Appendix G Preliminary Environmental Assesment

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PRELIMINARY ENVIRONMENTAL ASSESSMENT

SANTA FE ELEMENTARY SCHOOL EXPANSION PROJECT
PORTERVILLE, TULARE COUNTY, CALIFORNIA
(SITE CODE: 104890)

Prepared for:

Porterville Unified School District
and PlaceWorks

DECEMBER 2024

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

December 23, 2024
Project Number: 2301-3521

Elizabeth “Liz” Tisdale, Project Manager
California Department of Toxic Substances Control
Northern California Schools Unit
8800 Cal Center Drive
Sacramento, California 95826-3200

Subject: Preliminary Environmental Assessment Report
Santa Fe Elementary School Expansion Project
(Project Code: 104890)

Dear Ms. Tisdale:

Padre Associates, Inc. (Padre), on behalf of Porterville Unified School District and PlaceWorks, has prepared this Preliminary Environmental Assessment (PEA) Report for the Santa Fe Elementary School Expansion Project located at 256 and 286 East Orange Avenue in Porterville, Tulare County, California.

The PEA was completed in accordance with the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) approved PEA workplan titled: *Preliminary Environmental Assessment Workplan, Santa Fe Elementary School Expansion Project, Porterville, Tulare County, California (Padre, September 2024).*

The PEA results report will be made available to the public for review and comment pursuant to Option A of the California Education Code (CEC) §17213.1.a (6) (A). If you have any questions or require additional information, please contact the undersigned at (916) 333-5920 ext. 240/250.

Sincerely,
PADRE ASSOCIATES, INC.

Alan Churchill, P.G.
Senior Geologist

Alan J. Klein, R.E.P.A., C.P.E.S.C., QSD
Associate Senior Environmental Scientist

CC: Kevin Holtermann, Facilities, Construction & Operations, Porterville USD
Marianna Zimmerman, Senior Associate I, PlaceWorks
Dwayne Mears, Principal, PlaceWorks

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EXECUTIVE SUMMARY

Padre Associates, Inc. (Padre), on behalf of Porterville Unified School District (District), has prepared this Preliminary Environmental Assessment (PEA) Report for the Santa Fe Elementary School Expansion Project located at 256 & 286 East Orange Avenue in Porterville, Tulare County, California (Project Site).

The District plans to expand the existing Santa Fe Elementary School by adding an eleven-classroom building to house four transitional kindergartens, four pre-kindergarten, and three kindergarten classrooms. The school capacity would increase from approximately 830 students to 1,000 students.

The PEA was conducted in accordance with the document titled: *Preliminary Environmental Assessment Workplan, Santa Fe Elementary School, Expansion Project, 256 and 286 East Orange Avenue, Porterville, Tulare County, California (Site Code: 104890, (Padre, September 2024)*. The California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) approved the PEA workplan in a letter dated September 18, 2024.

The PEA Report will be made available to the public for review and comment pursuant to Option A of the California Education Code (CEC) §17213.1.a (6)(A).

The purpose of the PEA was to establish whether a release or potential release of hazardous substances or naturally occurring material, which would pose a threat to human health via ingestion, dermal contact, and inhalation exposure pathways, exists at the Project Site. Chemicals of potential concern (COPC) identified at the Project Site included total petroleum hydrocarbons (TPH) and metals from a historic railroad track activity; lead, pesticides, and polychlorinated biphenyls (PCBs) from former buildings; and naturally occurring asbestos (NOA) from the weathering and deposition of ultramafic rock outcrops located within 10 miles of the Project Site.

Based on the analytical laboratory results of the initial PEA sampling event, Padre returned to the Project Site on November 19, 2024, and collected step-out soil samples at four locations. At the location of soil sample RR-2 step-out soil samples were collected and analyzed for the presence of TPH-d. At the location of FB-8, and FB-13 step-out soil samples were collected and analyzed for the presence of lead, and at the location of FB-12 step-out soil samples were collected and analyzed for the presence of PCBs. The analytical laboratory results of step-out soil samples indicated that elevated levels of COPC at these locations were not present. Therefore, the 95% upper confidence limit (UCL) was used to calculate the risk for these COPC.

Using the 95% UCL for TPH-d and Aroclor 1248, the total risk for COPC was calculated to be 3.5×10^{-7}, which does not present an increased cancer risk of greater than 1 in 1,000,000 ($>10^{-6}$), and the total health hazard is calculated to be 0.6 which does not present an increased health hazard (i.e., >1).

Using the 95% UCL for lead in soil as the input concentration, a risk assessment was performed using DTSC's lead risk assessment spreadsheet model (*LeadSpread Version 9*). Based on the LeadSpread output, exposure to the lead concentrations detected at the Project Site will result in a 90th percentile blood lead concentration of 0.3 micrograms per deciliter (µg/dl) in children which is below the California Office of Environmental Health Hazard Assessment (OEHHA) blood toxicity level of 1 µg/dl.

Arsenic concentrations in soil ranged from 1.3 to 5.0 milligrams per kilogram (mg/kg). Arsenic concentrations were compared to an arsenic data set from a school site located approximately 1 mile northeast of the Project Site. The property has a similar geologic setting (Pleistocene Nonmarine (Qc) sedimentary deposits) as the Project Site and consists of similar type soils (sandy loam). The arsenic concentrations at the background site ranged from 1.02 to 4.04 mg/kg. Arsenic concentrations identified in surface soil at the Project Site are comparable to background concentrations.

Organochlorine pesticides (OCPs) in soil were not detected at or above their respective reporting limits.

Naturally occurring asbestos (NOA) in soil was not detected at or above the asbestos % type target analytical sensitivity by PLM (0.25%) or by TEM (0.01%).

The findings of the PEA did not identify the presence of COPC in soil that has adversely impacted the Project Site from historic or current land-use activities. Therefore, Padre recommends the issuance of a "No Further Action" designation from the DTSC regarding the completion of the PEA for the Santa Fe Elementary School Expansion Project.

1.0 INTRODUCTION

Padre Associates, Inc., on behalf of Porterville Unified School District (District), has prepared this Preliminary Environmental Assessment (PEA) report for the Santa Fe Elementary School Expansion Project located at 256 & 286 East Orange Avenue in Porterville, Tulare County, California (Project Site). The Project Site is identified on **Plate 1-1: Site Location** and **Plate 1-2: Site Map**.

Porterville USD plans to expand the existing Santa Fe Elementary School by adding an eleven-classroom building to house four transitional kindergartens, four pre-kindergarten, and three kindergarten classrooms. The school capacity would increase from approximately 830 students to 1,000 students.

The PEA was conducted in accordance with the document titled: *Preliminary Environmental Assessment Workplan, Santa Fe Elementary School Expansion Project, 256 and 286 East Orange Avenue, Porterville, Tulare County, California Site Code: 104890, (Padre, September, 2024)*. The California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) approved the PEA workplan in a letter dated September 18, 2024. A copy of DTSC's approval letter is presented in **Appendix A**.

1.1 PURPOSE

California Department of Education statutes (Assembly Bill 387, Senate Bill 162, and Assembly Bill 2644) require the CalEPA/DTSC to review environmental assessments for proposed new school sites and/or new construction school expansion projects. The role of the DTSC is to ensure that selected properties do not contain hazardous substances or naturally occurring materials that are a threat to public health and the environment.

1.2 OBJECTIVES

This PEA was conducted consistent with the DTSC guidance manual for evaluation of hazardous substance release sites titled *Preliminary Endangerment Assessment Guidance Manual*, State of California, Environmental Protection Agency, January 1994 (Revised October 2015). Pursuant to 79055(a) (1) (C) et. seq. (formerly Health and Safety Code §25355.5 (a) (1) (C)), the activities were performed to fulfill the requirements of the Environmental Oversight Agreement (EOA) issued to the school district by CalEPA/DTSC. The objectives of the PEA included:

- Evaluating historical information for indications of past use, storage, disposal, and/or release of hazardous substances at the Project Site;
- Establishing through a field sampling and laboratory analysis program, the nature, concentration, and general extent of hazardous substances that may be present in soil and/or groundwater at the Project Site; and
- Estimating the potential threat to public health and the environment presented by

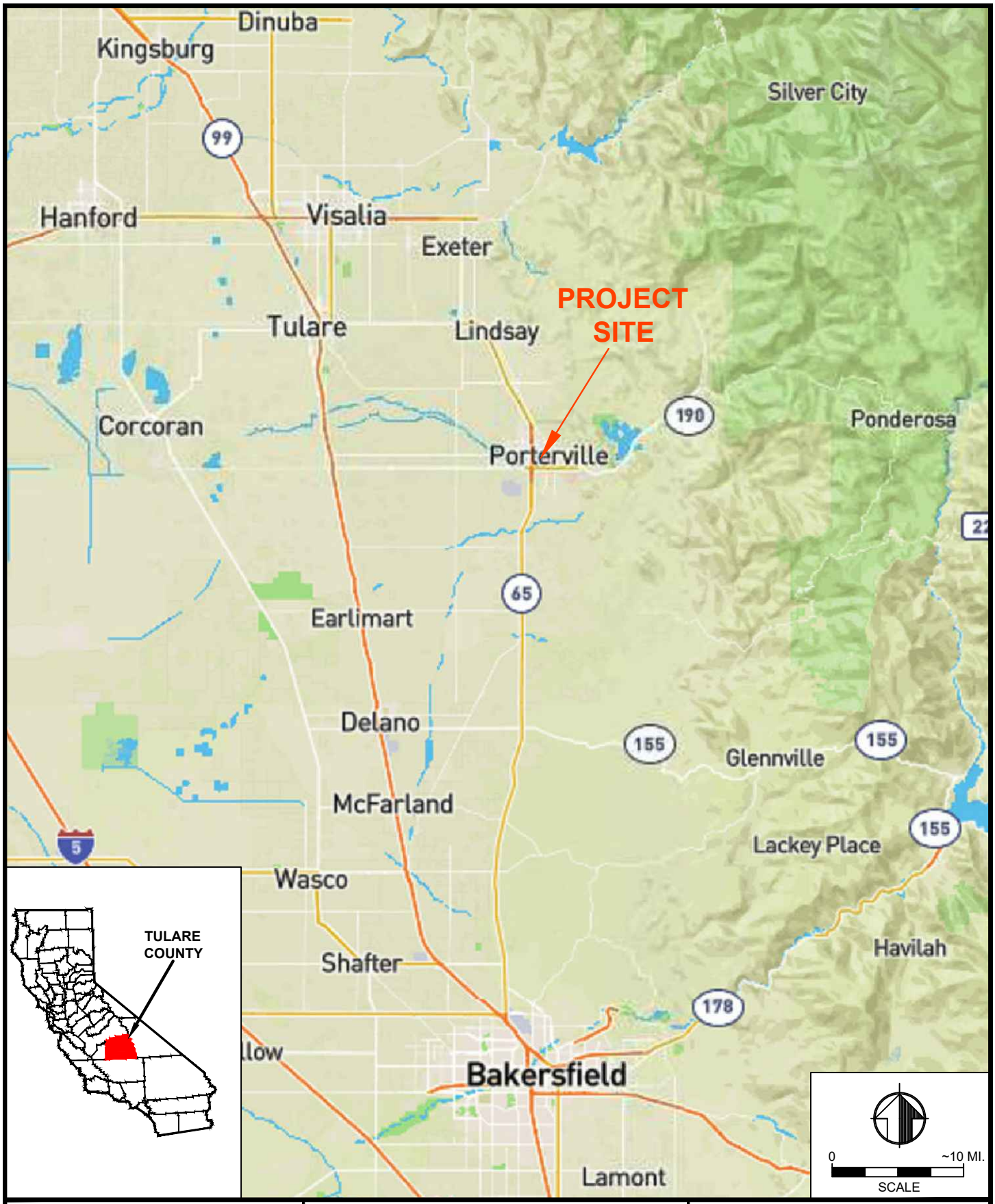
hazardous constituents identified at the property and providing an indicator of relative risk using a residential land-use scenario.

Based on information developed during the course of the PEA and the conservative human and ecological risk evaluation using the DTSC's *PEA Guidance Manual*, January 1994, (Revised October 2015), DTSC will then make an informed decision regarding potential risks posed by the Project Site.

Possible outcomes of the PEA decision include the issuance of a "No Further Action" finding if the risk level is found to be less than 1 in 1,000,000 ($>10^{-6}$) which is DTSC's "point of departure", and the health hazard index is less than 1.0. Additional outcomes may include the need for further assessment through the Remedial Investigation/ Feasibility Study (RI/FS) process if the Project Site presents a risk and/or health hazard; the need to perform a Removal Action if localized impacts by hazardous substances release(s) are found; or the abandonment of the Project Site as a potential school site and the pursuit of alternative sites.

1.3 PUBLIC PARTICIPATION

The PEA Report will be made available to the public for review and comment pursuant to Option A of the California Education Code (CEC) §17213.1.a (6)(A). When completed, public participation documentation will be submitted to DTSC under separate cover.



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SANTA FE ELEM. SCHOOL EXPANSION
256 & 286 EAST ORANGE AVENUE
PORTERVILLE, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2301-3652	12/18/24	AC	AJK

PLATE 1-1

SITE LOCATION

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GOOGLE EARTH IMAGERY (3/24)

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PLATE 1-2

SITE MAP

2.0 PROPERTY DESCRIPTION AND CONTACTS

2.1 SITE LOCATION AND ASSESSOR'S PARCEL NUMBER

The Project Site consists of approximately 4.5 acres and is located at 256 and 286 East Orange Avenue in Porterville, Tulare County, California. The eastern portion of the Project Site is occupied by the Santa Fe Elementary School, and the western portion of the Project Site is occupied by Heritage Park.

The Project Site is recognized as a portion of three parcels of land identified by the Tulare County Assessor's Office as Assessor's Parcel Numbers (APNs): 261-150-056, -057 and -058. The City of Porterville is identified as the owner of APNs: 261-150-056, and -057. The Porterville Unified School District is identified as the owner of APN: 261-150-058. A copy of the assessor's parcel map with an overlay of the Project Site is presented on **Plate 2-1**, and a copy of the parcel maps without the overlay was presented in the PEA Workplan.

2.2 DESIGNATED CONTACT PERSON

Kevin Holtermann, Project Manager
Facilities, Construction & Operations
Porterville Unified School District
534 N. "E" Street, Porterville, CA 93257
(559) 361-2306
kholtermann6345@portervilleschools.org

2.3 PROPERTY USE

The Project Site is currently an existing elementary school and public park.

2.4 ENVIROSTOR DATABASE NUMBER

The EnviroStor database number for the Project Site is 60003788.

2.5 TOWNSHIP, RANGE, AND SECTION

The Subject Property is located in Section 36, Township 21 South, Range 27 East, of the Porterville, California USGS 7½-Minute topographic series, Quadrangle Map (2021). Approximate latitude and longitude near the center of the Subject Property are identified to be:

- Latitude (North): 36°03'42.1"N (36.061693°)
- Longitude (West): 119°00'40.3"W (-119.011184°)

2.6 SITE MAPS

A site location map is included as **Plate 1-1**, and a site map is included as **Plate 1-2**.

2.7 PHYSICAL SETTING

Topography

Based on a review of the USGS 7.5-minute topographic quadrangle – Porterville, California (2021), the Subject Property is relatively level and situated at an approximate elevation of 460 feet above mean sea level (amsl). The Subject Property is occupied by a parking lot, building structures, and play fields. Typically, rainfall would be directed away from the Subject Property to storm drain inlets located in the lower adjacent streets.

Geology

The Subject Property is located in the southeastern portion of the Great Valley Geomorphic Province. The Great Valley Geomorphic Province, a north-south trending valley, is approximately 400 miles long by 50 miles wide, and the southern portion of which is known as the San Joaquin Valley. The Subject Property is located on the eastern flank of the San Joaquin Valley, west of the southern Sierra Nevada. The surface of the San Joaquin Valley is composed primarily of unconsolidated Pleistocene (1.6 million to 11,000 years ago) and Recent (11,000 years ago to the present) alluvial sediments. These lie unconformably on Mio-Pliocene, marine sediments, which extend to a crystalline basement at a depth of approximately 20,000 feet (Norris and Webb, 1990).

Stratigraphically, the subsurface of the Great Valley is complex, and is comprised of tens of thousands of feet of marine and non-marine sediments ranging in age from Jurassic to Recent. The sediments are important sources of groundwater and petroleum hydrocarbon resources (oil and gas). The relatively flat surface of the San Joaquin Valley is underlain by alluvial, lacustrine, and marine sedimentary deposits that accumulated as the structural trough formed as the adjacent mountain ranges were elevated through tectonic processes. The thickness of the sediments varies from a thin veneer along the valley margins to thousands of feet thick at the axis of the trough. The main axis of the trough is oriented north-south along the valley's main drainage axis.

According to the *Geologic Map of California – Fresno Sheet (1965)*, California Geological Survey, the Subject Property is underlain by the quaternary age Pleistocene Nonmarine (Qc) and alluvial Fan (Qf) sedimentary deposits.

Soils

According to the United States Department of Agriculture, Soil Conservation Service's, Soil Survey of Tulare County, California, Central Part dated February 1982, the surface soil at the Subject Property primarily consists of Tujunga Sand and San Emigdio Loam.

Tujunga sand consists of very deep, somewhat excessively drained soils which formed in alluvium derived from granitic rock sources. They are typically found on alluvial fans and have smooth and simple slopes. The native vegetation is annual grasses and forbs. Typically, the surface layer is light brownish gray sand about 16 inches thick. The underlying material to 60

inches is grayish brown and very pale brown sand to coarse sand. The soil can calcareous below a depth of about 20 inches. Permeability is rapid and the available water capacity is moderate (7.8 inches). The runoff is considered slow and the shrink-swell potential is considered low.

San Emigdio loam consists of very deep, well drained soils which are formed in alluvium derived from mica shist and weathered granitic sources. They are typically found on alluvial fans and have smooth and simple slopes. The native vegetation is annual grasses and forbs. Typically, the surface layer is pale brown loam about 29 inches thick. The underlying material to 66 inches is grayish brown loam fine sandy loam. The soil is calcareous throughout. Permeability is rapid and the available water capacity is low (4.2 inches). The runoff is considered slow and the shrink-swell potential is considered low.

Groundwater

The Subject Property is located in the San Joaquin groundwater basin, Tule subbasin. The Tule subbasin generally lies between the Kaweah Subbasin to the north and Kern County Groundwater Basin to the south and between the Tulare Lake Ground water Subbasin on the west and crystalline bedrock of the Sierra Nevada foothills on the east. The west flowing Tule River, Deer Creek, and the White River are the major drainages in the subbasin which empty into the Tulare lakebed.

According to the State Water Resources Control Board's (SWRCB) GeoTracker website, the depth to groundwater was measured at approximately 22-feet below grade surface (bgs) in 2011, at a facility located approximately 1,700 feet northwest of the Subject Property. Groundwater flow direction in the vicinity of the Subject Property is inferred to be to the south-southwest.

According to DTSC's *Draft Sea Level Rise Guidance to DTSC Project Managers for Cleanup Activities* dated February 2023, Sea Level Rise (SLR) has the potential to significantly impact wastes at a site by causing groundwater levels to rise, by inundation, and by the subsequent deterioration of the remedy and mobilization of contaminants. The Project Site is located greater than 110 miles from the Pacific Ocean and the potential for SLR to impact the Project Site is considered insignificant.

Radon

According to the U.S. EPA map of California radon zones, Tulare County is identified as a Zone 2 (orange) county. Zone 2 counties have a predicted average indoor radon screening level between 2 pCi/L and 4 pCi/L. According to the California Indoor Radon Test Results for Zip Code 93257 (updated February 2016), 150 radon tests were conducted with 23 sites reported to have radon levels ≥ 4 pCi/L. This represents 15.3% of the radon tests in the Project Site Zip Code. Therefore, the potential for indoor radon levels is low to moderate and dependent on building site construction.

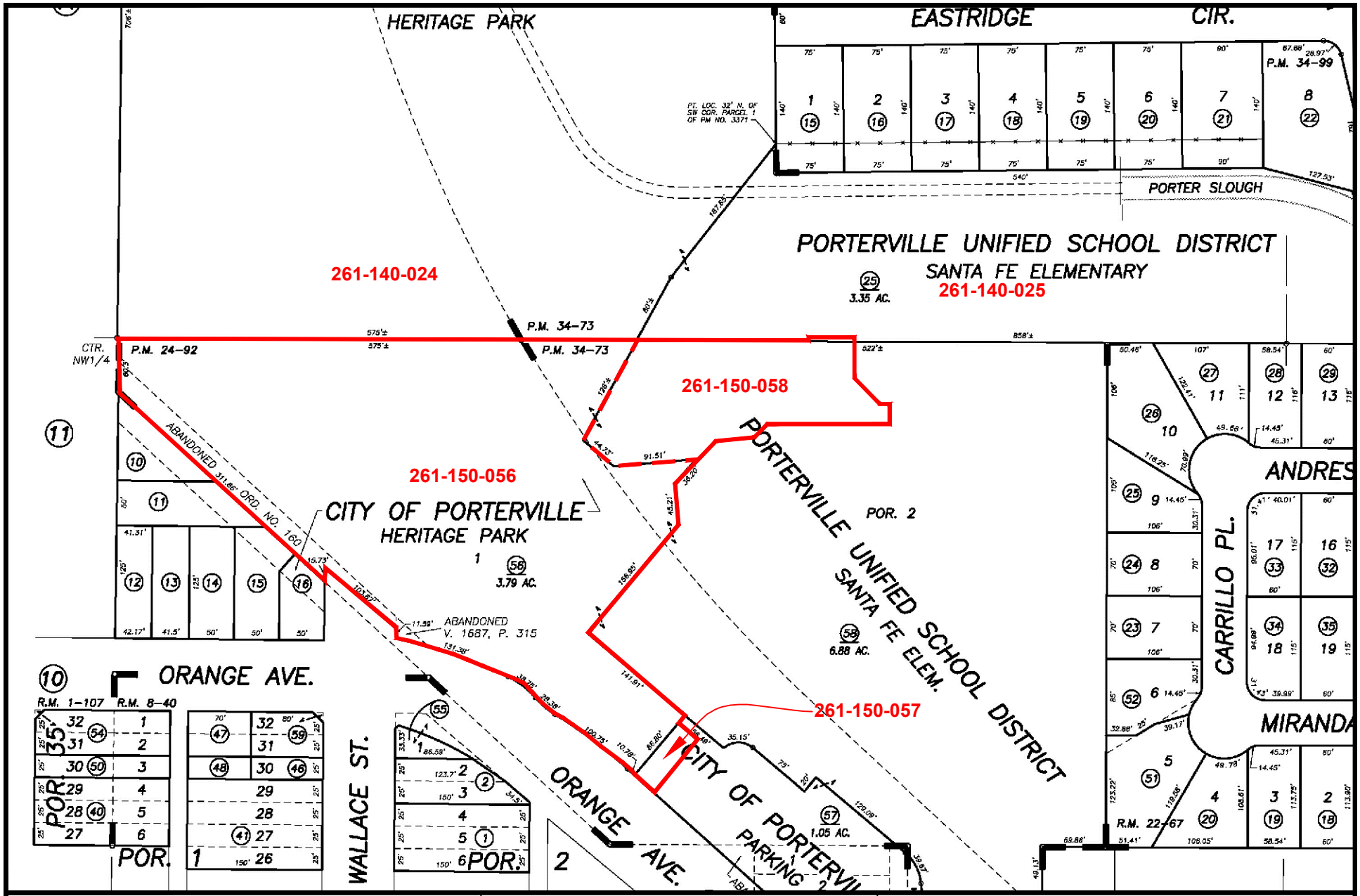

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PLATE 2-1

PARCEL MAP OVERLAY

3.0 BACKGROUND

3.1 SITE HISTORY

Padre prepared the report titled: *Phase I Environmental Site Assessment, Santa Fe Elementary School Expansion Project, 256 & 286 East Orange Avenue, Porterville, Tulare County, California, February 2024*.

Historically, the Project Site was bisected from the northwest to southeast by railroad tracks operated by the Santa Fe Railway, as identified in a 1929 topographic map. Based on historical aerial photographs the railroad tracks appear to have been removed between 1994 and 2006. Several historic buildings were present along the western property boundary from approximately 1957 through 1994.

The Project Site appears to represent a portion of the "Site" identified in Envirostor as "Porterville New Elementary School", Envirostor ID: 54400001 and Site Codes: 101213 and 101231. A PEA was completed under DTSC oversight in November 2000. The PEA was completed due to railroad activities and subsequent illegal storage and dumping at the "Site". In a letter dated February 6, 2001, DTSC issued a 'no further action" determination with respect to investigation and remediation of hazardous substances at the "Site".

A Project Site Environmental Questionnaire was submitted to both the Porterville Unified School District and the City of Porterville. Neither the District nor the City provided information with regards to the existence of a PEA report completed in November 2000 for the Porterville Unified School District – Proposed New Elementary School Site. Therefore, since Padre was unable to identify if the Project Site was included in the PEA, the potential for petroleum products and metals in soil from historic railroad activities was considered a recognized environmental concern (REC). In addition, the potential for lead-based paint (LBP); organochlorine pesticides (OCPs); and polychlorinated biphenyls (PCBs) in soil associated with former building structures at the Project Site was considered a REC.

According to the California Geological Survey's *Geologic Map of California – Fresno Sheet, 1:250,000* (1965), there are several potentially asbestos-bearing ultramafic rock outcrops located within 10-miles of the Project Site. The nearest exposure is located approximately 1,200 feet northeast in the Corona Heights neighborhood of Porterville. Therefore, the potential for NOA to be present at the Project Site from weathering and deposition of ultramafic rock outcrops was considered a REC.

A review of the online *Envirostor* and *Geotracker* databases did not identify any facilities that present a REC to the Project Site.

3.2 SURROUNDING PROPERTY LAND USE

The Subject Property is bordered to the north by a city park and school playfields, beyond which is a detention basin and apartments on Eastridge Circle; to the east by Santa Fe Elementary

School with associated playfields and parking lot, beyond which are residences and vacant land (including Porter Slough); to the south by East Orange Avenue, beyond which is commercial property (food pantry, tattoo shop), and residences; and to the west by commercial property (auto mechanic, tax services business), a vacant lot, a church facility, and residential property.

Padre reviewed the online *Envirostor* and *Geotracker* databases in June 2024 and did not identify any facilities that present a REC to the Project Site.

3.3 CHEMICALS OF POTENTIAL CONCERN

The chemicals of potential concern (COPC) identified at the Project Site are based on current site conditions and historic property use. This information is summarized below:

- Potential presence of total petroleum hydrocarbons as diesel fuel and motor oil (TPH-d and -mo), and metals in soil along an historic railroad track that traversed the Project Site;
- Potential presence of lead in soil from weathering of LBP at the location of former buildings;
- Potential presence of OCPs in soil from the application of termiticides at the location of former buildings;
- Potential presence of PCBs in soil from electrical equipment at the location of former buildings; and
- Potential presence of NOA in soil from weathering and deposition of ultramafic rock outcrops located within a 10-mile radius and within the drainage pattern of the of the Project Site.

4.0 CONCEPTUAL SITE MODEL

The conceptual site model is the tool used to identify the primary sources of COPC identified at the Project Site, release mechanisms for the COPC, points of exposure at the Project Site, and the exposure pathways (ingestion, inhalation, and dermal contact) for the screening level evaluation of chronic health risks. The objective of this PEA is to evaluate the Project Site for an unrestricted land use (residential) scenario.

There are several ways a receptor may be exposed to COPC (i.e., pesticides, metals, etc.). Receptors can include humans, animals, vegetation, surface water, and/or groundwater. Typical pathways for exposure to COPC include:

- Physical transport via tracking chemicals of concern on people, clothing, and/or equipment; and
- Transport by airborne particulate matter.

For humans and animals, exposure usually occurs by the following exposure routes:

- Ingestion or inhalation of contaminated soil particles; and
- Dermal contact with contaminated soil particles.

The conceptual site model for the Project Site was developed based on the following assumptions:

- Exposure of students, staff, and site visitors to COPC in soil via the ingestion and dermal contact routes is considered a complete exposure pathway;
- Exposure of students, staff, and site visitors to COPC in airborne particulate matter via the inhalation route is considered a complete exposure pathway;
- Exposure of students, staff, and site visitors to COPC in soil vapor via the inhalation route is considered an incomplete exposure pathway;
- Municipal drinking water and irrigation water will be provided to the Project Site. Therefore, the assessment of groundwater beneath the Project Site is not proposed;
- Surface water was not observed at the Project Site. Therefore, exposure to surface water at the Project Site is an incomplete exposure pathway; and
- Ingestion of vegetation and animals is considered an incomplete exposure pathway because of the proposed use as a school site.

A conceptual site model is presented on **Plate 4-1**.

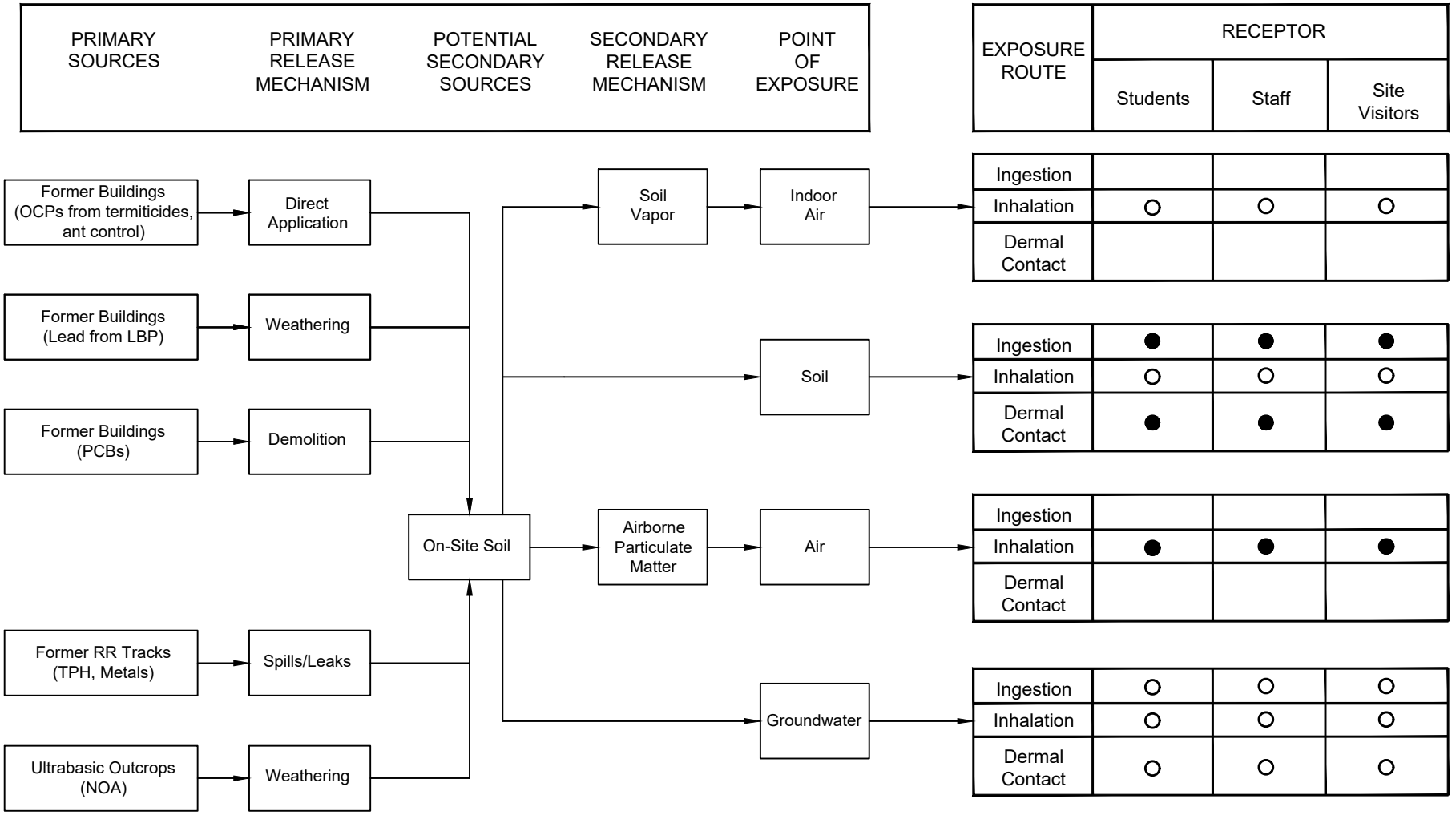

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PLATE 4-1

CONCEPTUAL SITE MODEL

5.0 PEA ASSESSMENT

The PEA soil sampling activities were completed on October 3 and November 19, 2024, in general accordance with the DTSC approved PEA workplan dated September 16, 2024. Prior to initiating field activities for the PEA, a field activities notification letter presented on District letterhead was delivered to nearby residents (line-of-sight) and posted at the Project Site. Site photographs are presented in **Appendix B** and a copy of the Health & Safety Plan is presented in **Appendix C**.

5.1 SAMPLE LOCATIONS

The sample collection locations are presented on **Plates 5-1**, **5-2** and **5-3**. Sample locations were identified using an EOS Arrow 100 handheld electronic navigating device operating with the United States Government's Global Positioning Satellite system. The GPS coordinates for the soil sample locations are presented in **Table 5-1**. The field sampling schedule is presented in **Table 5-2** and the sample collection information is presented in **Table 5-3**. Specific soil sample locations and sample depths are described below:

5.1.1 Soil Sampling

Based on site conditions and DTSC's sampling guidance documents the following sampling plan was implemented:

Former Railroad Tracks

- At eight (8) locations along the alignment of the former railroad tracks, discrete soil samples were collected from depths of surface to 0.5-feet and from approximate depths of 1.0- to 1.5-feet, for a total of sixteen (16) collected soil samples;
- Surface and subsurface soil samples were composited into four (4), 4:1 composite samples and analyzed for TPH (-d and -mo); and CAM 17 Metals;
- Sixteen (16) discrete soil samples (surface and subsurface) were analyzed for arsenic; and
- Four (4) step-out surface soil samples were collected at the location of RR-2 and were analyzed for TPH-d.

Former Buildings

- At fourteen (14) locations in the area of former buildings, discrete soil samples were collected from depths of surface to 0.5-feet and from approximate depths of 2.0- to 2.5-feet, for a total of 28 collected soil samples;
- All 28 discrete soil samples (surface and subsurface) were analyzed for the presence of lead;

- Surface and subsurface soil samples were composited into eight (8), 3:1 composite samples and analyzed for OCPs and PCBs;
- Four (4) step-out surface soil samples were collected at the location of FB-12 and were analyzed for PCBs;
- Four (4) step-out surface soil samples were collected at the location of FB-8 and were analyzed for Lead; and
- Five (5) step-out surface soil samples and one (1) subsurface soil sample (1.0- to 1.5') were collected at the location of FB-13 and were analyzed for Lead.

Naturally Occurring Asbestos

- At four (4) locations across the northern portion of the Project Site, which the area least disturbed by site development, discrete soil samples were collected from depths of surface to 0.5-feet and from approximate depths of 2.0- to 2.5-feet, for a total of eight (8) collected soil samples;
- Eight (8) discrete soil samples (surface and subsurface) were analyzed for the presence of NOA by polarized light microscopy (PLM); and
- At a minimum, two (2) soil samples, representing 25% of the collected soil samples were also analyzed for NOA by transmission electron microscopy (TEM).

5.1.2 Quality Analysis/Quality Control Samples

For quality assurance/quality control (QA/QC), approximately 10% of the discrete soil samples were analyzed as duplicate soil samples. Padre requested the analytical laboratory to split selected soil samples to be chemically analyzed as duplicates for TPH-d, -mo, CAM 17 metals, and lead. One equipment blank sample and one field blank sample per soil sampling event (water samples) were also collected and analyzed for the presence of arsenic and lead.

5.2 SAMPLE COLLECTION

5.2.1 Soil Sample Collection

Surface and subsurface soil samples were collected using hand sampling tools including a hand pick and auger. Soil sampling equipment was decontaminated prior to use at each sample collection location and sampling event. Soil samples were collected in 2-inch x 6-inch stainless steel sleeves and sealed with plastic end caps. Surface soil was loosened with the hand pick and placed into the sample sleeves. Soil cuttings will be placed back in the hole after sample collection.

The soil samples were sealed, labeled, and preserved on ice in the field. After completion of soil sampling activities, the soil samples were transferred to a State-certified analytical laboratory under chain-of-custody protocol for chemical analyses. Field sampling methods conformed to guidelines set forth in the Health and Safety Plan (Appendix C).

5.2.2 Decontamination Procedures

Equipment that came into contact with potentially contaminated soil was decontaminated consistently so as to assure the quality of samples collected. Disposable equipment intended for one-time use was not decontaminated but packaged for appropriate disposal. Decontamination occurred prior to and after each use of a piece of equipment. All sampling devices used were decontaminated using the following procedures:

- Non-phosphate detergent and tap water wash, in a 5-gallon plastic bucket, using a brush;
- Deionized/distilled water rinse, in a 5-gallon plastic bucket; and
- Final deionized/distilled water rinse in a 5-gallon plastic bucket.

At the completion of sampling activities, the small amount of wash water was dispersed to the field area and allowed to infiltrate/evaporate. The wash water consisted of water, non-phosphate detergent, and a small amount of surface soil.

5.3 SAMPLE ANALYSES

The laboratory analytical program schedule is summarized in **Table 5-2**. Analytical methods, types of containers, preservative, and holding times are summarized in **Table 5-3**. The laboratory analytical program will consist of chemical analyses of soil samples collected from the Project Site for the presence of:

- OCPs by U.S. Environmental Protection Agency (EPA) Method 8081A;
- Arsenic and Lead by U.S. EPA Method 6020;
- TPH (-d, -mo) by U.S. EPA Method 8015M;
- CAM 17 Metals by U.S. EPA Method 6000/7000 series;
- PCBs by U.S. EPA Method 8082; and
- NOA by PLM and TEM.

Equipment blanks (water sample) and field blanks (water sample) were also collected and analyzed for the presence of arsenic and lead by U.S. EPA Method 200.8.

5.3.1 Chain-of-Custody Records

Chain-of-custody (C-O-C) records are used to document sample collection and shipment to the laboratory for analysis. A C-O-C record accompanied all samples shipped for analysis. Form(s) were completed and sent with the samples for each laboratory and each shipment. If multiple coolers were sent to a single laboratory on a single day, C-O-C form(s) were completed and sent with the samples for each cooler. The C-O-C record identified the contents of each shipment and maintained the custodial integrity of the samples. Generally, a sample was considered to be in someone's

custody if it was either in someone's physical possession, in someone's view, locked up, or kept in a secured area that was restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples was the responsibility of the sample collector.

5.4 FIELD VARIANCES

Based on the analytical laboratory results of the initial PEA sampling event, Padre returned to the Project Site on November 19, 2024, and collected step-out soil samples at four locations. At the location of soil sample RR-2 step-out soil samples were collected and analyzed for the presence of TPH-d. At the location of FB-8, and FB-13 step-out soil samples were collected and analyzed for the presence of lead, and at the location of FB-12 step-out soil samples were collected and analyzed for the presence of PCBs.

Table 5-1: Soil Sample GPS Locations

Sample Identification	Coordinates	
	Latitude	Longitude
RR-1	36.06216723	-119.011737
RR-2	36.06203745	-119.011647
RR-3	36.06190155	-119.0115598
RR-4	36.06183223	-119.0115014
RR-5	36.06214033	-119.0117346
RR-6	36.06201267	-119.0116146
RR-7	36.06187027	-119.0115645
RR-8	36.06185668	-119.0115098
FB-1	36.06208804	-119.0121311
FB-2	36.06213919	-119.0120577
FB-3	36.06214518	-119.0119307
FB-4	36.06201486	-119.0120167
FB-5	36.0620499	-119.0119315
FB-6	36.06193529	-119.01192
FB-7	36.06194641	-119.0124631
FB-8	36.06189097	-119.0124352
FB-9	36.06188059	-119.0123316
FB-10	36.06179684	-119.0123012
FB-11	36.06177287	-119.0121798
FB-12	36.0616698	-119.0121772
FB-13	36.06165457	-119.0120253
FB-14	36.06155787	-119.0120118
N-1	36.06201785	-119.0117438
N-2	36.06199328	-119.0110461
N-3	36.06197608	-119.0106686
N-4	36.0620078	-119.0101236

GPS – U.S. Global Positioning Satellite System

Table 5-2: Sampling Schedule

Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Former Railroad Track				
TPH (-d and -mo) USEPA Method 8015M	Surface (0-0.5 feet)	2 (composite)	CS-1: RR-1, -2, -3, -4 CS-2: RR-5, -6, -7, -8	Analyze
		4 (discrete)	RR-1, -2, -3, -4	Analyze
	Subsurface (1-1.5 feet)	2 (composite)	CS-3: RR-1, -2, -3, -4 CS-4: RR-5, -6, -7, -8	Analyze
		4 (discrete)	RR-1, -2, -3, -4	Analyze
TPH (-d) USEPA Method 8015M	Surface (0-0.5 feet)	8 (discrete)	RR-2A, -2B, -2C, -2D	Analyze
			RR-2E, -F, -G, -H	Hold
	Subsurface (1-1.5 feet)	4 (discrete)	RR-2A, -2B, -2C, -2D	Hold
CAM17 Metals USEPA Method 7000 series	Surface (0-0.5 feet)	2 (composite)	CS-1: RR-1, -2, -3, -4 CS-2: RR-5, -6, -7, -8	Analyze
		4 (discrete)	RR-5, -6. -7, -8	Analyze
	Subsurface (1-1.5 feet)	2 (composite)	CS-3: RR-1, -2, -3, -4 CS-4: RR-5, -6, -7, -8	Analyze
		8 (discrete)	RR-1, -2. -3, -4, RR-5, -6, -7, -8	Analyze
Arsenic U.S. EPA Method 6020	Surface (0-0.5 feet)	8 (discrete)	RR-1 through RR-8	Analyze
	Subsurface (1-1.5 feet)	8 (discrete)	RR-1 through RR-8	Analyze

Table 5-2: Sampling Schedule (continued)

Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Former Buildings				
Lead U.S. EPA Method 6020	Surface (0-0.5 feet)	23 (discrete)	FB-1 through FB-14 FB-8A, -8D, -8E, -8D FB-13A, -13B, -13C, -13D, -13G	Analyze
	Subsurface (1.0-1.5 feet)	3 (discrete)	FB-8, -13, -13C	Analyze
	Subsurface (2.0-2.5 feet)	14 (discrete)	FB-1 through FB-14	Analyze
OCPs U.S. EPA Method 8081B	Surface (0-0.5 feet)	4 (composite)	CS-5: FB-1, -2, -3 CS-6: FB-4, -5, -6 CS-7: FB-7, -8, -9, -10 CS-8: FB-11, -12, -13, -14	Analyze
	Subsurface (2.0-2.5 feet)	4 (composite)	CS-9: FB-1, -2, -3 CS-10: FB-4, -5, -6 CS-11: FB-7, -8, -9, -10 CS-12: FB-11, -12, -13, -14	Analyze

Table 5-2: Sampling Schedule (continued)

Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Former Buildings				
PCBs U.S. EPA Method 8082	Surface (0-0.5 feet)	4 (composite)	CS-5: FB-1, -2, -3 CS-6: FB-4, -5, -6 CS-7: FB-7, -8, -9, -10 CS-8: FB-11, -12, -13, -14	Analyze
		12 (discrete)	FB-11, -12, -13, -14 FB-12A, -12B, -12C, -12D	Analyze
			FB-12E, -12F, -12G, -12H	Hold
	Subsurface (1.0-1.5 feet)	5 (discrete)	FB-12	Analyze
			FB-12A, -12B, -12C, -12D	Hold
	Subsurface (2.0-2.5 feet)	4 (composite)	CS-9: FB-1, -2, -3 CS-10: FB-4, -5, -6 CS-11: FB-7, -8, -9, -10 CS-12: FB-11, -12, -13, -14	Analyze
Naturally Occurring Asbestos (NOA)				
NOA by PLM	Surface (0-0.5 feet)	4 (discrete)	N-1 through N-4	Analyze
	Subsurface (2.0-2.5 feet)	4 (discrete)	N-1 through N-4	Analyze
NOA by TEM	Surface (0-0.5 feet)	4 (discrete)	N-1	Analyze
			N-2, N-3, N-4	Hold
	Subsurface (2.0-2.5 feet)	4 (discrete)	N-3	Analyze
			N-1, N-2, N-4	Hold

Table 5-2: Sampling Schedule (continued)

QA/QC Samples (water)				
Arsenic and Lead U.S. EPA Method 200.8	NA	1 per day 1 per day	Equipment Blank (EB-1, etc.) Field Blanks (FB-1, etc.)	Analyze Analyze

Notes:

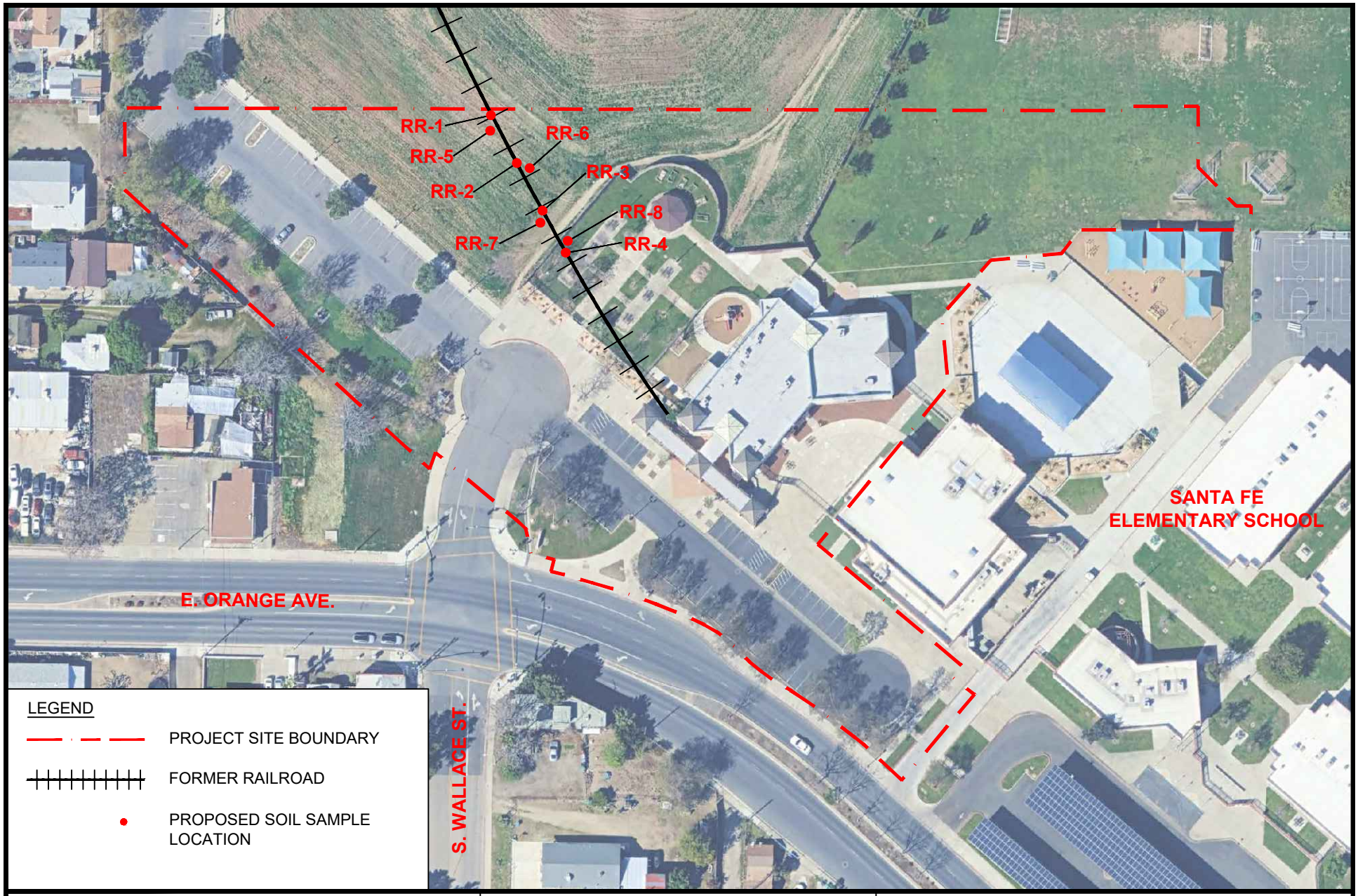
TPH (-d and -mo): total petroleum hydrocarbons as diesel fuel and motor oil.
OCPs: organochlorine pesticides
PCBs: polychlorinated biphenyls
NOA: naturally occurring asbestos
CS: composite samples prepared by the analytical laboratory.

Table 5-3. Sample Collection Information

Sample Matrix and Test Method	Container	Preservative	Holding Time From Sample Collection to Extraction
Soil			
OCPs U.S. EPA Method 8081B	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	14 days
PCBs U.S. EPA Method 8082	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	14 days
Arsenic U.S. EPA Method 6020	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	180 days
Lead U.S. EPA Method 6020	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	180 days
TPH (-d, -mo) U.S. EPA Method 8015m	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	14 days
CAM 17 Metals U.S. EPA Method 6000/7000 series	2-inch x 6-inch stainless steel sample sleeves and plastic end caps	Ice	180 days
NOA CARB 435 by PLM and TEM	9 oz glass jars with plastic screw lids	None	60 days
Water			
Arsenic and Lead U.S. EPA Method 200.8	250 mL poly bottle	HNO_3 / Ice	180 days

Notes:

OCPs – organochlorine pesticides
TPH – total petroleum hydrocarbons
CAM – California administrative manual
NOA – naturally occurring asbestos
HNO_3 – Nitric Acid



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GOOGLE EARTH IMAGERY (3/24)

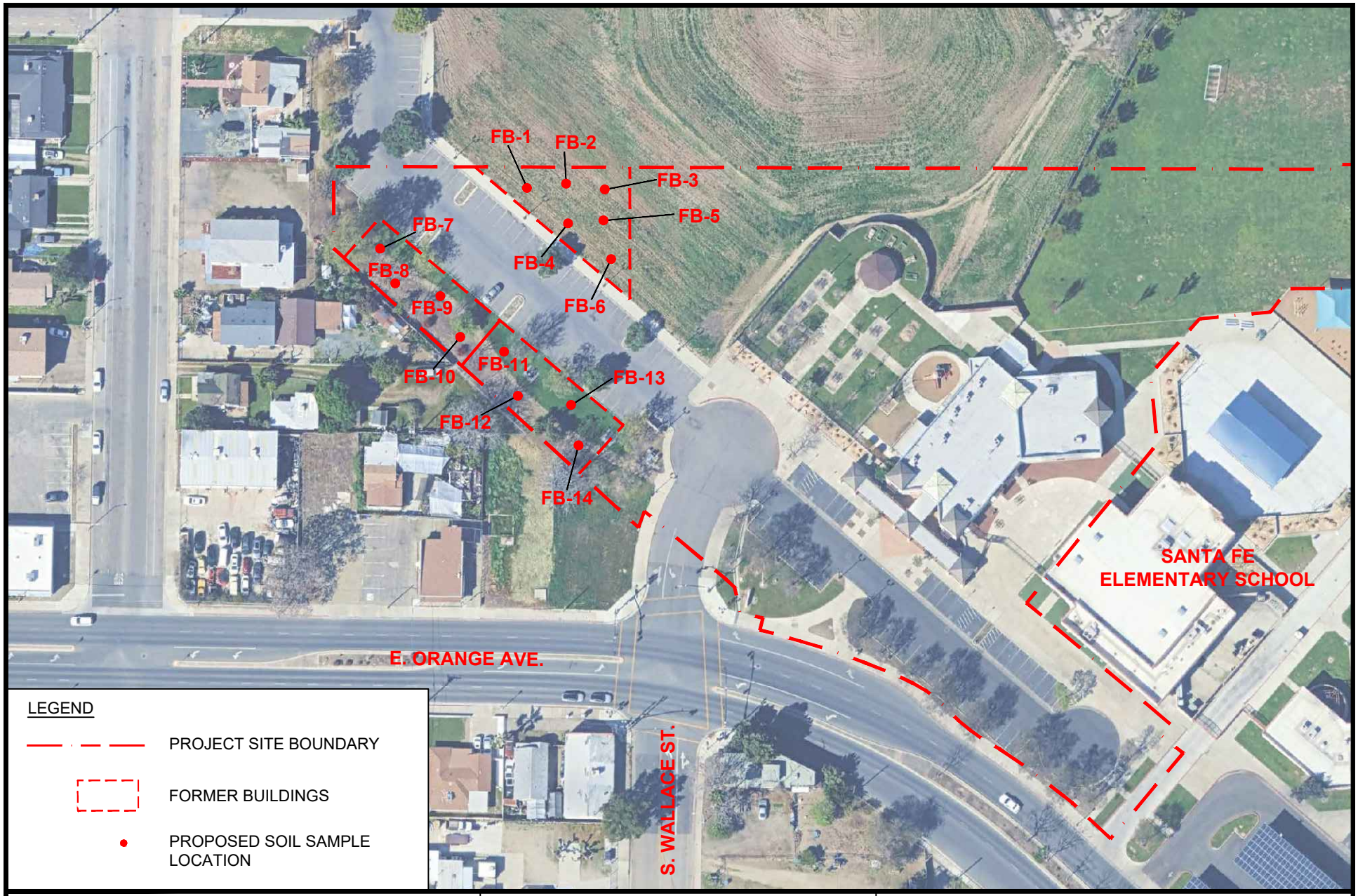
0 100
FEET

SANTA FE ELEM. SCHOOL EXPANSION
256 & 286 EAST ORANGE AVENUE
PORTERVILLE, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2301-3652	7/22/24	AC	AJK

PLATE 5-1

FORMER RR TRACK SAMPLE PLAN



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PROJECT NO.	DATE	DR. BY	APP. BY
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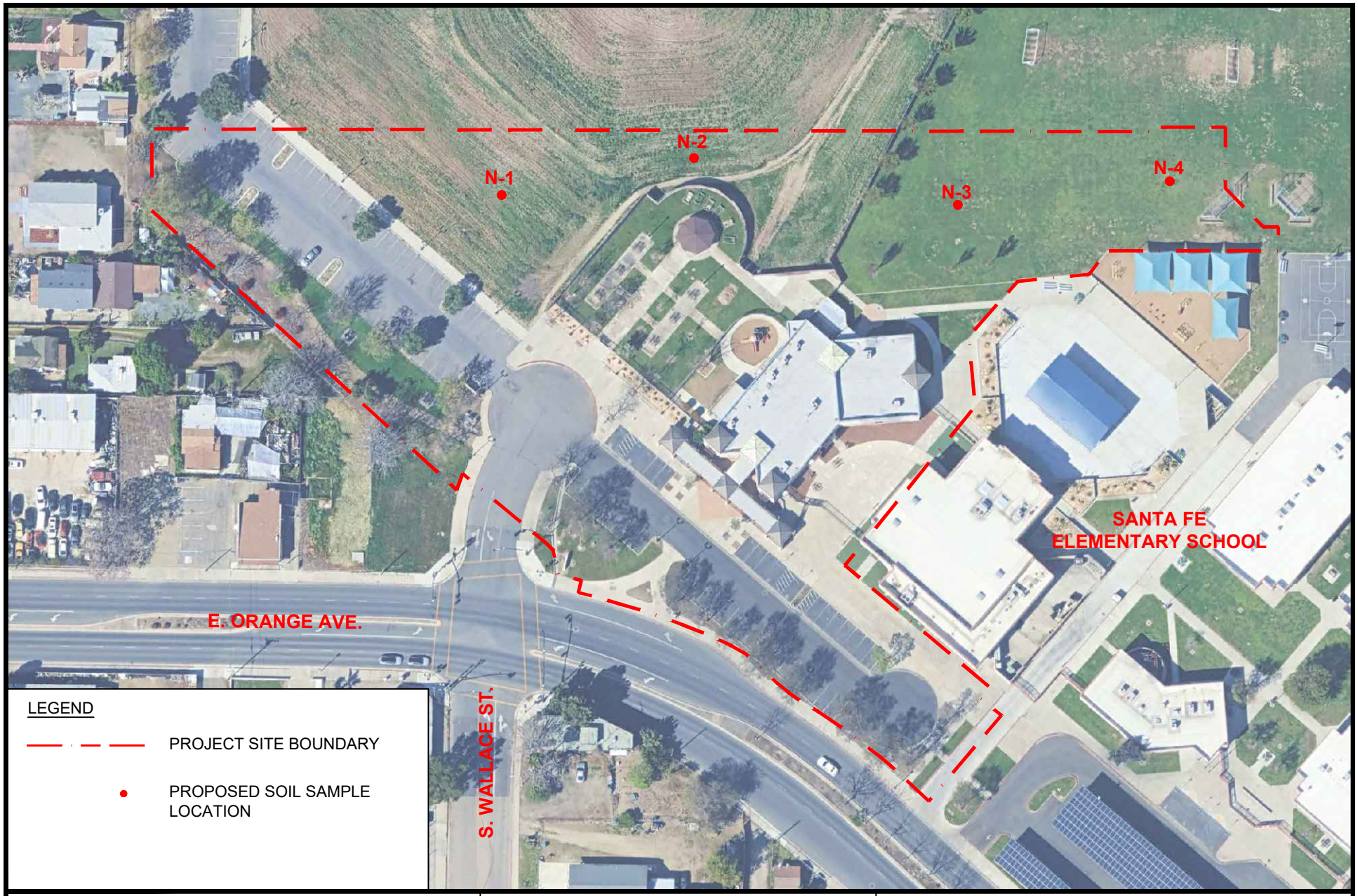
PLATE 5-2

FORMER BUILDINGS SAMPLE PLAN



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2301-3652	12/18/24	AC	AJK

PLATE 5-3

NOA SAMPLE PLAN

6.0 FINDINGS

The following sections describe the results of the PEA field activities performed by Padre at the Project Site. The following subsections describe soil sample analytical results, locations, and depth intervals for soil samples collected at the Project Site.

The laboratory analytical results are summarized in **Tables 6-1** through **6-7**. TPH-d in soil results are presented in **Plate 6-1**; lead in soil results are presented in **Plate 6-2**; and PCBs in soil are presented on **Plate 6-3**. Certified analytical laboratory reports and chain-of-custody documentation are provided in **Appendix D**.

6.1 SOIL RESULTS – FORMER RAILROAD TRACKS

Collected surface and subsurface soil samples in the former railroad tracks area were analyzed for TPH-d, -mo, CAM 17 metals and arsenic. The results are summarized below.

6.1.1 TPH-d, -mo

Results of the laboratory analyses are presented in **Table 6-1**; presented on **Plate 6-1**; and summarized below:

- TPH-d concentrations ranged from less than 9.9 to 150 milligram per kilogram (mg/kg); and
- TPH-mo concentrations ranged from less than 2.0 to 390 mg/kg.

6.1.2 CAM 17 Metals

Results of the laboratory analyses are presented in **Table 6-2** and summarized below:

- Arsenic concentrations ranged from 2.9 to 3.9 mg/kg.
- Barium concentrations ranged from 110 to 250 mg/kg.
- Chromium concentrations ranged from 17 to 37 mg/kg.
- Cobalt concentrations ranged from 4.5 to 13 mg/kg.
- Copper concentrations ranged from 8.9 to 15 mg/kg.
- Lead concentrations ranged from 6.8 to 11 mg/kg.
- Nickel concentrations ranged from 19 to 39 mg/kg.
- Vanadium concentrations ranged from 32 to 50 mg/kg.
- Zinc concentrations ranged from 41 to 57 mg/kg.
- No other metals were reported at or above their respective detection limits.

6.1.3 Arsenic

Results of the laboratory analyses are presented in **Table 6-3** and summarized below:

- Arsenic concentrations ranged from 1.3 to 5.0 mg/kg.

6.2 SOIL RESULTS – FORMER BUILDINGS

Collected surface and subsurface soil samples in the former building area were analyzed for lead, OCPs, and PCBs. The results are summarized below.

6.2.1 Lead

Results of the laboratory analyses are presented in **Table 6-4**; presented on **Plate 6-2**; and summarized below:

- Lead concentrations ranged from 3.1 to 120 mg/kg).

6.2.2 OCPs

Results of the laboratory analyses are presented in **Table 6-5** and summarized below:

- OCPs were not identified at or above their respective reporting limits.

6.2.3 PCBs

Results of the laboratory analyses are presented in **Table 6-6**; presented on **Plate 6-3**; and summarized below:

- Aroclor 1248 concentrations ranged from less than 0.018 to 0.25 mg/kg; and
- No other PCBs were identified at or above their respective reporting limits.

6.3 SOIL RESULTS – NOA

The laboratory analytical results for soil samples collected and analyzed for NOA are presented in Table 6-7 and summarized below:

- NOA was not detected at or above the 0.25% asbestos type sensitivity level by PLM; and
- NOA was not detected at or above the 0.01% asbestos type sensitivity level by TEM.

6.4 QA/QC SAMPLES

6.4.1 Equipment Blank

For each sampling event, distilled water was used as rinseate for decontaminating soil sampling equipment. The equipment blank sample was collected by pouring rinseate water over and through recently cleaned equipment and collected directly into the appropriate sample container.

The equipment blank sample was chemically analyzed for arsenic and lead by U.S. EPA Method 200.8. The results of the laboratory analysis did not identify the presence of arsenic or lead at or above their respective analytical reporting limits.

6.4.2 Field Blank

For each sampling event, distilled water was used as rinseate for decontaminating sampling equipment. The field blank sample was collected by pouring rinseate water into the appropriate sample container.

The field blank sample was chemically analyzed for arsenic and lead by U.S. EPA Method 200.8. The results of the laboratory analysis did not identify the presence of arsenic or lead at or above their respective analytical reporting limits.

6.5 LABORATORY QA/QC and DATA VALIDATION

Enthalpy Analytical (Enthalpy) located in Orange, California provided the required chemical analyses for soil and water samples collected at the Project Site. Enthalpy is certified (No. 1338) by the State of California Environmental Laboratory Accreditation Program (ELAP) Branch to provide the required chemical analyses.

EMSL Analytical, Inc. (EMSL) located in San Leandro, California provided the required NOA analyses for soil samples collected at the Project Site. EMSL is certified (No. 1620) by the State of California ELAP Branch to provide the required analyses.

A cover letter with the signature of the laboratory director accompanies every laboratory report received for this project. According to the lab director, samples were analyzed utilizing EPA or other ELAP approved methodologies, and that the results are in compliance both technically and for completeness. The data quality objectives (DQO) met by the analytical laboratory for this project were level II.

6.5.1 Precision

Precision measures the reproducibility of repetitive measurements. It is strictly defined as the degree of mutual agreement among independent measurements as the result of repeated application of the sample process under similar conditions.

Analytical precision is a measurement of the variability associated with duplicate or replicate analyses of the same sample in the laboratory and is determined by analysis of laboratory quality control samples such as duplicate control samples (LCSD or DCS), matrix spike duplicates (MSD), or sample duplicates. If the recoveries of analytes in the specified control samples are comparable within established control limits, then precision is within limits.

Total precision is a measurement of the variability associated with the entire sampling and analytical process. It is determined by analysis of duplicate or replicate field samples, and measures variability introduced by other than laboratory and field operations. Field duplicate samples are analyzed to assess field and analytical precision.

Duplicate results are assessed using the relative percent difference (RPD) between duplicate measurements. If the RPD for laboratory quality control samples exceeds 30 percent, data shall be qualified as described in the applicable validation procedure. If the RPD between primary and duplicate field samples exceeds 100 percent for soil, data shall be qualified as described in the applicable validation procedure. The RPD shall be calculated as follows:

$$\% \text{ RPD} = 100\% \times \frac{\text{Abs}(X_2 - X_1)}{\text{Avg}(X_2 + X_1)}$$

Where X_2 is the larger of the two observed values, and X_1 is the smaller of the two observed values. The RPDs for selected original and duplicate soil samples are calculated in the following tables.

TPH

Sample Identification	TPH – diesel	TPH – motor oil
CS-1	54	100
CS-1 DUPE	40	78
|RPD (%)|	**29.8**	**24.7**
Within Acceptable Range	Yes	Yes

Arsenic

Sample Identification	Original Sample (mg/kg)	Duplicate Sample (mg/kg)	|RPD (%)|	Within Acceptable Range
RR-4 (SURF)	1.3	1.7	**26.7**	Yes
RR-7 (1-1.5')	3.2	3.0	**6.5**	Yes

Lead

Sample Identification	Original Sample (mg/kg)	Duplicate Sample (mg/kg)	|RPD (%)|	Within Acceptable Range
FB-3 (SURF)	6.5	5.1	**24.1**	Yes
FB-3 (2-2.5')	4.7	5.3	**12**	Yes
FB-7 (SURF)	5.8	8.8	**41.1**	Yes

CAM 17 Metals

Sample Identification	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
CS-1	3.5	250	37	10	14	6.8	39	52	53
CS-1 DUPE	3.9	170	29	10	15	7.4	33	50	55
|RPD (%)|	**10.8**	**38.1**	**24.2**	**0**	**6.9**	**8.5**	**16.7**	**3.9**	**3.7**
Within Acceptable Range	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The RPDs for the original and duplicate constituents are within range and acceptable.

6.5.2 Accuracy

Accuracy of laboratory analyses was by laboratory control samples, surrogate standards, matrix spikes, and initial and continuing calibrations of instruments. Laboratory accuracy is expressed as the percent recovery (%R). Accuracy limits are statistically generated by the laboratory or required by specified EPA methods. If the percent recovery is determined to be outside of acceptance criteria, the data was qualified. The percent recovery was calculated as follows:

$$\%R = 100 \times \frac{X_s - X}{T}$$

where X_s is the measured value of the spike sample, X is measured value of the unspiked sample, and T is the true value of the spiked solution.

In general recoveries were within acceptance limits; however, if recoveries were outside of acceptance criteria, the data was qualified by the analytical laboratory.

6.5.3 Representativeness

Representativeness is the degree to which data accurately and precisely represent selected characteristics of the media sampled. Representiveness of data collection is addressed by the preparation of sampling and analyses programs. The PEA investigation had sufficient and the proper number of sample locations; incorporated the proper sampling methodologies; utilized

the proper sample collection techniques and decontamination procedures; utilized the proper laboratory methods to prepare and analyze soil/water samples; and performed proper field and laboratory QA/QC protocols.

6.5.4 Completeness

Completeness is the amount of valid data obtained compared to the amount that was expected under ideal conditions. The number of valid results divided by the number of possible results, expressed as a percentage, determines the completeness of the data set. The objective for completeness is to recover at least 90 percent of the planned data to support field efforts. The formula for is completeness is presented below:

$$\% \text{ Completeness} = 100 \times \frac{\textit{number of valid results}}{\textit{number of expected results}}$$

The analytical data for the soil and water samples is 100% complete.

6.5.5 Comparability

Comparability is an expression of confidence with which one data set can be compared to another data set. The objective of comparability is to ensure that data developed during the PEA investigation are comparable to site knowledge and adequately address applicable criteria or standards established by DTSC or the U.S. EPA. The laboratory methods that were utilized during this PEA investigation are consistent with the current standards of practice as approved by the DTSC and the USEPA.

6.5.6 Reporting Limits

Laboratory reporting limits for TPH, metals, and PCBs were at or below the respective screening levels provided in DTSC's HHRA Note No.3 (revised May 2022) and/or the U.S. EPA's Region 9 RSLs (November 2024). Reporting limits for the analysis of OCPs slightly exceeded their respective screening levels for composite samples CS-5, -6, and -7 as a result of sample dilution due to the color of the sample extracts. Based on an overall review of the analytical data, i.e. no detections, it is Padre's opinion that the sample results are acceptable, and the data is considered valid.

6.5.7 Chain-of-Custody

Completed chain-of-custody forms were provided with the samples upon sample delivery to Enthalpy and EMSL. Copies of the chain-of-custody forms were included in the final analytical report. No discrepancies were noted by the analytical laboratory.

6.5.8 Holding Time(s)

All soil and/or water analyses requested from the analytical laboratories (Enthalpy and EMSL) were performed within the method-specific holding times.

Table 6-1: Soil Results for TPH
(results in mg/kg)

Sample Identification	Date Collected	Sample Depth	TPH by EPA Method 8015M	
			TPH - diesel	TPH – motor oil
CS-1 (RR-1, -2, -3., -4)	10-3-24	0-0.5'	**54**	**100**
CS-1 (RR-1, -2, -3, -4) DUPE	10-3-24	0-0.5'	**40**	**78**
RR-1	10-3-24	0-0.5'	**16**	<2.0
RR-2	10-3-24	0-0.5'	**150**	**390**
RR-2A (step-out)	11-19-24	0-0.5'	<9.9	--
RR-2B (step-out)	11-19-24	0-0.5'	<10	--
RR-2C (step-out)	11-19-24	0-0.5'	<9.9	--
RR-2D (step-out)	11-19-24	0-0.5'	<10	--
RR-3	10-3-24	0-0.5'	<9.9	**36**
RR-4	10-3-24	0-0.5'	<9.9	**24**
CS-2 (RR-5, -6, -7, -8)	10-3-24	0-0.5'	<9.9	**26**
CS-3 (RR-1, -2, -3, -4)	10-3-24	1-1.5'	**67**	**100**
RR-1	10-3-24	1-1.5'	<10	<20
RR-2	10-3-24	1-1.5'	<10	<20
RR-3	10-3-24	1-1.5'	**31**	**98**
RR-4	10-3-24	1-1.5'	<10	**25**
CS-4 (RR-5, -6, -7, -8)	10-3-24	1-1.5'	<9.9	<20
DTSC Screening Levels ((SLs)			97	2,400
DTSC SLs (4:1) COMP			24	600
RWQCB Environmental Screening Levels (ESLs)			260	12,000
RWQCB ESLs 4:1 COMP			65	3,000

Notes:

TPH – Total Petroleum Hydrocarbons
mg/kg – milligrams per kilogram
XX – Above screening level
SL – HHRA Note #3, Table 1 - DTSC-Recommended Screening Level (Revised May 2022)

Table 6-2: CAM 17 Metals in Soil
(results in mg/kg)

Sample Identification	Date Collected	Depth	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
CS-1 (RR-1, -2, -3, -4)	10-3-24	0-0.5'	<1.0	**3.5**	**250**	<1.0	<0.50	**37**	**10**	**14**	**6.8**	<0.15	<1.0	**39**	<2.0	<0.50	<1.0	**52**	**53**
CS-1 DUPE (B8-1, -2, -3, -4)	10-3-24	0-0.5'	<0.95	**3.9**	**170**	<0.95	<0.48	**29**	**10**	**15**	**7.4**	<0.15	<0.95	**33**	<1.9	<0.48	<0.95	**50**	**55**
CS-2 (RR-5, -6, -7, -8)	10-3-24	0-0.5'	<1.0	**3.3**	**140**	<1.0	<0.50	**30**	**7.7**	**14**	**9.7**	<0.16	<1.0	**34**	<2.0	<0.50	<1.0	**40**	**57**
RR-5	10-3-24	0-0.5'	--	--	--	--	--	--	**13**	--	--	--	--	--	--	--	--	--	--
RR-6	10-3-24	0-0.5'	--	--	--	--	--	--	**6.9**	--	--	--	--	--	--	--	--	--	--
RR-7	10-3-24	0-0.5'	--	--	--	--	--	--	**7.8**	--	--	--	--	--	--	--	--	--	--
RR-8	10-3-24	0-0.5'	--	--	--	--	--	--	**7.1**	--	--	--	--	--	--	--	--	--	--
CS-3 (RR-1, -2, -3, -4)	10-3-24	1-1.5'	<0.97	**2.9**	**120**	<0.97	<0.49	**19**	**6.2**	**8.9**	**11**	<0.15	<0.97	**19**	<1.9	<0.49	<0.97	**33**	**47**
RR-1	10-3-24	1-1.5'	--	--	--	--	--	--	**8.7**	--	--	--	--	--	--	--	--	--	--
RR-2	10-3-24	1-1.5'	--	--	--	--	--	--	**4.8**	--	--	--	--	--	--	--	--	--	--
RR-3	10-3-24	1-1.5'	--	--	--	--	--	--	**7.9**	--	--	--	--	--	--	--	--	--	--
RR-4	10-3-24	1-1.5'	--	--	--	--	--	--	**7.5**	--	--	--	--	--	--	--	--	--	--
CS-4 (RR-5, -6, -7, -8)	10-3-24	1-1.5'	<0.95	**3.1**	**110**	<0.95	<0.48	**17**	**6.3**	**9.4**	**7.7**	<0.14	<0.95	**32**	<1.9	<0.48	<0.95	**32**	**41**
RR-5	10-3-24	1-1.5'	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--	--	--
RR-6	10-3-24	1-1.5'	--	--	--	--	--	--	**5.2**	--	--	--	--	--	--	--	--	--	--
RR-7	10-3-24	1-1.5'	--	--	--	--	--	--	**7.1**	--	--	--	--	--	--	--	--	--	--
RR-8	10-3-24	1-1.5'	--	--	--	--	--	--	**7.6**	--	--	--	--	--	--	--	--	--	--
RSL			31	AB	15,000	16[A]	7.1[A]	120,000	23	3,100	80[B]	1.0[A]	390	820[A]	390	390	1.6	390	23,000
4:1 COMP			7.8		3,750	4	1.8	30,000	5.8	775	20	0.25	97.5	205	97.5	97.5	0.4	97.5	5,750

Notes:

mg/kg – milligrams per kilogram
RSL – USEPA Regional Screening Level (May 2024)
AB – Proposed Elementary School Site PEA 2006 (Envirostor ID 60000280)
A - HHRA Note #3, DTSC-Recommended Screening Level (June 2020 – Revised May 2022)
B - DTSC's residential screening level based on LeadSpread Ver. 9

Table 6-3: Soil Results for Arsenic
(results in mg/kg)

Sample Identification	Date Collected	Depth (feet)	Arsenic
RR-1	10-3-24	0-0.5’	**3.8**
RR-1	10-3-24	1-1.5’	**2.0**
RR-2	10-3-24	0-0.5’	**4.2**
RR-2	10-3-24	1-1.5’	**2.1**
RR-3	10-3-24	0-0.5’	**4.2**
RR-3	10-3-24	1-1.5’	**5.0**
RR-4	10-3-24	0-0.5’	**1.3**
RR-4 DUPE	10-3-24	0-0.5’	**1.7**
RR-4	10-3-24	1-1.5’	**4.3**
RR-5	10-3-24	0-0.5’	**3.9**
RR-5	10-3-24	1-1.5’	**2.2**
RR-6	10-3-24	0-0.5’	**3.8**
RR-6	10-3-24	1-1.5’	**3.6**
RR-7	10-3-24	0-0.5’	**4.7**
RR-7	10-3-24	1-1.5’	**3.2**
RR-7 DUPE	10-3-24	1-1.5’	**3.0**
RR-8	10-3-24	0-0.5’	**3.8**
RR-8	10-3-24	1-1.5’	**4.0**
Project Site Range			1.3 – 5.0
Background Site Range*			1.02 – 4.04

Notes:

mg/kg – milligrams per kilogram
* - Proposed Elementary School Site PEA 2006
(Envirostor ID 60000280)

Table 6-4: Lead in Soil
(results in mg/kg)

Sample Identification	Date Collected	Sample Depth	Total Lead (mg/kg)
FB-1	10-3-24	0-0.5’	**6.6**
FB-1	10-3-24	2-2.5’	**5.3**
FB-2	10-3-24	0-0.5’	**5.0**
FB-2	10-3-24	2-2.5’	**3.1**
FB-3	10-3-24	0-0.5’	**6.5**
FB-3 DUPE	10-3-24	0-0.5’	**5.1**
FB-3	10-3-24	2-2.5’	**4.7**
FB-3 DUPE	10-3-24	2-2.5’	**5.3**
FB-4	10-3-24	0-0.5’	**7.9**
FB-4	10-3-24	2-2.5’	**4.6**
FB-5	10-3-24	0-0.5’	**4.9**
FB-5	10-3-24	2-2.5’	**5.3**
FB-6	10-3-24	0-0.5’	**8.7**
FB-6	10-3-24	2-2.5’	**5.3**
FB-7	10-3-24	0-0.5’	**5.8**
FB-7 DUPE	10-3-24	0-0.5’	**8.8**
FB-7	10-3-24	2-2.5’	**19**
FB-8	10-3-24	0-0.5’	**120**
FB-8	11-19-24	1-1.5’	**3.8**
FB-8	10-3-24	2-2.5’	**7.0**
FB-8A (step-out)	11-19-24	0-0.5’	**3.4**
FB-8B (step-out)	11-19-24	0-0.5’	**17**
FB-8C (step-out)	11-19-24	0-0.5’	**20**
FB-8D (step-out)	11-19-24	0-0.5’	**4.7**
FB-9	10-3-24	0-0.5’	**9.3**
FB-9	10-3-24	2-2.5’	**5.8**
FB-10	10-3-24	0-0.5’	**9.8**
FB-10	10-3-24	2-2.5’	**3.5**
FB-11	10-3-24	0-0.5’	**12**
FB-11	10-3-24	2-2.5’	**7.6**
U.S. EPA Method			6020
SL			80

Table 6-4: Lead in Soil
(results in mg/kg)

Sample Identification	Date Collected	Sample Depth	Total Lead (mg/kg)
FB-12	10-3-24	0-0.5’	**25**
FB-12	10-3-24	2-2.5’	**3.9**
FB-13	10-3-24	0-0.5’	**90**
FB-13	11-19-24	1-1.5’	**3.7**
FB-13	10-3-24	2-2.5’	**8.3**
FB-13A (step-out)	11-19-24	0-0.5’	**78**
FB-13B (step-out)	11-19-24	0-0.5’	**12**
FB-13C (step-out)	11-19-24	0-0.5’	**83**
FB-13C (step-out)	11-19-24	1-1.5’	**4.9**
FB-13D (step-out)	11-19-24	0-0.5’	**16**
FB-13G (step-out)	11-19-24	0-0.5’	**19**
FB-14	10-3-24	0-0.5’	**12**
FB-14	10-3-24	2-2.5’	**6.8**
U.S. EPA Method			6020
SL			80

Notes:

mg/kg – milligrams per kilogram
XX – Above screening level
SL - DTSC’s residential screening level based on LeadSpread Ver. 9

Table 6-5: OCPs in Soil
(results in µg/kg)

Sample Identification	Date Collected	Depth (feet)	Aldrin	(a,b,d)-BHC	Gamma-BHC	Chlordane-technical	DDD	DDE	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
CS-5 (FB-1, -2-, -3)	10-3-24	0-0.5'	<12	<13	<13	<140	<9.7	<16	<13	<12	<13	<13	<11	<12	<24	<13	<12	<12	<22	<320
CS-6 (FB—4, -5, -6)	10-3-24	0-0.5'	<12	<13	<13	<140	<9.8	<16	<13	<13	<13	<13	<11	<12	<24	<13	<12	<13	<22	<330
CS-7 (FB-7, -8-, -9, -10)	10-3-24	0-0.5'	<12	<13	<13	<140	<9.8	<16	<13	<13	<13	<13	<11	<12	<24	<13	<12	<13	<22	<330
CS-8 (FB-11, -12-, -13, -14)	10-3-24	0-0.5'	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<100
CS-9 (FB-1, -2-, -3)	10-3-24	2-2.5'	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<9.9	<99
CS-10 (FB—4, -5, -6)	10-3-24	2-2.5'	<4.9	<4.9	<4.9	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<98
CS-11 (FB-7, -8-, -9, -10)	10-3-24	2-2.5'	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<9.9	<99
CS-12 (FB-11, -12-, -13, -14)	10-3-24	2-2.5'	<4.9	<4.9	<4.9	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<98
SL			39	86	570	1,700	1,900	2,000	1,900	34	450,000[(a)]	450,000[(a)]	380,000	19,000	19,000[(b)]	19,000[(b)]	130	70	320,000	450
3:1 COMP			13	29	190	567	633	667	633	11	150,000	150,000	126,667	6,333	6,333	6,333	43	23	106,667	150
4:1 COMP			10	22	143	425	475	500	475	9	112,500	112,500	95,000	4,750	4,750	4,750	33	18	80,000	113

Notes:
µg/kg –micrograms per kilogram
SL - HHRA Note #3, Table 1 - DTSC-Recommended Screening Level (Revised May 2022)
(a) – Screening Level for Endosulfan
(b) – Screening Level for Endrin
(c) – USEPA Regional Screening Level (November 2024)

Table 6-6: PCBs in Soil
(results in mg/kg)

Sample Identification	Date Collected	Depth (feet)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs Total
CS-5 (FB-1, -2-, -3)	10-3-24	0-0.5'	<0.042	<0.041	<0.044	<0.046	<0.018	<0.047	<0.055	<0.055
CS-6 (FB—4, -5, -6)	10-3-24	0-0.5'	<0.043	<0.042	<0.045	<0.047	<0.018	<0.047	<0.056	<0.056
CS-7 (FB-7, -8-, -9, -10)	10-3-24	0-0.5'	<0.043	<0.042	<0.045	<0.047	<0.018	<0.047	<0.056	<0.056
CS-8 (FB-11, -12-, -13, -14)	10-3-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	**0.12**	<0.05	<0.05	**0.12**
FB-11	10-3-24	0-0.5'	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099
FB-12	10-3-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	**0.25**	<0.05	<0.05	**0.25**
FB-12	11-19-24	1-1.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-12A (step-out)	11-19-24	0-0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-12B (step-out)	11-19-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-12C (step-out)	11-19-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-12D (step-out)	11-19-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-13	10-3-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FB-14	10-3-24	0-0.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CS-9 (FB-1, -2-, -3)	10-3-24	2-2.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CS-10 (FB—4, -5, -6)	10-3-24	2-2.5'	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
CS-11 (FB-7, -8-, -9, -10)	10-3-24	2-2.5'	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CS-12 (FB-11, -12-, -13, -14)	10-3-24	2-2.5'	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
SL			6.6	0.20	0.17	0.23	0.23	0.24	0.24	0.23
3:1 COMP			2.2	0.07	0.06	0.08	0.08	0.08	0.08	0.08
4:1 COMP			1.7	0.05	0.04	0.06	0.06	0.06	0.06	0.06

Notes:

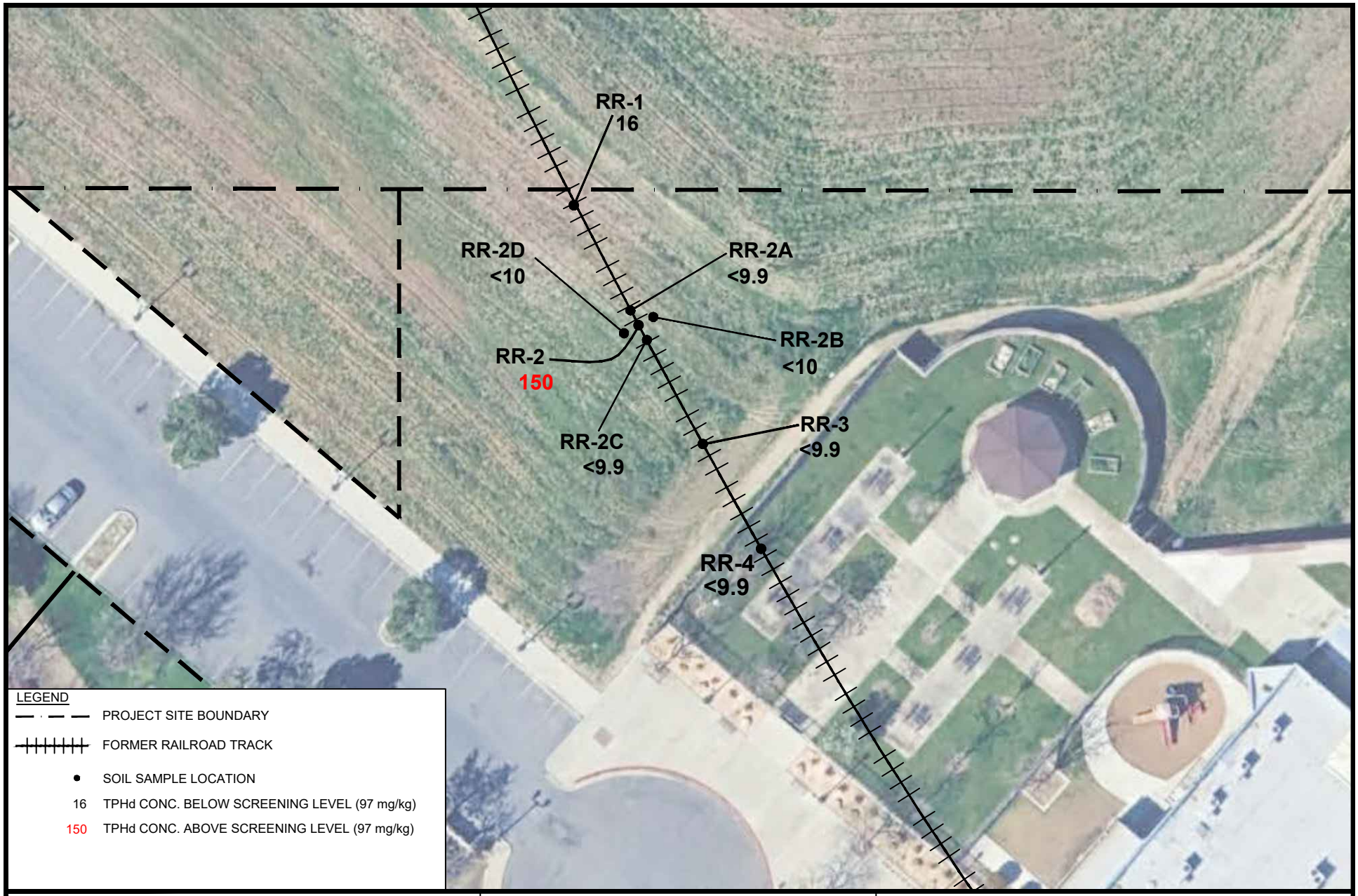
PCBs – Polychlorinated biphenyls
mg/kg – milligrams per kilogram
XX – Above screening level
SL – HHRA Note #3, Table 1 - DTSC-Recommended Screening Level (Revised May 2022)

Table 6-7: Soil Results for NOA

Sample Identification	Date Collected	Sample Depth	NOA PLM Analysis (% Type)	NOA TEM Analysis (Asbestos Weight %)
N-1	10-3-24	0-0.5’	None Detected	<0.01
N-1	10-3-24	2-2.5’	None Detected	NA
N-2	10-3-24	0-0.5’	None Detected	NA
N-2	10-3-24	2-2.5’	None Detected	NA
N-3	10-3-24	0-0.5’	None Detected	NA
N-3	10-3-24	2-2.5’	None Detected	<0.01
N-4	10-3-24	0-0.5’	None Detected	NA
N-4	10-3-24	2-2.5’	None Detected	NA
Analytical Sensitivity			0.25%	0.01%
Further Action Determination			0.25%	0.01%

Notes:

NOA – Naturally Occurring Asbestos
PLM – Polarized Light Microscopy
TEM – Transmission Electron Microscopy
NA – Not Analyzed



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GOOGLE EARTH IMAGERY (3/24)

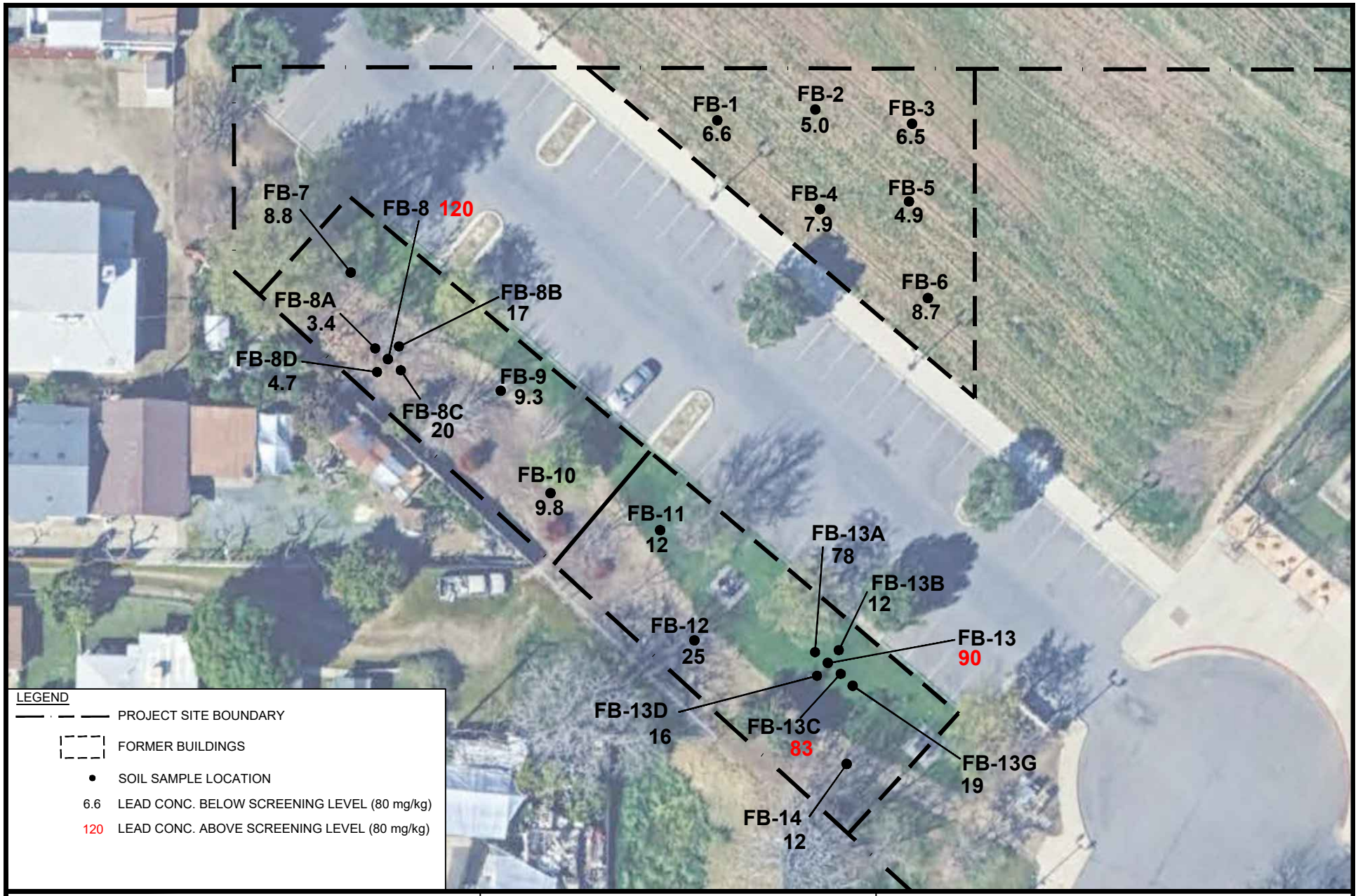
0 40
FEET

SANTA FE ELEM. SCHOOL EXPANSION
256 & 286 EAST ORANGE AVENUE
PORTERVILLE, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2301-3652	12/18/24	AC	AJK

PLATE 6-1

TPHd RESULTS
(SURFACE SOIL)



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PROJECT NO.	DATE	DR. BY	APP. BY
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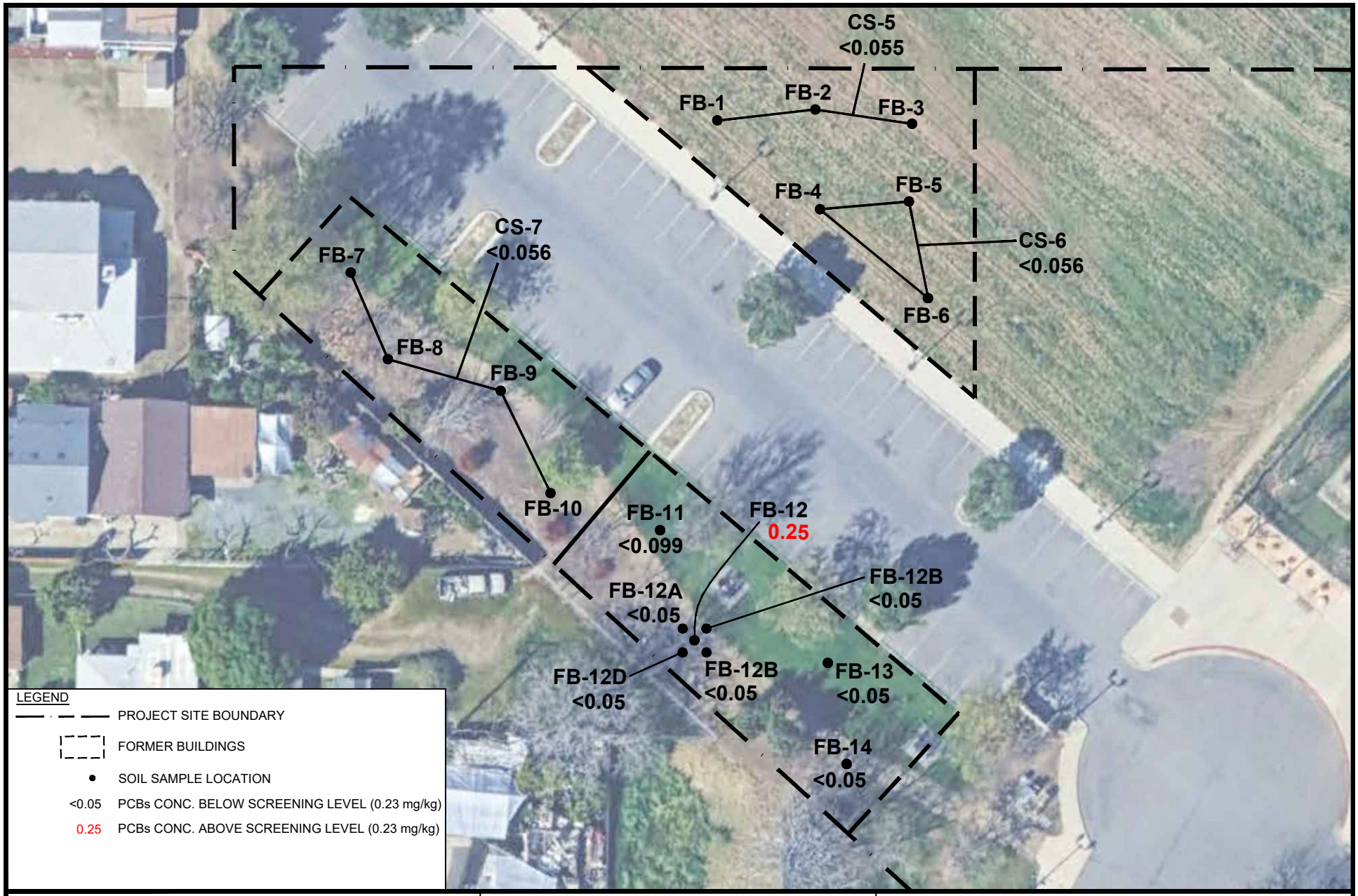
PLATE 6-2

LEAD RESULTS (SURFACE SOIL)



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PROJECT NO.	DATE	DR. BY	APP. BY
2301-3652	12/23/24	AC	AJK

PLATE 6-3

PCBs RESULTS (SURFACE SOIL)

7.0 HUMAN HEALTH SCREENING-LEVEL EVALUATION

7.1 CHEMICALS OF POTENTIAL CONCERN

The COPCs used in the human health screening-level evaluation for the Project Site completed by Padre included those compounds that were reported at concentrations at or in excess of their respective analytical laboratory reporting limits. Therefore, the following COPC in soil identified at the Project Site was evaluated:

- TPH – Diesel and Motor Oil
- PCB – Aroclor 1248
- Metals – Arsenic and Lead

The DTSC-modified screening levels provided in Human Health Risk Assessment (HHRA) Note 3 dated June 2020 – revised May 2022 were used to conduct a screening-level human health risk assessment using the residential land-use scenario. Carcinogenic screening levels are typically based on a predicted excess long-term cancer risk of one in a million. Non-carcinogenic screening levels are based on maintaining the daily COPC intake below the level at which deleterious health effects are considered possible.

In accordance with PEA guidance documents and DTSC's HHRA Note No. 4, dated March 2022, detected chemical concentrations in soil were evaluated as potential exposure point concentrations (EPCs). The maximum EPCs for the COPC were evaluated.

The EPCs were compared to their respective screening levels. The ratio of an EPC to the corresponding carcinogenic screening level was multiplied by 1E-06 to estimate the chemical-specific screening cancer risk. For noncarcinogens, the chemical-specific hazard index is the ratio of the EPC to the screening level based on noncarcinogenic effects. The risk screening equations are as follows:

For each carcinogenic chemical:

$$\frac{\text{Maximum Detected Concentration}}{\text{Screening Level}} \times 10^{-6} = \text{Cancer Risk}$$

For each non-carcinogenic chemical:

$$\frac{\text{Maximum Detected Concentration}}{\text{Screening Level}} = \text{Hazard Quotient}$$

The sums of the chemical-specific screening cancer risk and screening hazard index are the cumulative screening cancer risk and hazard index, respectively.

Using the maximum detected concentrations, the total risk identified in soil at the Project Site from the presence of TPH-d, -mo, and PCBs (Aroclor 1248) is estimated to be 1.1 x 10^{-6}, which presents an increased cancer risk of greater than 1 in 1,000,000 (>10^{-6}), and the total health hazard is estimated to be 1.7 which presents an increased health hazard (i.e., >1). The results of the soil exposure screening-level evaluations are presented in **Table 7-1**.

Based on the analytical laboratory results of the initial PEA sampling event, Padre returned to the Project Site on November 19, 2024, and collected step-out soil samples at four locations. At the location of soil sample RR-2 step-out soil samples were collected and analyzed for the presence of TPH-d. At the location of FB-8, and FB-13 step-out soil samples were collected and analyzed for the presence of lead, and at the location of FB-12 step-out soil samples were collected and analyzed for the presence of PCBs. The analytical laboratory results of step-out soil samples indicated that elevated levels of COPC at these locations were not present. Therefore, the 95% upper confidence limit (UCL) was used to calculate the risk for these COPC.

Using the 95% UCL for TPH-d and Aroclor 1248, the total risk for COPC was calculated to be 3.5 x 10^{-7}, which does not present an increased cancer risk of greater than 1 in 1,000,000 (>10^{-6}), and the total health hazard is calculated to be 0.6 which does not present an increased health hazard (i.e., >1). The results of the soil exposure screening-level evaluations are presented in **Table 7-2** and the 95% UCL output spreadsheets (ProUCL) are presented in **Appendix E**.

Using the 95% UCL for lead in soil (23 mg/kg) as the input concentration, a risk assessment was performed using DTSC's lead risk assessment spreadsheet model (*LeadSpread Version 9*). Based on the LeadSpread output, exposure to the lead concentrations detected at the Project Site will result in a 90th percentile blood lead concentration of 0.3 micrograms per deciliter (µg/dl) in children which is below the California Office of Environmental Health Hazard Assessment (OEHHA) blood toxicity level of 1 µg/dl. A copy of the LeadSpread Risk Assessment Spreadsheet is presented in **Appendix F**.

Arsenic concentrations in soil ranged from 1.3 to 5.0 milligrams per kilogram (mg/kg). Arsenic concentrations were compared to an arsenic data set from a school site located approximately 1-mile northeast of the Project Site. The property has a similar geologic setting (Pleistocene Nonmarine (Qc) sedimentary deposits) as the Project Site and consists of similar type soils (sandy loam). The arsenic concentrations at the background site ranged from 1.02 to 4.04 mg/kg. Arsenic concentrations identified in surface soil at the Project Site are comparable to background concentrations. A copy of the arsenic background data set is presented in **Appendix G**.

Table 7-1
Soil Exposure Screening Evaluation (Max Concentrations)
Santa Fe Elementary School Expansion Project
Porterville, California

COC	EPC (mg/kg)	Carcinogenic Risk			Non-carcinogenic Hazard		
		Screening Level (mg/kg)	Source	Ratio of EPC to Screening Level	Screening Level (mg/kg)	Source	Ratio of EPC to Screening Level
TPH-diesel	150	nc	SL	NA	97	SL	1.5E+00
TPH-motor oil	390	nc	SL	NA	2400	SL	1.6E-01
Aroclor 1248	0.25	0.23	SL	1.1E+00	1.2[A]	SL	2.1E-01
			Total Risk ($x10^{-6}$):	**1.1E-06**	**Total Hazard:**		**1.9E+00**

Notes:
COC = chemical of concern
EPC = exposure point concentration
Exposure Point Concentration = maximum detected concentration in soil
mg/kg = milligrams per kilogram
SL - Human Health Risk Assessment (Table 1 - DTSC-Recommended Screening Levels for Soil, June 2020 - Revised May 2022)
nc = non-carcinogenic
NE = not established
NA = not applicable
A - noncancer endpoint for Aroclor 1254

Table 7-2
Soil Exposure Screening Evaluation (TPH-d, Aroclor 1248 95% UCL)
Santa Fe Elementary School Expansion Project
Porterville, California

COC	EPC (mg/kg)	Carcinogenic Risk			Non-carcinogenic Hazard		
		Screening Level (mg/kg)	Source	Ratio of EPC to Screening Level	Screening Level (mg/kg)	Source	Ratio of EPC to Screening Level
TPH-diesel	40	nc	SL	NA	97	SL	4.1E-01
TPH-motor oil	390	nc	SL	NA	2400	SL	1.6E-01
Aroclor 1248	0.08	0.23	SL	3.5E-01	1.2[A]	SL	6.7E-02
			Total Risk ($x10^{-6}$):	**3.5E-07**	**Total Hazard:**		**6.4E-01**

Notes:
COC = chemical of concern
EPC = exposure point concentration
Exposure Point Concentration = maximum detected concentration in soil
mg/kg = milligrams per kilogram
SL - Human Health Risk Assessment (Table 1 - DTSC-Recommended Screening Levels for Soil, June 2020 - Revised May 2022)
nc = non-carcinogenic
NE = not established
NA = not applicable
A - noncancer endpoint for Aroclor 1254

8.0 ECOLOGICAL SCREENING

A detailed ecological screening evaluation was not performed during this PEA. Historically, the Project Site was bisected from the northwest to southeast by railroad tracks operated by the Santa Fe Railway, as identified in a 1929 topographic map. Based on historical aerial photographs the railroad tracks appear to have been removed between 1994 and 2006. Several historic buildings were present along the western property boundary from approximately 1957 through 1994. The Project Site is currently used as an existing elementary school and public park which includes a paved parking area. Therefore, based on the available information, there does not appear to be a significant pathway of exposure to nonhuman, sensitive ecological species.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the PEA was to establish whether a release or potential release of hazardous substances or naturally occurring material, which would pose a threat to human health via ingestion, dermal contact, and inhalation exposure pathways, exists at the Project Site. COPC identified at the Project Site included TPH and metals from a historic railroad track activity; lead, OCPs, and PCBs from former buildings; and NOA from the weathering and deposition of ultramafic rock outcrops located within 10 miles of the Project Site.

Using the 95% UCL for TPH-d and Aroclor 1248, the total risk for COPC was calculated to be 3.5×10^{-7}, which does not present an increased cancer risk of greater than 1 in 1,000,000 ($>10^{-6}$), and the total health hazard is calculated to be 0.6 which does not present an increased health hazard (i.e., >1).

Using the 95% UCL for lead in soil as the input concentration, a risk assessment was performed using DTSC's lead risk assessment spreadsheet model (*LeadSpread Version 9*). Based on the LeadSpread output, exposure to the lead concentrations detected at the Project Site will result in a 90th percentile blood lead concentration of 0.3 micrograms per deciliter (µg/dl) in children which is below the California OEHHA blood toxicity level of 1 µg/dl.

Arsenic concentrations in soil ranged from 1.3 to 5.0 mg/kg. Arsenic concentrations were compared to an arsenic data set from a school site located approximately 1 mile northeast of the Project Site. The property has a similar geologic setting (Pleistocene Nonmarine (Qc) sedimentary deposits) as the Project Site and consists of similar type soils (sandy loam). The arsenic concentrations at the background site ranged from 1.02 to 4.04 mg/kg. Arsenic concentrations identified in surface soil at the Project Site are comparable to background concentrations.

OCPs in soil were not detected at or above their respective reporting limits, and NOA in soil was not detected at or above the asbestos % type target analytical sensitivity by PLM (0.25%) or by TEM (0.01%).

The findings of the PEA did not identify the presence of COPC in soil that has adversely impacted the Project Site from historic or current land-use activities. Therefore, Padre recommends the issuance of a "No Further Action" designation from the DTSC regarding the completion of the PEA for the Santa Fe Elementary School Expansion Project.

10.0 REFERENCES

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_____, DTSC – *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers, Revised 06/09/06*.

_____, DTSC – *Interim Guidance Naturally Occurring Asbestos (NOA) at School Sites, Revised 9/24/04*.

_____, DTSC, *Preliminary Environmental Assessment Guidance Manual*, January 1994, (Revised October 2015).

California Division of Mines and Geology, *Geologic Map of California – Fresno Sheet, 1:250,000,* 1966, fourth printing 1991.

California Geological Survey, *A General Location Guide For Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos*. Open File Report 2000-19, 2000.

Norris, R. M., & R. W. Webb, 1976 (Second Edition 1990), *Geology of California*, John Wiley & Sons, New York, pp. 412-427.

Padre Associates, Inc., *Phase I Environmental Site Assessment, Santa Fe Elementary School Expansion Project, 256 &286 East Orange Avenue, Porterville, Tulare County California, February 2024*.

Padre Associates, Inc., *Preliminary Environmental Assessment Workplan, Santa Fe Elementary School Expansion Project, 256 &286 East Orange Avenue, Porterville, Tulare County California (Site Code: 104890)*, September 2024.

State Water Resources Control Board Geotracker website (http://geotracker.swrcb.ca.gov).

Tulare, County of, Assessor's Office.

United State Department of Agriculture, National Resources Conservation Service, Soil Survey of Tulare County Central Part California, February 1982.

U.S. EPA Region 9, Regional Screening Levels (RSLs) – Generic Tables, November 2024.

APPENDIX A
DTSC CORRESPONDENCE

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

Sent Via Electronic Mail

September 18, 2024

Mr. Kevin Holtermann
Project Manager
Porterville Unified School District
534 North E Street
Porterville, California 93257
KHoltermann6345@portervilleschools.org

PRELIMINARY ENVIRONMENTAL ASSESSMENT WORKPLAN – APPROVAL LETTER, PORTERVILLE UNIFIED SCHOOL DISTRICT, SANTA FE ELEMENTARY SCHOOL - EXPANSION PROJECT, 256 AND 286 EAST ORANGE AVENUE, PORTERVILLE, TULARE COUNTY, CALIFORNIA (PROJECT CODE: 104890)

Dear Mr. Holtermann:

The Department of Toxic Substances Control (DTSC) reviewed the final *Preliminary Environmental Assessment Workplan* (PEA Workplan – Padre Associates, Inc., September 16, 2024) received on September 16, 2024. The PEA Workplan includes project background information as well as proposed environmental investigation activities for the proposed Santa Fe Elementary School expansion project located at 256 and 286 E. Orange Avenue in Porterville, Tulare County, California (Site).

The PEA Workplan is approved.

If Site conditions differ from those presented in the approved PEA Workplan, additional work may be necessary. In accordance with Education Code section 17210.1(b), the Hope Elementary School District (District) shall provide written notice to businesses and residents in the immediate area, approved in form by DTSC, at least five days in advance of field investigation activities. The intent of this requirement is to provide advance notice

of fieldwork such as drilling, sampling, and other environmental data collection activities to anyone who lives or works in the line of sight of the Site. Please notify DTSC a minimum of 48 hours in advance of fieldwork or schedule changes.

The PEA Workplan states that the District intends to make the Draft PEA Report available for public review in compliance with Option A of the Education Code section 17213.1(a)(6)(A). Pursuant to Education Code section 17213.1, subdivision (a)(6), at the same time the Draft PEA Report is submitted to DTSC for review, the District shall publish a DTSC approved notice in a local newspaper of general circulation and post the notice in a prominent manner at the Site. The notice should state the District's intent of making the Draft PEA Report available for public review pursuant to Option A. A copy of the notice shall be submitted to DTSC with the Draft PEA Report.

If you have any questions regarding the project, please contact me at (916) 255-6666 or via email at Elizabeth.Tisdale@dtsc.ca.gov.

Sincerely,

E. Tisdale

Elizabeth Tisdale
Project Manager
Northern California Schools Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (see next page)

cc: (via email)

Alan Klein, REPA, CPESC, QSD/QSP
Senior Environmental Scientist
Padre Associates, Inc.
AKlein@padreinc.com

Alan Churchill, PG
Senior Geologist
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Tim Crick, PE, Chief
Northern California Schools Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control
Tim.Crick@dtsc.ca.gov

APPENDIX B
SITE PHOTOGRAHS

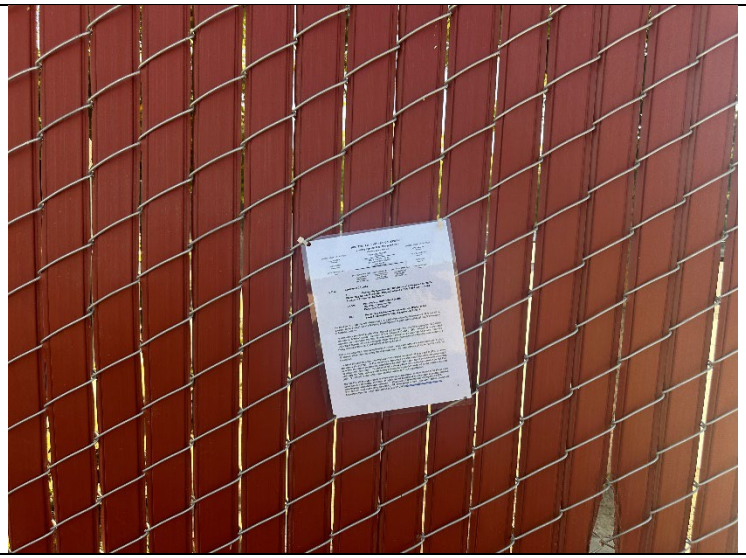


Photo No.1 – PEA Field Notice posted near the entrance to the Project Site.

Photo No.2 – View of former railroad tracks sample locations (pin flags) In northwest area of the Project Site.

Photo No.3 – View of former buildings sample area in the northwest area of the Project Site.

Photo No.4 – View of former buildings samples area in the northwest area of the Project Site.

Sampling Date: October 3, 2024

	
Photo No.5 – View of former buildings sample area in the west area of the Project Site.	Photo No.6 – Soil sample collection.
	
Photo No.7 – Sample decon station.	Photo No.8 – Sample decon station and cooler for samples.

Sampling Date: October 3, 2024

APPENDIX C

HEALTH & SAFETY PLAN
(from Appendix E of the PEA Workplan)

APPENDIX E
SITE HEALTH AND SAFETY PLAN

Project Title:	Preliminary Environmental Assessment for the Santa Fe Elementary School Expansion Project.	
Project Address:	256 & 286 East Orange Avenue, Porterville, CA.	
Project Manager:	Alan J. Klein	Cell Phone: (916) 947-4831
Project Supervisor:	Jerome K. Summerlin	Cell Phone: (805) 218-0109
Office Phone:	(916) 333-5920 (Sacramento Office) ext. 240.	

INTRODUCTION

The purpose of this Site Health and Safety Plan (HSP) is to establish requirements for protecting the health and safety of site workers for the above-referenced project. The HSP contains safety information, instructions, and procedures.

ORGANIZATION

The following personnel are designated to carry out the stated job functions pertaining to the site activities. All site personnel have read this safety plan and are familiar with its provisions.

	Name	Signature
Site Safety Officer:	Alan Churchill	_____
Field Team Leader:	Matt Miller	_____
Field Personnel:		_____
Field Personnel:		_____
Field Personnel:		_____
Equipment Operator:		_____
Operator Helper:		_____

Work was accomplished in accordance with the Site Safety Plan, with the following exceptions: _____

_____

Site Safety Office: _____

Date: _____

(RETURN ORIGINAL COPY TO JOB FILE WITH SIGNATURES)

EMERGENCY RESPONSE (DIAL 9-1-1)

Nearest phone located:	Within Padre Associates, Inc. vehicle or with Padre staff.
Emergency Facility:	Sierra View Medical Center
Address:	465 West Putnam Avenue, Porterville, CA 93257
Phone:	(559) 784-1110
Ambulance response time:	Approximately 6-minutes.

Fire and Police will also be contacted by dialing 911. Ambulance service is to be used in emergencies if the injured person cannot safely be transported by a Padre Associates, Inc., vehicle. When in doubt as to the severity of the situation, call 911. Driving directions to Memorial Medical Center Emergency Department and an illustrated map are located at the end of this HSP.

SITE DESCRIPTION

Location:	256 & 286 East Orange Avenue, Porterville, California.
Potential Hazards:	Soil containing organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), naturally occurring asbestos (NOA), and metals.
Area of Interest:	Surface and shallow subsurface soil at the Project Site.
Surrounding Land Use:	City Park and school playfields (North); Santa Fe Elementary School (East); East Orange Avenue (South), and commercial and residential (West).
Topography:	Relatively flat.
Weather Conditions:	Warm temperatures in the 90s+ expected.

PROJECT OBJECTIVE

The objectives of the environmental assessment program are to:

- Utilize hand sampling equipment to collect surface and subsurface soil samples across the Project Site; and
- Selected soil samples will be submitted to a certified analytical laboratory to be chemically analyzed for the presence of OCPs, PCBs, TPH, NOA, and metals.

AGENCY REPRESENTATIVES

Name:	Elizabeth Tisdale, Project Manager
Agency:	California Department of Toxic Substances Control
Program:	Northern California Schools Unit
Phone Number:	(916) 255-6666

SITE SETUP

A safe perimeter will be established at the work Project Site. The work area will be restricted to required personnel only. No unauthorized personnel will be allowed within the established safe perimeter or will be allowed to enter the Project Site during field work activities. Control boundaries will be marked with caution tape (if necessary) to maintain the established safe perimeter. The onsite command post will be established at the Padre Associates, Inc. vehicle onsite.

HAZARD EVALUATION

Chemicals Onsite. The following substance(s) are known or suspected to be onsite. The primary hazards of each are identified along with their concentrations, if known.

Substance Involved	Primary Hazard	Concentration
OCPs in soil	Ingestion, inhalation, and dermal contact	Unknown
PCBs in soil	Ingestion, inhalation, and dermal contact	Unknown
TPH in soil	Ingestion, inhalation, and dermal contact	Unknown
Metals in soil	Ingestion, inhalation, and dermal contact	Unknown
NOA in soil	Ingestion, inhalation, and dermal contact	Unknown

Notes:
OCPs - Organochlorine Pesticides
PCBs - Polychlorinated Biphenyls
TPH - Total Petroleum Hydrocarbons
NOA - Naturally Occurring Asbestos

Physical Hazards Onsite. The physical hazards and potential for employee exposure to the hazards (i.e., low, moderate, and high) anticipated during the field investigation are discussed below.

Heavy Equipment. The hazards involved with using heavy equipment (i.e., Geoprobe, pick-up trucks, backhoe) include hazards of pinch points; impact from moving parts; fatigue; and improper operation. Heavy equipment used during field activities will consist of pick-up trucks. The potential for incidents to occur from exposure to heavy equipment is considered low. Pre-cautions will be taken when working around heavy equipment. The following safe practices are to be followed during work around heavy equipment:

- While working onsite, wear reflective/visible safety vests, always maintain visual contact with the operator and remain alert.

- Never walk directly behind or to the side of heavy equipment without the operator's knowledge;
- All heavy equipment must be fitted with audible back-up alarms as mandated by OSHA;
- Blades, buckets, and other hydraulic systems will be fully lowered, and parking brakes engaged whenever equipment is not in use; and
- All non-essential personnel will be kept out of the work areas.

Heavy equipment other than pickup trucks is not anticipated for this project. Therefore, the potential for employee exposure to heavy equipment hazards during field activities is considered low.

Slips, Trips and Falls. Site activities can pose a variety of slip, trip and fall hazards. Examples that contribute to slips, trips and falls include uneven ground surfaces and slick or wet surfaces, and unstable earth slopes. Most of the work will be conducted on a relatively level ground surface area. The immediate work area will remain clear of all sampling tools and equipment not in use.

Overhead and Underground Utilities. Typical site activities such as movement of equipment or intrusive activities such as excavations can present the risk of contact with overhead or underground utilities. Overhead utilities are not present at the Project Site. Soil collection activities will consist of using hand sampling equipment to collected surface and near surface soil samples. Therefore, the potential for employee exposure to utility hazards during field activities is considered low.

Heat Stress. High temperatures, direct sun, use of PPE, and labor-intensive activities may contribute to heat stress. Heat stress can involve a high risk of illness of death. Symptoms of heat stress or heat exhaustion include:

- Headaches, dizziness, lightheadedness, or fainting;
- Weakness and moist;
- Mood changes such as irritability or confusion;
- Upset stomach or vomiting.

Preventing heat stress while working outdoors includes:

- Know the signs/symptoms of heat stress, and monitor yourself and coworkers;
- Drink lots of water; about 1 cup every 15 minutes;
- Take regular breaks away from the sun;
- Wear lightweight, light colored, loose-fitting clothes;
- Avoid alcohol, caffeinated drinks, or heavy meals.

Treatment for heat related illness includes:

- Move the worker to a cool shaded area;
- Loosen or remove heavy clothing;

- Provide cool drinking water;
- Fan and mist the person with water:
- Call 911.

Field work is expected to be completed during the summer months in 2023. Therefore, the potential for employee exposure to heat stress hazards during field activities is considered high and the appropriate mitigation measures will be implemented.

Fire and Explosion. Gas or sewer lines can contain hazardous levels of explosive or toxic gases, which may pose a fire risk. The risk of fire on site may also stem from the presence of vegetation, heat and fuel sources from construction equipment and site vehicles, or from the presence of combustible gases or vapors in contaminated soil and/or wells. Padre vehicles will be parked on unvegetated work areas. Therefore, the potential for exposure to fire and explosion hazards is considered low.

Traffic Hazards. Work activities along roadways, parking areas, and entrance and exit areas create exposure to traffic hazards. The Project Site consists of a fenced vacant lot. Therefore, the potential for exposure to traffic hazards is considered low.

Biological Hazards. The Project Site consists of vacant land with weeds, therefore there is potential presence for a wide variety of insects, including bees, ticks and spiders that may be encountered. Stings from bees may cause serious allergic reactions in certain individuals. Ticks are parasites that feed on the blood of an animal/human host and can carry several severe diseases, causing fever and pain for several days and even brain damage. Poisonous snakes or spiders may also be encountered. Skin contact with certain plants (i.e., poison oak and poison ivy) may cause severe reactions. The best protection is skin coverage (long pants, long shirts, and gloves). Avoid wearing perfumes and scents.

GENERAL SAFETY RULES

1. There will be no eating, drinking, or smoking within the safe perimeter set up.
2. Fire extinguishers will be in nearby Padre staff vehicles.
3. First aid kits will be in nearby Padre staff vehicles.

EQUIPMENT

Personal Protective Equipment. Based on the evaluation of potential hazards, the level of protection deemed appropriate for this site is Level D. Field sampling activities will be conducted in such a manner as to limit the creation of dust during soil disturbance.

Level D equipment includes:

hard hat
steel toe and shank boots
safety glasses or goggles
gloves

Level C equipment includes:

full or half face respirator
dual cartridge with organic vapor/acid gas hepa filtration
steel toe neoprene boots
Tyvek suits
latex inner gloves
PVC outer gloves
duct tape

DECONTAMINATION PROCEDURES

Level D - Decontamination. For Level D PPE work, the following personnel decontamination procedures must be observed by workers prior to rest breaks and upon leaving the exclusion zone:

1. Remove gross contamination from tools, monitoring equipment, boots, etc., prior to leaving the work site, using water, paper towels, Handi-Wipes®, etc.
2. Either completely decontaminate solid equipment at the work site using detergent and water (if possible) or wrap equipment in a plastic bag for transport until complete decontamination is possible.
3. Always follow established personnel decontamination procedures and remove contaminated gloves, paper towels, etc. by placing them in a plastic bag and arranging for proper disposal.
4. Wash hands and face (field wash) thoroughly with soap and water before lunch or coffee breaks, and as soon as possible after finishing work for the day.

MONITORING

Safety Monitoring

1. The designated Site Safety Officer is responsible for onsite safety recommendations during fieldwork activities.

2. A daily safety meeting will be conducted onsite by the Site Safety Officer prior to initiation of activities. The technical work plan will be discussed, and any other topic considered relevant by the Site Safety Officer.

Environmental Monitoring

1. The Site Safety Officer shall be notified of any onsite emergencies or potential hazards noticed by other site personnel. The Site Safety Officer is responsible for determining whether it is safe to proceed. If the Site Safety Officer does not or cannot make the determination, then the project manager shall be contacted prior to continuing with the investigation.
2. If any equipment onsite fails to operate properly, the Field Team Leader and Site Safety Officer shall be notified. It will be determined as to the effect of this failure on continuing

operations on the site. If the failure affects the safety of personnel or prevents completion of the work plan tasks, all personnel shall leave the job site until the situation is evaluated and appropriate actions taken.

Personal Monitoring.

The following personal monitoring will be in effect onsite:

- Site personnel will be observed by the Site Safety Officer to determine whether they are operating in a safe manner.

TRAINING REQUIREMENTS

All personnel will be up to date on the requirements set forth in 29 CFR 1910.120. It is the responsibility of the Corporate Health and Safety Coordinator to maintain the required annual 8-hour refresher training for all personnel. Padre's Corporate Health and Safety Coordinator is Mr. Andreas Wedderien (805) 644-2220 x19.

DISPOSAL OF WASTES DURING FIELD ACTIVITIES

Generated waste solids (gloves, bottles, wrappers, etc.) will be placed in plastic trash bag and removed from the Project Site and the end of day of field activities. Soil cuttings will be placed back into the bore holes; therefore, no waste solids will be stored onsite. At the completion of sampling activities, the small amount of wash water will be dispersed to the ground surface. The wash water will consist of water, non-phosphate detergent, and a small amount of surface soil.

ROUTE TO HOSPITAL

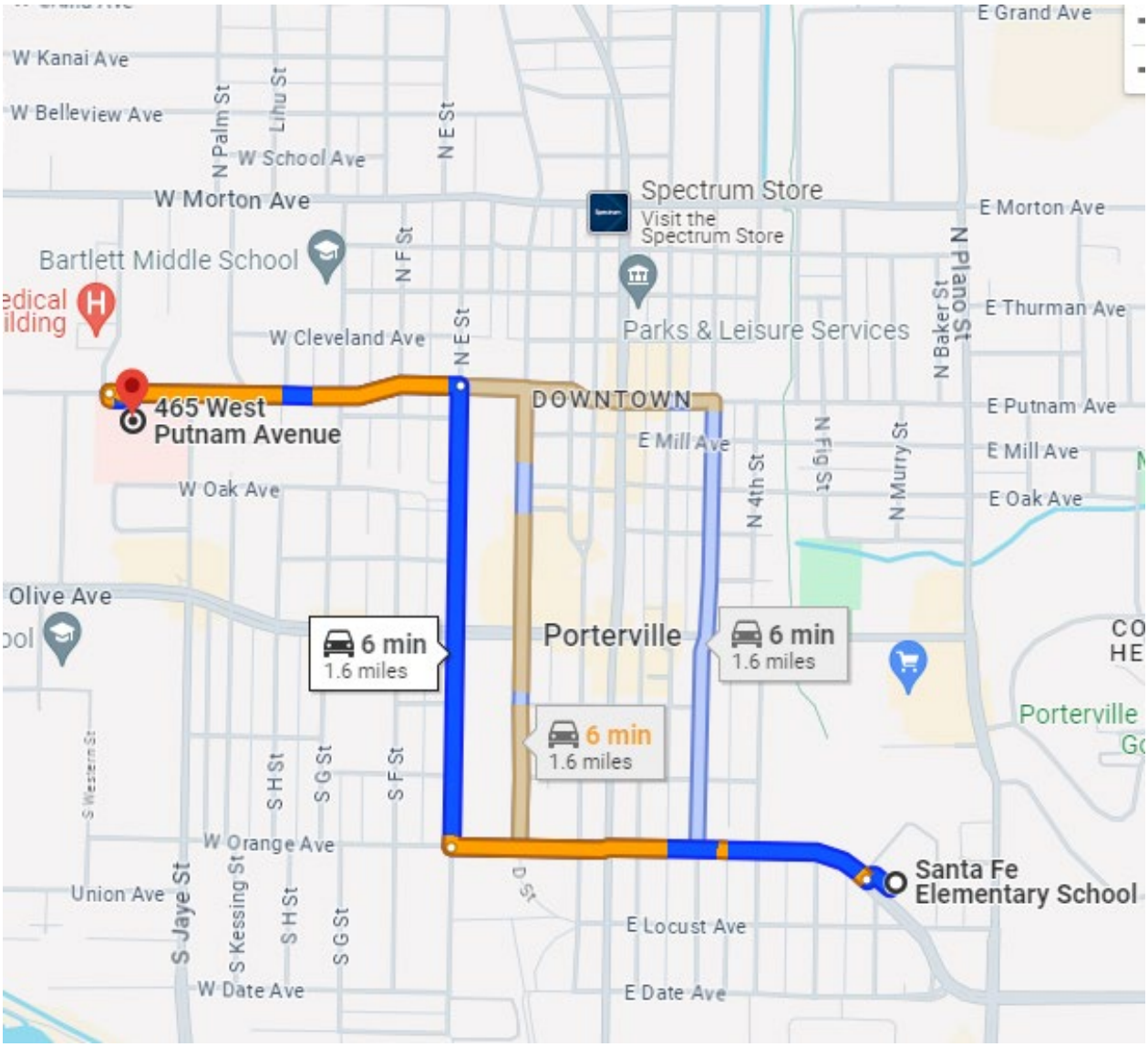
Directions

1. From the work area, head West on East Orange Avenue (0.5 mi.);
2. Turn Right onto South E Street (0.6 mi.);
3. Turn Left onto West Putnam Avenue (0.4 mi.);
4. Destination will be on the Left.

Arrive at Sierra View Medical Center, 465 West Putnam Avenue, Porterville, CA 93257

Trip length: Approximately 1.6-miles.

Trip time: Approximately 6-minutes.


E Grand Ave
W Kanai Ave
W Belleview Ave
N Palm St
Linn St
W School Ave
N E St
W Morton Ave
Spectrum Store
Visit the Spectrum Store
E Morton Ave
Bartlett Middle School
N F St
Parks & Leisure Services
N Plano St
N Baker St
E Thurman Ave
W Cleveland Ave
N E St
DOWNTOWN
E Putnam Ave
465 West Putnam Avenue
E Mill Ave
N 4th St
N Fig St
N Murry St
E Mill Ave
W Oak Ave
E Oak Ave
Olive Ave
6 min
1.6 miles
Porterville
6 min
1.6 miles
6 min
1.6 miles
Porterville
S Western St
S H St
S G St
S F St
W Orange Ave
Union Ave
S Jaye St
S Kessing St
S H St
S G St
D St
Santa Fe Elementary School
E Locust Ave
W Date Ave
E Date Ave

APPENDIX D

LABORATORY ANALTYICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

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

enthalpy.com

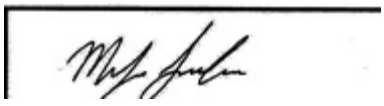
Lab Job Number : 517513
Report Level : II
Report Date : 10/24/2024

Analytical Report *prepared for:*

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA 95825

Project: 2301-3652 - Santa Fe Elem PEA

Authorized for release by:



Miguel Gamboa, Project Manager
miguel.gamboa@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

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	517513
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	10/04/24

Sample ID	Lab ID	Collected	Matrix
RR-1 (SURF)	517513-001	10/03/24 08:00	Soil
RR-2 (SURF)	517513-002	10/03/24 08:24	Soil
RR-3 (SURF)	517513-003	10/03/24 08:42	Soil
RR-4 (SURF)	517513-004	10/03/24 09:06	Soil
RR-5 (SURF)	517513-005	10/03/24 08:07	Soil
RR-6 (SURF)	517513-006	10/03/24 08:33	Soil
RR-7 (SURF)	517513-007	10/03/24 08:53	Soil
RR-8 (SURF)	517513-008	10/03/24 09:19	Soil
FB#1	517513-009	10/03/24 11:20	Drinking Water
EB#1	517513-010	10/03/24 11:30	Drinking Water
RR-1 (1-1.5)	517513-011	10/03/24 08:02	Soil
RR-2 (1-1.5)	517513-012	10/03/24 08:27	Soil
RR-3 (1-1.5)	517513-013	10/03/24 08:45	Soil
RR-4 (1-1.5)	517513-014	10/03/24 09:09	Soil
RR-5 (1-1.5)	517513-015	10/03/24 08:17	Soil
RR-6 (1-1.5)	517513-016	10/03/24 08:35	Soil
RR-7 (1-1.5)	517513-017	10/03/24 08:55	Soil
RR-8 (1-1.5)	517513-018	10/03/24 09:22	Soil
FB-1 (SURF)	517513-019	10/03/24 09:42	Soil
FB-2 (SURF)	517513-020	10/03/24 10:02	Soil
FB-3 (SURF)	517513-021	10/03/24 09:32	Soil
FB-4 (SURF)	517513-022	10/03/24 10:19	Soil
FB-5 (SURF)	517513-023	10/03/24 10:02	Soil
FB-6 (SURF)	517513-024	10/03/24 10:18	Soil
FB-7 (SURF)	517513-025	10/03/24 08:00	Soil
FB-8 (SURF)	517513-026	10/03/24 08:12	Soil

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	517513
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	10/04/24

Sample ID	Lab ID	Collected	Matrix
FB-9 (SURF)	517513-027	10/03/24 08:22	Soil
FB-10 (SURF)	517513-028	10/03/24 08:30	Soil
FB-11 (SURF)	517513-029	10/03/24 08:40	Soil
FB-12 (SURF)	517513-030	10/03/24 08:50	Soil
FB-13 (SURF)	517513-031	10/03/24 09:01	Soil
FB-14 (SURF)	517513-032	10/03/24 09:11	Soil
FB-1 (2-2.5)	517513-033	10/03/24 09:48	Soil
FB-2 (2-2.5)	517513-034	10/03/24 10:13	Soil
FB-3 (2-2.5)	517513-035	10/03/24 09:48	Soil
FB-4 (2-2.5)	517513-036	10/03/24 11:05	Soil
FB-5 (2-2.5)	517513-037	10/03/24 10:06	Soil
FB-6 (2-2.5)	517513-038	10/03/24 10:40	Soil
FB-7 (2-2.5)	517513-039	10/03/24 08:04	Soil
FB-8 (2-2.5)	517513-040	10/03/24 08:16	Soil
FB-9 (2-2.5)	517513-041	10/03/24 08:26	Soil
FB-10 (2-2.5)	517513-042	10/03/24 08:33	Soil
FB-11 (2-2.5)	517513-043	10/03/24 08:44	Soil
FB-12 (2-2.5)	517513-044	10/03/24 08:55	Soil
FB-13 (2-2.5)	517513-045	10/03/24 09:05	Soil
FB-14 (2-2.5)	517513-046	10/03/24 09:14	Soil
CS-1	517513-047	10/03/24 00:00	Soil
CS-2	517513-048	10/03/24 00:00	Soil
CS-3	517513-049	10/03/24 00:00	Soil
CS-4	517513-050	10/03/24 00:00	Soil
CS-5	517513-051	10/03/24 00:00	Soil
CS-6	517513-052	10/03/24 00:00	Soil

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	517513
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	10/04/24

Sample ID	Lab ID	Collected	Matrix
CS-7	517513-053	10/03/24 00:00	Soil
CS-8	517513-054	10/03/24 00:00	Soil
CS-9	517513-055	10/03/24 00:00	Soil
CS-10	517513-056	10/03/24 00:00	Soil
CS-11	517513-057	10/03/24 00:00	Soil
CS-12	517513-058	10/03/24 00:00	Soil
DUPE CS-1	517513-059	10/03/24 00:00	Soil
DUPE RR-4 (SURF)	517513-060	10/03/24 09:06	Soil
DUPE RR-7 (1-1.5)	517513-061	10/03/24 08:55	Soil
DUPE FB-3 (SURF)	517513-062	10/03/24 09:32	Soil
DUPE FB-7 (SURF)	517513-063	10/03/24 08:00	Soil
DUPE FB-3 (2-2.5)	517513-064	10/03/24 09:48	Soil

ENTHALPY ANALYTICAL

Case Narrative

Padre Associates, Inc. 350 University Avenue Suite 250 Sacramento, CA 95825 Alan Klein	Lab Job Number: 517513 Project No: 2301-3652 Location: Santa Fe Elem PEA Date Received: 10/04/24

- This data package contains sample and QC results for forty four soil samples, eight four-point soil composites, four three-point soil composites, and two drinking water samples, requested for the above referenced project on 10/07/24. The samples were received cold and intact.
- This report was revised and reissued on 10/24/24 to report OCPs and PCBs down to the MDL as requested.

TPH-Extractables by GC (EPA 8015M):

- RR-2 (SURF) (lab # 517513-002) was diluted due to the dark color of the sample extract.
- No other analytical problems were encountered.

Pesticides (EPA 8081A):

- CS-5 (lab # 517513-051), CS-6 (lab # 517513-052), and CS-7 (lab # 517513-053) were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

PCBs (EPA 8082):

- A number of samples were treated with sulfuric acid to reduce analytical interferences or due to the presence of color.
- A number of samples were diluted due to the dark color of the sample extracts.
- No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7471A):

- Low recoveries were observed for antimony in the MS/MSD of FB-9 (2-2.5) (lab # 517513-041); the LCS was within limits, and the associated RPD was within limits.
- No other analytical problems were encountered.

Metals (EPA 200.8):

No analytical problems were encountered.

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 517513

Page: 1 of 5

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Padre Assoc., Inc.	Quote #:	
Report To:	Alan Klein	Proj. Name:	Santa Fe Elem PEA
Email:	AKlein@padreinc.com	Proj. #:	2301-3652
Address:	350 University Ave #250	P.O. #:	
	Sacramento CA 95825	Address:	
Phone:	916-333-5520	Global ID:	
Fax:		Sampled By:	AC/MM

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	As (0.02) (Discrete)	As & Pb 200.8				TPH (-cl & -mo) 8015B	CAM 17 Metals 7000 Series	SPLIT/Duplicate	Test Instructions / Comments
1	RR-1 (surf)	10/3/24	0800	S	1	ICE	X			4:1 comp					4:1
2	RR-2 (surf)		0824				X			CS-1		X	X	X	Composite RR-1(surf)→RR-4(surf)
3	RR-3 (surf)		0842				X								
4	RR-4 (surf)		0906				X							X	Dupe RR-4(surf) for AS
5	RR-5 (surf)		0807				X			4:1 comp					4:1
6	RR-6 (surf)		0833				X			CS-2		X	X		Composite RR-5(surf)-RR-8(surf)
7	RR-7 (surf)		0853				X								
8	RR-8 (surf)		0919	↓			X								
9	FB#1		1120	DW				X							
10	EB#1	↓	1130	DW	↓	↓		X							

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	Matt Miller	Matt Miller	Padre	10-4-24 / 0920
[1] Received By:	Brenda Hamilton	Brenda Hamilton	EA	10-4-24 0920
[2] Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	10/4/24 1700
[2] Received By:	Adam	Adam Dinkmeyer	EA	10/8/24 1355
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL	Chain of Custody Record			Turn Around Time (rush by advanced notice only)					
	Lab No:	517513		Standard:	X	5 Day:		3 Day:	
	Page:	2	of	2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

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Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp:

(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Padre Assoc, Inc.	Quote #:	
Report To:	Matt Klein	Proj. Name:	Santa Fe Elem. PEA
Email:	AKlein@padreinc.com	Proj. #:	2301-3652
Address:	350 University Ave #250	P.O. #:	
	Sacramento CA 95825	Address:	
Phone:	916-333-5920	Global ID:	
Fax:		Sampled By:	MM/AC

Analysis Request: AS 6020 (Discrete); TPH (-d & -mo) 8015B; CAM17 Metals 7000 Series; SPLIT/Dupe

#	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	AS 6020 (Discrete)					TPH (-d & -mo) 8015B	CAM17 Metals 7000 Series	SPLIT/Dupe			Test Instructions / Comments
1	RR-1 (1-1.5)	10/3/24	0802	S	1	ICE	X	4:1 comp									
2	RR-2 (1-1.5)	↓	0827	↓	↓	↓	X	CS-3				X	X				
3	RR-3 (1-1.5)		0845				X										
4	RR-4 (1-1.5)		0909				X										
5	RR-5 (1-1.5)		0817				X	4:1 comp									
6	RR-6 (1-1.5)		0835				X	CS-4				X	X				
7	RR-7 (1-1.5)		0855				X							X			Dupe RR-7 (1-1.5) for AS
8	RR-8 (1-1.5)	↓	0922	↓	↓	↓	X										
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Matt Miller	Padre	10-4-24 / 0920
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA	10-4-24 0920
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	10/4/24 1700
2 Received By:	AdaDj	Adam Dinkmeyer	EA	10/8/24 1355
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 517513

Page: 3 of 5

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Padre Assoc., Inc	Quote #:	
Report To:	Alan Klein	Proj. Name:	Santa Fe Rail PEA
Email:	AKlein@padreinc.com	Proj. #:	2301-3652
Address:	350 University Ave #250	P.O. #:	
	Sacramento CA 95825	Address:	
Phone:	916-333-5920	Global ID:	
Fax:		Sampled By:	Matt/AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Pb (6020 (Discrete)				OCPs 8081B	PCBs 8082	SPLIT/Dup		Test Instructions / Comments
1	FB-1 (surf)	10/3/24	0942	S	1	ICE	X			4:1 comp CS-5					
2	FB-2 (surf)		1002				X				X	X			
3	FB-3 (surf)		0932				X						X		Dup for Pb
4	FB-4 (surf)		1019				X			4:1 comp CS-6					
5	FB-5 (surf)		1002				X				X	X			
6	FB-6 (surf)		1018				X								
7	FB-7 (surf)		0800				X						X		Dup for Pb
8	FB-8 (surf)		0812				X			4:1 comp CS-7	X	X			
9	FB-9 (surf)		0822				X								
10	FB-10 (surf)	↓	0830	↓	↓	↓	X								

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Matt Miller	Padre	10-4-24 0920
1 Received By:	Brenda Hamren	Brenda Hamilton	EA	10-4-24 0920
2 Relinquished By:	Brenda Hamren	Brenda Hamilton	EA	10-4-24 1700
2 Received By:	Ada	Adam Dinkmeyer	EA	10/18/24 1355
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 517513

Page: 4 of 5

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Padre Assoc. Inc.	Quote #:	
Report To:	Alan Klein	Proj. Name:	Santa Fe Elem PEA
Email:	Aklein@padreinc.com	Proj. #:	2301-3652
Address:	350 University Ave #250	P.O. #:	
	Sacramento CA 95825	Address:	
Phone:	916-333-5920	Global ID:	
Fax:		Sampled By:	

Analysis Request / **Test Instructions / Comments**

#	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Pb 6020 (Discrete)	Composite	OCPs 8081B	PCBs 8082	Dupe / Split	Test Instructions / Comments
1	FB-11 (surf)	10/3/24	0840	S	1	ICE	X	4:1 comp				
2	FB-12 (surf)	↓	0850	↓	↓	↓	X	CS-8	X	X		
3	FB-13 (surf)	↓	0901	↓	↓	↓	X					
4	FB-14 (surf)	↓	0911	↓	↓	↓	X					
5	FB-1 (2-2.5)	↓	0948	↓	↓	↓	X	4:1 comp				
6	FB-2 (2-2.5)	↓	1013	↓	↓	↓	X	CS-9	X	X		
7	FB-3 (2-2.5)	↓	0948	↓	↓	↓	X				X	Dupe for Pb
8	FB-4 (2-2.5)	↓	1105	↓	↓	↓	X	4:1 comp				
9	FB-5 (2-2.5)	↓	1006	↓	↓	↓	X	CS-10	X	X		
10	FB-6 (2-2.5)	↓	1040	↓	↓	↓	X					

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Matt Muller	Padre	10-4-24 / 0920
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA	10-4-24 0920
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	10-4-24 1700
2 Received By:	[signature]	Adam Dinkmeyer	EA	10/8/24 1355
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 517513

Page: 5 of 5

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Padre Assoc., Inc.	Quote #:	
Report To:	Alan Klein	Proj. Name:	Santa Fe Elem PEA
Email:	AKlein@padre-inc.com	Proj. #:	2301-3652
Address:	350 University Ave #250	P.O. #:	
	Sacramento CA 95825	Address:	
Phone:	916-333-5920	Global ID:	
Fax:		Sampled By:	MM/AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Pb 6020				OCPs 8081B	PCBs 8082				Test Instructions / Comments
1	FB-7 (2-2.5)	10/3/24	0804	S	1	ICE	X		4:1 comp							
2	FB-8 (2-2.5)		0816				X		CS-11		X	X				
3	FB-9 (2-2.5)		0826				X									
4	FB-10 (2-2.5)		0833				X									
5	FB-11 (2-2.5)		0844				X		4:1 comp							
6	FB-12 (2-2.5)		0855				X		CS-12		X	X				
7	FB-13 (2-2.5)		0905				X									
8	FB-14 (2-2.5)		0914				X									
9																
10																

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Matt Miller	Padre	10/4/24 0920
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA	10/4/24 0920
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	10/4/24 1700
2 Received By:	Adam	Adam Dinkmeyer	EA	10/8/24 1355
3 Relinquished By:				ABD 10-8-24
3 Received By:				

10 of 121

SAMPLE RECEIPT CHECKLIST

Section 1: General Info
Date Received: 10-4-24 WO# 517513 Client: Padre

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☒ No
Custody seals intact on arrival? ☒ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples
Shipping Info: GLS

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**
Date Opened 10-4-24 By (initials) AC Type of ice used : ☒ Wet ☐ Blue/Gel ☐ None
☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)
☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)
If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR07 CF: -0.3 °C
Cooler Temp (°C) #1: 1.3 °C / 1.0 °C #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ☒ **No microbiology samples submitted (skip 3b)**
☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.
☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☒ **No air samples submitted (skip 3c)**
☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	✓		
2) Is the sampler's name present on the CoC?	✓		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	✓		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	✓		
5) Were all of, and only, the correct samples received?	✓		
6) Are sample labels present, legible, and in agreement with the CoC?	✓		
7) Does the container count match the CoC?	✓		
8) Was sufficient sample volume / mass received for the analyses requested?	✓		
9) Were samples received in proper containers for the analyses requested?	✓		
10) Were samples received with > 1/2 holding time remaining?	✓		
11) Are samples properly preserved as indicated by CoC / labels?	✓		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			✓
13) Are VOA vials free from headspace/bubbles > 6mm?			✓

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 10-4-24 By (print) Berkeley (sign) _____
Date Labeled 10-4-24 By (print) Anthony Charles (sign) [signature]

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 10/7/24 WO# 517513 Client: Padre Assoc.

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☑ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 10/7/24 By (initials) JRQ Type of ice used : ☑ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR11 CF: +0.1

Cooler Temp (°C) #1: 4.4 / 4.5 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ■ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ■ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?		X	
2) Is the sampler's name present on the CoC?			
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	X		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	X		
5) Were all of, and only, the correct samples received?		X	
6) Are sample labels present, legible, and in agreement with the CoC?	X		
7) Does the container count match the CoC?			X
8) Was sufficient sample volume / mass received for the analyses requested?	X		
9) Were samples received in proper containers for the analyses requested?	X		
10) Were samples received with > 1/2 holding time remaining?	X		
11) Are samples properly preserved as indicated by CoC / labels?	X		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			X
13) Are VOA vials free from headspace/bubbles > 6mm?			X

Section 5: Explanations / Comments ☑ **PM notified**

4.1: No COC received with the samples. Confirmed via email with Brenda Hamilton that a second cooler which contained the COC was returned to Sacramento.

4.5: Missing samples as follows: 002, 003, 005, 006, 007, 009, 010, 012, 013, 016, 017, 018, 023, 024, 025, 027, 030, 031, 032, 033, 034, 039, 041, 044, 045, 060, 061, 062, 063, 064

Date Logged 10/4/24 **By (print)** Berkeley **(sign)** _____

Date Labeled 10/4/24 **By (print)** Sacramento **(sign)** _____

Outlook

No COC Received - Padre Associates - 517513

From Jelbert Quitugua <JelbertQuitugua@montrose-env.com>
Date Sat 10/5/2024 11:39 AM
To Brenda Hamilton <brenda.hamilton@enthalpy.com>; 003-Push <s003_push@montrose-env.com>
Cc Sample Receiving Group Orange <srloginorange@enthalpy.com>

Hi Brenda,

- We did not receive the COC for this LR
- We received only a portion of the samples for this LR (see details below):

Samples Received	Samples Missing
Sample 001	Sample 002
Sample 004	Sample 003
Sample 008	Sample 005
Sample 011	Sample 006
Sample 014	Sample 007
Sample 015	Sample 009
Sample 019	Sample 010
Sample 020	Sample 012
Sample 021	Sample 013
Sample 022	Sample 016
Sample 026	Sample 017
Sample 028	Sample 018
Sample 029	Sample 023
Sample 035	Sample 024
Sample 036	Sample 025
Sample 037	Sample 027
Sample 038	Sample 030
Sample 040	Sample 031
Sample 042	Sample 032
Sample 043	Sample 033
Sample 046	Sample 034
	Sample 039
	Sample 041
	Sample 044
	Sample 045
	Sample 060
	Sample 061
	Sample 062
	Sample 063
	Sample 064

I have instructed push to hold off on these samples until further notice.

Thanks!

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 10/8/24 WO# 517513 Client: Padre Assoc.

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☑ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 10/8/24 By (initials) ABD Type of ice used : ☑ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR01 CF: -0.6

Cooler Temp (°C) #1: 4.5 / 3.9 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ■ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ■ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	X		
2) Is the sampler's name present on the CoC?	X		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	X		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	X		
5) Were all of, and only, the correct samples received?		X	
6) Are sample labels present, legible, and in agreement with the CoC?	X		
7) Does the container count match the CoC?		X	
8) Was sufficient sample volume / mass received for the analyses requested?	X		
9) Were samples received in proper containers for the analyses requested?	X		
10) Were samples received with > 1/2 holding time remaining?	X		
11) Are samples properly preserved as indicated by CoC / labels?	X		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			X
13) Are VOA vials free from headspace/bubbles > 6mm?			X

Section 5: Explanations / Comments ☑ **PM notified**

4.5: This is the missing cooler containing samples: 002, 003, 005, 006, 007, 009, 010, 012, 013, 016, 017, 018, 023, 024, 025, 027, 030, 031, 032, 033, 034, 039, 041, 044, 045.

All physical samples are now accounted for. Samples 060, 061, 062, 063, 064 are alliases of other samples.

Date Logged 10/4/24 **By (print)** Berkeley **(sign)** _____

Date Labeled 10/4/24 **By (print)** Sacramento **(sign)** _____

GLS.

800-322-5555
www.gls-us.com

Ship From
ENTHALPY ANALYTICAL
SAC SERVICE CENTER
4630 NORTHGATE BLVD
SUITE 150
SACRAMENTO, CA 95834

Ship To
ENTHALPY ANALYTICAL
SAMPLE RECEIVING
931 W BARKLEY AVE
SAMPLE RECEIVING
ORANGE, CA 92868

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: STANDARD

Tracking #: 562050146

SDS

ORANGE

S10219D

16686440

ORC CA927-RD0

Print Date: 9/27/2024 2:55 PM

Package 5 of 10

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
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TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

GLS.

800-322-5555
www.gls-us.com

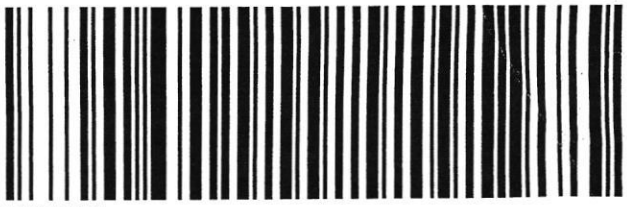
Ship From
ENTHALPY ANALYTICAL
SAC SERVICE CENTER
4630 NORTHGATE BLVD
SUITE 150
SACRAMENTO, CA 95834

Tracking #: 562050096

ORANGE

S10219D

4.5/3.9 IR01
0/C ice



16686287

Ship To
ENTHALPY ANALYTICAL
SAMPLE RECEIVING
931 W BARKLEY AVE
SAMPLE RECEIVING
ORANGE, CA 92868

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: STANDARD

ORC CA927-RD0

Print Date: 9/27/2024 3:00 PM

Package 11 of 25

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Step 2: Fold this page in half.
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TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

Outlook

Fw: [External] - RE: 2301-3652 - Enthalpy Data (517513) (Invoice CINV-324051)

From Will Rice <will.rice@enthalpy.com>
Date Wed 10/16/2024 12:36 PM
To Berkeley SR <031_login@montrose-env.com>

Hi All

Does anyone have time to log these and notify push team?

I will look into the question on limits

Will Rice
Business Development Manager
Enthalpy Analytical
2323 Fifth St, Berkeley, CA | US Pacific Time
1-510-439-7877
will.rice@enthalpy.com | enthalpy.com
Terms & Conditions

From: Alan Churchill <achurchill@PadreInc.com>
Sent: Tuesday, October 15, 2024 3:55 PM
To: Will Rice <will.rice@enthalpy.com>
Cc: Alan Klein <aklein@PadreInc.com>
Subject: [External] - RE: 2301-3652 - Enthalpy Data (517513) (Invoice CINV-324051)

Hi Will,

For Lab Job # 517513, please analyze the following discrete soil samples on Padre's standard TAT:

TPH-diesel by 8015M
RR-1 (SURF); RR-2 (SURF); RR-3 (SURF); RR-4 (SURF);
RR-1 (1-1.5'); RR-2 (1-1.5'); RR-3 (1-1.5'); RR-4 (1-1.5').

PCBs by 8082
FB-11 (SURF); FB-12 (SURF); FB-13 (SURF); FB-14 (SURF).

Cobalt by 6020
RR-5 (SURF); RR-6 (SURF); RR-7 (SURF); RR-8 (SURF);
RR-1 (1-1.5'); RR-2 (1-1.5'); RR-3 (1-1.5'); RR-4 (1-1.5');
RR-5 (1-1.5'); RR-6 (1-1.5'); RR-7 (1-1.5'); RR-8 (1-1.5').

Also, please can you have the chemist check and see if the detection limits for the following composite samples can be lowered:

OCPs by 8081A
CS-5; CS-6; CS-7

PCBs by 8082
CS-5; CS-6; C-7

Thank you.

Alan Churchill, P.G.
Padre Associates, Inc.
350 University Avenue, Suite 250
Sacramento, CA 95825
916-333-5920, ext. 250
916-952-5421 (cell)

From: Will Rice <will.rice@enthalpy.com>
Sent: Monday, October 14, 2024 3:20 PM
To: Alan Churchill <achurchill@PadreInc.com>
Subject: 2301-3652 - Enthalpy Data (517513) (Invoice CINV-324051)

Hi Alan,

Report too large to send, please download from LabLine.

Please find attached the following files:
• Invoice
• Standard Format EDD (517513_standard.zip)

Email was also sent to: aklein@Padreinc.com, ap@Padreinc.com, mmiller@Padreinc.com

Will Rice
Technical Sales and Business Development Manager

2323 5th St. Berkeley, CA 94710
Cell: (510) 439-7877
will.rice@enthalpy.com

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https://enthalpy.com/news-events/

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: RR-1 (SURF) **DF:** 0.9935 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-001 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-001 Analyte	Result	RL	Units
DRO C10-C28	**16**	9.9	mg/Kg
ORO C28-C44	ND	20	mg/Kg

517513-001 Surrogate	%REC	Limits
n-Triacontane	93	70-130

Field ID: RR-2 (SURF) **DF:** 9.980 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-002 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-002 Analyte	Result	RL	Units
DRO C10-C28	**150**	100	mg/Kg
ORO C28-C44	**390**	200	mg/Kg

517513-002 Surrogate	%REC	Limits
n-Triacontane	75	70-130

Field ID: RR-3 (SURF) **DF:** 0.9930 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-003 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-003 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg
ORO C28-C44	**36**	20	mg/Kg

517513-003 Surrogate	%REC	Limits
n-Triacontane	90	70-130

Field ID: RR-4 (SURF) **DF:** 0.9906 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-004 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-004 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg
ORO C28-C44	**24**	20	mg/Kg

517513-004 Surrogate	%REC	Limits
n-Triacontane	110	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: RR-1 (1-1.5) **DF:** 0.9985 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-011 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-011 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg
ORO C28-C44	ND	20	mg/Kg

517513-011 Surrogate	%REC	Limits
n-Triacontane	115	70-130

Field ID: RR-2 (1-1.5) **DF:** 0.9965 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-012 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-012 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg
ORO C28-C44	ND	20	mg/Kg

517513-012 Surrogate	%REC	Limits
n-Triacontane	116	70-130

Field ID: RR-3 (1-1.5) **DF:** 0.9980 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-013 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-013 Analyte	Result	RL	Units
DRO C10-C28	**31**	10	mg/Kg
ORO C28-C44	**98**	20	mg/Kg

517513-013 Surrogate	%REC	Limits
n-Triacontane	91	70-130

Field ID: RR-4 (1-1.5) **DF:** 0.9990 **Analyzed:** 10/17/24
Type: SAMPLE **Batch#:** 353067 **Prep:** EPA 3580M
Lab ID: 517513-014 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB
Basis: as received **Prepared:** 10/17/24

517513-014 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg
ORO C28-C44	**25**	20	mg/Kg

517513-014 Surrogate	%REC	Limits
n-Triacontane	114	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-1 **DF:** 0.9945 **Analyzed:** 10/11/24
Type: SAMPLE **Batch#:** 352434 **Prep:** EPA 3580M
Lab ID: 517513-047 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** KMB
Basis: as received **Prepared:** 10/09/24

517513-047 Analyte	Result	RL	Units
DRO C10-C28	**54**	9.9	mg/Kg
ORO C28-C44	**100**	20	mg/Kg

517513-047 Surrogate	%REC	Limits
n-Triacontane	126	70-130

Field ID: CS-2 **DF:** 0.9930 **Analyzed:** 10/11/24
Type: SAMPLE **Batch#:** 352434 **Prep:** EPA 3580M
Lab ID: 517513-048 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** KMB
Basis: as received **Prepared:** 10/09/24

517513-048 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg
ORO C28-C44	**26**	20	mg/Kg

517513-048 Surrogate	%REC	Limits
n-Triacontane	114	70-130

Field ID: CS-3 **DF:** 0.9975 **Analyzed:** 10/11/24
Type: SAMPLE **Batch#:** 352434 **Prep:** EPA 3580M
Lab ID: 517513-049 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** KMB
Basis: as received **Prepared:** 10/09/24

517513-049 Analyte	Result	RL	Units
DRO C10-C28	**67**	10	mg/Kg
ORO C28-C44	**100**	20	mg/Kg

517513-049 Surrogate	%REC	Limits
n-Triacontane	98	70-130

Field ID: CS-4 **DF:** 0.9935 **Analyzed:** 10/11/24
Type: SAMPLE **Batch#:** 352434 **Prep:** EPA 3580M
Lab ID: 517513-050 **Sampled:** 10/03/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 10/04/24 **Analyst:** KMB
Basis: as received **Prepared:** 10/09/24

517513-050 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg
ORO C28-C44	ND	20	mg/Kg

517513-050 Surrogate	%REC	Limits
n-Triacontane	117	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: DUPE CS-1 **DF:** 0.9940 **Analyzed:** 10/11/24

Type: SAMPLE **Batch#:** 352434 **Prep:** EPA 3580M

Lab ID: 517513-059 **Sampled:** 10/03/24 **Analysis:** EPA 8015M

Matrix: Soil **Received:** 10/04/24 **Analyst:** DIB

Basis: as received **Prepared:** 10/09/24

517513-059 Analyte	Result	RL	Units
DRO C10-C28	**40**	9.9	mg/Kg
ORO C28-C44	**78**	20	mg/Kg

517513-059 Surrogate	%REC	Limits
n-Triacontane	97	70-130

Type: BLANK **Batch#:** 352434 **Analysis:** EPA 8015M

Lab ID: QC1193956 **Prepared:** 10/09/24 **Analyst:** DIB

Matrix: Soil **Analyzed:** 10/10/24

DF: 0.9935 **Prep:** EPA 3580M

QC1193956 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg
ORO C28-C44	ND	20	mg/Kg

QC1193956 Surrogate	%REC	Limits
n-Triacontane	126	70-130

Type: BLANK **Batch#:** 353067 **Analysis:** EPA 8015M

Lab ID: QC1196043 **Prepared:** 10/17/24 **Analyst:** DIB

Matrix: Soil **Analyzed:** 10/17/24

DF: 1.010 **Prep:** EPA 3580M

QC1196043 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg
ORO C28-C44	ND	20	mg/Kg

QC1196043 Surrogate	%REC	Limits
n-Triacontane	101	70-130

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352434 **Analysis:** EPA 8015M

Lab ID: QC1193957 **Prepared:** 10/09/24 **Analyst:** DIB

Matrix: Soil **Analyzed:** 10/10/24

DF: 0.9960 **Prep:** EPA 3580M

QC1193957 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	249.0	211.9	85	76-122	mg/Kg

QC1193957 Surrogate	%REC	Limits
n-Triacontane	112	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/09/24
Type:	MS	**DF:**	4.988	**Analyzed:**	10/10/24
MSS Lab ID:	517621-001	**Batch#:**	352434	**Prep:**	EPA 3580M
Lab ID:	QC1193958	**Sampled:**	10/07/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	10/07/24	**Analyst:**	KMB

QC1193958 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	53.13	249.4	255.2	81	62-126	mg/Kg

QC1193958 Surrogate	%REC	Limits
n-Triacontane	126	70-130

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/09/24
Type:	MSD	**DF:**	4.973	**Analyzed:**	10/10/24
MSS Lab ID:	517621-001	**Batch#:**	352434	**Prep:**	EPA 3580M
Lab ID:	QC1193959	**Sampled:**	10/07/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	10/07/24	**Analyst:**	KMB

QC1193959 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	248.6	265.8	86	62-126	mg/Kg	4	35

QC1193959 Surrogate	%REC	Limits
n-Triacontane	129	70-130

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 353067 **Analysis:** EPA 8015M

Lab ID: QC1196044 **Prepared:** 10/17/24 **Analyst:** DIB

Matrix: Soil **Analyzed:** 10/17/24

DF: 1.000 **Prep:** EPA 3580M

QC1196044 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	250.0	229.9	92	76-122	mg/Kg

QC1196044 Surrogate	%REC	Limits
n-Triacontane	109	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/17/24
Type:	MS	**DF:**	0.9930	**Analyzed:**	10/17/24
MSS Lab ID:	517043-008	**Batch#:**	353067	**Prep:**	EPA 3580M
Lab ID:	QC1196066	**Sampled:**	09/26/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	09/27/24	**Analyst:**	DIB

QC1196066 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	<3.435	248.3	219.2	88	62-126	mg/Kg

QC1196066 Surrogate	%REC	Limits
n-Triacontane	97	70-130

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/17/24
Type:	MSD	**DF:**	0.9950	**Analyzed:**	10/17/24
MSS Lab ID:	517043-008	**Batch#:**	353067	**Prep:**	EPA 3580M
Lab ID:	QC1196067	**Sampled:**	09/26/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	09/27/24	**Analyst:**	DIB

QC1196067 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	248.8	218.8	88	62-126	mg/Kg	0	35

QC1196067 Surrogate	%REC	Limits
n-Triacontane	98	70-130

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-5	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-051	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		
DF:	4.950	**Analyzed:**	10/11/24		

517513-051 Analyte	Result	RL	MDL	Units
alpha-BHC	ND	25	12	ug/Kg
beta-BHC	ND	25	13	ug/Kg
gamma-BHC	ND	25	13	ug/Kg
delta-BHC	ND	25	10	ug/Kg
Heptachlor	ND	25	12	ug/Kg
Aldrin	ND	25	12	ug/Kg
Heptachlor epoxide	ND	25	12	ug/Kg
Endosulfan I	ND	25	13	ug/Kg
Dieldrin	ND	25	12	ug/Kg
4,4'-DDE	ND	25	16	ug/Kg
Endrin	ND	25	12	ug/Kg
Endosulfan II	ND	25	13	ug/Kg
Endosulfan sulfate	ND	25	11	ug/Kg
4,4'-DDD	ND	25	9.7	ug/Kg
Endrin aldehyde	ND	25	24	ug/Kg
Endrin ketone	ND	25	13	ug/Kg
4,4'-DDT	ND	25	13	ug/Kg
Methoxychlor	ND	50	22	ug/Kg
Toxaphene	ND	500	320	ug/Kg
Chlordane (Technical)	ND	250	140	ug/Kg

517513-051 Surrogate	%REC	Limits
TCMX	72	23-120
Decachlorobiphenyl	76	24-120

Legend

MDL: Method Detection Limit

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-6	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-052	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		
DF:	5.000	**Analyzed:**	10/11/24		

517513-052 Analyte	Result	RL	MDL	Units
alpha-BHC	ND	25	12	ug/Kg
beta-BHC	ND	25	13	ug/Kg
gamma-BHC	ND	25	13	ug/Kg
delta-BHC	ND	25	10	ug/Kg
Heptachlor	ND	25	12	ug/Kg
Aldrin	ND	25	12	ug/Kg
Heptachlor epoxide	ND	25	13	ug/Kg
Endosulfan I	ND	25	13	ug/Kg
Dieldrin	ND	25	13	ug/Kg
4,4'-DDE	ND	25	16	ug/Kg
Endrin	ND	25	12	ug/Kg
Endosulfan II	ND	25	13	ug/Kg
Endosulfan sulfate	ND	25	11	ug/Kg
4,4'-DDD	ND	25	9.8	ug/Kg
Endrin aldehyde	ND	25	24	ug/Kg
Endrin ketone	ND	25	13	ug/Kg
4,4'-DDT	ND	25	13	ug/Kg
Methoxychlor	ND	50	22	ug/Kg
Toxaphene	ND	500	330	ug/Kg
Chlordane (Technical)	ND	250	140	ug/Kg

517513-052 Surrogate	%REC	Limits
TCMX	73	23-120
Decachlorobiphenyl	72	24-120

Legend

MDL: Method Detection Limit

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-7	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-053	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		
DF:	5.000	**Analyzed:**	10/11/24		

517513-053 Analyte	Result	RL	MDL	Units
alpha-BHC	ND	25	12	ug/Kg
beta-BHC	ND	25	13	ug/Kg
gamma-BHC	ND	25	13	ug/Kg
delta-BHC	ND	25	10	ug/Kg
Heptachlor	ND	25	12	ug/Kg
Aldrin	ND	25	12	ug/Kg
Heptachlor epoxide	ND	25	13	ug/Kg
Endosulfan I	ND	25	13	ug/Kg
Dieldrin	ND	25	13	ug/Kg
4,4'-DDE	ND	25	16	ug/Kg
Endrin	ND	25	12	ug/Kg
Endosulfan II	ND	25	13	ug/Kg
Endosulfan sulfate	ND	25	11	ug/Kg
4,4'-DDD	ND	25	9.8	ug/Kg
Endrin aldehyde	ND	25	24	ug/Kg
Endrin ketone	ND	25	13	ug/Kg
4,4'-DDT	ND	25	13	ug/Kg
Methoxychlor	ND	50	22	ug/Kg
Toxaphene	ND	500	330	ug/Kg
Chlordane (Technical)	ND	250	140	ug/Kg

517513-053 Surrogate	%REC	Limits
TCMX	70	23-120
Decachlorobiphenyl	77	24-120

Legend

MDL: Method Detection Limit

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-8	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-054	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		
DF:	1.000	**Analyzed:**	10/11/24		

517513-054 Analyte	Result	RL	Units
alpha-BHC	ND	5.0	ug/Kg
beta-BHC	ND	5.0	ug/Kg
gamma-BHC	ND	5.0	ug/Kg
delta-BHC	ND	5.0	ug/Kg
Heptachlor	ND	5.0	ug/Kg
Aldrin	ND	5.0	ug/Kg
Heptachlor epoxide	ND	5.0	ug/Kg
Endosulfan I	ND	5.0	ug/Kg
Dieldrin	ND	5.0	ug/Kg
4,4'-DDE	ND	5.0	ug/Kg
Endrin	ND	5.0	ug/Kg
Endosulfan II	ND	5.0	ug/Kg
Endosulfan sulfate	ND	5.0	ug/Kg
4,4'-DDD	ND	5.0	ug/Kg
Endrin aldehyde	ND	5.0	ug/Kg
Endrin ketone	ND	5.0	ug/Kg
4,4'-DDT	ND	5.0	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	50	ug/Kg

517513-054 Surrogate	%REC	Limits
TCMX	101	23-120
Decachlorobiphenyl	104	24-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-9	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-055	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		
DF:	0.9901	**Analyzed:**	10/11/24		

517513-055 Analyte	Result	RL	Units
alpha-BHC	ND	5.0	ug/Kg
beta-BHC	ND	5.0	ug/Kg
gamma-BHC	ND	5.0	ug/Kg
delta-BHC	ND	5.0	ug/Kg
Heptachlor	ND	5.0	ug/Kg
Aldrin	ND	5.0	ug/Kg
Heptachlor epoxide	ND	5.0	ug/Kg
Endosulfan I	ND	5.0	ug/Kg
Dieldrin	ND	5.0	ug/Kg
4,4'-DDE	ND	5.0	ug/Kg
Endrin	ND	5.0	ug/Kg
Endosulfan II	ND	5.0	ug/Kg
Endosulfan sulfate	ND	5.0	ug/Kg
4,4'-DDD	ND	5.0	ug/Kg
Endrin aldehyde	ND	5.0	ug/Kg
Endrin ketone	ND	5.0	ug/Kg
4,4'-DDT	ND	5.0	ug/Kg
Methoxychlor	ND	9.9	ug/Kg
Toxaphene	ND	99	ug/Kg
Chlordane (Technical)	ND	50	ug/Kg

517513-055 Surrogate	%REC	Limits
TCMX	104	23-120
Decachlorobiphenyl	103	24-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-10	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-056	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		
DF:	0.9804	**Analyzed:**	10/11/24		

517513-056 Analyte	Result	RL	Units
alpha-BHC	ND	4.9	ug/Kg
beta-BHC	ND	4.9	ug/Kg
gamma-BHC	ND	4.9	ug/Kg
delta-BHC	ND	4.9	ug/Kg
Heptachlor	ND	4.9	ug/Kg
Aldrin	ND	4.9	ug/Kg
Heptachlor epoxide	ND	4.9	ug/Kg
Endosulfan I	ND	4.9	ug/Kg
Dieldrin	ND	4.9	ug/Kg
4,4'-DDE	ND	4.9	ug/Kg
Endrin	ND	4.9	ug/Kg
Endosulfan II	ND	4.9	ug/Kg
Endosulfan sulfate	ND	4.9	ug/Kg
4,4'-DDD	ND	4.9	ug/Kg
Endrin aldehyde	ND	4.9	ug/Kg
Endrin ketone	ND	4.9	ug/Kg
4,4'-DDT	ND	4.9	ug/Kg
Methoxychlor	ND	9.8	ug/Kg
Toxaphene	ND	98	ug/Kg
Chlordane (Technical)	ND	49	ug/Kg

517513-056 Surrogate	%REC	Limits
TCMX	102	23-120
Decachlorobiphenyl	93	24-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-11	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-057	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		
DF:	0.9901	**Analyzed:**	10/11/24		

517513-057 Analyte	Result	RL	Units
alpha-BHC	ND	5.0	ug/Kg
beta-BHC	ND	5.0	ug/Kg
gamma-BHC	ND	5.0	ug/Kg
delta-BHC	ND	5.0	ug/Kg
Heptachlor	ND	5.0	ug/Kg
Aldrin	ND	5.0	ug/Kg
Heptachlor epoxide	ND	5.0	ug/Kg
Endosulfan I	ND	5.0	ug/Kg
Dieldrin	ND	5.0	ug/Kg
4,4'-DDE	ND	5.0	ug/Kg
Endrin	ND	5.0	ug/Kg
Endosulfan II	ND	5.0	ug/Kg
Endosulfan sulfate	ND	5.0	ug/Kg
4,4'-DDD	ND	5.0	ug/Kg
Endrin aldehyde	ND	5.0	ug/Kg
Endrin ketone	ND	5.0	ug/Kg
4,4'-DDT	ND	5.0	ug/Kg
Methoxychlor	ND	9.9	ug/Kg
Toxaphene	ND	99	ug/Kg
Chlordane (Technical)	ND	50	ug/Kg

517513-057 Surrogate	%REC	Limits
TCMX	103	23-120
Decachlorobiphenyl	99	24-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-12	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-058	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		
DF:	0.9804	**Analyzed:**	10/11/24		

517513-058 Analyte	Result	RL	Units
alpha-BHC	ND	4.9	ug/Kg
beta-BHC	ND	4.9	ug/Kg
gamma-BHC	ND	4.9	ug/Kg
delta-BHC	ND	4.9	ug/Kg
Heptachlor	ND	4.9	ug/Kg
Aldrin	ND	4.9	ug/Kg
Heptachlor epoxide	ND	4.9	ug/Kg
Endosulfan I	ND	4.9	ug/Kg
Dieldrin	ND	4.9	ug/Kg
4,4'-DDE	ND	4.9	ug/Kg
Endrin	ND	4.9	ug/Kg
Endosulfan II	ND	4.9	ug/Kg
Endosulfan sulfate	ND	4.9	ug/Kg
4,4'-DDD	ND	4.9	ug/Kg
Endrin aldehyde	ND	4.9	ug/Kg
Endrin ketone	ND	4.9	ug/Kg
4,4'-DDT	ND	4.9	ug/Kg
Methoxychlor	ND	9.8	ug/Kg
Toxaphene	ND	98	ug/Kg
Chlordane (Technical)	ND	49	ug/Kg

517513-058 Surrogate	%REC	Limits
TCMX	101	23-120
Decachlorobiphenyl	92	24-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: BLANK **Batch#:** 352502 **Analysis:** EPA 8081A

Lab ID: QC1194186 **Prepared:** 10/10/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/11/24

DF: 1.000 **Prep:** EPA 3546

QC1194186 Analyte	Result	RL	MDL	Units
alpha-BHC	ND	5.0	2.3	ug/Kg
beta-BHC	ND	5.0	2.6	ug/Kg
gamma-BHC	ND	5.0	2.5	ug/Kg
delta-BHC	ND	5.0	2.0	ug/Kg
Heptachlor	ND	5.0	2.3	ug/Kg
Aldrin	ND	5.0	2.5	ug/Kg
Heptachlor epoxide	ND	5.0	2.5	ug/Kg
Endosulfan I	ND	5.0	2.6	ug/Kg
Dieldrin	ND	5.0	2.5	ug/Kg
4,4'-DDE	ND	5.0	3.1	ug/Kg
Endrin	ND	5.0	2.4	ug/Kg
Endosulfan II	ND	5.0	2.5	ug/Kg
Endosulfan sulfate	ND	5.0	2.2	ug/Kg
4,4'-DDD	ND	5.0	2.0	ug/Kg
Endrin aldehyde	ND	5.0	4.8	ug/Kg
Endrin ketone	ND	5.0	2.6	ug/Kg
4,4'-DDT	ND	5.0	2.7	ug/Kg
Methoxychlor	ND	10	4.4	ug/Kg
Toxaphene	ND	100	65	ug/Kg
Chlordane (Technical)	ND	50	27	ug/Kg

QC1194186 Surrogate	%REC	Limits
TCMX	99	23-120
Decachlorobiphenyl	86	24-120

Legend

MDL: Method Detection Limit

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352502 **Analysis:** EPA 8081A

Lab ID: QC1194187 **Prepared:** 10/10/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/11/24

DF: 0.9901 **Prep:** EPA 3546

QC1194187 Analyte	Spiked	Result	%REC	Limits	Units
alpha-BHC	49.50	49.37	100	22-129	ug/Kg
beta-BHC	49.50	51.75	105	28-125	ug/Kg
gamma-BHC	49.50	49.41	100	22-128	ug/Kg
delta-BHC	49.50	50.09	101	24-131	ug/Kg
Heptachlor	49.50	46.31	94	18-124	ug/Kg
Aldrin	49.50	43.36	88	23-120	ug/Kg
Heptachlor epoxide	49.50	48.01	97	26-120	ug/Kg
Endosulfan I	49.50	51.09	103	25-126	ug/Kg
Dieldrin	49.50	47.05	95	23-124	ug/Kg
4,4'-DDE	49.50	49.35	100	28-121	ug/Kg
Endrin	49.50	50.08	101	25-127	ug/Kg
Endosulfan II	49.50	49.09	99	29-121	ug/Kg
Endosulfan sulfate	49.50	45.27	91	30-121	ug/Kg
4,4'-DDD	49.50	45.52	92	26-120	ug/Kg
Endrin aldehyde	49.50	22.38	45	10-120	ug/Kg
Endrin ketone	49.50	46.45	94	28-125	ug/Kg
4,4'-DDT	49.50	45.66	92	22-125	ug/Kg
Methoxychlor	49.50	46.90	95	28-130	ug/Kg

QC1194187 Surrogate	%REC	Limits
TCMX	97	23-120
Decachlorobiphenyl	87	24-120

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-5	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MS	**DF:**	5.000	**Analyzed:**	10/11/24
MSS Lab ID:	517513-051	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	QC1194188	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB

QC1194188 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
alpha-BHC	<11.53	50.00	34.46	69	46-120	ug/Kg
beta-BHC	<12.83	50.00	37.13	74	41-120	ug/Kg
gamma-BHC	<12.58	50.00	35.43	71	41-120	ug/Kg
delta-BHC	<10.15	50.00	33.25	66	38-123	ug/Kg
Heptachlor	<11.51	50.00	33.73	67	39-120	ug/Kg
Aldrin	<12.14	50.00	34.39	69	34-120	ug/Kg
Heptachlor epoxide	<12.47	50.00	35.58	71	43-120	ug/Kg
Endosulfan I	<12.81	50.00	36.91	74	45-120	ug/Kg
Dieldrin	<12.49	50.00	34.80	70	45-120	ug/Kg
4,4'-DDE	<15.57	50.00	34.81	70	34-120	ug/Kg
Endrin	<11.82	50.00	36.77	74	40-120	ug/Kg
Endosulfan II	<12.57	50.00	34.34	69	41-120	ug/Kg
Endosulfan sulfate	<10.71	50.00	31.92	64	42-120	ug/Kg
4,4'-DDD	<9.719	50.00	30.98	62	41-120	ug/Kg
Endrin aldehyde	<23.57	50.00	28.31	57	30-120	ug/Kg
Endrin ketone	<12.63	50.00	33.98	68	45-120	ug/Kg
4,4'-DDT	<13.13	50.00	40.00	80	35-127	ug/Kg
Methoxychlor	<21.99	50.00	35.95	72	42-136	ug/Kg

QC1194188 Surrogate	%REC	Limits
TCMX	71	23-120
Decachlorobiphenyl	73	24-120

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-5	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MSD	**DF:**	5.000	**Analyzed:**	10/11/24
MSS Lab ID:	517513-051	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	QC1194189	**Sampled:**	10/03/24	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB

QC1194189 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
alpha-BHC	50.00	33.90	68	46-120	ug/Kg	2	30
beta-BHC	50.00	37.94	76	41-120	ug/Kg	2	30
gamma-BHC	50.00	35.17	70	41-120	ug/Kg	1	30
delta-BHC	50.00	34.13	68	38-123	ug/Kg	3	30
Heptachlor	50.00	33.66	67	39-120	ug/Kg	0	30
Aldrin	50.00	35.35	71	34-120	ug/Kg	3	30
Heptachlor epoxide	50.00	35.74	71	43-120	ug/Kg	0	30
Endosulfan I	50.00	35.29	71	45-120	ug/Kg	4	30
Dieldrin	50.00	34.62	69	45-120	ug/Kg	1	30
4,4'-DDE	50.00	35.62	71	34-120	ug/Kg	2	30
Endrin	50.00	35.58	71	40-120	ug/Kg	3	30
Endosulfan II	50.00	34.17	68	41-120	ug/Kg	0	30
Endosulfan sulfate	50.00	30.99	62	42-120	ug/Kg	3	30
4,4'-DDD	50.00	32.04	64	41-120	ug/Kg	3	30
Endrin aldehyde	50.00	26.17	52	30-120	ug/Kg	8	30
Endrin ketone	50.00	33.03	66	45-120	ug/Kg	3	30
4,4'-DDT	50.00	39.49	79	35-127	ug/Kg	1	30
Methoxychlor	50.00	34.49	69	42-136	ug/Kg	4	30

QC1194189 Surrogate	%REC	Limits
TCMX	73	23-120
Decachlorobiphenyl	71	24-120

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-11 (SURF)	**DF:**	1.980	**Analyzed:**	10/18/24
Type:	SAMPLE	**Batch#:**	353123	**Prep:**	EPA 3546
Lab ID:	517513-029	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/17/24		

517513-029 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	99	42	ug/Kg
Aroclor-1221	ND	99	41	ug/Kg
Aroclor-1232	ND	99	44	ug/Kg
Aroclor-1242	ND	99	46	ug/Kg
Aroclor-1248	ND	99	18	ug/Kg
Aroclor-1254	ND	99	47	ug/Kg
Aroclor-1260	ND	99	55	ug/Kg
Aroclor-1262	ND	99	36	ug/Kg
Aroclor-1268	ND	99	26	ug/Kg

517513-029 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	73	19-121

Field ID:	FB-12 (SURF)	**DF:**	0.9901	**Analyzed:**	10/18/24
Type:	SAMPLE	**Batch#:**	353123	**Prep:**	EPA 3546
Lab ID:	517513-030	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/17/24		

517513-030 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	**250**	50	8.9	ug/Kg
Aroclor-1254	ND	50	23	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-030 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	81	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-13 (SURF) **DF:** 1.000 **Analyzed:** 10/18/24

Type: SAMPLE **Batch#:** 353123 **Prep:** EPA 3546

Lab ID: 517513-031 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/17/24

517513-031 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	9.0	ug/Kg
Aroclor-1254	ND	50	24	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-031 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	100	19-121

Field ID: FB-14 (SURF) **DF:** 1.000 **Analyzed:** 10/18/24

Type: SAMPLE **Batch#:** 353123 **Prep:** EPA 3546

Lab ID: 517513-032 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/17/24

517513-032 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	9.0	ug/Kg
Aroclor-1254	ND	50	24	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-032 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	92	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-5	**DF:**	1.980	**Analyzed:**	10/11/24
Type:	SAMPLE	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-051	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		

517513-051 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	99	42	ug/Kg
Aroclor-1221	ND	99	41	ug/Kg
Aroclor-1232	ND	99	44	ug/Kg
Aroclor-1242	ND	99	46	ug/Kg
Aroclor-1248	ND	99	18	ug/Kg
Aroclor-1254	ND	99	47	ug/Kg
Aroclor-1260	ND	99	55	ug/Kg
Aroclor-1262	ND	99	36	ug/Kg
Aroclor-1268	ND	99	26	ug/Kg

517513-051 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	63	19-121

Field ID:	CS-6	**DF:**	2.000	**Analyzed:**	10/11/24
Type:	SAMPLE	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-052	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		

517513-052 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	100	43	ug/Kg
Aroclor-1221	ND	100	42	ug/Kg
Aroclor-1232	ND	100	45	ug/Kg
Aroclor-1242	ND	100	47	ug/Kg
Aroclor-1248	ND	100	18	ug/Kg
Aroclor-1254	ND	100	47	ug/Kg
Aroclor-1260	ND	100	56	ug/Kg
Aroclor-1262	ND	100	36	ug/Kg
Aroclor-1268	ND	100	26	ug/Kg

517513-052 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	59	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-7	**DF:**	2.000	**Analyzed:**	10/11/24
Type:	SAMPLE	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-053	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB
Basis:	as received	**Prepared:**	10/10/24		

517513-053 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	100	43	ug/Kg
Aroclor-1221	ND	100	42	ug/Kg
Aroclor-1232	ND	100	45	ug/Kg
Aroclor-1242	ND	100	47	ug/Kg
Aroclor-1248	ND	100	18	ug/Kg
Aroclor-1254	ND	100	47	ug/Kg
Aroclor-1260	ND	100	56	ug/Kg
Aroclor-1262	ND	100	36	ug/Kg
Aroclor-1268	ND	100	26	ug/Kg

517513-053 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	60	19-121

Field ID:	CS-8	**DF:**	1.000	**Analyzed:**	10/11/24
Type:	SAMPLE	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	517513-054	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	10/10/24		

517513-054 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	**120**	50	9.0	ug/Kg
Aroclor-1254	ND	50	24	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-054 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	116	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-9 **DF:** 0.9901 **Analyzed:** 10/11/24

Type: SAMPLE **Batch#:** 352502 **Prep:** EPA 3546

Lab ID: 517513-055 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/10/24

517513-055 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	8.9	ug/Kg
Aroclor-1254	ND	50	23	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-055 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	121	19-121

Field ID: CS-10 **DF:** 0.9804 **Analyzed:** 10/11/24

Type: SAMPLE **Batch#:** 352502 **Prep:** EPA 3546

Lab ID: 517513-056 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/10/24

517513-056 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	49	21	ug/Kg
Aroclor-1221	ND	49	20	ug/Kg
Aroclor-1232	ND	49	22	ug/Kg
Aroclor-1242	ND	49	23	ug/Kg
Aroclor-1248	ND	49	8.8	ug/Kg
Aroclor-1254	ND	49	23	ug/Kg
Aroclor-1260	ND	49	27	ug/Kg
Aroclor-1262	ND	49	18	ug/Kg
Aroclor-1268	ND	49	13	ug/Kg

517513-056 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	115	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-11 **DF:** 0.9901 **Analyzed:** 10/11/24

Type: SAMPLE **Batch#:** 352502 **Prep:** EPA 3546

Lab ID: 517513-057 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/10/24

517513-057 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	8.9	ug/Kg
Aroclor-1254	ND	50	23	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

517513-057 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	117	19-121

Field ID: CS-12 **DF:** 0.9804 **Analyzed:** 10/11/24

Type: SAMPLE **Batch#:** 352502 **Prep:** EPA 3546

Lab ID: 517513-058 **Sampled:** 10/03/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 10/04/24 **Analyst:** KLR

Basis: as received **Prepared:** 10/10/24

517513-058 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	49	21	ug/Kg
Aroclor-1221	ND	49	20	ug/Kg
Aroclor-1232	ND	49	22	ug/Kg
Aroclor-1242	ND	49	23	ug/Kg
Aroclor-1248	ND	49	8.8	ug/Kg
Aroclor-1254	ND	49	23	ug/Kg
Aroclor-1260	ND	49	27	ug/Kg
Aroclor-1262	ND	49	18	ug/Kg
Aroclor-1268	ND	49	13	ug/Kg

517513-058 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	118	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: BLANK **Batch#:** 352502 **Analysis:** EPA 8082

Lab ID: QC1194186 **Prepared:** 10/10/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/11/24

DF: 1.000 **Prep:** EPA 3546

QC1194186 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	9.0	ug/Kg
Aroclor-1254	ND	50	24	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

QC1194186 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	65	19-121

Type: BLANK **Batch#:** 353123 **Analysis:** EPA 8082

Lab ID: QC1196211 **Prepared:** 10/17/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/18/24

DF: 1.000 **Prep:** EPA 3546

QC1196211 Analyte	Result	RL	MDL	Units
Aroclor-1016	ND	50	21	ug/Kg
Aroclor-1221	ND	50	21	ug/Kg
Aroclor-1232	ND	50	22	ug/Kg
Aroclor-1242	ND	50	23	ug/Kg
Aroclor-1248	ND	50	9.0	ug/Kg
Aroclor-1254	ND	50	24	ug/Kg
Aroclor-1260	ND	50	28	ug/Kg
Aroclor-1262	ND	50	18	ug/Kg
Aroclor-1268	ND	50	13	ug/Kg

QC1196211 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	112	19-121

Legend

MDL: Method Detection Limit

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352502 **Analysis:** EPA 8082

Lab ID: QC1194190 **Prepared:** 10/10/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/11/24

DF: 1.000 **Prep:** EPA 3546

QC1194190 Analyte	Spiked	Result	%REC	Limits	Units
Aroclor-1016	500.0	478.1	96	14-150	ug/Kg
Aroclor-1260	500.0	465.7	93	10-150	ug/Kg

QC1194190 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	78	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	CS-6	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MS	**DF:**	2.000	**Analyzed:**	10/11/24
MSS Lab ID:	517513-052	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	QC1194191	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB

QC1194191 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Aroclor-1016	<42.87	500.0	397.8	80	42-127	ug/Kg
Aroclor-1260	<55.90	500.0	414.7	83	38-130	ug/Kg

QC1194191 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	67	19-121

Field ID:	CS-6	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MSD	**DF:**	2.000	**Analyzed:**	10/11/24
MSS Lab ID:	517513-052	**Batch#:**	352502	**Prep:**	EPA 3546
Lab ID:	QC1194192	**Sampled:**	10/03/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	BLB

QC1194192 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Aroclor-1016	500.0	386.1	77	42-127	ug/Kg	3	30
Aroclor-1260	500.0	383.2	77	38-130	ug/Kg	8	30

QC1194192 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	62	19-121

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 353123 **Analysis:** EPA 8082

Lab ID: QC1196215 **Prepared:** 10/17/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 10/18/24

DF: 0.9804 **Prep:** EPA 3546

QC1196215 Analyte	Spiked	Result	%REC	Limits	Units
Aroclor-1016	490.2	441.0	90	14-150	ug/Kg
Aroclor-1260	490.2	497.2	101	10-150	ug/Kg

QC1196215 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	104	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/17/24
Type:	MS	**DF:**	1.000	**Analyzed:**	10/18/24
MSS Lab ID:	518259-002	**Batch#:**	353123	**Prep:**	EPA 3546
Lab ID:	QC1196216	**Sampled:**	10/16/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/16/24	**Analyst:**	KLR

QC1196216 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Aroclor-1016	<21.22	500.0	472.9	95	42-127	ug/Kg
Aroclor-1260	<27.67	500.0	539.9	108	38-130	ug/Kg

QC1196216 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	111	19-121

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/17/24
Type:	MSD	**DF:**	1.000	**Analyzed:**	10/18/24
MSS Lab ID:	518259-002	**Batch#:**	353123	**Prep:**	EPA 3546
Lab ID:	QC1196217	**Sampled:**	10/16/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	10/16/24	**Analyst:**	KLR

QC1196217 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Aroclor-1016	500.0	451.9	90	42-127	ug/Kg	5	30
Aroclor-1260	500.0	507.1	101	38-130	ug/Kg	6	30

QC1196217 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	96	19-121

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-1 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-001	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9615	**Analyzed:**	10/09/24		

517513-001 Analyte	Result	RL	Units
Arsenic	**3.8**	0.96	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-2 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-002	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-002 Analyte	Result	RL	Units
Arsenic	**4.2**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-3 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-003	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-003 Analyte	Result	RL	Units
Arsenic	**4.2**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-4 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-004	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-004 Analyte	Result	RL	Units
Arsenic	**1.3**	0.98	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-5 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-005	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-005 Analyte	Result	RL	Units
Arsenic	**3.9**	1.0	mg/Kg
Cobalt	**13**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-6 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-006	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-006 Analyte	Result	RL	Units
Arsenic	**3.8**	1.0	mg/Kg
Cobalt	**6.9**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-7 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-007	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-007 Analyte	Result	RL	Units
Arsenic	**4.7**	0.99	mg/Kg
Cobalt	**7.8**	0.99	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-8 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-008	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-008 Analyte	Result	RL	Units
Arsenic	**3.8**	0.98	mg/Kg
Cobalt	**7.1**	0.98	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-1 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-011	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-011 Analyte	Result	RL	Units
Arsenic	**2.0**	1.0	mg/Kg
Cobalt	**8.7**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-2 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-012	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9615	**Analyzed:**	10/09/24		

517513-012 Analyte	Result	RL	Units
Arsenic	**2.1**	0.96	mg/Kg
Cobalt	**4.8**	0.96	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-3 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-013	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-013 Analyte	Result	RL	Units
Arsenic	**5.0**	1.0	mg/Kg
Cobalt	**7.9**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-4 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-014	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-014 Analyte	Result	RL	Units
Arsenic	**4.3**	0.98	mg/Kg
Cobalt	**7.5**	0.98	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-5 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-015	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-015 Analyte	Result	RL	Units
Arsenic	**2.2**	0.99	mg/Kg
Cobalt	**4.5**	0.99	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-6 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-016	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-016 Analyte	Result	RL	Units
Arsenic	**3.6**	0.97	mg/Kg
Cobalt	**5.2**	0.97	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-7 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-017	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-017 Analyte	Result	RL	Units
Arsenic	**3.2**	0.98	mg/Kg
Cobalt	**7.1**	0.98	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-8 (1-1.5)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-018	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-018 Analyte	Result	RL	Units
Arsenic	**4.0**	0.98	mg/Kg
Cobalt	**7.6**	0.98	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-1 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-019	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-019 Analyte	Result	RL	Units
Lead	**6.6**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-2 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-020	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-020 Analyte	Result	RL	Units
Lead	**5.0**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-3 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-021	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-021 Analyte	Result	RL	Units
Lead	**6.5**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-4 (SURF)	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	517513-022	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-022 Analyte	Result	RL	Units
Lead	**7.9**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-5 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-023	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-023 Analyte	Result	RL	Units
Lead	**4.9**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-6 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-024	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-024 Analyte	Result	RL	Units
Lead	**8.7**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-7 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-025	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-025 Analyte	Result	RL	Units
Lead	**5.8**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-8 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-026	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-026 Analyte	Result	RL	Units
Lead	**120**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-9 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-027	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9524	**Analyzed:**	10/09/24		

517513-027 Analyte	Result	RL	Units
Lead	**9.3**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-10 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-028	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9615	**Analyzed:**	10/09/24		

517513-028 Analyte	Result	RL	Units
Lead	**9.8**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-11 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-029	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9524	**Analyzed:**	10/09/24		

517513-029 Analyte	Result	RL	Units
Lead	**12**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-12 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-030	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-030 Analyte	Result	RL	Units
Lead	**25**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-13 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-031	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9615	**Analyzed:**	10/09/24		

517513-031 Analyte	Result	RL	Units
Lead	**90**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-14 (SURF)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-032	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-032 Analyte	Result	RL	Units
Lead	**12**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-1 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-033	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9901	**Analyzed:**	10/09/24		

517513-033 Analyte	Result	RL	Units
Lead	**5.3**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-2 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-034	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-034 Analyte	Result	RL	Units
Lead	**3.1**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-3 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-035	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-035 Analyte	Result	RL	Units
Lead	**4.7**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-4 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-036	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-036 Analyte	Result	RL	Units
Lead	**4.6**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-5 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-037	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9804	**Analyzed:**	10/09/24		

517513-037 Analyte	Result	RL	Units
Lead	**5.3**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-6 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-038	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-038 Analyte	Result	RL	Units
Lead	**5.3**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-7 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-039	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9709	**Analyzed:**	10/09/24		

517513-039 Analyte	Result	RL	Units
Lead	**19**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-8 (2-2.5)	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	517513-040	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/08/24		
DF:	0.9615	**Analyzed:**	10/09/24		

517513-040 Analyte	Result	RL	Units
Lead	**7.0**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-9 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-041	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	1.000	**Analyzed:**	10/10/24		

517513-041 Analyte	Result	RL	Units
Lead	**5.8**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-10 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-042	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9901	**Analyzed:**	10/10/24		

517513-042 Analyte	Result	RL	Units
Lead	**3.5**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-11 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-043	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9804	**Analyzed:**	10/10/24		

517513-043 Analyte	Result	RL	Units
Lead	**7.6**	0.49	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-12 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-044	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9901	**Analyzed:**	10/10/24		

517513-044 Analyte	Result	RL	Units
Lead	**3.9**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-13 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-045	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9524	**Analyzed:**	10/10/24		

517513-045 Analyte	Result	RL	Units
Lead	**8.3**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-14 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-046	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9615	**Analyzed:**	10/10/24		

517513-046 Analyte	Result	RL	Units
Lead	**6.8**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-1 **Basis:** as received **Analyzed:** 10/10/24

Lab ID: 517513-047 **Sampled:** 10/03/24

Matrix: Soil **Received:** 10/04/24

517513-047 Analyte	Result	RL	Units	DF	Batch#	Prepared	Prep	Analysis	Analyst
Antimony	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Arsenic	**3.5**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Barium	**250**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Beryllium	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cadmium	ND	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Chromium	**37**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cobalt	**10**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Copper	**14**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Lead	**6.8**	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Mercury	ND	0.15	mg/Kg	1.052	352454	10/10/24	METHOD	EPA 7471A	MLL
Molybdenum	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Nickel	**39**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Selenium	ND	2.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Silver	ND	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Thallium	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Vanadium	**52**	2.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Zinc	**53**	5.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-2 **Basis:** as received **Analyzed:** 10/10/24

Lab ID: 517513-048 **Sampled:** 10/03/24

Matrix: Soil **Received:** 10/04/24

517513-048 Analyte	Result	RL	Units	DF	Batch#	Prepared	Prep	Analysis	Analyst
Antimony	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Arsenic	**3.3**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Barium	**140**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Beryllium	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cadmium	ND	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Chromium	**30**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cobalt	**7.7**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Copper	**14**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Lead	**9.7**	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Mercury	ND	0.16	mg/Kg	1.176	352454	10/10/24	METHOD	EPA 7471A	MLL
Molybdenum	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Nickel	**34**	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Selenium	ND	2.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Silver	ND	0.50	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Thallium	ND	1.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Vanadium	**40**	2.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Zinc	**57**	5.0	mg/Kg	1.000	352411	10/09/24	EPA 3050B	EPA 6020	DXC

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-3 **Basis:** as received **Analyzed:** 10/10/24

Lab ID: 517513-049 **Sampled:** 10/03/24

Matrix: Soil **Received:** 10/04/24

517513-049 Analyte	Result	RL	Units	DF	Batch#	Prepared	Prep	Analysis	Analyst
Antimony	ND	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Arsenic	**2.9**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Barium	**120**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Beryllium	ND	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cadmium	ND	0.49	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Chromium	**19**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cobalt	**6.2**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Copper	**8.9**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Lead	**11**	0.49	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Mercury	ND	0.15	mg/Kg	1.052	352454	10/10/24	METHOD	EPA 7471A	MLL
Molybdenum	ND	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Nickel	**19**	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Selenium	ND	1.9	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Silver	ND	0.49	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Thallium	ND	0.97	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Vanadium	**33**	1.9	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Zinc	**47**	4.9	mg/Kg	0.9709	352411	10/09/24	EPA 3050B	EPA 6020	DXC

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: CS-4 **Basis:** as received **Analyzed:** 10/10/24

Lab ID: 517513-050 **Sampled:** 10/03/24

Matrix: Soil **Received:** 10/04/24

517513-050 Analyte	Result	RL	Units	DF	Batch#	Prepared	Prep	Analysis	Analyst
Antimony	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Arsenic	**3.1**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Barium	**110**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Beryllium	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cadmium	ND	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Chromium	**17**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cobalt	**6.3**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Copper	**9.4**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Lead	**7.7**	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Mercury	ND	0.14	mg/Kg	1.034	352454	10/10/24	METHOD	EPA 7471A	MLL
Molybdenum	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Nickel	**32**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Selenium	ND	1.9	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Silver	ND	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Thallium	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Vanadium	**32**	1.9	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Zinc	**41**	4.8	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: DUPE CS-1 **Basis:** as received **Analyzed:** 10/10/24

Lab ID: 517513-059 **Sampled:** 10/03/24

Matrix: Soil **Received:** 10/04/24

517513-059 Analyte	Result	RL	Units	DF	Batch#	Prepared	Prep	Analysis	Analyst
Antimony	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Arsenic	**3.9**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Barium	**170**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Beryllium	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cadmium	ND	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Chromium	**29**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Cobalt	**10**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Copper	**15**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Lead	**7.4**	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Mercury	ND	0.15	mg/Kg	1.052	352454	10/10/24	METHOD	EPA 7471A	MLL
Molybdenum	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Nickel	**33**	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Selenium	ND	1.9	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Silver	ND	0.48	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Thallium	ND	0.95	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Vanadium	**50**	1.9	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC
Zinc	**55**	4.8	mg/Kg	0.9524	352411	10/09/24	EPA 3050B	EPA 6020	DXC

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	DUPE RR-4 (SURF)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-060	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	1.000	**Analyzed:**	10/10/24		

517513-060 Analyte	Result	RL	Units
Arsenic	**1.7**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	DUPE RR-7 (1-1.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-061	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	1.000	**Analyzed:**	10/10/24		

517513-061 Analyte	Result	RL	Units
Arsenic	**3.0**	1.0	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	DUPE FB-3 (SURF)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-062	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9901	**Analyzed:**	10/10/24		

517513-062 Analyte	Result	RL	Units
Lead	**5.1**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	DUPE FB-7 (SURF)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-063	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9615	**Analyzed:**	10/10/24		

517513-063 Analyte	Result	RL	Units
Lead	**8.8**	0.48	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	DUPE FB-3 (2-2.5)	**Batch#:**	352411	**Prep:**	EPA 3050B
Lab ID:	517513-064	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC
Basis:	as received	**Prepared:**	10/09/24		
DF:	0.9901	**Analyzed:**	10/10/24		

517513-064 Analyte	Result	RL	Units
Lead	**5.3**	0.50	mg/Kg

Legend

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type:	BLANK	**Batch#:**	352293	**Analysis:**	EPA 6020
Lab ID:	QC1193482	**Prepared:**	10/08/24	**Analyst:**	DXC
Matrix:	Soil	**Analyzed:**	10/09/24		
DF:	1.000	**Prep:**	EPA 3050B		

QC1193482 Analyte	Result	RL	Units
Arsenic	ND	1.0	mg/Kg
Cobalt	ND	1.0	mg/Kg
Lead	ND	0.50	mg/Kg

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352293 **Analysis:** EPA 6020

Lab ID: QC1193483 **Prepared:** 10/08/24 **Analyst:** DXC

Matrix: Soil **Analyzed:** 10/09/24

DF: 1.000 **Prep:** EPA 3050B

QC1193483 Analyte	Spiked	Result	%REC	Limits	Units
Arsenic	100.0	100.7	101	80-120	mg/Kg
Cobalt	100.0	111.1	111	80-120	mg/Kg
Lead	100.0	97.24	97	80-120	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-1 (SURF)	**Basis:**	as received	**Prepared:**	10/08/24
Type:	MS	**DF:**	0.9804	**Analyzed:**	10/09/24
MSS Lab ID:	517513-001	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	QC1193484	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC

QC1193484 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	3.777	98.04	97.69	96	75-125	mg/Kg
Cobalt	15.16	98.04	114.1	101	75-125	mg/Kg
Lead	4.580	98.04	98.10	95	75-125	mg/Kg

Field ID:	RR-1 (SURF)	**Basis:**	as received	**Prepared:**	10/08/24
Type:	MSD	**DF:**	0.9804	**Analyzed:**	10/09/24
MSS Lab ID:	517513-001	**Batch#:**	352293	**Prep:**	EPA 3050B
Lab ID:	QC1193485	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC

QC1193485 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Arsenic	98.04	102.3	100	75-125	mg/Kg	5	20
Cobalt	98.04	114.6	101	75-125	mg/Kg	0	20
Lead	98.04	98.70	96	75-125	mg/Kg	1	20

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	RR-1 (SURF)	**Basis:**	as received	**Analyzed:**	10/09/24
Type:	Post Digest Spike	**DF:**	0.9615	**Prep:**	EPA 3050B
MSS Lab ID:	517513-001	**Batch#:**	352293	**Analysis:**	EPA 6020
Lab ID:	QC1193486	**Sampled:**	10/03/24	**Analyst:**	DXC
Matrix:	Soil	**Received:**	10/04/24		

QC1193486 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	3.777	96.15	101.5	102	75-125	mg/Kg
Cobalt	15.16	96.15	116.6	105	75-125	mg/Kg
Lead	4.580	96.15	98.79	98	75-125	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type:	BLANK	**Batch#:**	352312	**Analysis:**	EPA 6020
Lab ID:	QC1193560	**Prepared:**	10/08/24	**Analyst:**	DXC
Matrix:	Soil	**Analyzed:**	10/09/24		
DF:	1.000	**Prep:**	EPA 3050B		

QC1193560 Analyte	Result	RL	Units
Lead	ND	0.50	mg/Kg

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352312 **Analysis:** EPA 6020

Lab ID: QC1193561 **Prepared:** 10/08/24 **Analyst:** DXC

Matrix: Soil **Analyzed:** 10/09/24

DF: 1.000 **Prep:** EPA 3050B

QC1193561 Analyte	Spiked	Result	%REC	Limits	Units
Lead	100.0	93.53	94	80-120	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-5 (SURF)	**Basis:**	as received	**Prepared:**	10/08/24
Type:	MS	**DF:**	0.9804	**Analyzed:**	10/09/24
MSS Lab ID:	517513-023	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	QC1193562	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC

QC1193562 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	4.905	98.04	97.41	94	75-125	mg/Kg

Field ID:	FB-5 (SURF)	**Basis:**	as received	**Prepared:**	10/08/24
Type:	MSD	**DF:**	0.9804	**Analyzed:**	10/09/24
MSS Lab ID:	517513-023	**Batch#:**	352312	**Prep:**	EPA 3050B
Lab ID:	QC1193563	**Sampled:**	10/03/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	DXC

QC1193563 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Lead	98.04	100.8	98	75-125	mg/Kg	3	20

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-5 (SURF)	**Basis:**	as received	**Analyzed:**	10/09/24
Type:	Post Digest Spike	**DF:**	0.9709	**Prep:**	EPA 3050B
MSS Lab ID:	517513-023	**Batch#:**	352312	**Analysis:**	EPA 6020
Lab ID:	QC1193564	**Sampled:**	10/03/24	**Analyst:**	DXC
Matrix:	Soil	**Received:**	10/04/24		

QC1193564 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	4.905	97.09	96.02	94	75-125	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: BLANK **Batch#:** 352411 **Analysis:** EPA 6020

Lab ID: QC1193877 **Prepared:** 10/09/24 **Analyst:** DXC

Matrix: Soil **Analyzed:** 10/10/24

DF: 1.000 **Prep:** EPA 3050B

QC1193877 Analyte	Result	RL	Units
Antimony	ND	1.0	mg/Kg
Arsenic	ND	1.0	mg/Kg
Barium	ND	1.0	mg/Kg
Beryllium	ND	1.0	mg/Kg
Cadmium	ND	0.50	mg/Kg
Chromium	ND	1.0	mg/Kg
Cobalt	ND	1.0	mg/Kg
Copper	ND	1.0	mg/Kg
Lead	ND	0.50	mg/Kg
Molybdenum	ND	1.0	mg/Kg
Nickel	ND	1.0	mg/Kg
Selenium	ND	2.0	mg/Kg
Silver	ND	0.50	mg/Kg
Thallium	ND	1.0	mg/Kg
Vanadium	ND	2.0	mg/Kg
Zinc	ND	5.0	mg/Kg

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352411 **Analysis:** EPA 6020

Lab ID: QC1193878 **Prepared:** 10/09/24 **Analyst:** DXC

Matrix: Soil **Analyzed:** 10/10/24

DF: 1.000 **Prep:** EPA 3050B

QC1193878 Analyte	Spiked	Result	%REC	Limits	Units
Antimony	100.0	103.0	103	80-120	mg/Kg
Arsenic	100.0	97.28	97	80-120	mg/Kg
Barium	100.0	99.18	99	80-120	mg/Kg
Beryllium	100.0	96.14	96	80-120	mg/Kg
Cadmium	100.0	97.13	97	80-120	mg/Kg
Chromium	100.0	100.2	100	80-120	mg/Kg
Cobalt	100.0	109.9	110	80-120	mg/Kg
Copper	100.0	107.6	108	80-120	mg/Kg
Lead	100.0	97.47	97	80-120	mg/Kg
Molybdenum	100.0	97.70	98	80-120	mg/Kg
Nickel	100.0	105.7	106	80-120	mg/Kg
Selenium	100.0	95.77	96	80-120	mg/Kg
Silver	50.00	48.71	97	80-120	mg/Kg
Thallium	100.0	94.49	94	80-120	mg/Kg
Vanadium	100.0	100.1	100	80-120	mg/Kg
Zinc	100.0	102.9	103	80-120	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-9 (2-2.5) **Basis:** as received **Prepared:** 10/09/24

Type: MS **DF:** 0.9804 **Analyzed:** 10/10/24

MSS Lab ID: 517513-041 **Batch#:** 352411 **Prep:** EPA 3050B

Lab ID: QC1193879 **Sampled:** 10/03/24 **Analysis:** EPA 6020

Matrix: Soil **Received:** 10/04/24 **Analyst:** DXC

QC1193879 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Antimony	0.6573	98.04	58.50	59 *	75-125	mg/Kg
Arsenic	2.004	98.04	96.76	97	75-125	mg/Kg
Barium	83.64	98.04	199.6	118	75-125	mg/Kg
Beryllium	0.2533	98.04	92.25	94	75-125	mg/Kg
Cadmium	<0.1571	98.04	95.80	98	75-125	mg/Kg
Chromium	9.923	98.04	105.9	98	75-125	mg/Kg
Cobalt	3.789	98.04	108.6	107	75-125	mg/Kg
Copper	5.719	98.04	111.3	108	75-125	mg/Kg
Lead	5.823	98.04	96.01	92	75-125	mg/Kg
Molybdenum	<0.5585	98.04	87.91	90	75-125	mg/Kg
Nickel	6.402	98.04	105.5	101	75-125	mg/Kg
Selenium	<1.823	98.04	91.99	94	75-125	mg/Kg
Silver	<0.07020	49.02	47.72	97	75-125	mg/Kg
Thallium	0.3124	98.04	85.95	87	75-125	mg/Kg
Vanadium	21.01	98.04	118.5	99	75-125	mg/Kg
Zinc	44.22	98.04	152.8	111	75-125	mg/Kg

Field ID: FB-9 (2-2.5) **Basis:** as received **Prepared:** 10/09/24

Type: MSD **DF:** 0.9615 **Analyzed:** 10/10/24

MSS Lab ID: 517513-041 **Batch#:** 352411 **Prep:** EPA 3050B

Lab ID: QC1193880 **Sampled:** 10/03/24 **Analysis:** EPA 6020

Matrix: Soil **Received:** 10/04/24 **Analyst:** DXC

QC1193880 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Antimony	96.15	49.34	51 *	75-125	mg/Kg	15	20
Arsenic	96.15	97.28	99	75-125	mg/Kg	2	20
Barium	96.15	190.7	111	75-125	mg/Kg	4	20
Beryllium	96.15	90.40	94	75-125	mg/Kg	0	20
Cadmium	96.15	90.38	94	75-125	mg/Kg	4	20
Chromium	96.15	103.1	97	75-125	mg/Kg	1	20
Cobalt	96.15	106.1	106	75-125	mg/Kg	0	20
Copper	96.15	110.8	109	75-125	mg/Kg	1	20
Lead	96.15	100.1	98	75-125	mg/Kg	6	20
Molybdenum	96.15	87.53	91	75-125	mg/Kg	2	20
Nickel	96.15	106.5	104	75-125	mg/Kg	3	20
Selenium	96.15	96.91	101	75-125	mg/Kg	7	20
Silver	48.08	46.14	96	75-125	mg/Kg	1	20
Thallium	96.15	87.73	91	75-125	mg/Kg	4	20
Vanadium	96.15	116.9	100	75-125	mg/Kg	0	20
Zinc	96.15	161.9	122	75-125	mg/Kg	7	20

Legend

*: Value is outside QC limits

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-9 (2-2.5)	**Basis:**	as received	**Analyzed:**	10/10/24
Type:	Post Digest Spike	**DF:**	1.000	**Prep:**	EPA 3050B
MSS Lab ID:	517513-041	**Batch#:**	352411	**Analysis:**	EPA 6020
Lab ID:	QC1193881	**Sampled:**	10/03/24	**Analyst:**	DXC
Matrix:	Soil	**Received:**	10/04/24		

QC1193881 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Antimony	0.6573	100.0	95.73	95	75-125	mg/Kg
Arsenic	2.004	100.0	101.6	100	75-125	mg/Kg
Barium	83.64	100.0	189.3	106	75-125	mg/Kg
Beryllium	0.2533	100.0	95.90	96	75-125	mg/Kg
Cadmium	<0.1571	100.0	99.72	100	75-125	mg/Kg
Chromium	9.923	100.0	110.9	101	75-125	mg/Kg
Cobalt	3.789	100.0	113.3	110	75-125	mg/Kg
Copper	5.719	100.0	115.4	110	75-125	mg/Kg
Lead	5.823	100.0	104.2	98	75-125	mg/Kg
Molybdenum	<0.5585	100.0	100.1	100	75-125	mg/Kg
Nickel	6.402	100.0	112.2	106	75-125	mg/Kg
Selenium	<1.823	100.0	99.44	99	75-125	mg/Kg
Silver	<0.07020	50.00	52.85	106	75-125	mg/Kg
Thallium	0.3124	100.0	97.74	97	75-125	mg/Kg
Vanadium	21.01	100.0	122.7	102	75-125	mg/Kg
Zinc	44.22	100.0	150.7	106	75-125	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type:	BLANK	**Batch#:**	352454	**Analysis:**	EPA 7471A
Lab ID:	QC1194015	**Prepared:**	10/10/24	**Analyst:**	MLL
Matrix:	Soil	**Analyzed:**	10/10/24		
DF:	0.9998	**Prep:**	METHOD		

QC1194015 Analyte	Result	RL	Units
Mercury	ND	0.14	mg/Kg

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352454 **Analysis:** EPA 7471A

Lab ID: QC1194016 **Prepared:** 10/10/24 **Analyst:** MLL

Matrix: Soil **Analyzed:** 10/10/24

DF: 0.9998 **Prep:** METHOD

QC1194016 Analyte	Spiked	Result	%REC	Limits	Units
Mercury	0.8333	0.7575	91	80-120	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MS	**DF:**	1.132	**Analyzed:**	10/10/24
MSS Lab ID:	517509-010	**Batch#:**	352454	**Prep:**	METHOD
Lab ID:	QC1194017	**Sampled:**	10/03/24	**Analysis:**	EPA 7471A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	MLL

QC1194017 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Mercury	0.2349	0.9434	1.090	91	75-125	mg/Kg

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	10/10/24
Type:	MSD	**DF:**	1.052	**Analyzed:**	10/10/24
MSS Lab ID:	517509-010	**Batch#:**	352454	**Prep:**	METHOD
Lab ID:	QC1194018	**Sampled:**	10/03/24	**Analysis:**	EPA 7471A
Matrix:	Soil	**Received:**	10/04/24	**Analyst:**	MLL

QC1194018 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Mercury	0.8772	1.034	91	75-125	mg/Kg	0	20

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB#1	**Batch#:**	352298	**Prep:**	METHOD
Type:	SAMPLE	**Sampled:**	10/03/24	**Analysis:**	EPA 200.8
Lab ID:	517513-009	**Received:**	10/04/24	**Analyst:**	DXC
Matrix:	Drinking Water	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-009 Analyte	Result	RL	Units
Arsenic	ND	2.0	ug/L
Lead	ND	5.0	ug/L

Field ID:	EB#1	**Batch#:**	352298	**Prep:**	METHOD
Type:	SAMPLE	**Sampled:**	10/03/24	**Analysis:**	EPA 200.8
Lab ID:	517513-010	**Received:**	10/04/24	**Analyst:**	DXC
Matrix:	Drinking Water	**Prepared:**	10/08/24		
DF:	1.000	**Analyzed:**	10/09/24		

517513-010 Analyte	Result	RL	Units
Arsenic	ND	2.0	ug/L
Lead	ND	5.0	ug/L

Type:	BLANK	**Batch#:**	352298	**Analysis:**	EPA 200.8
Lab ID:	QC1193489	**Prepared:**	10/08/24	**Analyst:**	DXC
Matrix:	Drinking Water	**Analyzed:**	10/09/24		
DF:	1.000	**Prep:**	METHOD		

QC1193489 Analyte	Result	RL	Units
Arsenic	ND	2.0	ug/L
Lead	ND	5.0	ug/L

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 352298 **Analysis:** EPA 200.8

Lab ID: QC1193490 **Prepared:** 10/08/24 **Analyst:** DXC

Matrix: Drinking Water **Analyzed:** 10/09/24

DF: 1.000 **Prep:** METHOD

QC1193490 Analyte	Spiked	Result	%REC	Limits	Units
Arsenic	100.0	97.19	97	85-115	ug/L
Lead	100.0	93.83	94	85-115	ug/L

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 517513 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**DF:**	1.000	**Analyzed:**	10/09/24
Type:	MS	**Batch#:**	352298	**Prep:**	METHOD
MSS Lab ID:	517623-001	**Sampled:**	10/07/24	**Analysis:**	EPA 200.8
Lab ID:	QC1193493	**Received:**	10/07/24	**Analyst:**	DXC
Matrix:	Drinking Water	**Prepared:**	10/08/24		

QC1193493 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	<0.6560	100.0	97.43	97	70-130	ug/L
Lead	<0.1764	100.0	99.74	100	70-130	ug/L

Field ID:	ZZZZZZZZZZ	**DF:**	1.000	**Analyzed:**	10/09/24
Type:	MSD	**Batch#:**	352298	**Prep:**	METHOD
MSS Lab ID:	517623-001	**Sampled:**	10/07/24	**Analysis:**	EPA 200.8
Lab ID:	QC1193494	**Received:**	10/07/24	**Analyst:**	DXC
Matrix:	Drinking Water	**Prepared:**	10/08/24		

QC1193494 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Arsenic	100.0	96.26	96	70-130	ug/L	1	20
Lead	100.0	98.95	99	70-130	ug/L	1	20

Legend

RPD: Relative Percent Difference

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

enthalpy.com

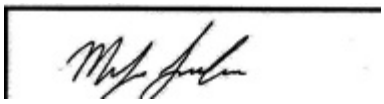
Lab Job Number : 520798
Report Level : II
Report Date : 12/05/2024

Analytical Report *prepared for:*

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA 95825

Project: 2301-3652 - Santa Fe Elem PEA

Authorized for release by:



Miguel Gamboa, Project Manager
miguel.gamboa@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

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	520798
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	11/20/24

Sample ID	Lab ID	Collected	Matrix
FB-8 (1-1.5')	520798-001	11/19/24 09:30	Soil
FB-8A (SURF)	520798-002	11/19/24 09:36	Soil
FB-8A (1-1.5')	520798-003	11/19/24 09:39	Soil
FB-8B (SURF)	520798-004	11/19/24 09:42	Soil
FB-8B (1-1.5')	520798-005	11/19/24 09:45	Soil
FB-8C (SURF)	520798-006	11/19/24 09:50	Soil
FB-8C (1-1.5')	520798-007	11/19/24 09:52	Soil
FB-8D (SURF)	520798-008	11/19/24 09:57	Soil
FB-8D (1-1.5')	520798-009	11/19/24 09:58	Soil
FB #1	520798-010	11/19/24 13:20	Water
FB-8E (SURF)	520798-011	11/19/24 10:02	Soil
FB-8F (SURF)	520798-012	11/19/24 10:04	Soil
FB-8G (SURF)	520798-013	11/19/24 10:07	Soil
FB-8H (SURF)	520798-014	11/19/24 10:09	Soil
FB-13 (1-1.5')	520798-015	11/19/24 11:10	Soil
FB-13A (SURF)	520798-016	11/19/24 11:15	Soil
FB-13A (1-1.5')	520798-017	11/19/24 11:16	Soil
FB-13B (SURF)	520798-018	11/19/24 11:20	Soil
FB-13B (1-1.5')	520798-019	11/19/24 11:23	Soil
EB #1	520798-020	11/19/24 13:30	Water
FB-13C (SURF)	520798-021	11/19/24 11:27	Soil
FB-13C (1-1.5')	520798-022	11/19/24 11:28	Soil
FB-13D (SURF)	520798-023	11/19/24 11:35	Soil
FB-13D (1-1.5')	520798-024	11/19/24 11:37	Soil
FB-13E (SURF)	520798-025	11/19/24 11:43	Soil
FB-13F (SURF)	520798-026	11/19/24 11:48	Soil

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	520798
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	11/20/24

Sample ID	Lab ID	Collected	Matrix
FB-13G (SURF)	520798-027	11/19/24 11:57	Soil
FB-13H (SURF)	520798-028	11/19/24 11:53	Soil
FB-12 (1-1.5')	520798-029	11/19/24 10:20	Soil
FB-12A (SURF)	520798-030	11/19/24 10:23	Soil
FB-12A (1-1.5')	520798-031	11/19/24 10:26	Soil
FB-12B (SURF)	520798-032	11/19/24 10:30	Soil
FB-12B (1-1.5')	520798-033	11/19/24 10:33	Soil
FB-12C (SURF)	520798-034	11/19/24 10:37	Soil
FB-12C (1-1.5')	520798-035	11/19/24 10:40	Soil
FB-12D (SURF)	520798-036	11/19/24 10:48	Soil
FB-12D (1-1.5')	520798-037	11/19/24 10:51	Soil
FB-12E (SURF)	520798-038	11/19/24 10:54	Soil
FB-12F (SURF)	520798-039	11/19/24 10:58	Soil
FB-12G (SURF)	520798-040	11/19/24 11:00	Soil
FB-12H (SURF)	520798-041	11/19/24 11:04	Soil
RR-2A (SURF)	520798-042	11/19/24 12:10	Soil
RR-2A (1-1.5')	520798-043	11/19/24 12:14	Soil
RR-2B (SURF)	520798-044	11/19/24 12:20	Soil
RR-2B (1-1.5')	520798-045	11/19/24 12:22	Soil
RR-2C (SURF)	520798-046	11/19/24 12:27	Soil
RR-2C (1-1.5')	520798-047	11/19/24 12:29	Soil
RR-2D (SURF)	520798-048	11/19/24 12:35	Soil
RR-2D (1-1.5')	520798-049	11/19/24 12:37	Soil
RR-2E (SURF)	520798-050	11/19/24 12:43	Soil
RR-2F (SURF)	520798-051	11/19/24 00:00	Soil
RR-2G (SURF)	520798-052	11/19/24 00:00	Soil

ENTHALPY ANALYTICAL

Sample Summary

Alan Klein
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA
95825

Lab Job #:	520798
Project No:	2301-3652
Location:	Santa Fe Elem PEA
Date Received:	11/20/24

Sample ID	Lab ID	Collected	Matrix
RR-2H (SURF)	520798-053	11/19/24 00:00	Soil

ENTHALPY ANALYTICAL

Case Narrative

Padre Associates, Inc. 350 University Avenue Suite 250 Sacramento, CA 95825 Alan Klein	Lab Job Number: 520798 Project No: 2301-3652 Location: Santa Fe Elem PEA Date Received: 11/20/24

- This data package contains sample and QC results for twenty one soil samples and two water samples, requested for the above referenced project on 11/21/24. The samples were received cold and intact.
- Report revised and reissued on 12/5/24 to report additional testing results.

TPH-Extractables by GC (EPA 8015M):
No analytical problems were encountered.

PCBs (EPA 8082):
No analytical problems were encountered.

Metals (EPA 6020):
No analytical problems were encountered.

Metals (EPA 200.8):
No analytical problems were encountered.

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 520798

Page: 1 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	LEAD (6020)	LEAD (200.8)	HOLD	Test Instructions / Comments
1	FB-8 (1-1.5')	11/19/24	0930	S	2"X6" STEEL	ICE	X			
2	FB-8A (SURF)	11/19/24	0936	S	2"X6" STEEL	ICE	X			
3	FB-8A (1-1.5')	11/19/24	0939	S	2"X6" STEEL	ICE			X	
4	FB-8B (SURF)	11/19/24	0942	S	2"X6" STEEL	ICE	X			
5	FB-8B (1-1.5')	11/19/24	0945	S	2"X6" STEEL	ICE			X	
6	FB-8C (SURF)	11/19/24	0950	S	2"X6" STEEL	ICE	X			
7	FB-8C (1-1.5')	11/19/24	0952	S	2"X6" STEEL	ICE			X	
8	FB-8D (SURF)	11/19/24	0957	S	2"X6" STEEL	ICE	X			
9	FB-8D (1-1.5')	11/19/24	0958	S	2"X6" STEEL	ICE			X	
10	FB #1	11/19/24	1320	W	250 mL POLY	3, ICE		X		

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA	11/20/24 0955
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	11/20/24 1700
2 Received By:		VETH CO	ENTHALPY	11/21/24 11:11
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 530198

Page: 2 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives:
1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3
4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp:

(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	LEAD (6020)	LEAD (200.8)	HOLD	Test Instructions / Comments
1	FB-8E (SURF)	11/19/24	1002	S	2"X6" STEEL	ICE			X	
2	FB-8F (SURF)	11/19/24	1004	S	2"X6" STEEL	ICE			X	
3	FB-8G (SURF)	11/19/24	1007	S	2"X6" STEEL	ICE			X	
4	FB-8H (SURF)	11/19/24	1009	S	2"X6" STEEL	ICE			X	
5	FB-13 (1-1.5')	11/19/24	1110	S	2"X6" STEEL	ICE	X			
6	FB-13A (SURF)	11/19/24	1115	S	2"X6" STEEL	ICE	X			
7	FB-13A (1-1.5')	11/19/24	1116	S	2"X6" STEEL	ICE			X	
8	FB-13B (SURF)	11/19/24	1120	S	2"X6" STEEL	ICE	X			
9	FB-13B (1-1.5')	11/19/24	1123	S	2"X6" STEEL	ICE			X	
10	EB #1	11/19/24	1330	W	250 mL POLY	3, ICE		X		

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	AL C	ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
1 Received By:	Brenda Hamem	Brenda Hamilton	EA	11/20/24 / 0955
2 Relinquished By:	Brenda Hamem	Brenda Hamilton	EA	11/20/24 1700
2 Received By:		JETH CO	ENTHALPY	11/21/24 1111
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 520198

Page: 3 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM.
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	LEAD (6020)	PCBs (8082)	HOLD	Test Instructions / Comments
1	FB-13C (SURF)	11/19/24	1127	S	2"X6" STEEL	ICE	X			
2	FB-13C (1-1.5')	11/19/24	1128	S	2"X6" STEEL	ICE			X	
3	FB-13D (SURF)	11/19/24	1135	S	2"X6" STEEL	ICE	X			
4	FB-13D (1-1.5')	11/19/24	1137	S	2"X6" STEEL	ICE			X	
5	FB-13E (SURF)	11/19/24	1143	S	2"X6" STEEL	ICE			X	
6	FB-13F (SURF)	11/19/24	1148	S	2"X6" STEEL	ICE			X	
7	FB-13G (SURF)	11/19/24	1157	S	2"X6" STEEL	ICE			X	
8	FB-13H (SURF)	11/19/24	1153	S	2"X6" STEEL	ICE			X	
9	FB-12 (1-1.5')	11/19/24	1020	S	2"X6" STEEL	ICE		X		
10	FB-12A (SURF)	11/19/24	1023	S	2"X6" STEEL	ICE		X		

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 0955
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 1700
2 Received By:		VETH CO	ENTHALPY	11/21/24 11:11
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record Lab No: 530798 Page: 4 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	PCBs (8082)	HOLD	Test Instructions / Comments
1	FB-12A (1-1.5')	11/19/24	1026	S	2"X6" STEEL	ICE		X	
2	FB-12B (SURF)	11/19/24	1030	S	2"X6" STEEL	ICE	X		
3	FB-12B (1-1.5')	11/19/24	1033	S	2"X6" STEEL	ICE		X	
4	FB-12C (SURF)	11/19/24	1037	S	2"X6" STEEL	ICE	X		
5	FB-12C (1-1.5')	11/19/24	1040	S	2"X6" STEEL	ICE		X	
6	FB-12D (SURF)	11/19/24	1048	S	2"X6" STEEL	ICE	X		
7	FB-12D (1-1.5')	11/19/24	1051	S	2"X6" STEEL	ICE		X	
8	FB-12E (SURF)	11/19/24	1054	S	2"X6" STEEL	ICE		X	
9	FB-12F (SURF)	11/19/24	1058	S	2"X6" STEEL	ICE		X	
10	FB-12G (SURF)	11/19/24	1100	S	2"X6" STEEL	ICE		X	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
[1] Received By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 0955
[2] Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 1700
[2] Received By:		VETH CO	ENTHALPY	11/21/24 11:11
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 520798

Page: 5 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH-diesel (8015M)	HOLD	Test Instructions / Comments
1	FB-12H (SURF)	11/19/24	1104	S	2"X6" STEEL	ICE		X	
2	RR-2A (SURF)	11/19/24	1210	S	2"X6" STEEL	ICE	X		
3	RR-2A (1-1.5')	11/19/24	1214	S	2"X6" STEEL	ICE		X	
4	RR-2B (SURF)	11/19/24	1220	S	2"X6" STEEL	ICE	X		
5	RR-2B (1-1.5')	11/19/24	1222	S	2"X6" STEEL	ICE		X	
6	RR-2C (SURF)	11/19/24	1227	S	2"X6" STEEL	ICE	X		
7	RR-2C (1-1.5')	11/19/24	1229	S	2"X6" STEEL	ICE		X	
8	RR-2D (SURF)	11/19/24	1235	S	2"X6" STEEL	ICE	X		
9	RR-2D (1-1.5')	11/19/24	1237	S	2"X6" STEEL	ICE		X	
10	RR-2E (SURF)	11/19/24	1243	S	2"X6" STEEL	ICE		X	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
1 Received By:		Brenda Hamilton	EA	11-20-24 0955
2 Relinquished By:		Brenda Hamilton	EA	11-20-24 1700
2 Received By:		VETH CO	ENTHALPY	11/21/24 11:11
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 530918

Page: 6 of 6

Turn Around Time (rush by advanced notice only)

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

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

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

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	PADRE ASSOCIATES, INC.	Name:	PORTERVILLE USD - SANTA FE ELEM
Report To:	ALAN KLEIN	Number:	2301-3652
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	PORTERVILLE, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	HOLD	Test Instructions / Comments
1	RR-2F (SURF)	11/19/24	1248	S	2"X6" STEEL	ICE	X	
2	RR-2G (SURF)	11/19/24	1252	S	2"X6" STEEL	ICE	X	
3	RR-2H (SURF)	11/19/24	1300	S	2"X6" STEEL	ICE	X	
4								
5								
6								
7								
8								
9								
10								

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		ALAN CHURCHILL	PADRE / GEOLOGIST	11-20-24 / 0955
[1] Received By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 0955
[2] Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA	11-20-24 1700
[2] Received By:		VETH CO	ENTHALPY	11/21/24 11:41
[3] Relinquished By:				
[3] Received By:				

SAMPLE RECEIPT CHECKLIST

ENTHALPY

Section 1: General Info

Date Received: 11/21/24 WO# 520798 Client: PADRE

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☑ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: GLS

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 11/21/24 By (initials) DEP Type of ice used : ☑ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): ____ / ____ Thermometer/IR Gun: IR01 CF: -0.5

Cooler Temp (°C) #1: 3.5 / 3.0 #2: 5.6 / 5.1 #3: ____ / ____ #4: ____ / ____ #5: ____ / ____ #6: ____ / ____

Section 3b: Microbiology Samples ☑ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☑ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other ____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	✓		
2) Is the sampler's name present on the CoC?	✓		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	✓		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	✓		
5) Were all of, and only, the correct samples received?	✓		
6) Are sample labels present, legible, and in agreement with the CoC?	✓		
7) Does the container count match the CoC?	✓		
8) Was sufficient sample volume / mass received for the analyses requested?	✓		
9) Were samples received in proper containers for the analyses requested?	✓		
10) Were samples received with > 1/2 holding time remaining?	✓		
11) Are samples properly preserved as indicated by CoC / labels?	✓		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			✓
13) Are VOA vials free from headspace/bubbles > 6mm?			✓

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 11/20/24 **By (print)** SACRAMENTO **(sign)** ____

Date Labeled 11/20/24 **By (print)** SACRAMENTO **(sign)** ____

SAMPLE RECEIPT CHECKLIST

Section 1: General Info
Date Received: 11/22/24 WO# 520198 Client: PADRE

ENTHALPY

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No
Custody seals intact on arrival? ☐ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples
Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**
Date Opened 11/20/24 By (initials) BH Type of ice used : ☑ Wet ☐ Blue/Gel ☐ None
☒ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)
☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)
If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: TR01 CF: -0.3°C
Cooler Temp (°C) #1: 1.1°C / 0.8°C #2: ____ / ____ #3: ____ / ____ #4: ____ / ____ #5: ____ / ____ #6: ____ / ____

Section 3b: Microbiology Samples ☒ **No microbiology samples submitted (skip 3b)**
☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.
☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☒ **No air samples submitted (skip 3c)**
☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	X		
2) Is the sampler's name present on the CoC?	X		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	X		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)		X	
5) Were all of, and only, the correct samples received?	X		
6) Are sample labels present, legible, and in agreement with the CoC?	X		
7) Does the container count match the CoC?	X		
8) Was sufficient sample volume / mass received for the analyses requested?	X		
9) Were samples received in proper containers for the analyses requested?	X		
10) Were samples received with > 1/2 holding time remaining?	X		
11) Are samples properly preserved as indicated by CoC / labels?	X		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			X
13) Are VOA vials free from headspace/bubbles > 6mm?			X

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 11/20/24 **By (print)** Brenda Hamilton **(sign)** Brenda Hamilton
Date Labeled 11/20/24 **By (print)** Brenda Hamilton **(sign)** Brenda Hamilton

GLS.

800-322-5555
www.gls-us.com

Ship From
ENTHALPY ANALYTICAL

Tracking #: 562283874

SAMPLE RECEIVING

4630 NORTHGATE BLVD

SUITE 150

GLS.

800-322-5555
www.gls-us.com

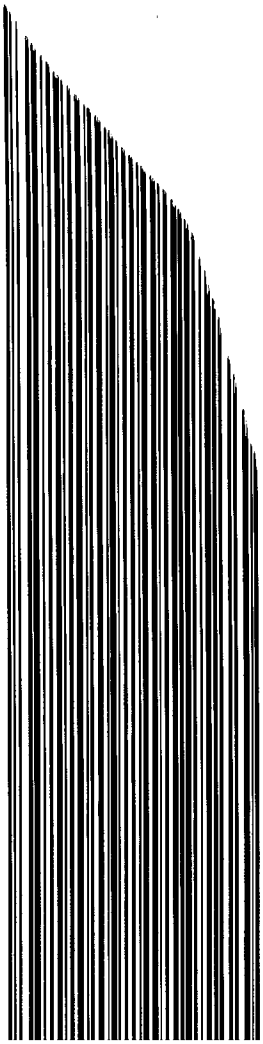
Ship From
ENTHALPY ANALYTICAL

Tracking #: 562283874

SAMPLE RECEIVING

4630 NORTHGATE BLVD

SUITE 150



GLS.

800-322-5555
www.gls-us.com

Ship From
ENTHALPY ANALYTICAL
SAMPLE RECEIVING
4630 NORTHGATE BLVD
SUITE 150
SACRAMENTO, CA 95834

Tracking #: 562283874

NPS

Ship To
ENTHALPY ANALYTICAL LABORATORIES
SAMPLE RECEIVING
931 WEST BARKLEY AVENUE
ORANGE, CA 92868

ORANGE

S10219D

20159002

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: STANDARD

ORC CA927-RD0

Print Date: 11/19/2024 12:59 PM

Package 9 of 20

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

GLS.

800-322-5555
www.gls-us.com

Ship From
ENTHALPY ANALYTICAL
SAMPLE RECEIVING
4630 NORTHGATE BLVD
SUITE 150
SACRAMENTO, CA 95834

Tracking #: 562283875

NPS

Ship To
ENTHALPY ANALYTICAL LABORATORIES
SAMPLE RECEIVING
931 WEST BARKLEY AVENUE
ORANGE, CA 92868

ORANGE

S10219D

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

20159003

Signature Type: STANDARD

ORC CA927-RD0

Print Date: 11/19/2024 12:59 PM

Package 10 of 20

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

Outlook

[External] - RE: 2301-3652 - Enthalpy Data (520798)

From Alan Churchill <achurchill@PadreInc.com>
Date Mon 12/2/2024 3:50 PM
To Miguel Gamboa <miguel.gamboa@enthalpy.com>
Cc Alan Klein <aklein@PadreInc.com>

Hi Miguel,

Please analyze the following soil samples for lead by EPA 6020 on a 3-day TAT:

FB-13C (1-1.5') [*LAB ID 520798-022*]; and

FB-13G (SURF) [*LAB ID 520798-027*].

Thanks.

Alan Churchill, P.G.
Padre Associates, Inc.
350 University Avenue, Suite 250
Sacramento, CA 95825
916-333-5920, ext. 250
916-952-5421 (cell)

From: Miguel Gamboa <miguel.gamboa@enthalpy.com>
Sent: Monday, December 2, 2024 2:31 PM
To: Alan Churchill <achurchill@PadreInc.com>
Subject: 2301-3652 - Enthalpy Data (520798)

Hi Alan,

Please find attached the following files:
• PDF Deliverable
• Standard Format EDD (520798_standard.zip)

You may also access this data at https://labline-orange.enthalpy.com/
Email was also sent to: aklein@Padreinc.com, mmiller@Padreinc.com

Miguel Gamboa
Project Manager
Enthalpy Analytical, LLC
2323 Fifth St., Berkeley, CA 94710
(510) 204-2236
Miguel.Gamboa@enthalpy.com

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: RR-2A (SURF) **DF:** 0.9921 **Analyzed:** 11/23/24
Type: SAMPLE **Batch#:** 356177 **Prep:** EPA 3580M
Lab ID: 520798-042 **Sampled:** 11/19/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 11/20/24 **Analyst:** DIB
Basis: as received **Prepared:** 11/22/24

520798-042 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg

520798-042 Surrogate	%REC	Limits
n-Triacontane	81	70-130

Field ID: RR-2B (SURF) **DF:** 0.9955 **Analyzed:** 11/23/24
Type: SAMPLE **Batch#:** 356177 **Prep:** EPA 3580M
Lab ID: 520798-044 **Sampled:** 11/19/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 11/20/24 **Analyst:** DIB
Basis: as received **Prepared:** 11/22/24

520798-044 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg

520798-044 Surrogate	%REC	Limits
n-Triacontane	77	70-130

Field ID: RR-2C (SURF) **DF:** 0.9935 **Analyzed:** 11/23/24
Type: SAMPLE **Batch#:** 356177 **Prep:** EPA 3580M
Lab ID: 520798-046 **Sampled:** 11/19/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 11/20/24 **Analyst:** DIB
Basis: as received **Prepared:** 11/22/24

520798-046 Analyte	Result	RL	Units
DRO C10-C28	ND	9.9	mg/Kg

520798-046 Surrogate	%REC	Limits
n-Triacontane	75	70-130

Field ID: RR-2D (SURF) **DF:** 0.9950 **Analyzed:** 11/23/24
Type: SAMPLE **Batch#:** 356177 **Prep:** EPA 3580M
Lab ID: 520798-048 **Sampled:** 11/19/24 **Analysis:** EPA 8015M
Matrix: Soil **Received:** 11/20/24 **Analyst:** DIB
Basis: as received **Prepared:** 11/22/24

520798-048 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg

520798-048 Surrogate	%REC	Limits
n-Triacontane	77	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type:	BLANK	**Batch#:**	356177	**Analysis:**	EPA 8015M
Lab ID:	QC1206427	**Prepared:**	11/22/24	**Analyst:**	DIB
Matrix:	Soil	**Analyzed:**	11/23/24		
DF:	0.9950	**Prep:**	EPA 3580M		

QC1206427 Analyte	Result	RL	Units
DRO C10-C28	ND	10	mg/Kg

QC1206427 Surrogate	%REC	Limits
n-Triacontane	98	70-130

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 356177 **Analysis:** EPA 8015M

Lab ID: QC1206428 **Prepared:** 11/22/24 **Analyst:** DIB

Matrix: Soil **Analyzed:** 11/23/24

DF: 1.000 **Prep:** EPA 3580M

QC1206428 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	250.0	214.2	86	76-122	mg/Kg

QC1206428 Surrogate	%REC	Limits
n-Triacontane	92	70-130

ENTHALPY ANALYTICAL

Extractable Carbon Chain: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	11/22/24
Type:	MS	**DF:**	0.9945	**Analyzed:**	11/23/24
MSS Lab ID:	520852-001	**Batch#:**	356177	**Prep:**	EPA 3580M
Lab ID:	QC1206429	**Sampled:**	11/20/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	11/20/24	**Analyst:**	DIB

QC1206429 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	<3.436	248.6	214.6	86	62-126	mg/Kg

QC1206429 Surrogate	%REC	Limits
n-Triacontane	93	70-130

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	11/22/24
Type:	MSD	**DF:**	0.9906	**Analyzed:**	11/23/24
MSS Lab ID:	520852-001	**Batch#:**	356177	**Prep:**	EPA 3580M
Lab ID:	QC1206430	**Sampled:**	11/20/24	**Analysis:**	EPA 8015M
Matrix:	Soil	**Received:**	11/20/24	**Analyst:**	DIB

QC1206430 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	247.6	207.9	84	62-126	mg/Kg	3	35

QC1206430 Surrogate	%REC	Limits
n-Triacontane	91	70-130

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-12 (1-1.5') **DF:** 0.9901 **Analyzed:** 11/26/24

Type: SAMPLE **Batch#:** 356327 **Prep:** EPA 3546

Lab ID: 520798-029 **Sampled:** 11/19/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 11/20/24 **Analyst:** KLR

Basis: as received **Prepared:** 11/25/24

520798-029 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

520798-029 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	69	19-121

Field ID: FB-12A (SURF) **DF:** 0.9901 **Analyzed:** 11/26/24

Type: SAMPLE **Batch#:** 356327 **Prep:** EPA 3546

Lab ID: 520798-030 **Sampled:** 11/19/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 11/20/24 **Analyst:** KLR

Basis: as received **Prepared:** 11/25/24

520798-030 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

520798-030 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	69	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-12B (SURF)	**DF:**	1.000	**Analyzed:**	11/26/24
Type:	SAMPLE	**Batch#:**	356327	**Prep:**	EPA 3546
Lab ID:	520798-032	**Sampled:**	11/19/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	11/20/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	11/25/24		

520798-032 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

520798-032 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	48	19-121

Field ID:	FB-12C (SURF)	**DF:**	1.000	**Analyzed:**	11/26/24
Type:	SAMPLE	**Batch#:**	356327	**Prep:**	EPA 3546
Lab ID:	520798-034	**Sampled:**	11/19/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	11/20/24	**Analyst:**	KLR
Basis:	as received	**Prepared:**	11/25/24		

520798-034 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

520798-034 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	70	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs)

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-12D (SURF) **DF:** 1.000 **Analyzed:** 11/26/24

Type: SAMPLE **Batch#:** 356327 **Prep:** EPA 3546

Lab ID: 520798-036 **Sampled:** 11/19/24 **Analysis:** EPA 8082

Matrix: Soil **Received:** 11/20/24 **Analyst:** KLR

Basis: as received **Prepared:** 11/25/24

520798-036 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

520798-036 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	71	19-121

Type: BLANK **Batch#:** 356327 **Analysis:** EPA 8082

Lab ID: QC1206935 **Prepared:** 11/25/24 **Analyst:** KLR

Matrix: Soil **Analyzed:** 11/25/24

DF: 1.000 **Prep:** EPA 3546

QC1206935 Analyte	Result	RL	Units
Aroclor-1016	ND	50	ug/Kg
Aroclor-1221	ND	50	ug/Kg
Aroclor-1232	ND	50	ug/Kg
Aroclor-1242	ND	50	ug/Kg
Aroclor-1248	ND	50	ug/Kg
Aroclor-1254	ND	50	ug/Kg
Aroclor-1260	ND	50	ug/Kg
Aroclor-1262	ND	50	ug/Kg
Aroclor-1268	ND	50	ug/Kg

QC1206935 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	79	19-121

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 356327 **Analysis:** EPA 8082

Lab ID: QC1207107 **Prepared:** 11/25/24 **Analyst:** KLR

Matrix: Miscell. **Analyzed:** 11/25/24

DF: 1.000 **Prep:** EPA 3546

QC1207107 Analyte	Spiked	Result	%REC	Limits	Units
Aroclor-1016	500.0	456.2	91	14-150	ug/Kg
Aroclor-1260	500.0	480.2	96	10-150	ug/Kg

QC1207107 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	89	19-121

ENTHALPY ANALYTICAL

Polychlorinated Biphenyls (PCBs): Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	11/25/24
Type:	MS	**DF:**	0.9901	**Analyzed:**	11/25/24
MSS Lab ID:	520931-001	**Batch#:**	356327	**Prep:**	EPA 3546
Lab ID:	QC1207108	**Sampled:**	11/21/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	11/21/24	**Analyst:**	KLR

QC1207108 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Aroclor-1016	<21.44	495.0	427.1	86	42-127	ug/Kg
Aroclor-1260	<27.95	495.0	424.9	86	38-130	ug/Kg

QC1207108 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	84	19-121

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Prepared:**	11/25/24
Type:	MSD	**DF:**	0.9804	**Analyzed:**	11/26/24
MSS Lab ID:	520931-001	**Batch#:**	356327	**Prep:**	EPA 3546
Lab ID:	QC1207109	**Sampled:**	11/21/24	**Analysis:**	EPA 8082
Matrix:	Soil	**Received:**	11/21/24	**Analyst:**	KLR

QC1207109 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Aroclor-1016	490.2	407.2	83	42-127	ug/Kg	4	30
Aroclor-1260	490.2	408.6	83	38-130	ug/Kg	3	30

QC1207109 Surrogate	%REC	Limits
Decachlorobiphenyl (PCB)	79	19-121

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Lead

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-8 (1-1.5')	**DF:** 0.9804	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-001	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-001 Analyte	Result	RL	Units
Lead	**3.8**	0.49	mg/Kg

Field ID: FB-8A (SURF)	**DF:** 1.000	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-002	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-002 Analyte	Result	RL	Units
Lead	**3.4**	0.50	mg/Kg

Field ID: FB-8B (SURF)	**DF:** 0.9901	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-004	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-004 Analyte	Result	RL	Units
Lead	**17**	0.50	mg/Kg

Field ID: FB-8C (SURF)	**DF:** 0.9615	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-006	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-006 Analyte	Result	RL	Units
Lead	**20**	0.48	mg/Kg

Field ID: FB-8D (SURF)	**DF:** 0.9709	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-008	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-008 Analyte	Result	RL	Units
Lead	**4.7**	0.49	mg/Kg

ENTHALPY ANALYTICAL

Lead

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-13 (1-1.5')	**DF:** 0.9524	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-015	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-015 Analyte	Result	RL	Units
Lead	**3.7**	0.48	mg/Kg

Field ID: FB-13A (SURF)	**DF:** 0.9709	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-016	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-016 Analyte	Result	RL	Units
Lead	**78**	0.49	mg/Kg

Field ID: FB-13B (SURF)	**DF:** 0.9804	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-018	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-018 Analyte	Result	RL	Units
Lead	**12**	0.49	mg/Kg

Field ID: FB-13C (SURF)	**DF:** 0.9901	**Analyzed:** 11/22/24
Type: SAMPLE	**Batch#:** 356147	**Prep:** EPA 3050B
Lab ID: 520798-021	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** KAM
Basis: as received	**Prepared:** 11/21/24	

520798-021 Analyte	Result	RL	Units
Lead	**83**	0.50	mg/Kg

Field ID: FB-13C (1-1.5')	**DF:** 0.9709	**Analyzed:** 12/04/24
Type: SAMPLE	**Batch#:** 357009	**Prep:** EPA 3050B
Lab ID: 520798-022	**Sampled:** 11/19/24	**Analysis:** EPA 6020
Matrix: Soil	**Received:** 11/20/24	**Analyst:** DXC
Basis: as received	**Prepared:** 12/04/24	

520798-022 Analyte	Result	RL	Units
Lead	**4.9**	0.49	mg/Kg

ENTHALPY ANALYTICAL

Lead

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID: FB-13D (SURF) **DF:** 0.9901 **Analyzed:** 11/22/24
Type: SAMPLE **Batch#:** 356147 **Prep:** EPA 3050B
Lab ID: 520798-023 **Sampled:** 11/19/24 **Analysis:** EPA 6020
Matrix: Soil **Received:** 11/20/24 **Analyst:** KAM
Basis: as received **Prepared:** 11/21/24

520798-023 Analyte	Result	RL	Units
Lead	**16**	0.50	mg/Kg

Field ID: FB-13G (SURF) **DF:** 0.9901 **Analyzed:** 12/04/24
Type: SAMPLE **Batch#:** 357009 **Prep:** EPA 3050B
Lab ID: 520798-027 **Sampled:** 11/19/24 **Analysis:** EPA 6020
Matrix: Soil **Received:** 11/20/24 **Analyst:** DXC
Basis: as received **Prepared:** 12/04/24

520798-027 Analyte	Result	RL	Units
Lead	**19**	0.50	mg/Kg

Type: BLANK **Batch#:** 356147 **Analysis:** EPA 6020
Lab ID: QC1206303 **Prepared:** 11/21/24 **Analyst:** KAM
Matrix: Soil **Analyzed:** 11/22/24
DF: 1.000 **Prep:** EPA 3050B

QC1206303 Analyte	Result	RL	Units
Lead	ND	0.50	mg/Kg

Type: BLANK **Batch#:** 357009 **Analysis:** EPA 6020
Lab ID: QC1209431 **Prepared:** 12/04/24 **Analyst:** DXC
Matrix: Soil **Analyzed:** 12/04/24
DF: 1.000 **Prep:** EPA 3050B

QC1209431 Analyte	Result	RL	Units
Lead	ND	0.50	mg/Kg

Legend
ND: Not Detected
RL: Reporting Limit

ENTHALPY ANALYTICAL

Lead: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 356147 **Analysis:** EPA 6020
Lab ID: QC1206304 **Prepared:** 11/21/24 **Analyst:** KAM
Matrix: Soil **Analyzed:** 11/22/24
DF: 1.000 **Prep:** EPA 3050B

QC1206304 Analyte	Spiked	Result	%REC	Limits	Units
Lead	100.0	103.5	104	80-120	mg/Kg

Type: LCS **Batch#:** 357009 **Analysis:** EPA 6020
Lab ID: QC1209432 **Prepared:** 12/04/24 **Analyst:** DXC
Matrix: Soil **Analyzed:** 12/04/24
DF: 1.000 **Prep:** EPA 3050B

QC1209432 Analyte	Spiked	Result	%REC	Limits	Units
Lead	100.0	103.3	103	80-120	mg/Kg

Field ID: FB-8 (1-1.5') **Basis:** as received **Prepared:** 11/21/24
Type: MS **DF:** 1.000 **Analyzed:** 11/22/24
MSS Lab ID: 520798-001 **Batch#:** 356147 **Prep:** EPA 3050B
Lab ID: QC1206305 **Sampled:** 11/19/24 **Analysis:** EPA 6020
Matrix: Soil **Received:** 11/20/24 **Analyst:** KAM

QC1206305 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	3.810	100.0	106.0	102	75-125	mg/Kg

Field ID: FB-13C (1-1.5') **Basis:** as received **Prepared:** 12/04/24
Type: MS **DF:** 0.9709 **Analyzed:** 12/04/24
MSS Lab ID: 520798-022 **Batch#:** 357009 **Prep:** EPA 3050B
Lab ID: QC1209433 **Sampled:** 11/19/24 **Analysis:** EPA 6020
Matrix: Soil **Received:** 11/20/24 **Analyst:** DXC

QC1209433 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	4.881	97.09	105.0	103	75-125	mg/Kg

Field ID: FB-8 (1-1.5') **Basis:** as received **Prepared:** 11/21/24
Type: MSD **DF:** 0.9901 **Analyzed:** 11/22/24
MSS Lab ID: 520798-001 **Batch#:** 356147 **Prep:** EPA 3050B
Lab ID: QC1206306 **Sampled:** 11/19/24 **Analysis:** EPA 6020
Matrix: Soil **Received:** 11/20/24 **Analyst:** KAM

QC1206306 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Lead	99.01	105.0	102	75-125	mg/Kg	0	20

ENTHALPY ANALYTICAL

Lead: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-13C (1-1.5')	**Basis:**	as received	**Prepared:**	12/04/24
Type:	MSD	**DF:**	0.9804	**Analyzed:**	12/04/24
MSS Lab ID:	520798-022	**Batch#:**	357009	**Prep:**	EPA 3050B
Lab ID:	QC1209434	**Sampled:**	11/19/24	**Analysis:**	EPA 6020
Matrix:	Soil	**Received:**	11/20/24	**Analyst:**	DXC

QC1209434 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Lead	98.04	107.7	105	75-125	mg/Kg	2	20

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Lead: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-8 (1-1.5')	**Basis:**	as received	**Analyzed:**	11/22/24
Type:	Post Digest Spike	**DF:**	0.9804	**Prep:**	EPA 3050B
MSS Lab ID:	520798-001	**Batch#:**	356147	**Analysis:**	EPA 6020
Lab ID:	QC1206307	**Sampled:**	11/19/24	**Analyst:**	KAM
Matrix:	Soil	**Received:**	11/20/24		

QC1206307 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	3.810	98.04	107.7	106	75-125	mg/Kg

ENTHALPY ANALYTICAL

Lead: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB-13C (1-1.5')	**Basis:**	as received	**Analyzed:**	12/04/24
Type:	Post Digest Spike	**DF:**	0.9709	**Prep:**	EPA 3050B
MSS Lab ID:	520798-022	**Batch#:**	357009	**Analysis:**	EPA 6020
Lab ID:	QC1209435	**Sampled:**	11/19/24	**Analyst:**	DXC
Matrix:	Soil	**Received:**	11/20/24		

QC1209435 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	4.881	97.09	108.4	107	75-125	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Field ID:	FB #1	**Batch#:**	356201	**Prep:**	EPA 3015A
Type:	SAMPLE	**Sampled:**	11/19/24	**Analysis:**	EPA 200.8
Lab ID:	520798-010	**Received:**	11/20/24	**Analyst:**	DXC
Matrix:	Water	**Prepared:**	11/22/24		
DF:	1.000	**Analyzed:**	11/25/24		

520798-010 Analyte	Result	RL	Units
Lead	ND	5.0	ug/L

Field ID:	EB #1	**Batch#:**	356201	**Prep:**	EPA 3015A
Type:	SAMPLE	**Sampled:**	11/19/24	**Analysis:**	EPA 200.8
Lab ID:	520798-020	**Received:**	11/20/24	**Analyst:**	DXC
Matrix:	Water	**Prepared:**	11/22/24		
DF:	1.000	**Analyzed:**	11/25/24		

520798-020 Analyte	Result	RL	Units
Lead	ND	5.0	ug/L

Type:	BLANK	**Batch#:**	356201	**Analysis:**	EPA 200.8
Lab ID:	QC1206496	**Prepared:**	11/22/24	**Analyst:**	DXC
Matrix:	Water	**Analyzed:**	11/25/24		
DF:	1.000	**Prep:**	EPA 3015A		

QC1206496 Analyte	Result	RL	Units
Lead	ND	5.0	ug/L

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 520798 **Project#:** 2301-3652

Client: Padre Associates, Inc. **Location:** Santa Fe Elem PEA

Type: LCS **Batch#:** 356201 **Analysis:** EPA 200.8

Lab ID: QC1206497 **Prepared:** 11/22/24 **Analyst:** DXC

Matrix: Water **Analyzed:** 11/25/24

DF: 1.000 **Prep:** EPA 3015A

QC1206497 Analyte	Spiked	Result	%REC	Limits	Units
Lead	100.0	103.2	103	85-115	ug/L

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 11/25/24

Type: MS **Batch#:** 356201 **Prep:** EPA 3015A

MSS Lab ID: 520893-003 **Sampled:** 11/21/24 **Analysis:** EPA 200.8

Lab ID: QC1206494 **Received:** 11/21/24 **Analyst:** DXC

Matrix: Water **Prepared:** 11/22/24

QC1206494 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	2.176	100.0	107.4	105	70-130	ug/L

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 11/25/24

Type: MS **Batch#:** 356201 **Prep:** EPA 3015A

MSS Lab ID: 520722-002 **Sampled:** 11/19/24 **Analysis:** EPA 200.8

Lab ID: QC1206534 **Received:** 11/19/24 **Analyst:** DXC

Matrix: Water **Prepared:** 11/22/24

QC1206534 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Lead	<0.1764	100.0	101.6	102	70-130	ug/L

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 11/25/24

Type: MSD **Batch#:** 356201 **Prep:** EPA 3015A

MSS Lab ID: 520893-003 **Sampled:** 11/21/24 **Analysis:** EPA 200.8

Lab ID: QC1206495 **Received:** 11/21/24 **Analyst:** DXC

Matrix: Water **Prepared:** 11/22/24

QC1206495 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Lead	100.0	107.1	105	70-130	ug/L	0	20

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 11/25/24

Type: MSD **Batch#:** 356201 **Prep:** EPA 3015A

MSS Lab ID: 520722-002 **Sampled:** 11/19/24 **Analysis:** EPA 200.8

Lab ID: QC1206535 **Received:** 11/19/24 **Analyst:** DXC

Matrix: Water **Prepared:** 11/22/24

QC1206535 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Lead	100.0	103.6	104	70-130	ug/L	2	20

Legend

RPD: Relative Percent Difference

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	092418649
Customer ID:	PADR62
Customer PO:	
Project ID:	

Attention:	Alan J. Klein Padre Associates, Inc. 555 University Ave Suite 110 Sacramento, CA 95827	**Phone:**	(916) 333-5920
		Fax:	(916) 333-5921
		Received:	10/07/2024 11:30 AM
		Analysis Date:	10/19/2024
		Collected:	
Project:	SANTA FE ELEMENTARY SCHOOL / 2301-3652		

Test Report: Asbestos Analysis of Soils via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
N-1 (SURF) *092418649-0001*	N-1 (SURF) / 10-3-24 (1110)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-1 (2-2.5') *092418649-0002*	N-1 (2-2.5') / 10-3-24 (1115)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-2 (SURF) *092418649-0003*	N-2 (SURF) / 10-3-24 (1125)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-2 (2-2.5') *092418649-0004*	N-2 (2-2.5') / 10-3-24 (1127)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-3 (SURF) *092418649-0005*	N-3 (SURF) / 10-3-24 (1105)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-3 (2-2.5') *092418649-0006*	N-3 (2-2.5') / 10-3-24 (1108)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-4 (SURF) *092418649-0007*	N-4 (SURF) / 10-3-24 (1036)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
N-4 (2-2.5') *092418649-0008*	N-4 (2-2.5') / 10-3-24 (1038)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 10/19/2024 16:21:37

EMSL Analytical, Inc.
464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	092418649
Customer ID:	PADR62
Customer PO:	
Project ID:	

Attention:	Alan J. Klein Padre Associates, Inc. 555 University Ave Suite 110 Sacramento, CA 95827	**Phone:**	(916) 333-5920
		Fax:	(916) 333-5921
		Received:	10/07/2024 11:30 AM
		Analysis Date:	10/19/2024
		Collected:	
Project:	SANTA FE ELEMENTARY SCHOOL / 2301-3652		

Test Report: Asbestos Analysis of Soils via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**

Analyst(s)

Xeena Paul (8)

Oscar Merino, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 10/19/2024 16:21:37

EMSL Analytical, Inc.
464 McCormick Street, San Leandro, CA 94577
Phone: (510) 895-3675
Fax: (510) 895-3680
Email: SanLeandroLab@emsl.com

EMSL Order: 092418649
Customer ID: PADR62
Customer PO:
Project ID:

Attn: *Alan J. Klein*
Padre Associates, Inc.
350 University Avenue
Suite 250
Sacramento, CA, 95825

Phone: (916) 333-5920
Fax: (916) 333-5921
Collected: N/A
Received: 10/07/24 11:30

Project: **SANTA FE ELEMENTARY SCHOOL / 2301-3652**

Analyzed: 10/31/24

SUMMARY REPORT : Modified TEM CARB 435 Level: C (0.01%)

Analysis of Soil Material Utilizing Analytical Electron Microscopy (Section 2.5.5.2) with CARB 435 Prep (Milling)

Sample ID	Minerals Present	Results	Structures	Reporting Limit	Asbestos Weight	Comments
N-1 (SURF)	*No Structures Detected*	Regulated Asbestos	0	0.01%	< 0.01%	
092418649-0001		Other Minerals	0		< 0.01%	
N-1 (SURF) / 10-3-24 (1110)		**Total**	**0**		**< 0.01%**	
		Undetermined	0		----------	
N-3 (2-2.5')	*No Structures Detected*	Regulated Asbestos	0	0.01%	< 0.01%	
092418649-0006		Other Minerals	0		< 0.01%	
N-3 (2-2.5') / 10-3-24 (1108)		**Total**	**0**		**< 0.01%**	
		Undetermined	0		----------	

K. Corbin
Analyst

Approved Signatory

APPENDIX E
95% UCL OUTPUT SPREADSHEETS

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation	ProUCL 5.2 12/12/2024 1:04:33 PM										
5	From File	PCB_data_ucl.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Number of Bootstrap Operations	2000										
9												
10												
11	Aroclor 1248											
12												
13	General Statistics											
14	Total Number of Observations					16			Number of Distinct Observations			5
15									Number of Missing Observations			0
16	Minimum					0.018			Mean			0.0594
17	Maximum					0.25			Median			0.05
18	SD					0.0542			Std. Error of Mean			0.0135
19	Coefficient of Variation					0.912			Skewness			3.236
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic					0.527			Shapiro Wilk GOF Test			
23	1% Shapiro Wilk Critical Value					0.844			Data Not Normal at 1% Significance Level			
24	Lilliefors Test Statistic					0.444			Lilliefors GOF Test			
25	1% Lilliefors Critical Value					0.248			Data Not Normal at 1% Significance Level			
26	Data Not Normal at 1% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL								95% UCLs (Adjusted for Skewness)			
30	95% Student's-t UCL					0.0832			95% Adjusted-CLT UCL (Chen-1995)			0.0934
31									95% Modified-t UCL (Johnson-1978)			0.085
32												
33	Gamma GOF Test											
34	A-D Test Statistic					2.206			Anderson-Darling Gamma GOF Test			
35	5% A-D Critical Value					0.748			Data Not Gamma Distributed at 5% Significance Level			
36	K-S Test Statistic					0.391			Kolmogorov-Smirnov Gamma GOF Test			
37	5% K-S Critical Value					0.217			Data Not Gamma Distributed at 5% Significance Level			
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)					2.389			k star (bias corrected MLE)			1.982
42	Theta hat (MLE)					0.0249			Theta star (bias corrected MLE)			0.03
43	nu hat (MLE)					76.43			nu star (bias corrected)			63.43
44	MLE Mean (bias corrected)					0.0594			MLE Sd (bias corrected)			0.0422
45									Approximate Chi Square Value (0.05)			46.11
46	Adjusted Level of Significance					0.0335			Adjusted Chi Square Value			44.43
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL					0.0818			95% Adjusted Gamma UCL			0.0849
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic					0.756			Shapiro Wilk Lognormal GOF Test			
53	10% Shapiro Wilk Critical Value					0.906			Data Not Lognormal at 10% Significance Level			

	A	B	C	D	E	F	G	H	I	J	K	L
54					Lilliefors Test Statistic	0.343	Lilliefors Lognormal GOF Test					
55					10% Lilliefors Critical Value	0.196	Data Not Lognormal at 10% Significance Level					
56	Data Not Lognormal at 10% Significance Level											
57												
58	Lognormal Statistics											
59					Minimum of Logged Data	-4.017			Mean of logged Data			-3.047
60					Maximum of Logged Data	-1.386			SD of logged Data			0.64
61												
62	Assuming Lognormal Distribution											
63					95% H-UCL	0.084			90% Chebyshev (MVUE) UCL			0.0864
64					95% Chebyshev (MVUE) UCL	0.0995			97.5% Chebyshev (MVUE) UCL			0.118
65					99% Chebyshev (MVUE) UCL	0.153						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution											
69												
70	Nonparametric Distribution Free UCLs											
71					95% CLT UCL	0.0817			95% BCA Bootstrap UCL			0.0978
72					95% Standard Bootstrap UCL	0.081			95% Bootstrap-t UCL			0.128
73					95% Hall's Bootstrap UCL	0.204			95% Percentile Bootstrap UCL			0.0844
74					90% Chebyshev(Mean, Sd) UCL	0.1			95% Chebyshev(Mean, Sd) UCL			0.118
75					97.5% Chebyshev(Mean, Sd) UCL	0.144			99% Chebyshev(Mean, Sd) UCL			0.194
76												
77	Suggested UCL to Use											
78					95% Student's-t UCL	0.0832						
79												
80	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
81	Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.											
82	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
83												

Location	Aroclor 1248 Concentration (mg/kg)	95% UCL Aroclor 1248 Data Set
CS-5 (FB-1, -2-, -3)	<0.018	0.018
CS-6 (FB—4, -5, -6)	<0.018	0.018
CS-7 (FB-7, -8-, -9, -10)	<0.018	0.018
FB-11	<0.099	0.099
FB-12	**0.25**	**0.25**
FB-12	<0.05	0.05
FB-12A	<0.05	0.05
FB-12B	<0.05	0.05
FB-12C	<0.05	0.05
FB-12D	<0.05	0.05
FB-13	<0.05	0.05
FB-14	<0.05	0.05
CS-9 (FB-1, -2-, -3)	<0.05	0.05
CS-10 (FB—4, -5, -6)	<0.049	0.049
CS-11 (FB-7, -8-, -9, -10)	<0.05	0.05
CS-12 (FB-11, -12-, -13, -14)	<0.049	0.049

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation	ProUCL 5.2 12/12/2024 1:05:40 PM										
5	From File	TPHd_data_ucl.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Number of Bootstrap Operations	2000										
9												
10												
11	TPHd											
12												
13	General Statistics											
14	Total Number of Observations					14		Number of Distinct Observations				5
15								Number of Missing Observations				0
16	Minimum					9.9		Mean				21.89
17	Maximum					150		Median				10
18	SD					37.31		Std. Error of Mean				9.972
19	Coefficient of Variation					1.705		Skewness				3.601
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic					0.372		Shapiro Wilk GOF Test				
23	1% Shapiro Wilk Critical Value					0.825		Data Not Normal at 1% Significance Level				
24	Lilliefors Test Statistic					0.42		Lilliefors GOF Test				
25	1% Lilliefors Critical Value					0.263		Data Not Normal at 1% Significance Level				
26	Data Not Normal at 1% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL							95% UCLs (Adjusted for Skewness)				
30	95% Student's-t UCL					39.55		95% Adjusted-CLT UCL (Chen-1995)				48.54
31								95% Modified-t UCL (Johnson-1978)				41.15
32												
33	Gamma GOF Test											
34	A-D Test Statistic					3.622		Anderson-Darling Gamma GOF Test				
35	5% A-D Critical Value					0.757		Data Not Gamma Distributed at 5% Significance Level				
36	K-S Test Statistic					0.452		Kolmogorov-Smirnov Gamma GOF Test				
37	5% K-S Critical Value					0.234		Data Not Gamma Distributed at 5% Significance Level				
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)					1.181		k star (bias corrected MLE)				0.976
42	Theta hat (MLE)					18.53		Theta star (bias corrected MLE)				22.43
43	nu hat (MLE)					33.07		nu star (bias corrected)				27.32
44	MLE Mean (bias corrected)					21.89		MLE Sd (bias corrected)				22.16
45								Approximate Chi Square Value (0.05)				16.4
46	Adjusted Level of Significance					0.0312		Adjusted Chi Square Value				15.28
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL					36.46		95% Adjusted Gamma UCL				39.12
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic					0.493		Shapiro Wilk Lognormal GOF Test				
53	10% Shapiro Wilk Critical Value					0.895		Data Not Lognormal at 10% Significance Level				

	A	B	C	D	E	F	G	H	I	J	K	L
54					Lilliefors Test Statistic	0.441	Lilliefors Lognormal GOF Test					
55					10% Lilliefors Critical Value	0.208	Data Not Lognormal at 10% Significance Level					
56	Data Not Lognormal at 10% Significance Level											
57												
58	Lognormal Statistics											
59					Minimum of Logged Data	2.293				Mean of logged Data		2.606
60					Maximum of Logged Data	5.011				SD of logged Data		0.762
61												
62	Assuming Lognormal Distribution											
63					95% H-UCL	30.21				90% Chebyshev (MVUE) UCL		29.06
64					95% Chebyshev (MVUE) UCL	34.23				97.5% Chebyshev (MVUE) UCL		41.4
65					99% Chebyshev (MVUE) UCL	55.48						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution											
69												
70	Nonparametric Distribution Free UCLs											
71					95% CLT UCL	38.29				95% BCA Bootstrap UCL		52.96
72					95% Standard Bootstrap UCL	37.85				95% Bootstrap-t UCL		287.5
73					95% Hall's Bootstrap UCL	294.4				95% Percentile Bootstrap UCL		41.43
74					90% Chebyshev(Mean, Sd) UCL	51.8				95% Chebyshev(Mean, Sd) UCL		65.35
75					97.5% Chebyshev(Mean, Sd) UCL	84.16				99% Chebyshev(Mean, Sd) UCL		121.1
76												
77	Suggested UCL to Use											
78					95% Student's-t UCL	39.55						
79												
80	The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.											
81	Please verify the data were collected from random locations.											
82	If the data were collected using judgmental or other non-random methods,											
83	then contact a statistician to correctly calculate UCLs.											
84												
85	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
86	Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
88												

Location	TPH-d Concentration (mg/kg)	TPHd 95% UCL Data Set
RR-1	**16**	**16**
RR-2	**150**	**150**
RR-2A	<9.9	9.9
RR-2B	<10	10
RR-2C	<9.9	9.9
RR-2D	<10	10
RR-3	<9.9	9.9
RR-4	<9.9	9.9
CS-2 (RR-5, -6, -7, -8)	<9.9	9.9
RR-1	<10	10
RR-2	<10	10
RR-3	**31**	**31**
RR-4	<10	10
CS-4 (RR-5, -6, -7, -8)	<9.9	9.9

APPENDIX F
LEADSPREAD RISK ASSESSMENT SPREADSHEET

LeadSpread 9- LEAD RISK ASSESSMENT SPREADSHEET
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

USERS GUIDE to Leadspread Version 9

INPUT

MEDIUM	LEVEL
Lead in Soil/Dust (µg/g)	23
Respirable Dust (µg/cubic m)	1.5

EXPOSURE PARAMETERS

Parameter	units	adults	children
Days per week	days/wk	7	
Days per week, occupational	-	5	
Geometric Standard Deviation	-	1.6	
Blood lead level of concern	(µg/dl)	1.1	1
Skin area, residential	square cm	6032	2373
Skin area occupational	square cm	6032	
Soil adherence	µg/square cm	70	200
Dermal uptake constant	(µg/dl)/(µg/day)	0.00027	0.00048
Soil ingestion	mg/day	30	80
Soil ingestion, pica	mg/day		1000
Ingestion constant	(µg/dl)/(µg/day)	0.09	0.16
Bioavailability	unitless	0.6	
Breathing rate	cubic meter/day	20	10
Inhalation constant	(µg/dl)/(µg/day)	0.082	0.192

Click here for REFERENCES

OUTPUT

ENDPOINT and RECEPTOR	50th Percentile Change in Blood Pb (µg/dl)	90th Percentile Change in Blood Pb (µg/dl)	95th Percentile Change in Blood Pb (µg/dl)	PRG-90 (µg/g)	PRG-95 (µg/g)
BLOOD Pb, ADULT	0.0	0.1	0.1	356	301
BLOOD Pb, CHILD	0.2	0.3	0.4	70	59
BLOOD Pb, PICA CHILD	2.2	4.0	4.8	6	5
BLOOD Pb, OCCUPATIONAL	0.0	0.1	0.1	499	421

PATHWAYS

ADULTS	Residential Pathway Contribution	Residential Pathway Contribution	Residential Pathway Contribution	Occupational Pathway contribution	Occupational Pathway contribution	Occupational Pathway contribution
Pathway	PEF*	µg/dl	percent	PEF	µg/dl	percent
Soil Contact	6.8E-5	0.00	4%	4.9E-5	0.00	4%
Soil Ingestion	1.6E-3	0.04	96%	1.2E-3	0.03	96%
Inhalation	2.5E-6	0.00	0.1%	1.8E-6	0.00	0.1%

CHILDREN	Typical Pathway contribution	Typical Pathway contribution	Typical Pathway contribution	with pica Pathway contribution	with pica Pathway contribution	with pica Pathway contribution
Pathway	PEF*	µg/dl	percent	PEF	µg/dl	percent
Soil Contact	1.4E-4	0.00	1.7%		0.00	0.1%
Soil Ingestion	7.7E-3	0.18	98%	9.6E-2	2.21	100%
Inhalation	2.9E-6	0.00	0.0%		0.00	0.0%

Click here for Equations

*Pathway Exposure Factor

1	UCL Statistics for Uncensored Full Data Sets										
2											
3	User Selected Options										
4	Date/Time of Computation	ProUCL 5.2 12/10/2024 3:17:27 PM									
5	From File	Lead_data_ucl.xls									
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Number of Bootstrap Operations	2000									
9											
10											
11	Lead										
12											
13	General Statistics										
14	Total Number of Observations				42			Number of Distinct Observations			32
15								Number of Missing Observations			0
16	Minimum				3.1			Mean			16.46
17	Maximum				120			Median			6.8
18	SD				26.08			Std. Error of Mean			4.025
19	Coefficient of Variation				1.584			Skewness			2.883
20											
21	Normal GOF Test										
22	Shapiro Wilk Test Statistic				0.508			Shapiro Wilk GOF Test			
23	1% Shapiro Wilk Critical Value				0.922			Data Not Normal at 1% Significance Level			
24	Lilliefors Test Statistic				0.33			Lilliefors GOF Test			
25	1% Lilliefors Critical Value				0.157			Data Not Normal at 1% Significance Level			
26	Data Not Normal at 1% Significance Level										
27											
28	Assuming Normal Distribution										
29	95% Normal UCL							95% UCLs (Adjusted for Skewness)			
30	95% Student's-t UCL				23.24			95% Adjusted-CLT UCL (Chen-1995)			25
31								95% Modified-t UCL (Johnson-1978)			23.54
32											
33	Gamma GOF Test										
34	A-D Test Statistic				4.421			Anderson-Darling Gamma GOF Test			
35	5% A-D Critical Value				0.779			Data Not Gamma Distributed at 5% Significance Level			
36	K-S Test Statistic				0.242			Kolmogorov-Smirnov Gamma GOF Test			
37	5% K-S Critical Value				0.141			Data Not Gamma Distributed at 5% Significance Level			
38	Data Not Gamma Distributed at 5% Significance Level										
39											
40	Gamma Statistics										
41	k hat (MLE)				0.978			k star (bias corrected MLE)			0.924
42	Theta hat (MLE)				16.83			Theta star (bias corrected MLE)			17.81
43	nu hat (MLE)				82.17			nu star (bias corrected)			77.64
44	MLE Mean (bias corrected)				16.46			MLE Sd (bias corrected)			17.13
45								Approximate Chi Square Value (0.05)			58.34
46	Adjusted Level of Significance				0.0443			Adjusted Chi Square Value			57.74
47											
48	Assuming Gamma Distribution										
49	95% Approximate Gamma UCL				21.91			95% Adjusted Gamma UCL			22.14
50											
51	Lognormal GOF Test										
52	Shapiro Wilk Test Statistic				0.804			Shapiro Wilk Lognormal GOF Test			
53	10% Shapiro Wilk Critical Value				0.951			Data Not Lognormal at 10% Significance Level			

	A	B	C	D	E	F	G	H	I	J	K	L
54					Lilliefors Test Statistic	0.159	Lilliefors Lognormal GOF Test					
55					10% Lilliefors Critical Value	0.124	Data Not Lognormal at 10% Significance Level					
56	Data Not Lognormal at 10% Significance Level											
57												
58	Lognormal Statistics											
59					Minimum of Logged Data	1.131				Mean of logged Data		2.21
60					Maximum of Logged Data	4.787				SD of logged Data		0.926
61												
62	Assuming Lognormal Distribution											
63					95% H-UCL	19.46				90% Chebyshev (MVUE) UCL		20.59
64					95% Chebyshev (MVUE) UCL	23.66				97.5% Chebyshev (MVUE) UCL		27.93
65					99% Chebyshev (MVUE) UCL	36.32						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution											
69												
70	Nonparametric Distribution Free UCLs											
71					95% CLT UCL	23.08				95% BCA Bootstrap UCL		24.23
72					95% Standard Bootstrap UCL	22.82				95% Bootstrap-t UCL		27.8
73					95% Hall's Bootstrap UCL	23				95% Percentile Bootstrap UCL		23.25
74					90% Chebyshev(Mean, Sd) UCL	28.54				95% Chebyshev(Mean, Sd) UCL		34.01
75					97.5% Chebyshev(Mean, Sd) UCL	41.6				99% Chebyshev(Mean, Sd) UCL		56.51
76												
77	Suggested UCL to Use											
78					95% Student's-t UCL	23.24						
79												
80	The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.											
81	Please verify the data were collected from random locations.											
82	If the data were collected using judgmental or other non-random methods,											
83	then contact a statistician to correctly calculate UCLs.											
84												
85	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
86	Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
88												

APPENDIX G
ARSENIC BACKGROUND DATA SET

SOILS ENGINEERING, INC.

PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT

PROPOSED ELEMENTARY SCHOOL
NW CORNER OF E. MORTON AVE. & HILLCREST ST.
PORTERVILLE, CALIFORNIA

Prepared For:

Porterville Unified School District
600 West Grand Ave.
Porterville, CA 93257
Attn: Owen Fish

File No. 05-11560

Prepared By:

Soils Engineering, Inc.
4400 Yeager Way
Bakersfield, CA. 93313

June 2006

Background soil samples BK1-5' to BK5-5' (includes a duplicate) were collected near the 4 corners of the site at a depth of 5' and analyzed for CAM 17 Metals for comparison metal concentration evaluation.

See Plate 3 for sample locations.

The analytical results of the 0" to 6" composite soil samples analyzed indicate that minor OCP concentrations were present in two (2) of the soil samples, but not at concentrations higher then the CHHSLs. The highest OCP concentration reported in the 8 composite soil samples was 4,4'-DDE at only 31.2 ug/kg. Soil samples PP1-3" and PP1-2' collected beneath a suspected former electrical transformer location had no PCBs reported. See Table 1 for analytical results for pesticides and PCBs.

The results of on-site metal analyses indicate median concentrations within the range of background metal concentrations. Arsenic concentrations ranged from 1.02 to 3.79 mg/kg (ppm) in the discrete on-site soil samples analyzed. Lead concentrations ranged from 3.74 to 12.8 mg/kg across the site. In the discrete soil samples collected adjacent to the former buildings no elevated lead concentrations were reported. The highest lead concentration reported was only 12.8 mg/kg in sample D8-3".

Naturally occurring asbestos (NOA) results ranged from 0.0002% to 0.0022% in the seven (7) 0 to 6" soil samples analyzed by Transmission Electron Microscopy (TEM). See Table 2 for metal and asbestos concentrations reported onsite and in background samples.

The highest reported concentration of 4,4'-DDE (31.2 ug/kg) was compared to the California Human Health Screening Levels (CHHSLs) for residential soil and included in the human health screening evaluation of potential chemicals of concern (COC's). All of the metals were eliminated from the risk and hazard calculations based on the on-site mean (average) concentration of each metal being within the range of the background soil sample concentrations. See Table 2 for on-site and background metal concentrations for comparisons.

The highest reported concentration of naturally occurring asbestos (0.0022%) was independently evaluated. The concentrations of asbestos were reported above 0.001% by weight at only three (3) of the seven (7) soil sample locations, and is low enough to not require mitigation measures.

The human health screening evaluation conducted indicates a low cumulative risk (1.87×10^{-8}) and cumulative hazard (0.0012). The Lead Risk Assessment Spreadsheet (DTSC Lead Spread Vers. 7.0) calculations indicate a low potential risk to adults, children or workers at this site from the concentrations of lead in the soil sample. See Table 6 for the Lead Spread calculations.

SEI recommends no further action at the site based on the absence of significant pesticides, PCBs, NOA and metals detected at the site.

TABLE 2 Left Side

TABL

Soil Sample Analytical Results Fo
Porterville Unified
NW Corner of E. Morton Ave. and

CONSTITUENTS (EPA Method)		DISCRETE SOIL SAMPLES (0 to 6" d																				
CAM-Metals (6010/7471)	PQL (ppm)	C1A-3"	C1B-3"	C2A-3"	C2B-3"	C3B-3"	C4B-3"	C5B-3"	C6B-3"	C9B-3" (Dup. Of C6-3")	C7B-3"	C8B-3"	D1-3"	D2-3"	D3-3"	D4-3"	D5-3"	D6-3"	D7-3"	D8-3"	D9-3"	D
Antimony	10	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Arsenic	1	NA	3.79	NA	2.99	3.00	3.19	1.02	2.35	2.10	1.45	3.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	1	NA	351	NA	NA	213	NA	72.2	NA	NA	138	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Beryllium	1	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	1	NA	1.37	NA	NA	1.30	NA	ND	NA	NA	1.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium	1	NA	55.6	NA	NA	66.6	NA	34.5	NA	NA	66.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cobalt	1	NA	16.2	NA	NA	14.0	NA	6.71	NA	NA	12.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Copper	1	NA	19.8	NA	NA	21.5	NA	11.6	NA	NA	27.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Lead	1	NA	9.87	NA	NA	9.08	NA	3.76	NA	NA	10.7	NA	11	8.89	11.9	7.31	10.7	8.35	6.26	12.8	8.34	1
Mercury	0.1	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Molybdenum	5	NA	2.42	NA	NA	2.29	NA	1.81	NA	NA	2.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nickel	2	NA	76.0	NA	NA	104	NA	44.5	NA	NA	93.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	1	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	1	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Thallium	1	NA	ND	NA	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Vanadium	1	NA	53.9	NA	NA	45.9	NA	21.0	NA	NA	34.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zinc	5	NA	52.3	NA	NA	65.9	NA	29.9	NA	NA	78.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Asbestos PLM	0.25%	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	
Asbestos TEM	0.0001%	0.0002%	NA	0.0009%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0021%	NA	NA	NA	0.0007%	NA	NA	

Note : Results in ppm unless otherwise noted, ppm = parts per million (mg/kg), ND = None Detected, NA = Not Analyzed, PQL = Practical Quantitation Limit for Reporting, ppb = parts concentration, PLM=Polarized Light Microscopy, TEM=Transmission Electron Microscopy

TABLE 2

TABLE 2 Right Side

lts For CAM-17 Metals and Asbestos

ıified School District

). and N. Hillcrest St., Porterville, CA

:o 6" depth)

	D9-3"	D10-3"	D11-3"	D12-3"	D13-3"	D14-3"	D15-3"	D16-3"	D17-3"	D18-3"	D19-3"	D20-3"	D21-3"	D22-3"	Background On-Site @ 5' BK1-5'	BK2-5'	BK3-5'	BK4-5'	BK5-5' (Dup. Of BK4-5')	COMPARISON OF ON-SITE & BACKGROUND METAL CONCENTRATIONS On-Site Mean Concentration	0 to 6" Background Concentration Range	Metal Eliminated As Chemical Of Concern?
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.34	4.04	3.61	3.49	3.95	2.59	2.34 to 4.04	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	107	159	238	293	365	193.55	107 to 293	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<1.0	<1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.17	2.14	1.62	1.52	1.72	1.20	1.17 to 2.14	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	113	233	68.9	61.6	66.7	56.25	61.6 to 233	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.8	23.1	14.2	13.9	14.1	12.33	13.8 to 23.1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.8	43.4	21.1	21.9	24.6	20.18	21.1 to 43.4	Yes
8	8.34	12.0	9.11	9.43	3.88	5.69	3.74	4.84	10.1	10.1	6.38	9.50	7.12	7.85	5.39	15.7	8.33	8.07	8.36	8.40	5.39 to 15.7	See Table 8
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<0.1	<0.1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.75	4.01	2.55	2.05	2.77	2.14	2.05 to 4.01	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	127	163	91.4	76.9	83.1	79.58	76.9 to 163	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<1	<1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<1	<1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	<1	<1	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49.2	88	60.2	54.5	57.4	38.90	49.2 to 88	Yes
\	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.7	117	57.6	51.2	59.4	58.55	40.7 to 117	Yes
\	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
\	NA	NA	NA	NA	0.0021%	0.0008%	0.0022%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

ppb = parts per billion. Metal eliminated as chemical of concern if on-site mean is within background range, Bold = Elevated