-015	04/18/24 11:02	Soil
P3-B4D-5.0	506694-016	04/18/24 11:13	Soil
P3-B4D-6.0	506694-017	04/18/24 11:20	Soil
P3-B4D-7.0	506694-018	04/18/24 11:21	Soil
P3-B4D-8.0	506694-019	04/18/24 11:22	Soil
P3-B4D-10.0	506694-020	04/18/24 11:23	Soil
P3-B5D-5.0	506694-021	04/18/24 12:37	Soil
P3-B5D-6.0	506694-022	04/18/24 12:43	Soil
P3-B5D-7.0	506694-023	04/18/24 12:44	Soil
P3-B5D-8.0	506694-024	04/18/24 12:45	Soil
P3-B5D-10.0	506694-025	04/18/24 12:46	Soil
DUP-1-240418	506694-026	04/18/24 12:47	Soil

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 506694
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 04/18/24

Sample ID	Lab ID	Collected	Matrix
P3-B6D-5.0	506694-027	04/18/24 13:00	Soil
P3-B6D-6.0	506694-028	04/18/24 13:03	Soil
P3-B6D-7.0	506694-029	04/18/24 13:04	Soil
P3-B6D-8.0	506694-030	04/18/24 13:05	Soil
P3-B6D-10.0	506694-031	04/18/24 13:06	Soil
P3-B7D-5.0	506694-032	04/18/24 13:30	Soil
P3-B7D-6.0	506694-033	04/18/24 13:36	Soil
P3-B7D-7.0	506694-034	04/18/24 13:37	Soil
P3-B7D-8.0	506694-035	04/18/24 13:38	Soil
P3-B7D-10.0	506694-036	04/18/24 13:39	Soil
P3-B8D-5.0	506694-037	04/18/24 13:53	Soil
P3-B8D-6.0	506694-038	04/18/24 13:56	Soil
P3-B8D-7.0	506694-039	04/18/24 13:57	Soil
P3-B8D-8.0	506694-040	04/18/24 13:58	Soil
P3-B8D-10.0	506694-041	04/18/24 13:59	Soil
DUP-2-240418	506694-042	04/18/24 14:00	Soil
P3-B9D-5.0	506694-043	04/18/24 14:13	Soil
P3-B9D-6.0	506694-044	04/18/24 14:18	Soil
P3-B9D-7.0	506694-045	04/18/24 14:19	Soil
P3-B9D-8.0	506694-046	04/18/24 14:20	Soil
P3-B9D-10.0	506694-047	04/18/24 14:21	Soil
P3-T1-1.0	506694-048	04/18/24 14:55	Soil
P3-T1-1.5	506694-049	04/18/24 14:57	Soil
P3-T1-2.0	506694-050	04/18/24 14:58	Soil
DUP-3-240418	506694-051	04/18/24 14:56	Soil
P3-T2-1.0	506694-052	04/18/24 14:38	Soil

Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 506694
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 04/18/24

Sample ID	Lab ID	Collected	Matrix
P3-T2-1.5	506694-053	04/18/24 14:39	Soil
P3-T2-2.0	506694-054	04/18/24 14:40	Soil
P3-T3-1.0	506694-055	04/18/24 15:00	Soil
P3-T3-1.5	506694-056	04/18/24 15:01	Soil
P3-T3-2.0	506694-057	04/18/24 15:02	Soil
P3-T4-1.0	506694-058	04/18/24 14:42	Soil
P3-T4-1.5	506694-059	04/18/24 14:43	Soil
P3-T4-2.0	506694-060	04/18/24 14:44	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 506694
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park

Date Received: 04/18/24

- This data package contains sample and QC results for twenty soil samples, requested for the above referenced project on 04/18/24. The samples were received cold and intact.
- Report reissued 05.09.2024 with additional results.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- High response was observed for benzo(g,h,i)perylene in the CCV analyzed 04/25/24 11:55; affected data was qualified with "b".
- High response was observed for benzo(g,h,i)perylene in the CCV analyzed 04/26/24 13:42; affected data was qualified with "b".
- A number of samples were diluted due to the dark and viscous nature of the sample extracts.
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- High recovery was observed for lead in the MSD of P3-T3-1.0 (lab # 506694-055); the LCS was within limits. High RPD was also observed for lead in the MS/MSD of P3-T3-1.0 (lab # 506694-055).
- No other analytical problems were encountered.



506694

FROM: GSI Environmental Inc.
2000 Powell St. Suite 820
Emeryville, CA 94608

PROJECT NAME: Berkeley Truckbed to Park

PROJECT NO.: 6272

PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield
Emails: TRKflitzke@gslenv.com; AJCleary@gslenv.com; GFredericks@gslenv.com; JPDuffield@gslenv.com

LAB CONTACT: Sophia Baughman

SAMPLER(S) (PRINT): Allison Cleary & Skyler Bowersmith

LABORATORY: Enthalpy Analytical, Berkeley, CA

LABORATORY ID: (510) 463-8484

LABORATORY CONTACT: N/A

TURNAROUND TIME: SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Arsenic (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	HOLD
		DATE	TIME								
	P3-B1d-5.0	4/18/24	0925	Soil	1	X					
	P3-B1d-6.0		0927		1	X					
	P3-B1d-7.0		1000		1	X					
	P3-B1d-8.0		1003		1	X					
	P3-B1d-10.0		1005		1	X					
	P3-B2d-5.0		1022		1	X					
	P3-B2d-6.0		1030		1	X					
	P3-B2d-7.0		1031		1	X					
	P3-B2d-8.0		1032		1	X					
	P3-B2d-10.0		1033		1	X					
	P3-B3d-5.0		1049		1	X					
	P3-B3d-6.0		1059		1	X					
	P3-B3d-7.0		1100		1	X					
	P3-B3d-8.0		1101		1	X					
	P3-B3d-10.0		1102		1	X					

Relinquished by: (Signature) *Wm. Chen* Date: 4/19/24 Time: 14:00

Received by: (Signature) *A. Baughman* Date: 4/18/24 Time: 16:20

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____



506694

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484		PROJECT NAME: Berkeley Truckbed to Park PROJECT NO.: 6272											
LABORATORY: Enthelphy Analytical, Berkeley, CA GLOBAL ID: N/A		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield LAB CONTACT: Sophia Baughman Emails: TRKizke@gsienv.com; AJCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com SAMPLER(S) (PRINT): Allison Cleary & Skyler Bowersmith											
REQUESTED ANALYSES Please check box or fill in blank as needed.													
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD													
SPECIAL INSTRUCTIONS:													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		Field Filtered	Arsenic (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	HOLD
		DATE	TIME			Unpreserved	Preserved						
	P3-B4d-5.0	4/18/24	1113	Soil	1	X			X				
	P3-B4d-6.0		1120		1	X							X
	P3-B4d-7.0		1121		1	X							X
	P3-B4d-8.0		1122		1	X							X
	P3-B4d-10.0		1123		1	X							X
	P3-B5d-5.0		1237		1	X			X				
	P3-B5d-6.0		1243		1	X							X
	P3-B5d-7.0		1244		1	X							X
	P3-B5d-8.0		1245		1	X							X
	P3-B5d-10.0		1246		1	X							X
	DUP-1-240418		1247		1	X							X
	P3-B6d-5.0		1300		1	X			X				
	P3-B6d-6.0		1303		1	X							X
	P3-B6d-7.0		1304		1	X							X
	P3-B6d-8.0		1305		1	X							X
Relinquished by: (Signature) <i>Allison Cleary</i>		Received by: (Signature)				Date: 4/18/24		Time: 1620					
Relinquished by: (Signature)		Received by: (Signature) <i>J. Baughman</i>				Date: 4/22/24		Time: 0930					
Relinquished by: (Signature)		Received by: (Signature)				Date:		Time:					



506694

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608		PROJECT NAME: Berkeley Truckbed to Park		PROJECT NO.: 6272									
TEL: (510) 463-8484		PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield		LAB CONTACT: Sophia Baughman									
GLOBAL ID: N/A		Emails: TRKtiffge@gsienv.com; AUCleary@gsienv.com; GFredericks@gsienv.com; JPDuffield@gsienv.com		SAMPLER(S): Allison Cleary & Skyler Bowersmith (PRINT)									
LABORATORY: Enthalpy Analytical, Berkeley, CA		REQUESTED ANALYSES Please check box or fill in blank as needed.											
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD													
SPECIAL INSTRUCTIONS:													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Arsenic (6010B)	Lead (6010B)	Mercury (7471A)	PAHs (8270C SIM)	HOLD
		DATE	TIME										
	P3-B6d-10.0	4/18/24	1306	Soil	1	X							X
	P3-B7d-5.0		1330		1	X			X				
	P3-B7d-6.0		1336		1	X							X
	P3-B7d-7.0		1337		1	X							X
	P3-B7d-8.0		1338		1	X							X
	P3-B7d-10.0		1339		1	X							X
	P3-B8d-5.0		1353		1	X			X				
	P3-B8d-6.0		1356		1	X							X
	P3-B8d-7.0		1357		1	X							X
	P3-B8d-8.0		1358		1	X							X
	P3-B8d-10.0		1359		1	X							X
	DUP-2-24018		1400		1	X							X
	P3-B9d-5.0		1413		1	X							X
	P3-B9d-6.0		1418		1	X			X				
	P3-B9d-7.0		1419		1	X							X
Relinquished by: (Signature) <i>[Signature]</i>		Date: 4/18/24		Time: 1620		Received by: (Signature) <i>[Signature]</i>		Date: 4/18/24		Time: 1030			
Relinquished by: (Signature) <i>[Signature]</i>		Date: 4/19/24		Time: 1428		Received by: (Signature) <i>[Signature]</i>		Date: 4/19/24		Time: 1030			
Relinquished by: (Signature) <i>[Signature]</i>		Date: 4/19/24		Time: 1428		Received by: (Signature) <i>[Signature]</i>		Date: 4/19/24		Time: 1030			



506694

FROM: GSI Environmental Inc.
 2000 Powell St. Suite 820
 Emeryville, CA 94608

PROJECT NAME: Berkeley Trackbed to Park

PROJECT NO.: 6272

PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield

LAB CONTACT: Sophia Baughman

TRKlitzke@gslenv.com; AJCleary@gslenv.com; GFredericks@gslenv.com; JPDuffield@gslenv.com

SAMPLER(S): Allison Cleary & Skyler Bowersmith (PRINT)

TEL: (510) 463-8484

GLOBAL ID: N/A

LABORATORY: Enthalpy Analytical, Berkeley, CA

REQUESTED ANALYSES
 Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVED		Field Filtered	Arsenic (601B)	Lead (601B)	Mercury (7471A)	PAHs (8270C SIM)	HOLD
		DATE	TIME			Unpreserved	Preserved						
	P3-B9d-8.0	4/18/24	1424	Soil	1	X							
	P3-B9d-10.0	4/18/24	1421		1	X							
	P3-T1-1.0		1455		1	X							
	P3-T1-1.5		1452		1	X							
	P3-T1-2.0		1458		1	X							
	DUP-3-240418		1456		1	X							
	P3-T2-1.0		1438		1	X							
	P3-T2-1.5		1439		1	X							
	P3-T2-2.0		1440		1	X							
	P3-T3-1.0		1500		1	X							
	P3-T3-1.5		1501		1	X							
	P3-T3-2.0		1502		1	X							
	P3-T4-1.0		1442		1	X							
	P3-T4-1.5		1443		1	X							
	P3-T4-2.0		1444		1	X							

Requisitioned by: (Signature) *[Signature]* Date: 4/18/24 Time: 1620

Requisitioned by: (Signature) *[Signature]* Date: 4/20/24 Time: 1030

Requisitioned by: (Signature) *[Signature]* Date: _____ Time: _____

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 4/18/24 Login # 506694 Client: GSI

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 4/18/24 By (print) M (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____		/	

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)			
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			

Preservative added:

- H2SO4 lot# _____ added to samples _____ Date/Time _____
- HCL lot# _____ added to samples _____ Date/Time _____
- HNO3 lot# _____ added to samples _____ Date/Time _____
- CrVI Buffer lot# _____ added to samples _____ Date/Time _____

Section 6: Explanations / Comments

Date Logged 4/18/24 By (print) M (sign) [Signature]
 Date Labeled 4/19/24 By (print) M (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: GSI Environmental Project: Berkeley Trackbed to Park

Date Received: 4/20/24 Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 2 No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 2.8 #2: 2.8 #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam

Paper None Other _____

Cooler Temp (°C): #1: 1.7 #2: 0.8 #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample IDs present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sampling dates & times present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a relinquished signature present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are custody seals present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the containers labeled with the correct preservatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5 Explanations/Comments

506694

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: J. Antigua Date: 4/20/24

SOUTHWEST AIRLINES

Printed on:
19 APR 20:14

526 OAK 1178 1405 

ONT

PC#
13 OF

DG
13 G

LOT WT
675 LB
(306.1 KG)

OAK WN 1426 20 APR 09:10

STN FLT DATE ETD LOT 01



2.8 / 0.8

PC ID: 0006
PC WT: 51LB

S

526 11781405 0006

SOUTHWEST AIRLINES

Printed on:
19 APR 20:14

526 OAK 1178 1405

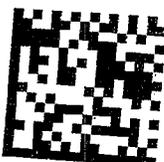


ONT

PC#
6 OF
13
DG
G
LOT WT
675 LB
(306.1 KG)

OAK WN 1426 20 APR 09:10

STN FLT DATE ETD LOT 01



2.8 / 1.7

PC ID: 0008
PC WT: 52LB

526 11781405 0008

S

[External] - Re: 6272 - Enthalpy Data (506694)

Allison J Cleary <AJCleary@gsi-net.com>

Mon 4/29/2024 10:24 AM

To: Sophia Baughman <sophia.baughman@enthalpy.com>

Cc: Jennifer P. Duffield <JPDuffield@gsi-net.com>; Tiffany R. George <TRKlitzke@gsi-net.com>

Hi Sophia,

For this report can we please analyze the following hold samples:

For arsenic only:

P3-B1D-6.0

P3-B7D-6.0

P3-T1-1.5

For lead only:

P3-T4-1.5

Thanks!

Allison J Cleary

GSI Environmental Inc.

O 510.858.0923 | C 510.789.9638

From: Sophia Baughman <sophia.baughman@enthalpy.com>**Sent:** Friday, April 26, 2024 4:32 PM**To:** Allison J Cleary <ajcleary@gsi-net.com>**Subject:** 6272 - Enthalpy Data (506694)

Hi Allison,

Please find attached the following files:

- PDF Deliverable
- Standard Format EDD (506694_standard.zip)

You may also access this data at <https://labline-orange.enthalpy.com/>

Email was also sent to: TRKlitzke@gsi-net.com, gfredericks@gsi-net.com, jpduffield@gsienv.com

Sophia Baughman
Project Manager

2323 Fifth St., Berkeley, CA 94710

O: (510)204-2227

Sophia.Baughman@enthalpy.com

*To help protect the air we breathe, the water we drink, and the soil that feeds us.**Please take a moment to provide [customer feedback](#)**[Terms and Conditions](#) & [Enthalpy Sample Acceptance Policy](#)*

[External] - Re: 6272 - Enthalpy Data (506694)

Allison J Cleary <AJCleary@gsi-net.com>

Fri 5/3/2024 3:27 PM

To: Sophia Baughman <sophia.baughman@enthalpy.com>

Cc: Jennifer P. Duffield <JPDuffield@gsi-net.com>; Tiffany R. George <TRKlitzke@gsi-net.com>

Hi Sophia,

Thank you so much! Please analyze and add the following samples:

- Arsenic only: P3-T1-2.0
- Lead only: P3-T4-2.0

Thanks!!

Allison J Cleary

GSI Environmental Inc.

O 510.858.0923 | C 510.789.9638

From: Sophia Baughman <sophia.baughman@enthalpy.com>**Sent:** Friday, May 3, 2024 12:03 PM**To:** Allison J Cleary <ajcleary@gsi-net.com>**Subject:** 6272 - Enthalpy Data (506694)

Hi Allison,

Updated report with additional samples removed off hold on 04.29.2024

Please find attached the following files:

- PDF Deliverable
- Standard Format EDD (506694_standard_rev1.zip)

You may also access this data at <https://labline-orange.enthalpy.com/>

Email was also sent to: TRKlitzke@gsi-net.com, gfredericks@gsi-net.com, jpduffield@gsienv.com

Sophia Baughman

Project Manager

2323 Fifth St., Berkeley, CA 94710

O: (510)204-2227

Sophia.Baughman@enthalpy.com

*To help protect the air we breathe, the water we drink, and the soil that feeds us.**Please take a moment to provide [customer feedback](#)*[Terms and Conditions](#) & [Enthalpy Sample Acceptance Policy](#)<https://enthalpy.com/news-events/>

Analysis Results for 506694

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 506694
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 04/18/24

Sample ID: P3-B1D-5.0 **Lab ID: 506694-001** **Collected: 04/18/24 09:25**
Matrix: Soil

506694-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	90		mg/Kg	0.95	0.95	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B1D-6.0 **Lab ID: 506694-002** **Collected: 04/18/24 09:27**
Matrix: Soil

506694-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.4		mg/Kg	0.96	0.96	339039	04/29/24	04/30/24	SBW

Sample ID: P3-B2D-5.0 **Lab ID: 506694-006** **Collected: 04/18/24 10:22**
Matrix: Soil

506694-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.9		mg/Kg	0.98	0.98	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B3D-5.0 **Lab ID: 506694-011** **Collected: 04/18/24 10:49**
Matrix: Soil

506694-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.3		mg/Kg	0.96	0.96	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B4D-5.0 **Lab ID: 506694-016** **Collected: 04/18/24 11:13**
Matrix: Soil

506694-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	8.1		mg/Kg	0.98	0.98	338334	04/21/24	04/21/24	SBW

Analysis Results for 506694

Sample ID: P3-B5D-5.0	Lab ID: 506694-021	Collected: 04/18/24 12:37
	Matrix: Soil	

506694-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.8		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B6D-5.0	Lab ID: 506694-027	Collected: 04/18/24 13:00
	Matrix: Soil	

506694-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.8		mg/Kg	0.98	0.98	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B7D-5.0	Lab ID: 506694-032	Collected: 04/18/24 13:30
	Matrix: Soil	

506694-032 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	51		mg/Kg	0.96	0.96	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B7D-6.0	Lab ID: 506694-033	Collected: 04/18/24 13:36
	Matrix: Soil	

506694-033 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.1		mg/Kg	0.95	0.95	339039	04/29/24	04/30/24	SBW

Sample ID: P3-B8D-5.0	Lab ID: 506694-037	Collected: 04/18/24 13:53
	Matrix: Soil	

506694-037 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.2		mg/Kg	0.95	0.95	338334	04/21/24	04/21/24	SBW

Sample ID: P3-B9D-5.0	Lab ID: 506694-043	Collected: 04/18/24 14:13
	Matrix: Soil	

506694-043 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	9.6		mg/Kg	0.96	0.96	338334	04/21/24	04/21/24	SBW

Analysis Results for 506694

Sample ID: P3-T1-1.0	Lab ID: 506694-048	Collected: 04/18/24 14:55
Matrix: Soil		

506694-048 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	46		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW
Lead	50		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.28		mg/Kg	0.15	1.1	338355	04/22/24	04/22/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
2-Methylnaphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Naphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Acenaphthylene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Acenaphthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Fluorene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Phenanthrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(a)anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Chrysene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(b)fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(k)fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(a)pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Surrogates				Limits					
Nitrobenzene-d5	66%		%REC	27-125	50	338638	04/24/24	04/25/24	HQN
2-Fluorobiphenyl	83%		%REC	30-120	50	338638	04/24/24	04/25/24	HQN
Terphenyl-d14	84%		%REC	33-155	50	338638	04/24/24	04/25/24	HQN

Sample ID: P3-T1-1.5	Lab ID: 506694-049	Collected: 04/18/24 14:57
Matrix: Soil		

506694-049 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.0		mg/Kg	0.97	0.97	339039	04/29/24	04/30/24	SBW

Sample ID: P3-T1-2.0	Lab ID: 506694-050	Collected: 04/18/24 14:58
Matrix: Soil		

506694-050 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	27		mg/Kg	0.96	0.96	339478	05/04/24	05/05/24	SBW

Analysis Results for 506694

Sample ID: DUP-3-240418	Lab ID: 506694-051	Collected: 04/18/24 14:56
Matrix: Soil		

506694-051 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	27		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW
Lead	46		mg/Kg	0.97	0.97	338334	04/21/24	04/22/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.20		mg/Kg	0.16	1.1	338355	04/22/24	04/22/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
2-Methylnaphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Naphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Acenaphthylene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Acenaphthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Fluorene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Phenanthrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(a)anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Chrysene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(b)fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(k)fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(a)pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Surrogates				Limits					
Nitrobenzene-d5	99%		%REC	27-125	25	338638	04/24/24	04/25/24	HQN
2-Fluorobiphenyl	93%		%REC	30-120	25	338638	04/24/24	04/25/24	HQN
Terphenyl-d14	84%		%REC	33-155	25	338638	04/24/24	04/25/24	HQN

Analysis Results for 506694

Sample ID: P3-T2-1.0	Lab ID: 506694-052	Collected: 04/18/24 14:38
Matrix: Soil		

506694-052 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.9		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW
Lead	52		mg/Kg	0.97	0.97	338334	04/21/24	04/22/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.16		mg/Kg	0.16	1.1	338355	04/22/24	04/22/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
2-Methylnaphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Naphthalene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Acenaphthylene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Acenaphthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Fluorene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Phenanthrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(a)anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Chrysene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(b)fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(k)fluoranthene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(a)pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	250	25	338638	04/24/24	04/25/24	HQN
Surrogates				Limits					
Nitrobenzene-d5	46%		%REC	27-125	25	338638	04/24/24	04/25/24	HQN
2-Fluorobiphenyl	63%		%REC	30-120	25	338638	04/24/24	04/25/24	HQN
Terphenyl-d14	63%		%REC	33-155	25	338638	04/24/24	04/25/24	HQN

Analysis Results for 506694

Sample ID: P3-T3-1.0	Lab ID: 506694-055	Collected: 04/18/24 15:00
Matrix: Soil		

506694-055 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	7.5		mg/Kg	0.95	0.95	338675	04/24/24	04/25/24	SBW
Lead	43		mg/Kg	0.95	0.95	338675	04/24/24	04/25/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	338717	04/25/24	04/25/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
2-Methylnaphthalene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Naphthalene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Acenaphthylene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Acenaphthene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Fluorene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Phenanthrene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Anthracene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Fluoranthene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Pyrene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Benzo(a)anthracene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Chrysene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Benzo(b)fluoranthene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Benzo(k)fluoranthene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Benzo(a)pyrene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	100	10	338638	04/24/24	04/25/24	HQN
Surrogates				Limits					
Nitrobenzene-d5	59%		%REC	27-125	10	338638	04/24/24	04/25/24	HQN
2-Fluorobiphenyl	62%		%REC	30-120	10	338638	04/24/24	04/25/24	HQN
Terphenyl-d14	59%		%REC	33-155	10	338638	04/24/24	04/25/24	HQN

Analysis Results for 506694

Sample ID: P3-T4-1.0	Lab ID: 506694-058	Collected: 04/18/24 14:42
Matrix: Soil		

506694-058 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	11		mg/Kg	0.98	0.98	338334	04/21/24	04/21/24	SBW
Lead	190		mg/Kg	0.98	0.98	338334	04/21/24	04/22/24	SBW
Method: EPA 7471A Prep Method: METHOD									
Mercury	0.17		mg/Kg	0.16	1.1	338355	04/22/24	04/22/24	KAM
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
2-Methylnaphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Naphthalene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Acenaphthylene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Acenaphthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Fluorene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Phenanthrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(a)anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Chrysene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(b)fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(k)fluoranthene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(a)pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Dibenz(a,h)anthracene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Benzo(g,h,i)perylene	ND		ug/Kg	500	50	338638	04/24/24	04/25/24	HQN
Surrogates				Limits					
Nitrobenzene-d5	55%		%REC	27-125	50	338638	04/24/24	04/25/24	HQN
2-Fluorobiphenyl	69%		%REC	30-120	50	338638	04/24/24	04/25/24	HQN
Terphenyl-d14	69%		%REC	33-155	50	338638	04/24/24	04/25/24	HQN

Sample ID: P3-T4-1.5	Lab ID: 506694-059	Collected: 04/18/24 14:43
Matrix: Soil		

506694-059 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	88		mg/Kg	0.98	0.98	339039	04/29/24	04/30/24	SBW

Sample ID: P3-T4-2.0	Lab ID: 506694-060	Collected: 04/18/24 14:44
Matrix: Soil		

506694-060 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	170		mg/Kg	0.98	0.98	339478	05/04/24	05/05/24	SBW

Analysis Results for 506694

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1146448	Batch: 338334
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146448 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/21/24	04/21/24
Lead	ND		mg/Kg	1.0	04/21/24	04/21/24

Type: Lab Control Sample	Lab ID: QC1146449	Batch: 338334
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146449 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	100.2	100.0	mg/Kg	100%		80-120
Lead	107.0	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1146452	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146452 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	94.34	3.364	95.24	mg/Kg	96%		75-125	0.95
Lead	102.9	9.161	95.24	mg/Kg	98%		75-125	0.95

Type: Matrix Spike Duplicate	Lab ID: QC1146453	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146453 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	88.18	3.364	95.24	mg/Kg	89%		75-125	7	35	0.95
Lead	96.23	9.161	95.24	mg/Kg	91%		75-125	7	20	0.95

Type: Post Digest Spike	Lab ID: QC1146454	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146454 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	105.1	3.364	98.04	mg/Kg	104%		75-125	0.98
Lead	111.8	9.161	98.04	mg/Kg	105%		75-125	0.98

Type: Blank	Lab ID: QC1147630	Batch: 338675
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1147630 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/24/24	04/25/24
Lead	ND		mg/Kg	1.0	04/24/24	04/25/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1147631	Batch: 338675
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1147631 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	98.99	100.0	mg/Kg	99%		80-120
Lead	103.2	100.0	mg/Kg	103%		80-120

Type: Matrix Spike	Lab ID: QC1147632	Batch: 338675
Matrix (Source ID): Soil (506694-055)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1147632 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	101.7	7.536	99.01	mg/Kg	95%		75-125	0.99
Lead	137.4	42.74	99.01	mg/Kg	96%		75-125	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1147633	Batch: 338675
Matrix (Source ID): Soil (506694-055)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1147633 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	97.68	7.536	96.15	mg/Kg	94%		75-125	1	35	0.96
Lead	174.3	42.74	96.15	mg/Kg	137%	*	75-125	26*	20	0.96

Type: Post Digest Spike	Lab ID: QC1147634	Batch: 338675
Matrix (Source ID): Soil (506694-055)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1147634 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.0	7.536	95.24	mg/Kg	97%		75-125	0.95
Lead	133.0	42.74	95.24	mg/Kg	95%		75-125	0.95

Type: Blank	Lab ID: QC1148898	Batch: 339039
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148898 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/29/24	04/30/24
Lead	ND		mg/Kg	1.0	04/29/24	04/30/24

Type: Lab Control Sample	Lab ID: QC1148899	Batch: 339039
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148899 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	97.29	100.0	mg/Kg	97%		80-120
Lead	108.2	100.0	mg/Kg	108%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1148900	Batch: 339039
Matrix (Source ID): Soil (506694-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148900 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	95.82	5.377	95.24	mg/Kg	95%		75-125	0.95
Lead	103.7	6.670	95.24	mg/Kg	102%		75-125	0.95

Type: Matrix Spike Duplicate	Lab ID: QC1148901	Batch: 339039
Matrix (Source ID): Soil (506694-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148901 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	101.3	5.377	98.04	mg/Kg	98%		75-125	3	35	0.98
Lead	110.4	6.670	98.04	mg/Kg	106%		75-125	4	20	0.98

Type: Post Digest Spike	Lab ID: QC1148902	Batch: 339039
Matrix (Source ID): Soil (506694-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148902 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	98.06	5.377	96.15	mg/Kg	96%		75-125	0.96
Lead	103.8	6.670	96.15	mg/Kg	101%		75-125	0.96

Type: Blank	Lab ID: QC1150379	Batch: 339478
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1150379 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	05/04/24	05/05/24
Lead	ND		mg/Kg	1.0	05/04/24	05/05/24

Type: Lab Control Sample	Lab ID: QC1150380	Batch: 339478
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1150380 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	95.54	100.0	mg/Kg	96%		80-120
Lead	104.2	100.0	mg/Kg	104%		80-120

Type: Matrix Spike	Lab ID: QC1150381	Batch: 339478
Matrix (Source ID): Soil (507632-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1150381 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	105.4	5.724	100.0	mg/Kg	100%		75-125	1
Lead	159.9	59.42	100.0	mg/Kg	100%		75-125	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1150382	Batch: 339478
Matrix (Source ID): Soil (507632-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1150382 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	101.2	5.724	98.04	mg/Kg	97%		75-125	2	35	0.98
Lead	142.2	59.42	98.04	mg/Kg	84%		75-125	10	20	0.98

Type: Post Digest Spike	Lab ID: QC1150383	Batch: 339478
Matrix (Source ID): Soil (507632-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1150383 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	107.7	5.724	99.01	mg/Kg	103%		75-125	0.99
Lead	160.6	59.42	99.01	mg/Kg	102%		75-125	0.99

Type: Blank	Lab ID: QC1146552	Batch: 338355
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1146552 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	04/22/24	04/22/24

Type: Lab Control Sample	Lab ID: QC1146553	Batch: 338355
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1146553 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8948	0.8333	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC1146573	Batch: 338355
Matrix (Source ID): Soil (506694-048)	Method: EPA 7471A	Prep Method: METHOD

QC1146573 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.137	0.2846	0.8475	mg/Kg	101%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1146574	Batch: 338355
Matrix (Source ID): Soil (506694-048)	Method: EPA 7471A	Prep Method: METHOD

QC1146574 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.304	0.2846	0.9615	mg/Kg	106%		75-125	4	20	1.2

Batch QC

Type: Blank	Lab ID: QC1147754	Batch: 338717
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1147754 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	04/25/24	04/25/24

Type: Lab Control Sample	Lab ID: QC1147755	Batch: 338717
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC1147755 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8506	0.8333	mg/Kg	102%		80-120

Type: Matrix Spike	Lab ID: QC1147756	Batch: 338717
Matrix (Source ID): Soil (506694-055)	Method: EPA 7471A	Prep Method: METHOD

QC1147756 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.102	0.09864	0.9804	mg/Kg	102%		75-125	1.2

Type: Matrix Spike Duplicate	Lab ID: QC1147757	Batch: 338717
Matrix (Source ID): Soil (506694-055)	Method: EPA 7471A	Prep Method: METHOD

QC1147757 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	1.090	0.09864	0.9615	mg/Kg	103%		75-125	1	20	1.2

Batch QC

Type: Blank	Lab ID: QC1147496	Batch: 338638
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1147496 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	04/24/24	04/25/24
2-Methylnaphthalene	ND		ug/Kg	10	04/24/24	04/25/24
Naphthalene	ND		ug/Kg	10	04/24/24	04/25/24
Acenaphthylene	ND		ug/Kg	10	04/24/24	04/25/24
Acenaphthene	ND		ug/Kg	10	04/24/24	04/25/24
Fluorene	ND		ug/Kg	10	04/24/24	04/25/24
Phenanthrene	ND		ug/Kg	10	04/24/24	04/25/24
Anthracene	ND		ug/Kg	10	04/24/24	04/25/24
Fluoranthene	ND		ug/Kg	10	04/24/24	04/25/24
Pyrene	ND		ug/Kg	10	04/24/24	04/25/24
Benzo(a)anthracene	ND		ug/Kg	10	04/24/24	04/25/24
Chrysene	ND		ug/Kg	10	04/24/24	04/25/24
Benzo(b)fluoranthene	ND		ug/Kg	10	04/24/24	04/25/24
Benzo(k)fluoranthene	ND		ug/Kg	10	04/24/24	04/25/24
Benzo(a)pyrene	ND		ug/Kg	10	04/24/24	04/25/24
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	04/24/24	04/25/24
Dibenz(a,h)anthracene	ND		ug/Kg	10	04/24/24	04/25/24
Benzo(g,h,i)perylene	ND		ug/Kg	10	04/24/24	04/25/24
Surrogates				Limits		
Nitrobenzene-d5	113%		%REC	27-125	04/24/24	04/25/24
2-Fluorobiphenyl	104%		%REC	30-120	04/24/24	04/25/24
Terphenyl-d14	102%		%REC	33-155	04/24/24	04/25/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1147497	Batch: 338638
Matrix: Soil	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1147497 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	168.8	200.3	ug/Kg	84%		28-130
2-Methylnaphthalene	168.9	200.3	ug/Kg	84%		33-130
Naphthalene	174.3	200.3	ug/Kg	87%		25-130
Acenaphthylene	162.9	200.3	ug/Kg	81%		28-130
Acenaphthene	168.8	200.3	ug/Kg	84%		32-130
Fluorene	175.3	200.3	ug/Kg	88%		35-130
Phenanthrene	182.8	200.3	ug/Kg	91%		35-132
Anthracene	185.5	200.3	ug/Kg	93%		34-136
Fluoranthene	186.3	200.3	ug/Kg	93%		34-139
Pyrene	185.1	200.3	ug/Kg	92%		35-134
Benzo(a)anthracene	184.0	200.3	ug/Kg	92%		30-132
Chrysene	184.2	200.3	ug/Kg	92%		29-130
Benzo(b)fluoranthene	183.0	200.3	ug/Kg	91%		32-137
Benzo(k)fluoranthene	202.8	200.3	ug/Kg	101%		32-130
Benzo(a)pyrene	164.7	200.3	ug/Kg	82%		10-138
Indeno(1,2,3-cd)pyrene	217.2	200.3	ug/Kg	108%		34-132
Dibenz(a,h)anthracene	198.0	200.3	ug/Kg	99%		32-130
Benzo(g,h,i)perylene	209.8	200.3	ug/Kg	105%	b	27-130
Surrogates						
Nitrobenzene-d5	191.4	200.3	ug/Kg	96%		27-125
2-Fluorobiphenyl	181.2	200.3	ug/Kg	90%		30-120
Terphenyl-d14	190.3	200.3	ug/Kg	95%		33-155

Batch QC

Type: Matrix Spike	Lab ID: QC1147498	Batch: 338638
Matrix (Source ID): Soil (506694-055)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1147498 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	138.0	ND	198.6	ug/Kg	69%		25-130	9.9
2-Methylnaphthalene	141.8	ND	198.6	ug/Kg	71%		32-133	9.9
Naphthalene	147.1	ND	198.6	ug/Kg	74%		33-130	9.9
Acenaphthylene	129.0	ND	198.6	ug/Kg	65%		14-157	9.9
Acenaphthene	110.9	ND	198.6	ug/Kg	56%		28-134	9.9
Fluorene	113.3	ND	198.6	ug/Kg	57%		27-140	9.9
Phenanthrene	128.8	25.14	198.6	ug/Kg	52%		29-147	9.9
Anthracene	115.7	ND	198.6	ug/Kg	58%		24-156	9.9
Fluoranthene	126.7	ND	198.6	ug/Kg	64%		28-160	9.9
Pyrene	118.8	ND	198.6	ug/Kg	60%		26-153	9.9
Benzo(a)anthracene	114.0	ND	198.6	ug/Kg	57%		26-174	9.9
Chrysene	119.6	14.54	198.6	ug/Kg	53%		40-139	9.9
Benzo(b)fluoranthene	116.4	16.65	198.6	ug/Kg	50%		36-164	9.9
Benzo(k)fluoranthene	117.1	ND	198.6	ug/Kg	59%		36-161	9.9
Benzo(a)pyrene	102.1	ND	198.6	ug/Kg	51%		18-173	9.9
Indeno(1,2,3-cd)pyrene	119.7	ND	198.6	ug/Kg	60%		26-154	9.9
Dibenz(a,h)anthracene	104.1	ND	198.6	ug/Kg	52%		38-132	9.9
Benzo(g,h,i)perylene	119.7	ND	198.6	ug/Kg	60%	b	36-130	9.9
Surrogates								
Nitrobenzene-d5	159.3		198.6	ug/Kg	80%		27-125	9.9
2-Fluorobiphenyl	135.7		198.6	ug/Kg	68%		30-120	9.9
Terphenyl-d14	110.2		198.6	ug/Kg	55%		33-155	9.9

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1147499	Batch: 338638
Matrix (Source ID): Soil (506694-055)	Method: EPA 8270C-SIM	Prep Method: EPA 3546

QC1147499 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	136.3	ND	200.4	ug/Kg	68%		25-130	2	35	10
2-Methylnaphthalene	146.6	ND	200.4	ug/Kg	73%		32-133	2	35	10
Naphthalene	147.2	ND	200.4	ug/Kg	73%		33-130	1	35	10
Acenaphthylene	133.6	ND	200.4	ug/Kg	67%		14-157	3	35	10
Acenaphthene	124.2	ND	200.4	ug/Kg	62%		28-134	10	35	10
Fluorene	128.7	ND	200.4	ug/Kg	64%		27-140	12	35	10
Phenanthrene	148.0	25.14	200.4	ug/Kg	61%		29-147	13	35	10
Anthracene	153.9	ND	200.4	ug/Kg	77%		24-156	27	35	10
Fluoranthene	148.9	ND	200.4	ug/Kg	74%		28-160	15	35	10
Pyrene	140.7	ND	200.4	ug/Kg	70%		26-153	16	35	10
Benzo(a)anthracene	140.3	ND	200.4	ug/Kg	70%		26-174	20	35	10
Chrysene	143.4	14.54	200.4	ug/Kg	64%		40-139	17	35	10
Benzo(b)fluoranthene	148.3	16.65	200.4	ug/Kg	66%		36-164	23	35	10
Benzo(k)fluoranthene	145.8	ND	200.4	ug/Kg	73%		36-161	21	35	10
Benzo(a)pyrene	122.8	ND	200.4	ug/Kg	61%		18-173	18	35	10
Indeno(1,2,3-cd)pyrene	139.8	ND	200.4	ug/Kg	70%		26-154	15	35	10
Dibenz(a,h)anthracene	120.7	ND	200.4	ug/Kg	60%		38-132	14	35	10
Benzo(g,h,i)perylene	137.1	ND	200.4	ug/Kg	68%	b	36-130	13	35	10
Surrogates										
Nitrobenzene-d5	129.5		200.4	ug/Kg	65%		27-125			10
2-Fluorobiphenyl	131.6		200.4	ug/Kg	66%		30-120			10
Terphenyl-d14	128.1		200.4	ug/Kg	64%		33-155			10

* Value is outside QC limits

ND Not Detected

b See narrative



Enthalpy Analytical
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enthalpy.com

Lab Job Number : 506774
Report Level : II
Report Date : 05/03/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105



Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 506774
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 04/19/24

Sample ID	Lab ID	Collected	Matrix
P2-B10D-5.0	506774-001	04/19/24 08:30	Soil
P2-B10D-6.0	506774-002	04/19/24 08:35	Soil
P2-B10D-7.0	506774-003	04/19/24 08:36	Soil
P2-B10D-8.0	506774-004	04/19/24 08:37	Soil
P2-B10D-10.0	506774-005	04/19/24 08:38	Soil
P2-B9D-5.0	506774-006	04/19/24 09:04	Soil
P2-B9D-6.0	506774-007	04/19/24 09:10	Soil
P2-B9D-7.0	506774-008	04/19/24 09:12	Soil
P2-B9D-8.0	506774-009	04/19/24 09:13	Soil
P2-B9D-10.0	506774-010	04/19/24 09:14	Soil
DUP-1-240419	506774-011	04/19/24 09:11	Soil
P2-B7D-5.0	506774-012	04/19/24 09:29	Soil
P2-B7D-6.0	506774-013	04/19/24 09:36	Soil
P2-B7D-7.0	506774-014	04/19/24 09:37	Soil
P2-B7D-8.0	506774-015	04/19/24 09:38	Soil
P2-B7D-10.0	506774-016	04/19/24 09:39	Soil
P2-B6D-5.0	506774-017	04/19/24 09:56	Soil
P2-B6D-6.0	506774-018	04/19/24 10:00	Soil
P2-B6D-7.0	506774-019	04/19/24 10:01	Soil
P2-B6D-8.0	506774-020	04/19/24 10:02	Soil
P2-B6D-10.0	506774-021	04/19/24 10:03	Soil
P2-B4D-5.0	506774-022	04/19/24 10:22	Soil
P2-B4D-6.0	506774-023	04/19/24 10:25	Soil
P2-B4D-7.0	506774-024	04/19/24 10:26	Soil
P2-B4D-8.0	506774-025	04/19/24 10:27	Soil
P2-B4D-10.0	506774-026	04/19/24 10:28	Soil

Sample Summary

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Lab Job #: 506774
Project No: 6272
Location: Berkeley Trackbed to Park
Date Received: 04/19/24

Sample ID	Lab ID	Collected	Matrix
P2-B1D-5.0	506774-027	04/19/24 10:43	Soil
P2-B1D-6.0	506774-028	04/19/24 10:50	Soil
P2-B1D-7.0	506774-029	04/19/24 10:51	Soil
P2-B1D-8.0	506774-030	04/19/24 10:52	Soil
P2-B1D-10.0	506774-031	04/19/24 10:53	Soil
P1-B6D-5.0	506774-032	04/19/24 12:25	Soil
P1-B6D-6.0	506774-033	04/19/24 12:35	Soil
P1-B6D-7.0	506774-034	04/19/24 12:36	Soil
P1-B6D-8.0	506774-035	04/19/24 12:37	Soil
P1-B6D-10.0	506774-036	04/19/24 12:38	Soil
P1-B5D-5.0	506774-037	04/19/24 12:51	Soil
P1-B5D-6.0	506774-038	04/19/24 12:55	Soil
P1-B5D-7.0	506774-039	04/19/24 12:56	Soil
P1-B5D-8.0	506774-040	04/19/24 12:57	Soil
P1-B5D-10.0	506774-041	04/19/24 12:58	Soil
DUP-2-240419	506774-042	04/19/24 12:52	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 506774
Number:
Project No: 6272
Location: Berkeley Trackbed to
Park
Date Received: 04/19/24

- This data package contains sample and QC results for thirteen soil samples, requested for the above referenced project on 04/19/24. The samples were received cold and intact.
- Report reissued 05.03.2024

Metals (EPA 6010B):

No analytical problems were encountered.



506674

506774

FROM: GSI Environmental Inc. 2000 Powell St. Suite 820 Emeryville, CA 94608 TEL: (510) 463-8484 GLOBAL ID: N/A		PROJECT NAME: Berkeley Trackbed to Park PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffield Emails: T.Klitzke@gseinvy.com; A.J.Cleary@gseinvy.com; G.Fredericks@gseinvy.com; JPDuffield@gseinvy.com		PROJECT NO.: 6272 LAB CONTACT: Sophia Baughman SAMPLER(S) (PRINT): Allison Cleary & Skyler Bowersmith																																																																																																																																																																																																																																			
LABORATORY: Enthalpy Analytical, Berkeley, CA TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.																																																																																																																																																																																																																																					
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5-06674

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506674

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 TEL: (510) 463-8484 GLOBAL ID: N/A

PROJECT NAME: Berkeley Trackbed to Park
 PROJECT NO.: 6272

PROJECT CONTACT: Tiffany George, Allison Cleary, Gabrielle Fredericks, Jennifer Duffie
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LAB CONTACT: Sophia Baughman
 SAMPLER(S) (PRINT): Allison Cleary & Skyler Bowersmith

REQUESTED ANALYSES
 Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Status		Arsenic (601B)	Lead (601B)	Mercury (747A)	PAHs (8270C SIM)	HOLD
		DATE	TIME			Unpreserved	Preserved					
	P2-B6d-10.0	4/19/24	1053	Soil	1	X						
	P1-B6d-5.0		1225		1	X						
	P1-B6d-6.0		1235		1	X						
	P1-B6d-7.0		1236		1	X						
	P1-B6d-8.0		1237		1	X						
	P1-B6d-10.0		1238		1	X						
	P1-B5d-5.0		1251		1	X						
	P1-B5d-6.0		1255		1	X						
	P1-B5d-7.0		1256		1	X						
	P1-B5d-8.0		1257		1	X						
	P1-B5d-10.0		1258		1	X						
	DUP-2-240419		1252		1	X						

Relinquished by: (Signature) *[Signature]* Date: 4/19/24 Time: 1401

Relinquished by: (Signature) *[Signature]* Date: 4/20/24 Time: 1030

Relinquished by: (Signature) *[Signature]* Date: 4/20/24 Time: 1620

SAMPLE RECEIPT CHECKLIST



Section 1: General Info

Date Received: 4/19/21 Login # 506674 Client: GST

Section 2: Shipping / Custody

Shipping Info: _____

Are custody seals present? No Yes If yes, where? on cooler, on samples, on package

Custody seals intact on arrival? Yes No N/A Date: _____ # of seals _____ Signature Initials

Section 3: Condition / Packaging

Important: Notify PM if temperature exceeds 6°C or arrive frozen

Date Opened 4/19/21 By (print) me (sign) [Signature]

Samples received on ice directly from the field. Cooling process had begun. (if checked, skip temperatures)

If no cooler: Sample Temp (°C): _____

How many coolers? 2 Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____ #5: _____ #6: _____

Temperature measured using Thermometer ID: _____, or IR Gun # B C

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Section 4: Containers / Labels / Samples

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable?	/		
Were Method 5035 sampling containers present? Transferred to freezer @: _____		/	
Did all containers arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm present in VOA samples?			/
Was the client contacted about this delivery? Contacted: _____ By: _____ Date: _____		/	

Section 5: Preservatives

	YES	NO	N/A
Are the samples appropriately preserved? (if yes, skip the rest of section 5)			
Did any samples / containers require preservation upon receipt?			
Did you document your preservative check in the bench book?			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ Date/Time _____			
<input type="checkbox"/> CrVI Buffer lot# _____ added to samples _____ Date/Time _____			

Section 6: Explanations / Comments

Date Logged 4/19/21 By (print) me (sign) [Signature]
 Date Labeled 4.19.21 By (print) JH (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: GSI Environmental Project: Berkeley Trackbed to Park

Date Received: 4/20/24 Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 4.4 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam

Paper None Other _____

Cooler Temp (°C): #1: 1.8 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample IDs present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sampling dates & times present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a relinquished signature present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are custody seals present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If custody seals are present, were they intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the containers labeled with the correct preservatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5 Explanations/Comments

506774

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time: _____

Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: J. Antognesi Date: 4/20/24

SOUTHWEST AIRLINES

Printed on:
19 APR 20:14

526 OAK 1178 1405



ONT

PC#
2 OF

13

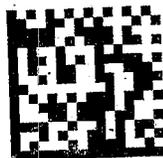
DG
G

LOT WT
675 LB
(306.1 KG)

OAK WN 1426 20 APR 09:10

STN FLT DATE ETD LOT 01

4.4
/
1.8



PC ID: 0002
PC WT: 52LB

S

526 11781405 0002

[External] - Re: 6272 - Enthalpy Data (506774)

Allison J Cleary <AJCleary@gsi-net.com>

Fri 4/26/2024 1:41 PM

To: Sophia Baughman <sophia.baughman@enthalpy.com>

Cc: Jennifer P. Duffield <JPDuffield@gsi-net.com>; Tiffany R. George <TRKlitzke@gsi-net.com>

Hi Sophia,

Could you please run the following samples (for arsenic only) and update the report & EDD accordingly?

P1-B6D-6.0

P2-B9D-6.0

DUP-1-240419

P2-B10D-6.0

Thanks!

Allison J Cleary

GSI Environmental Inc.

O 510.858.0923 | C 510.789.9638

From: Sophia Baughman <sophia.baughman@enthalpy.com>**Sent:** Friday, April 26, 2024 12:50 PM**To:** Allison J Cleary <ajcleary@gsi-net.com>**Subject:** 6272 - Enthalpy Data (506774)

Hi Allison,

Please find attached the following files:

- PDF Deliverable
- Standard Format EDD (506774_standard.zip)

You may also access this data at <https://labline-orange.enthalpy.com/>

Email was also sent to: TRKlitzke@gsi-net.com, gfredericks@gsi-net.com, jpduffield@gsienv.com

Sophia Baughman
Project Manager

2323 Fifth St., Berkeley, CA 94710

O: (510)204-2227

Sophia.Baughman@enthalpy.com

*To help protect the air we breathe, the water we drink, and the soil that feeds us.**Please take a moment to provide [customer feedback](#)*[Terms and Conditions](#) & [Enthalpy Sample Acceptance Policy](#)<https://enthalpy.com/news-events/>

Analysis Results for 506774

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 506774
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Date Received: 04/19/24

Sample ID: P2-B10D-5.0 Lab ID: 506774-001 Collected: 04/19/24 08:30
Matrix: Soil

506774-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	15		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW

Sample ID: P2-B10D-6.0 Lab ID: 506774-002 Collected: 04/19/24 08:35
Matrix: Soil

506774-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	2.7		mg/Kg	0.95	0.95	338942	04/28/24	04/28/24	SBW

Sample ID: P2-B9D-5.0 Lab ID: 506774-006 Collected: 04/19/24 09:04
Matrix: Soil

506774-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	12		mg/Kg	0.96	0.96	338334	04/21/24	04/21/24	SBW

Sample ID: P2-B9D-6.0 Lab ID: 506774-007 Collected: 04/19/24 09:10
Matrix: Soil

506774-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.5		mg/Kg	0.99	0.99	338942	04/28/24	04/28/24	SBW

Sample ID: DUP-1-240419 Lab ID: 506774-011 Collected: 04/19/24 09:11
Matrix: Soil

506774-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	5.8		mg/Kg	0.99	0.99	338942	04/28/24	04/28/24	SBW

Analysis Results for 506774

Sample ID: P2-B7D-5.0	Lab ID: 506774-012	Collected: 04/19/24 09:29
	Matrix: Soil	

506774-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.1		mg/Kg	0.97	0.97	338334	04/21/24	04/21/24	SBW

Sample ID: P2-B6D-5.0	Lab ID: 506774-017	Collected: 04/19/24 09:56
	Matrix: Soil	

506774-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	3.6		mg/Kg	0.95	0.95	338334	04/21/24	04/21/24	SBW

Sample ID: P2-B4D-5.0	Lab ID: 506774-022	Collected: 04/19/24 10:22
	Matrix: Soil	

506774-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.6		mg/Kg	0.99	0.99	338334	04/21/24	04/22/24	SBW

Sample ID: P2-B1D-5.0	Lab ID: 506774-027	Collected: 04/19/24 10:43
	Matrix: Soil	

506774-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	4.4		mg/Kg	0.95	0.95	338335	04/21/24	04/21/24	SBW

Sample ID: P1-B6D-5.0	Lab ID: 506774-032	Collected: 04/19/24 12:25
	Matrix: Soil	

506774-032 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	23		mg/Kg	0.97	0.97	338335	04/21/24	04/21/24	SBW

Sample ID: P1-B6D-6.0	Lab ID: 506774-033	Collected: 04/19/24 12:35
	Matrix: Soil	

506774-033 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Arsenic	6.6		mg/Kg	0.98	0.98	338942	04/28/24	04/28/24	SBW

Analysis Results for 506774

Sample ID: P1-B5D-5.0	Lab ID: 506774-037	Collected: 04/19/24 12:51
	Matrix: Soil	

506774-037 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	5.2		mg/Kg	0.98	0.98	338335	04/21/24	04/21/24	SBW

Sample ID: DUP-2-240419	Lab ID: 506774-042	Collected: 04/19/24 12:52
	Matrix: Soil	

506774-042 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Arsenic	2.8		mg/Kg	0.97	0.97	338335	04/21/24	04/21/24	SBW

Batch QC

Type: Blank	Lab ID: QC1146448	Batch: 338334
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146448 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/21/24	04/21/24

Type: Lab Control Sample	Lab ID: QC1146449	Batch: 338334
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146449 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	100.2	100.0	mg/Kg	100%		80-120

Type: Matrix Spike	Lab ID: QC1146452	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146452 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	94.34	3.364	95.24	mg/Kg	96%		75-125	0.95

Type: Matrix Spike Duplicate	Lab ID: QC1146453	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146453 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	88.18	3.364	95.24	mg/Kg	89%		75-125	7	35	0.95

Type: Post Digest Spike	Lab ID: QC1146454	Batch: 338334
Matrix (Source ID): Soil (506764-021)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146454 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	105.1	3.364	98.04	mg/Kg	104%		75-125	0.98

Type: Blank	Lab ID: QC1146455	Batch: 338335
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146455 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/21/24	04/21/24

Type: Lab Control Sample	Lab ID: QC1146456	Batch: 338335
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146456 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	94.16	100.0	mg/Kg	94%		80-120

Batch QC

Type: Matrix Spike	Lab ID: QC1146457	Batch: 338335
Matrix (Source ID): Soil (506774-027)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146457 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	95.96	4.418	97.09	mg/Kg	94%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1146458	Batch: 338335
Matrix (Source ID): Soil (506774-027)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146458 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Arsenic	95.86	4.418	95.24	mg/Kg	96%		75-125	2	35	0.95

Type: Post Digest Spike	Lab ID: QC1146459	Batch: 338335
Matrix (Source ID): Soil (506774-027)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1146459 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	99.69	4.418	95.24	mg/Kg	100%		75-125	0.95

Type: Blank	Lab ID: QC1148560	Batch: 338942
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148560 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	04/28/24	04/28/24

Type: Lab Control Sample	Lab ID: QC1148561	Batch: 338942
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148561 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	88.41	100.0	mg/Kg	88%		80-120

Type: Matrix Spike	Lab ID: QC1148562	Batch: 338942
Matrix (Source ID): Soil (506774-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148562 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	107.7	2.749	99.01	mg/Kg	106%		75-125	0.99

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1148563	Batch: 338942
Matrix (Source ID): Soil (506774-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148563 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	90.75	2.749	97.09	mg/Kg	91%		75-125	15	35	0.97

Type: Post Digest Spike	Lab ID: QC1148564	Batch: 338942
Matrix (Source ID): Soil (506774-002)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1148564 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	100.4	2.749	95.24	mg/Kg	103%		75-125	0.95

ND Not Detected



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number : 504541
Report Level : II
Report Date : 03/27/2024

Analytical Report *prepared for:*

Tiffany George
GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608

Project: 6272 - Berkeley Trackbed to Park

Authorized for release by:

Sophia Baughman, Project Manager
sophia.baughman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 504541
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Dates Received: 01/08/24-01/12/24

Sample ID	Lab ID	Collected	Matrix
P1-A8-1.0	504541-001	01/11/24 13:53	Soil
P1-B4-2.0	504541-002	01/11/24 10:29	Soil
P1-B5-3.0	504541-003	01/11/24 11:34	Soil
P1-B6-3.0	504541-004	01/11/24 12:03	Soil
P2-A8-2.0	504541-005	01/08/24 10:13	Soil
P2-B10-2.0	504541-006	01/08/24 08:57	Soil
P2-B4-3.0	504541-007	01/08/24 13:52	Soil
P2-B6-2.0	504541-008	01/08/24 12:00	Soil
P2-B7-2.0	504541-009	01/08/24 11:22	Soil
P2-B8-2.0	504541-010	01/08/24 10:26	Soil
P3-A1-2.0	504541-011	01/09/24 08:53	Soil
P3-A1-3.0	504541-012	01/09/24 08:56	Soil
P3-A9-2.0	504541-013	01/09/24 14:25	Soil
P3-B3-2.0	504541-014	01/09/24 10:03	Soil
P3-B4-2.0	504541-015	01/09/24 10:20	Soil
P3-B4-3.0	504541-016	01/09/24 10:23	Soil
P3-B6-2.0	504541-017	01/09/24 13:18	Soil
P3-B7-2.0	504541-018	01/09/24 13:45	Soil
P3-B7-3.0	504541-019	01/09/24 13:48	Soil
P3-B8-3.0	504541-020	01/09/24 14:09	Soil
P3-B8-4.0	504541-021	01/09/24 14:13	Soil
P4-A1-2.0	504541-022	01/10/24 09:25	Soil
P4-A8-2.0	504541-023	01/12/24 09:54	Soil
P4-B10-2.0	504541-024	01/10/24 15:03	Soil
P4-B3-2.0	504541-025	01/10/24 10:27	Soil
DUP-02-01102024	504541-026	01/10/24 00:00	Soil

Case Narrative

GSI Environmental, Inc.
2000 Powell Street
Suite 820
Emeryville, CA 94608
Tiffany George

Lab Job 504541
Number:
Project No: 6272
Location: Berkeley Trackbed to Park
Dates Received: 01/08/24, 01/09/24, 01/10/24, 01/11/24...

- This data package contains sample and QC results for twenty six soil samples, requested for the above referenced project on 03/18/24. The samples were received cold and intact.
- Report revised 03.27.2024 with corrected sample ID for 009.

Metals (EPA 6010B and EPA 7470A) TCLP Leachate:

No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A) WET Leachate:

No analytical problems were encountered.

RE: [External] - Do you still have these samples?

Tiffany R. George <TRKlitzke@gsi-net.com>

Fri 3/15/2024 5:34 PM

To: Sophia Baughman <sophia.baughman@enthalpy.com>; Jennifer P. Duffield <JPDuffield@gsi-net.com>

Hi Sophia,

Will you please have the analyses listed below run on a standard TAT?

Enthalpy Job #	GSI Sample ID	WET	TCLP
499748	P1-A8-1.0	Pb	--
499746	P1-B4-2.0	As	--
499746	P1-B5-3.0	As	As
499746	P1-B6-3.0	As	As
499553	P2-A8-2.0	Pb	Pb
499551	P2-B10-2.0	As, Pb	As, Pb
499551	P2-B4-3.0	As	--
499551	P2-B6-2.0	As, Pb	As
499551	P2-B7-2.0	As, Hg, Pb	As, Hg
499551	P2-B8-2.0	As	As
499646	P3-A1-2.0	Pb, Hg	Hg
499646	P3-A1-3.0	Hg	Hg
499646	P3-A9-2.0	Pb	--
499647	P3-B3-2.0	Pb	--
499647	P3-B4-2.0	Pb	--
499647	P3-B4-3.0	As, Pb	Pb
499647	P3-B6-2.0	As	--
499647	P3-B7-2.0	As, Pb	--
499647	P3-B7-3.0	Pb	--
499647	P3-B8-3.0	As, Pb	Pb
499647	P3-B8-4.0	As	As
499700	P4-A1-2.0	As, Pb	--
499887	P4-A8-2.0	As	As
499723	P4-B10-2.0	Pb, Hg	Pb, Hg
499723	P4-B3-2.0	As	--
499723	DUP-02-01102024	As	--

Let me know if you have any questions.

Thank you!

Tiffany R. George
Senior Scientist

GSI Environmental Inc.

O 510.858.0102 | C 831.227.5144

Analysis Results for 504541

Tiffany George
 GSI Environmental, Inc.
 2000 Powell Street
 Suite 820
 Emeryville, CA 94608

Lab Job #: 504541
 Project No: 6272
 Location: Berkeley Trackbed to Park
 Dates Received: 01/08/24-01/12/24

Sample ID: P1-A8-1.0 Lab ID: 504541-001 Collected: 01/11/24 13:53
Matrix: WET Leachate

504541-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Lead	0.16		mg/L	0.15	10	335864	03/20/24	03/21/24	SBW

Sample ID: P1-B4-2.0 Lab ID: 504541-002 Collected: 01/11/24 10:29
Matrix: WET Leachate

504541-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Arsenic	1.5		mg/L	0.30	10	335864	03/20/24	03/21/24	SBW

Sample ID: P1-B5-3.0 Lab ID: 504541-003 Collected: 01/11/24 11:34

504541-003 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.29		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	2.5		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P1-B6-3.0 Lab ID: 504541-004 Collected: 01/11/24 12:03

504541-004 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.25		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	1.2		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P2-A8-2.0 Lab ID: 504541-005 Collected: 01/08/24 10:13

504541-005 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Lead	ND		mg/L	0.015	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Lead	ND		mg/L	0.15	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Analysis Results for 504541

Sample ID: P2-B10-2.0	Lab ID: 504541-006	Collected: 01/08/24 08:57
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504541-006 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.43		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Lead	0.016		mg/L	0.015	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	1.8		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW
Lead	0.85		mg/L	0.15	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P2-B4-3.0	Lab ID: 504541-007	Collected: 01/08/24 13:52
Matrix: WET Leachate		

504541-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Arsenic	0.91		mg/L	0.30	10	335864	03/20/24	03/21/24	SBW

Sample ID: P2-B6-2.0	Lab ID: 504541-008	Collected: 01/08/24 12:00
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504541-008 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.31		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	3.5		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW
Lead	0.37		mg/L	0.15	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P2-B7-2.0	Lab ID: 504541-009	Collected: 01/08/24 11:22
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504541-009 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.37		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: WET										
Arsenic	10		mg/L	0.30	WET Leachate	10	335923	03/21/24	03/21/24	SBW
Lead	1.1		mg/L	0.15	WET Leachate	10	335923	03/21/24	03/21/24	SBW
Method: EPA 7470A Prep Method: METHOD										
Mercury	ND		mg/L	0.010	TCLP Leachate	10	335794	03/20/24	03/20/24	KAM
Mercury	0.052		mg/L	0.010	WET Leachate	10	335882	03/21/24	03/22/24	KAM

Analysis Results for 504541

Sample ID: P2-B8-2.0	Lab ID: 504541-010	Collected: 01/08/24 10:26
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504541-010 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.078		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	0.76		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P3-A1-2.0	Lab ID: 504541-011	Collected: 01/09/24 08:53
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504541-011 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD										
Lead	0.32		mg/L	0.15	WET Leachate	10	335864	03/20/24	03/21/24	SBW
Method: EPA 7470A Prep Method: METHOD										
Mercury	ND		mg/L	0.010	TCLP Leachate	10	335794	03/20/24	03/20/24	KAM
Mercury	0.030		mg/L	0.010	WET Leachate	10	335882	03/21/24	03/22/24	KAM

Sample ID: P3-A1-3.0	Lab ID: 504541-012	Collected: 01/09/24 08:56
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504541-012 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 7470A Prep Method: METHOD										
Mercury	ND		mg/L	0.010	TCLP Leachate	10	335794	03/20/24	03/20/24	KAM
Mercury	0.012		mg/L	0.010	WET Leachate	10	335882	03/21/24	03/22/24	KAM

Sample ID: P3-A9-2.0	Lab ID: 504541-013	Collected: 01/09/24 14:25
Matrix: WET Leachate		

504541-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Lead	0.27		mg/L	0.15	10	335864	03/20/24	03/21/24	SBW

Sample ID: P3-B3-2.0	Lab ID: 504541-014	Collected: 01/09/24 10:03
Matrix: WET Leachate		

504541-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Lead	0.44		mg/L	0.15	10	335864	03/20/24	03/21/24	SBW

Analysis Results for 504541

Sample ID: P3-B4-2.0	Lab ID: 504541-015	Collected: 01/09/24 10:20
Matrix: WET Leachate		

504541-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: METHOD									
Lead	0.25		mg/L	0.15	10	335864	03/20/24	03/21/24	SBW

Sample ID: P3-B4-3.0	Lab ID: 504541-016	Collected: 01/09/24 10:23
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504541-016 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Lead	0.020		mg/L	0.015	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: METHOD										
Arsenic	0.94		mg/L	0.30	WET Leachate	10	335864	03/20/24	03/21/24	SBW
Lead	0.59		mg/L	0.15	WET Leachate	10	335864	03/20/24	03/21/24	SBW

Sample ID: P3-B6-2.0	Lab ID: 504541-017	Collected: 01/09/24 13:18
Matrix: WET Leachate		

504541-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: WET									
Arsenic	0.80		mg/L	0.30	10	335923	03/21/24	03/21/24	SBW

Sample ID: P3-B7-2.0	Lab ID: 504541-018	Collected: 01/09/24 13:45
Matrix: WET Leachate		

504541-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: WET									
Arsenic	0.79		mg/L	0.30	10	335923	03/21/24	03/21/24	SBW
Lead	0.39		mg/L	0.15	10	335923	03/21/24	03/21/24	SBW

Sample ID: P3-B7-3.0	Lab ID: 504541-019	Collected: 01/09/24 13:48
Matrix: WET Leachate		

504541-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: WET									
Lead	0.25		mg/L	0.15	10	335923	03/21/24	03/21/24	SBW

Analysis Results for 504541

Sample ID: P3-B8-3.0	Lab ID: 504541-020	Collected: 01/09/24 14:09
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504541-020 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Lead	0.016		mg/L	0.015	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: WET										
Arsenic	1.1		mg/L	0.30	WET Leachate	10	335923	03/21/24	03/21/24	SBW
Lead	0.87		mg/L	0.15	WET Leachate	10	335923	03/21/24	03/21/24	SBW

Sample ID: P3-B8-4.0	Lab ID: 504541-021	Collected: 01/09/24 14:13
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504541-021 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.14		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: WET										
Arsenic	1.1		mg/L	0.30	WET Leachate	10	335923	03/21/24	03/21/24	SBW

Sample ID: P4-A1-2.0	Lab ID: 504541-022	Collected: 01/10/24 09:25
Matrix: WET Leachate		

504541-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist	
Method: EPA 6010B Prep Method: WET										
Arsenic	ND		mg/L	0.30	10	335923	03/21/24	03/21/24	SBW	
Lead	ND		mg/L	0.15	10	335923	03/21/24	03/21/24	SBW	

Sample ID: P4-A8-2.0	Lab ID: 504541-023	Collected: 01/12/24 09:54
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504541-023 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Arsenic	0.41		mg/L	0.030	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: WET										
Arsenic	1.2		mg/L	0.30	WET Leachate	10	335923	03/21/24	03/21/24	SBW

Analysis Results for 504541

Sample ID: P4-B10-2.0 Lab ID: 504541-024 Collected: 01/10/24 15:03

504541-024 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3015A										
Lead	0.034		mg/L	0.015	TCLP Leachate	1	335829	03/20/24	03/21/24	SBW
Method: EPA 6010B Prep Method: WET										
Lead	1.3		mg/L	0.15	WET Leachate	10	335923	03/21/24	03/21/24	SBW
Method: EPA 7470A Prep Method: METHOD										
Mercury	ND		mg/L	0.010	TCLP Leachate	10	335794	03/20/24	03/20/24	KAM
Mercury	0.034		mg/L	0.010	WET Leachate	10	335882	03/21/24	03/22/24	KAM

Sample ID: P4-B3-2.0 Lab ID: 504541-025 Collected: 01/10/24 10:27
Matrix: WET Leachate

504541-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: WET									
Arsenic	0.69		mg/L	0.30	10	335923	03/21/24	03/21/24	SBW

Sample ID: DUP-02-01102024 Lab ID: 504541-026 Collected: 01/10/24
Matrix: WET Leachate

504541-026 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: WET									
Arsenic	0.61		mg/L	0.30	10	335923	03/21/24	03/21/24	SBW

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC1137907	Batch: 335829
Matrix: TCLP Leachate	Method: EPA 6010B	Prep Method: EPA 3015A

QC1137907 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/L	0.030	03/20/24	03/21/24
Lead	ND		mg/L	0.015	03/20/24	03/21/24

Type: Lab Control Sample	Lab ID: QC1137908	Batch: 335829
Matrix: TCLP Leachate	Method: EPA 6010B	Prep Method: EPA 3015A

QC1137908 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	1.870	2.000	mg/L	94%		80-120
Lead	1.796	2.000	mg/L	90%		80-120

Type: Matrix Spike	Lab ID: QC1137909	Batch: 335829
Matrix (Source ID): TCLP Leachate (504627-001)	Method: EPA 6010B	Prep Method: EPA 3015A

QC1137909 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	1.953	ND	2.000	mg/L	98%		75-125	1
Lead	1.806	ND	2.000	mg/L	90%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC1137910	Batch: 335829
Matrix (Source ID): TCLP Leachate (504627-001)	Method: EPA 6010B	Prep Method: EPA 3015A

QC1137910 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	1.951	ND	2.000	mg/L	98%		75-125	0	20	1
Lead	1.799	ND	2.000	mg/L	90%		75-125	0	20	1

Type: Blank	Lab ID: QC1138017	Batch: 335864
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: METHOD

QC1138017 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/L	0.30	03/20/24	03/21/24
Lead	ND		mg/L	0.15	03/20/24	03/21/24

Type: Lab Control Sample	Lab ID: QC1138018	Batch: 335864
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: METHOD

QC1138018 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	4.146	4.000	mg/L	104%		80-120
Lead	4.333	4.000	mg/L	108%		80-120

Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC1138019	Batch: 335864
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: METHOD

QC1138019 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Arsenic	4.167	4.000	mg/L	104%		80-120	0	20
Lead	4.342	4.000	mg/L	109%		80-120	0	20

Type: Blank	Lab ID: QC1138020	Batch: 335864
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: METHOD

QC1138020 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/L	0.30	03/20/24	03/21/24
Lead	ND		mg/L	0.15	03/20/24	03/21/24

Type: Blank	Lab ID: QC1138219	Batch: 335923
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: WET

QC1138219 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/L	0.30	03/21/24	03/21/24
Lead	ND		mg/L	0.15	03/21/24	03/21/24

Type: Lab Control Sample	Lab ID: QC1138220	Batch: 335923
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: WET

QC1138220 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	4.130	4.000	mg/L	103%		80-120
Lead	4.357	4.000	mg/L	109%		80-120

Type: Lab Control Sample Duplicate	Lab ID: QC1138221	Batch: 335923
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: WET

QC1138221 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Arsenic	3.988	4.000	mg/L	100%		80-120	3	20
Lead	4.207	4.000	mg/L	105%		80-120	4	20

Type: Blank	Lab ID: QC1138222	Batch: 335923
Matrix: WET Leachate	Method: EPA 6010B	Prep Method: WET

QC1138222 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Arsenic	ND		mg/L	0.30	03/21/24	03/21/24
Lead	ND		mg/L	0.15	03/21/24	03/21/24

Type: Blank	Lab ID: QC1137786	Batch: 335794
Matrix: TCLP Leachate	Method: EPA 7470A	Prep Method: METHOD

QC1137786 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/L	0.010	03/20/24	03/20/24

Batch QC

Type: Lab Control Sample	Lab ID: QC1137787	Batch: 335794
Matrix: TCLP Leachate	Method: EPA 7470A	Prep Method: METHOD

QC1137787 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.04810	0.05000	mg/L	96%		80-120

Type: Matrix Spike	Lab ID: QC1137788	Batch: 335794
Matrix (Source ID): TCLP Leachate (504613-001)	Method: EPA 7470A	Prep Method: METHOD

QC1137788 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.04690	ND	0.05000	mg/L	94%		75-125	10

Type: Matrix Spike Duplicate	Lab ID: QC1137789	Batch: 335794
Matrix (Source ID): TCLP Leachate (504613-001)	Method: EPA 7470A	Prep Method: METHOD

QC1137789 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Mercury	0.04901	ND	0.05000	mg/L	98%		75-125	4	20	10

Type: Blank	Lab ID: QC1138088	Batch: 335882
Matrix: WET Leachate	Method: EPA 7470A	Prep Method: METHOD

QC1138088 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/L	0.010	03/21/24	03/22/24

Type: Blank	Lab ID: QC1138089	Batch: 335882
Matrix: WET Leachate	Method: EPA 7470A	Prep Method: METHOD

QC1138089 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/L	0.010	03/21/24	03/22/24

Type: Lab Control Sample	Lab ID: QC1138090	Batch: 335882
Matrix: WET Leachate	Method: EPA 7470A	Prep Method: METHOD

QC1138090 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.04916	0.05000	mg/L	98%		80-120

Type: Matrix Spike	Lab ID: QC1138091	Batch: 335882
Matrix (Source ID): WET Leachate (504541-012)	Method: EPA 7470A	Prep Method: METHOD

QC1138091 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.06216	0.01231	0.05000	mg/L	100%		75-125	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC1138092	Batch: 335882
Matrix (Source ID): WET Leachate (504541-012)	Method: EPA 7470A	Prep Method: METHOD

QC1138092 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.06175	0.01231	0.05000	mg/L	99%		75-125	1	20	10

ND Not Detected

FINAL ADDITIONAL SOIL INVESTIGATION REPORT
Santa Fe Trackbed to Park
Berkeley, California

APPENDIX D

Data Quality Summary

APPENDIX D
DATA QUALITY SUMMARY
Santa Fe Trackbed to Park
Berkeley, California

The field sampling and analytical data were reviewed to determine the data usability in accordance with guidelines published by USEPA:

- *National Functional Guidelines for Inorganic Superfund Methods Data Review*¹
- *National Functional Guidelines for Organic Superfund Methods Data Review*²

The data usability evaluation included a review of surrogate recovery results, laboratory blank sample results, matrix spike (MS) and matrix spike duplicate (MSD) results, laboratory control sample results and laboratory calibration standards. Data quality issues that resulted in qualification of the data are summarized herein.

As described below, two types of data qualifiers were issued to select data, as follows:

- J indicates the detected result is estimated.
- UJ indicates the non-detected result is estimated.

Metals by Method 6010B and Method 7471A:

The detected lead result from sample P3-T3-1.0 (Lab Job #506694) was issued a “J” qualifier because the percent recovery (%R) from matrix spike duplicate (MSD) was 137% which exceeds the upper laboratory limit of 125%. The %R from the matrix spike (MS) was within the acceptable limits, however the relative percent difference between the MS and MSD was 26 which exceeds the laboratory control limit of 20.

Detected mercury results from Lab Job #499646, Batch 330383, were issued a “J” qualifier because the MS recovery was -155% and the MSD %R was 262%. The RPD between the MS and MSD was 26 which exceeds the laboratory control limit of 20. Associated non-detected results were issued a “UJ” qualifier.

Non-detected antimony results from Lab Job #499748, Batch 330484, were issued a “UJ” qualifier because the MS %R was 40% and the MSD %R was 41%. These values are below the acceptable laboratory control limits of 75-125%.

Non-detected mercury results in from Lab Job #499748, Batch 330473, were issued a “UJ” qualifier because the RPD between the MS and the MSD was 21 which exceeds the acceptable laboratory limit of 20.

¹ USEPA, 2020, National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 542-R-20-006), November.

² USEPA, 2020, National Functional Guidelines for Organic Superfund Methods Data Review (EPA 540-R-20-005), November.