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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PRELIMINARY ENVIRONMENTAL ASSESSMENT

CARLTON / AKERS (WEST) SCHOOL SITE
VISALIA, TULARE COUNTY, CALIFORNIA
(SITE CODE: 104905 AND ENVIROSTOR NUMBER 60003862)



Prepared for:

Visalia Unified School District

OCTOBER 2025

padre associates
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

October 1, 2025
Project Number: 2401-4672

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
Carlton / Akers (West) School Site
(Site Code: 104905)

Dear Ms. Tisdale:

Padre Associates (Padre), on behalf of Visalia Unified School District, has prepared this Preliminary Environmental Assessment (PEA) Report for the Carlton / Akers (West) School Site located approximately 2,000 feet southwest of the intersection of North Akers Street and Avenue 320 in Visalia, 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, Carlton / Akers (West) School Site, Visalia, Tulare County, California, (Padre, June 2025).*

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

Alan Churchill, P.G.
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EXECUTIVE SUMMARY

Padre Associates, Inc., on behalf of Visalia Unified School District (District), has prepared this Preliminary Environmental Assessment (PEA) report for the Carlton/Akers (West) School Site located approximately 2,000 feet southwest of the intersection of North Akers Street and Avenue 320 in Visalia, Tulare County, California a (Project Site).

The school district plans to acquire the property for the construction of a new school that will accommodate approximately 747 students, with 30 classrooms and is anticipated to open in the Fall 2028. Municipal water will be provided by California Water Service and sewer services will be provided by the City of Visalia, Public Works Department.

The PEA was conducted in accordance with the document titled: *Preliminary Environmental Assessment Workplan, Carlton / Akers (West) School Site, Visalia, Tulare County, California, Site Code: 104905, (Padre, June 2025)*. The California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) approved the PEA workplan in a letter dated July 10, 2025.

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 residual organochlorine pesticides (OCPs), arsenic, and lead from historic agricultural use.

The total estimated risk from OCPs identified in soils is estimated to be 2.7×10^{-8}, which does not provide an increased cancer risk of greater than 1 in 1,000,000 ($>10^{-6}$). The total health hazard from OCPs identified in soils is estimated to be 0.002 which does not present an increased health hazard (i.e., >1). Therefore, further assessment or remedial action for OCPs in soil is not warranted.

Arsenic concentrations in soil at the Project Site ranged from 3.8 to 5.2 milligrams per kilogram (mg/kg). Project Site arsenic concentrations were compared to a background arsenic data set from a site located southwest and adjacent to the Project Site (Envirostor ID No. 60002713). The background arsenic data set consisted of 13 soil samples, with arsenic concentrations ranging from 2.9 to 9.6 mg/kg. Arsenic concentrations identified at the Project Site are comparable to background concentrations. Therefore, further assessment or remedial action for arsenic in soil is not warranted.

Lead concentrations in soil ranged from 5.5 to 6.5 mg/kg in soil at the Project Site. A risk assessment was performed using the DTSC 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 0.1 microgram 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. Therefore, further assessment or remedial action for lead in soil is not warranted.

Based on the findings of the PEA, the Project Site has not been adversely impacted by historic or current land-use activities. Therefore, Padre recommends the issuance of a "No Further Action" designation from the DTSC regarding the Carlton / Akers (West) School Site.

1.0 INTRODUCTION

Padre Associates, Inc., on behalf of Visalia Unified School District (District), has prepared this Preliminary Environmental Assessment (PEA) report for the Carlton/Akers (West) School Site located approximately 2,000 feet southwest of the intersection of North Akers Street and Avenue 320 in Visalia, Tulare County, California (Project Site). The Project Site is identified on **Plate 1-1: Site Location** and **Plate 1-2: Site Map**.

The school district plans to acquire the property for the construction of a new school that will accommodate approximately 747 students, with 30 classrooms and is anticipated to open in the Fall 2028. Municipal water will be provided by California Water Service and sewer services will be provided by the City of Visalia, Public Works Department.

The PEA was conducted in accordance with the document titled: *Preliminary Environmental Assessment Workplan, Carlton / Akers (West) School Site, Visalia, Tulare County, California, Site Code: 104905, (Padre, June 2025)*. The California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) approved the PEA workplan in a letter dated July 10, 2025. 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:

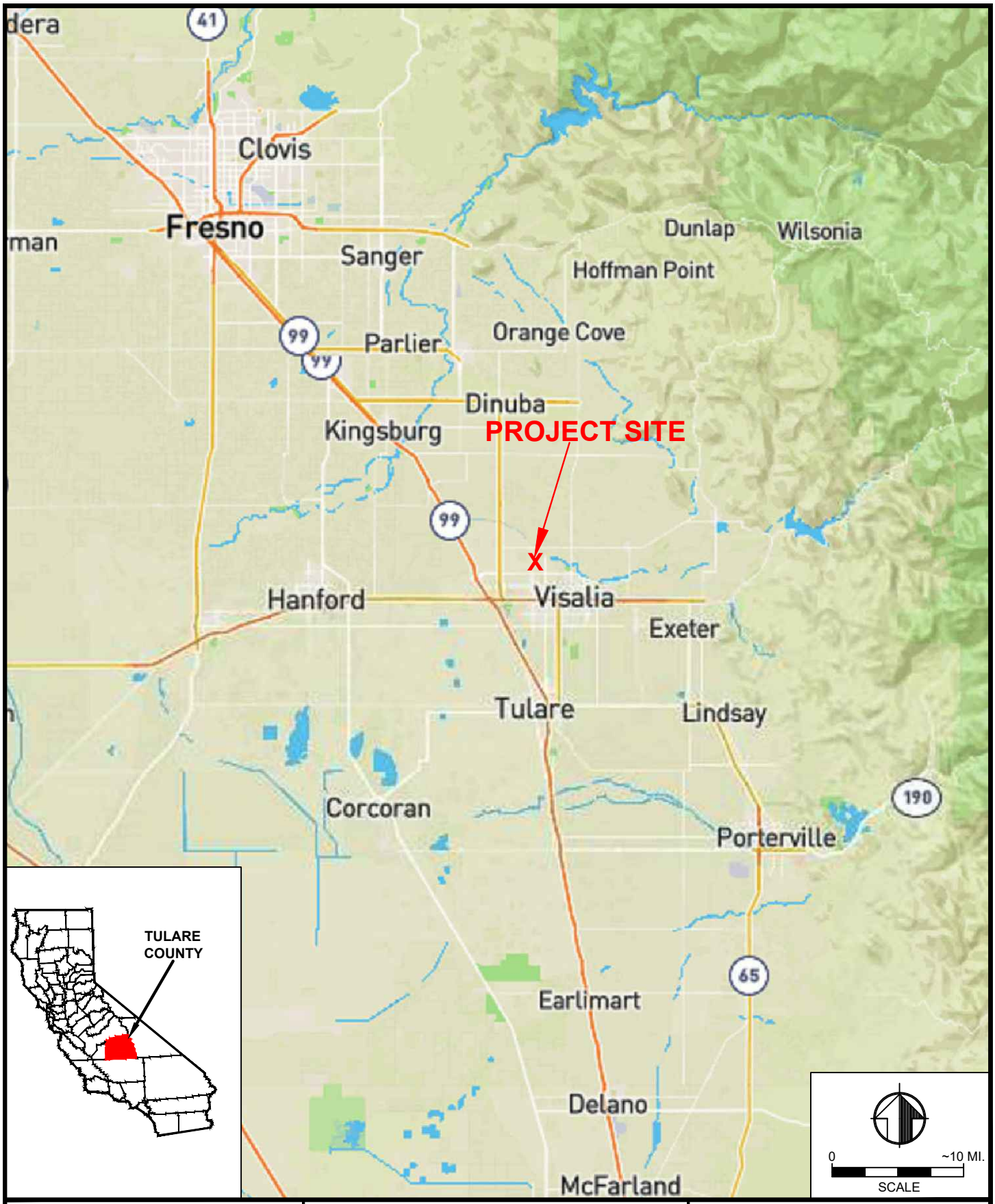
- Evaluating historical information for indications of past use, storage, disposal, and/or release of hazardous substances at the Project Site;
- Establishing through a field sampling and laboratory analysis program, the nature, concentration, and general extent of hazardous substances that may be present 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.



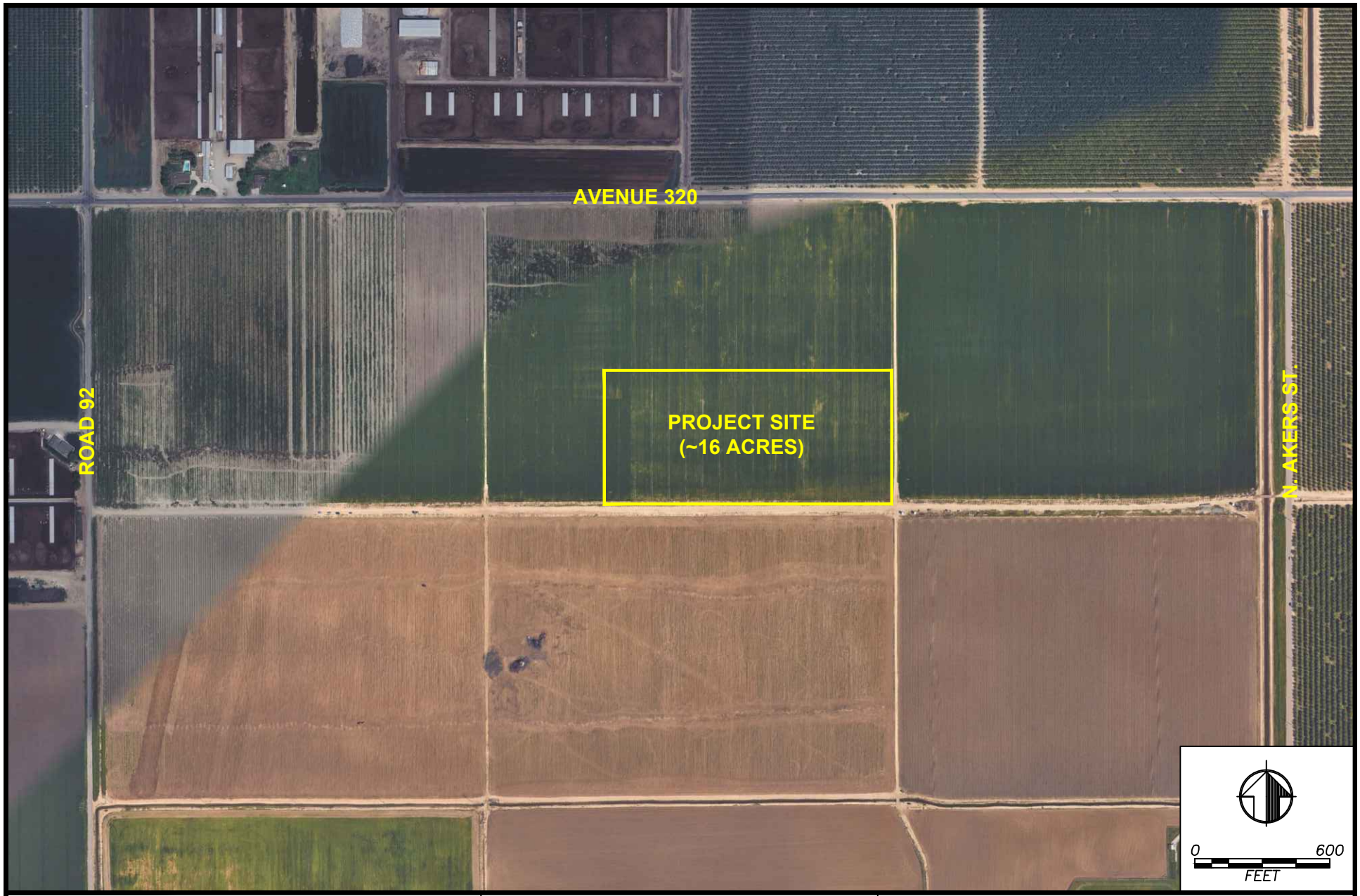
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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

CARLTON / AKERS (WEST)
VISALIA UNIFIED SCHOOL DISTRICT
VISALIA, CALIFORNIA

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PLATE 1-1

SITE LOCATION



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GOOGLE EARTH IMAGERY (3/24)

CARLTON / AKERS (WEST)
VISALIA UNIFIED SCHOOL DISTRICT
VISALIA, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
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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 is located approximately 2,000 feet southwest of the intersection of North Akers Street and Avenue 320 in Visalia, California. The Project Site consists of approximately 16-acres of agricultural land, and represents a portion of a larger parcel of land (439.09-acres) identified by Tulare County as Assessor's Parcel Number (APN): 077-100-117-000. The Project Site is relatively flat and lies at an approximate elevation of 310 feet above mean sea level (amsl). A copy of the parcel map was presented in the PEA Workplan.

2.2 DESIGNATED CONTACT PERSON

Steve Pena, Director of Facilities
Visalia Unified School District
801 North Mooney Boulevard, Suite A, Visalia, CA 93291
(559) 931-8092, ext. 11202
spena01@vusd.org

2.3 PROPERTY USE

The Project Site consists of an active agricultural field recently used for row crops (corn), and previously was planted with grapevines. At the time of field activities, the Project Site had recently been harvested for corn and was fallow.

2.4 ENVIROSTOR DATABASE NUMBER

The EnviroStor database number for the Project Site is 60003862.

2.5 TOWNSHIP, RANGE, AND SECTION

The Project Site is located in Township 18 South, Range 24 East, Section 15 of the USGS 7½-Minute topographic series, Visalia, California Quadrangle Map (2021). The latitude and longitude near the approximate center of the Project Site are identified as:

Latitude (North):	36° 22' 5.20'' (36.3681120)
Longitude (West):	119° 21' 28.85' (-119.3580150)

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

2.7.1 Topography

The Project Site is located on a relatively flat parcel of land within the northwestern portion of the town of Visalia. According to the United States Geological Survey (USGS) Visalia Quadrangle, California topographic map (2021), the Project Site is essentially flat and is located at an elevation of approximately 310 feet above mean sea level (msl). The general topography for the Project Site area is flat. Modoc Ditch is located approximately 1,600 feet east of the Project Site.

2.7.2 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 California Geological Survey's *Geologic Map of California – Fresno Sheet, 1:250,000,* 1966, fourth printing 1991, the Project Site is underlain by the quaternary age alluvial fan (Qf) sedimentary deposits.

2.7.3 Soils

According to the United States Department of Agriculture, Soil Conservation Service's, Soil Survey of Tulare County, California – Western Part (2003), the surface soil at the Project Site includes primarily Akers-Akers saline-sodic complex, 0 to 2 percent slopes in the southern portion of the Project Site and Grangeville sandy loam, drained, 0 to 2 percent slopes in the northern portion of the Project Site.

Akers series consists of soil formed in alluvium derived from granitic rock sources. The surface layers are light brownish gray fine sandy loam about 16 inches thick. The subsurface layers are pale brown fine sandy loam from a depth of 16 to 60 inches. The soil is well drained with moderate permeability and a low shrink-well potential.

Grangeville series consists of alluvium derived from granitic rock sources. The surface layer is grayish brown fine sandy loam about 11 inches thick. The subsurface layer is a light brownish gray fine sandy loam from a depth of 11 to 20 inches. The subsoil is pale brown stratified fine sandy loam, loamy fine sand, and loam to a depth of 60 inches. The soil is somewhat poorly drained with moderate to rapid permeability and a low shrink-well potential.

2.7.4 Groundwater

The Subject Property is located in the San Joaquin groundwater basin, Kaweah subbasin. The Kaweah Subbasin generally lies between the Kings subbasin to the north and Tule subbasin to the south and between the Kings River Conservation District on the west and crystalline bedrock of the Sierra Nevada foothills on the east. The west flowing Kaweah River is the primary source of recharge to the area.

Based on a review of the California Department of Water Resources water data library station map for groundwater wells located in the vicinity of the Project Site, depth to groundwater beneath the Project Site is estimated to range from 110 to 120 feet below ground surface (bgs) and generally flows in a northwest direction.

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 100 miles from the Pacific Ocean and the potential for SLR to impact the Project Site is considered insignificant.

2.7.5 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 93291 (updated February 2016), 90 radon tests were conducted with 28 sites reported to have radon levels ≥ 4 pCi/L. This represents 15.3% of the radon tests in the Project Site Zip Code.

According to the U.S. EPA document titled: *Building Radon Out, April 2001 (EPA/402-K-01-002)*, "Soil testing for radon is not recommended for determining whether a house should be built radon-resistant. Although soil testing can be done, it cannot rule out the possibility that radon could be a problem in the house you build on a lot. Even if soil testing reveals low levels of radon gas in the soil, the amount of radon that may enter the finished house cannot be accurately predicted

because one cannot predict the impact that the site preparation will have on introducing new radon pathways or the extent to which a vacuum will be produced by the house."

The potential for radon hazard at the Project Site is considered moderate and is dependent on site-design and building construction specifications. Currently, there are no design plans for the Project Site. If/when site development occurs the potential for "indoor radon risk" can be addressed during the CEQA process. Therefore, radon testing is not proposed as part of the PEA.

2.7.6 Sea Level Rise

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 100 miles from the Pacific Ocean and the potential for SLR to impact the Project Site is considered insignificant.

3.0 BACKGROUND

3.1 SITE HISTORY

Costco Wholesale Corporation has owned the Project Site since January 14, 2025. Prior to this, the Project Site was owned by Hayes Ranch, LLC. (2006-2025) and the Hayes family dating back to the 1940s. According to Mr. Eric Shannon, representative for Hayes Ranch, LLC., the Project Site has been utilized for row crop production for more than 70 years. Historically, the Project Site was transected by Modoc Ditch prior to relocation between 1952 and 1969.

Based on a review of historical aerial photographs, the Project Site has been in agriculture-use since at least the 1950s through to the present day. There are no building structures currently onsite nor is there any evidence of historical structures. Prior to field activities, the Project Site was planted with corn.

Padre completed a site reconnaissance of the Project Site on February 18, 2025. The Project Site plowed into rows but not planted at the time of the site reconnaissance. Irrigation standpipes were observed along the southern Project Site boundary. An empty 1,000-gallon polyurethane tank labeled “field storage fertilizer” was staged on the dirt road immediately south and adjacent to the Project Site.

A review of the Environmental Data Resources (EDR) Radius Map Report (February 2025) did not identify facilities in the database records search within a one-mile radius of the Project Site that present a recognized environmental condition (REC) to the Project Site. According to the EDR Environmental Lien Search, no environmental liens or AULs were identified for the Project Site.

Padre contacted the Tulare County Agricultural Commissioner (TCAC) requesting information regarding pesticide use permits issued for the Project Site. According to the TCAC, pesticide usage reports were on file for those permits held by the C.R.S. and S-K Ranch, for the parent parcel. According to the pesticide usage reports, the following chemicals have been applied to the parent parcel since 2020:

Table 1-1: Pesticide-Use Report (2020-2024)

Chemical	Chemical
Alion Herbicide (herbicide)	Parazone 3SL Herbicide (herbicide)
Choice Trio (water conditioner)	Pht Latron B-1956 (spreader-sticker)
Deploy (spreader-activator)	Pruvin (herbicide)
Dupont Matrix SG Herbicide (herbicide)	Quitec (fungicide)
Flint Extra (fungicide)	Rally 40WSP (fungicide)

Table 1-1: PUR (continued)

Chemical	Chemical
Fusilade DX Herbicide (herbicide)	R-Agent DL (spreader-activator)
Gly Star Original (herbicide)	Roundup Powermax 3 Herbicide (herbicide)
Glystar K-Plus (herbicide)	Reaper Clearform (insecticide)
GoalTender (herbicide)	Ryme Fungicide (fungicide)
Gramoxone SL 2.0 (herbicide)	Sequoia CA (insecticide)
Li 700 (surfactant)	Shark EW (herbicide)
Lifeline Herbicide (herbicide)	Simplicity CA (herbicide)
MCPA Amine 4 (herbicide)	Sovran Fungicide (fungicide)
Mettle 125 ME Fungicide (fungicide)	Thiolux (fungicide/miticide)
Microthiol Disperss (fungicide)	Venue Herbicide (herbicide)
Miravis Prime (fungicide)	Vivando Fungicide (fungicide)
Movento (insecticide)	Weather Gard Complete (adjuvant)
MSO Complete (spreader-activator)	Wilbur-Ellis Dusting Sulfur (fungicide)
MSO Concentrate with Leci-Tech (spreader-activator)	Yellow Jacke Wettable Sulfur II (fungicide)
Oxidate 5.0 (bactericide/fungicide)	Zeal MVP Miticide (insecticide)

Based on a review of insecticides, herbicides, and fungicides, Padre did not identify any chemicals that would require additional laboratory analyses of soil, other than the standard requirement of OCPs, arsenic, and lead .

3.2 SURROUNDING PROPERTY LAND USE

The Project Site is bordered to the north by agricultural land, beyond which is Avenue 320 and a dairy farm; to the east by an unpaved road beyond which is agricultural land; to the south by an unpaved road, beyond which is agricultural land; and to the west by agricultural land.

A review of the EDR Radius Map Report did not identify facilities in the database records search within a one-mile radius of the Project Site that present a REC to the Project Site.

Padre reviewed the California SWRCB GeoTracker website for facilities that may present a REC to the Project Site. No facilities were identified in October 2025.

Padre reviewed the California DTSC Envirostor Database website for facilities that may present a recognized environmental concern to the Project Site. Two facilities located within 1-mile radius of the Project Site were identified on the Envirostor List. The two properties are school sites (Envirostor ID Nos. 60000112 and 60002713) that were evaluated or remediated under the oversight of DTSC. Neither of these properties 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:

- OCPs, arsenic, and lead in soil from agriculture-use (1950s – present day);
- No historic building structures are identified to have been located on the Project Site;
- According to the California Geological Survey (CGS) *Map of California – Fresno Sheet (1966, fourth printing 1991)*, the occurrence of small ultrabasic outcrops has been identified approximately 9 miles upgradient of the Project Site. However, the Ferguson and Leila School Site (Envirostor ID No. 70000054) located approximately 2.1 miles southeast of the Project Site and the Shannon Ranch School Site (Envirostor ID No. 60002085) located approximately 2.9 miles southeast of the Project Site, were investigated for the presence of naturally occurring asbestos (NOA) and according to published reports (BSK, 2007 and Geosyntec, 2015), analyzed soil samples did not contain detectable concentrations of asbestos. Therefore, sampling for NOA in soil was not performed;
- The potential for radon hazard at the Project Site is considered moderate and is dependent on site-design and building construction specifications. Currently, there are no development or construction plans for the Project Site. If/when site development occurs the potential for "indoor radon risk" can be addressed during the CEQA process. Therefore, radon testing was not performed as part of the PEA; and
- Municipal water will be provided by California Water Service and sewer services will be provided by the City of Visalia, Public Works Department.

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.

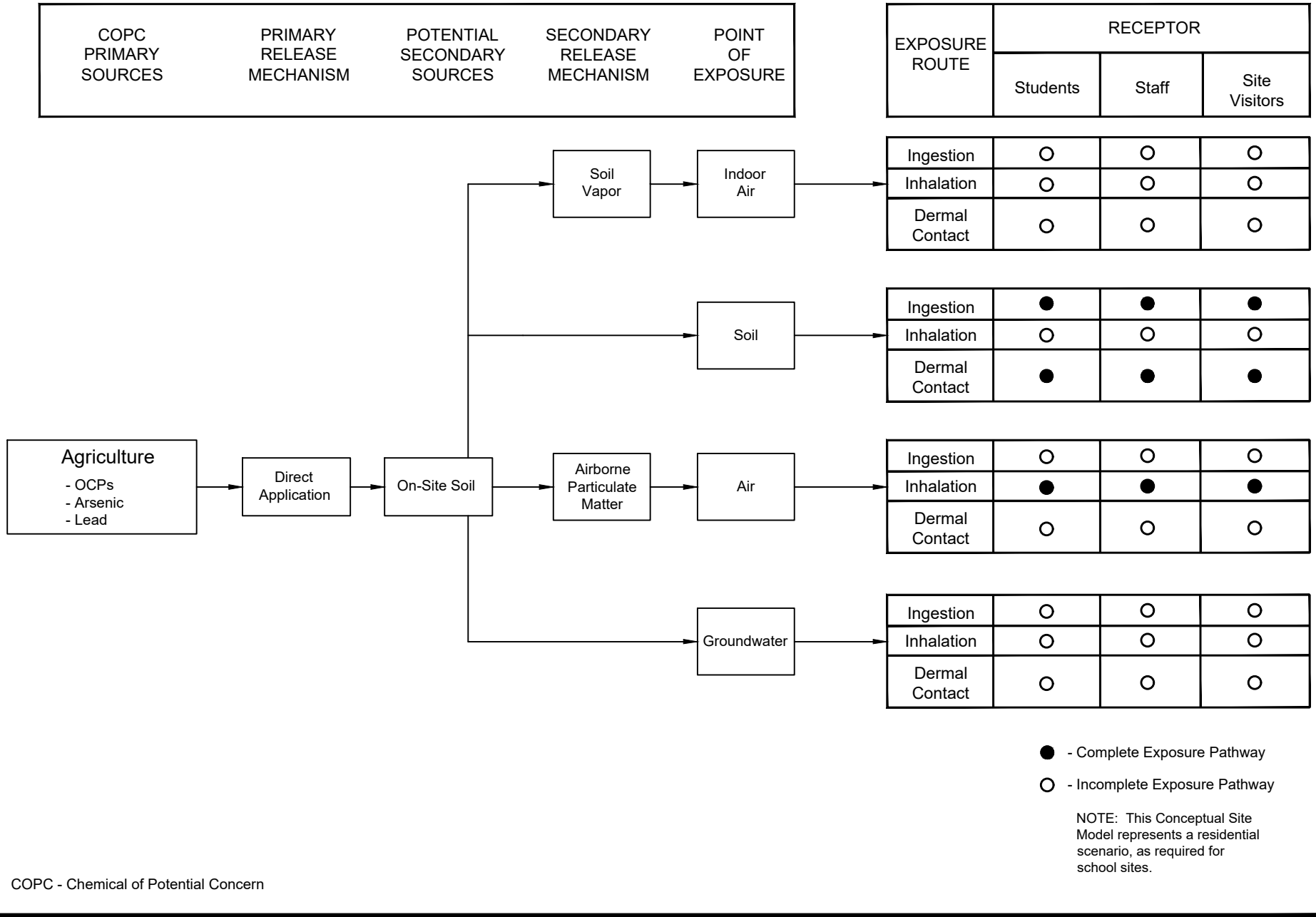
For humans and animals, exposure usually occurs by the following exposure routes:

- 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 was not performed;
- 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 September 11, 2025, in general accordance with the DTSC approved PEA workplan dated July 10, 2025. At the time of field sampling activities, the Project Site was fallow.

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

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:

Orchard

At twenty-six (26) locations discrete surface soil samples were collected from a grid-pattern across the Project Site. The discrete soil samples (selected by Padre) were made into six (6), 4-point composite soil samples and one (1), 2-point composite sample by the analytical laboratory. The composite soil samples were chemically analyzed for the presence of OCPs. Prior to the analytical laboratory preparing composite soil samples, one discrete soil sample was selected from each composite grouping to be chemically analyzed for the presence of arsenic and lead. Sample location areas are presented on **Plate 5-1**.

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 for selected analyses. Padre requested the analytical laboratory to split selected soil samples to be chemically analyzed as duplicates for OCPs, arsenic, 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 soil samples were collected using hand sampling tools including a hand pick and hand 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.

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 soil sample collection activities, the small amount of wash water was dispersed to the orchard area. 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 consisted of chemical analyses of soil samples collected from the Project Site for the presence of:

- OCPs by U.S. Environmental Protection Agency (EPA) Method 8081B;
- Arsenic by U.S. EPA Method 6020; and
- Lead by U.S. EPA Method 6020.

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 secure 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

No field variances were implemented during the course of sampling activities.

Table 5-1: GPS Soil Sample Locations

Sample Identification	Coordinates	
	Latitude	Longitude
Planting Field		
AG-1	36.368729°	-119.360170°
AG-2	36.367921°	-119.360168°
AG-3	36.368323°	-119.359840°
AG-4	36.367510°	-119.359838°
AG-5	36.368734°	-119.359503°
AG-6	36.367912°	-119.359508°
AG-7	36.368330°	-119.359176°
AG-8	36.367510°	-119.359173°
AG-9	36.368737°	-119.358842°
AG-10	36.367921°	-119.358845°
AG-11	36.368329°	-119.358511°
AG-12	36.367507°	-119.358510°
AG-13	36.368734°	-119.358178°
AG-14	36.367913°	-119.358179°
AG-15	36.368328°	-119.357847°
AG-16	36.367513°	-119.357846°
AG-17	36.368745°	-119.357514°
AG-18	36.367918°	-119.357515°
AG-19	36.368334°	-119.357187°
AG-20	36.367507°	-119.357183°
AG-21	36.368745°	-119.356850°
AG-22	36.367917°	-119.356851°
AG-23	36.368336°	-119.356518°
AG-24	36.367508°	-119.356520°
AG-25	36.368744°	-119.356176°
AG-26	36.367920°	-119.356176°

GPS – U.S. Global Positioning Satellite System

Table 5-2. Field Sampling Schedule

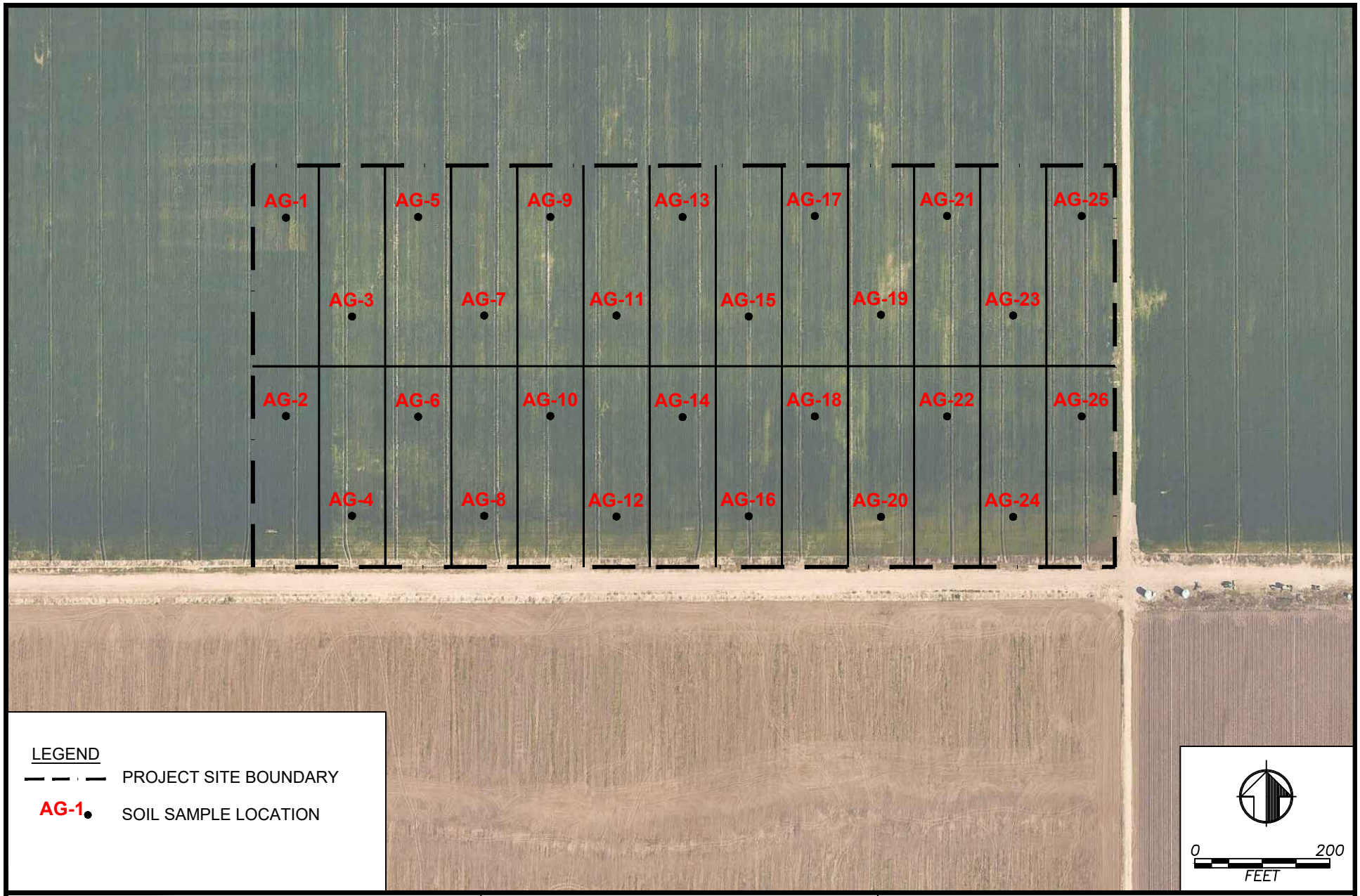
Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Planting Field				
OCPs by U.S. EPA Method 8081B	Surface (0-0.5 feet)	26 (discrete)	CS-1: AG-1, -2, -3, -4 CS-2: AG-5, -6, -7, -8 CS-3: AG-9, -10, -11, -12 CS-4: AG-13, -14, -15, -16 CS-5: AG-17, -18, -19, -20 CS-6: AG-21, -22, -23, -24 CS-7: AG-25, -26 Duplicate: CS-4	Analyze
Arsenic by U.S. EPA Method 6020	Surface (0-0.5 feet)	7 (discrete)	AG-1, -6, -11, -16, -17, -22, -26, Duplicate: AG-11	Analyze
Lead by U.S. EPA Method 6020	Surface (0-0.5 feet)	7 (discrete)	AG-1, -6, -11, -16, -17, -22, -26 Duplicate: AG-26	Analyze
QA/QC Samples (water)				
Arsenic and Lead by 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

CS – composite sample

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 liners and plastic ends caps	Ice	14 days
Arsenic U.S. EPA Method 6020	2-inch x 6-inch stainless steel liners and plastic ends caps	Ice	180 days
Lead U.S. EPA Method 6020	2-inch x 6-inch stainless steel liners and plastic ends caps	Ice	180 days
Water			
Arsenic and Lead U.S. EPA Method 200.8	1- 250 milliliter poly bottle	Ice	180 days

OCP – organochlorine pesticides



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PLATE 5-1

SOIL SAMPLING 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** and **Table 6-2**. Certified analytical laboratory reports and chain-of-custody documentation are provided in **Appendix D**.

6.1 SOIL RESULTS –PLANTING FIELD

Collected surface soil samples in the orchard area were analyzed for OCPs, arsenic, and lead. The results are summarized below.

6.1.1 OCPs

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

- DDE was reported at concentrations ranging from 5.3 to 53 micrograms per kilogram (ug/kg); and
- No other OCPs were reported at or above their respective detection limits.

6.1.2 Arsenic

Results of the laboratory analyses are presented on **Plate 6-1**, in **Table 6-2** and summarized below:

- Arsenic was reported at concentrations ranging from 3.8 to 5.2 milligrams per kilogram (mg/kg).

6.1.3 Lead

Results of the laboratory analyses are presented on **Plate 6-1**, in **Table 6-2** and summarized below:

- Lead was reported at concentrations ranging from 5.5 to 6.5 mg/kg.

6.2 QA/QC SAMPLES

6.2.1 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 by U.S. EPA Method 200.8. Arsenic was not reported at or above the analytical reporting limit of 2.0 micrograms per liter (µg/L), and lead was not reported at or above the reporting limit of 5.0 µg/L.

6.2.2 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 by U.S. EPA Method 200.8. Arsenic was not reported at or above the analytical reporting limit of 2.0 micrograms per liter (µg/L), and lead was not reported at or above the reporting limit of 5.0 µg/L.

6.3 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.

A cover letter with the signature of the lab director of Enthalpy Analytical, Inc. (Enthalpy) accompanies every laboratory report received for this project. According to the lab director, samples were analyzed utilizing U.S. 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 laboratory for this project were level II.

6.3.1 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.

OCPs

Sample Identification	Chlordane	DDD	DDE	DDT	Dieldrin
CS-4	<51	<5.1	17	<5.1	<5.1
CS-4 (duplicate)	<50	<5.0	5.3	<5.0	<5.0
|RPD (%)|	**0**	**0**	**105**	**0**	**0**
Within Acceptable Range	Yes	Yes	No	Yes	Yes

Arsenic and Lead

Sample Identification	Arsenic	Lead
AG-11	4.1	--
AG-11 (duplicate)	4.2	--
|RPD (%)|	**2.4**	--
Within Acceptable Range	Yes	Yes
AG-26	--	5.7
AG-26 (duplicate)	--	6.0
|RPD (%)|	--	**5.1**
Within Acceptable Range	Yes	Yes

Approximately 10% of soil samples were analyzed as duplicates for the requested laboratory analyses. For OCP analysis, sample (CS-4 and CS-4 Dupe) was reported to exceed the RPD of 100% for the constituent DDE. The reported concentrations for the original and duplicate sample were well below the DTSC screening level, and the sample was validated by the analytical laboratory QA/QC. Therefore, the data is considered valid.

6.3.2 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.

6.3.3 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.

6.3.4 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.

6.3.5 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.

6.3.6 Reporting Limits

Laboratory detection limits for the proposed analytical methods were presented in the PEA Workplan dated June 2025 and approved by DTSC. Laboratory reporting limits for OCPs and metals were met by the analytical laboratory.

6.3.7 Chain-of-Custody

Completed chain-of-custody forms were provided with the samples upon sample delivery to Enthalpy. No discrepancies were noted.

6.3.8 Holding Time(s)

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

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Table 6-1: Soil Results for OCPs
(results in µg/kg)

Sample Identification	Date Collected	Depth (feet)	Aldrin	alpha-BHC	beta-BHC	delta-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
Planting Field																						
CS-1 (AG-1, -2, -3, -4)	9-11-25	0-0.5'	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	**34**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<100
CS-2 (AG-5, -6, -7, -8)	9-11-25	0-0.5'	<5.1	<5.1	<5.1	<5.1	<5.1	<51	<5.1	**12**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<100
CS-3 (AG-9, -10, -11, -12)	9-11-25	0-0.5'	<4.9	<4.9	<4.9	<4.9	<4.9	<49	<4.9	**8.6**	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<98
CS-4 (AG-13, -14, -15, -16)	9-11-25	0-0.5'	<5.1	<5.1	<5.1	<5.1	<5.1	<51	<5.1	**17**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<100
CS-4 (AG-13, -14, -15, -16) Dupe	9-11-25	0-0.5'	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	**5.3**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<100
CS-5 (AG-17, -18, -19, -20)	9-11-25	0-0.5'	<5.1	<5.1	<5.1	<5.1	<5.1	<51	<5.1	**9.9**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<100
CS-6 (AG-21, -22, -23, -24)	9-11-25	0-0.5'	<5.1	<5.1	<5.1	<5.1	<5.1	<51	<5.1	**15**	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<100
CS-7 (AG-25, -26)	9-11-25	0-0.5'	<4.9	<4.9	<4.9	<4.9	<4.9	<49	<4.9	**53**	<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	300	3.8[(a)]	570	1,700	1,900	2,000	1,900	34	450,000[(b)]	450,000[(b)]	380,000	19,000	19,000[(c)]	19,000[(c)]	130	70	320,000	450
2:1 COMP			19	43	150	1.9	285	850	950	1,000	950	17	225,000	225,000	190,000	9,500	9,500	9,500	65	35	160,000	225
4:1 COMP			10	22	75	1.0	143	425	475	500	475	9	112,500	112,500	95,000	4,750	4,750	4,750	33	18	80,000	113

Notes:

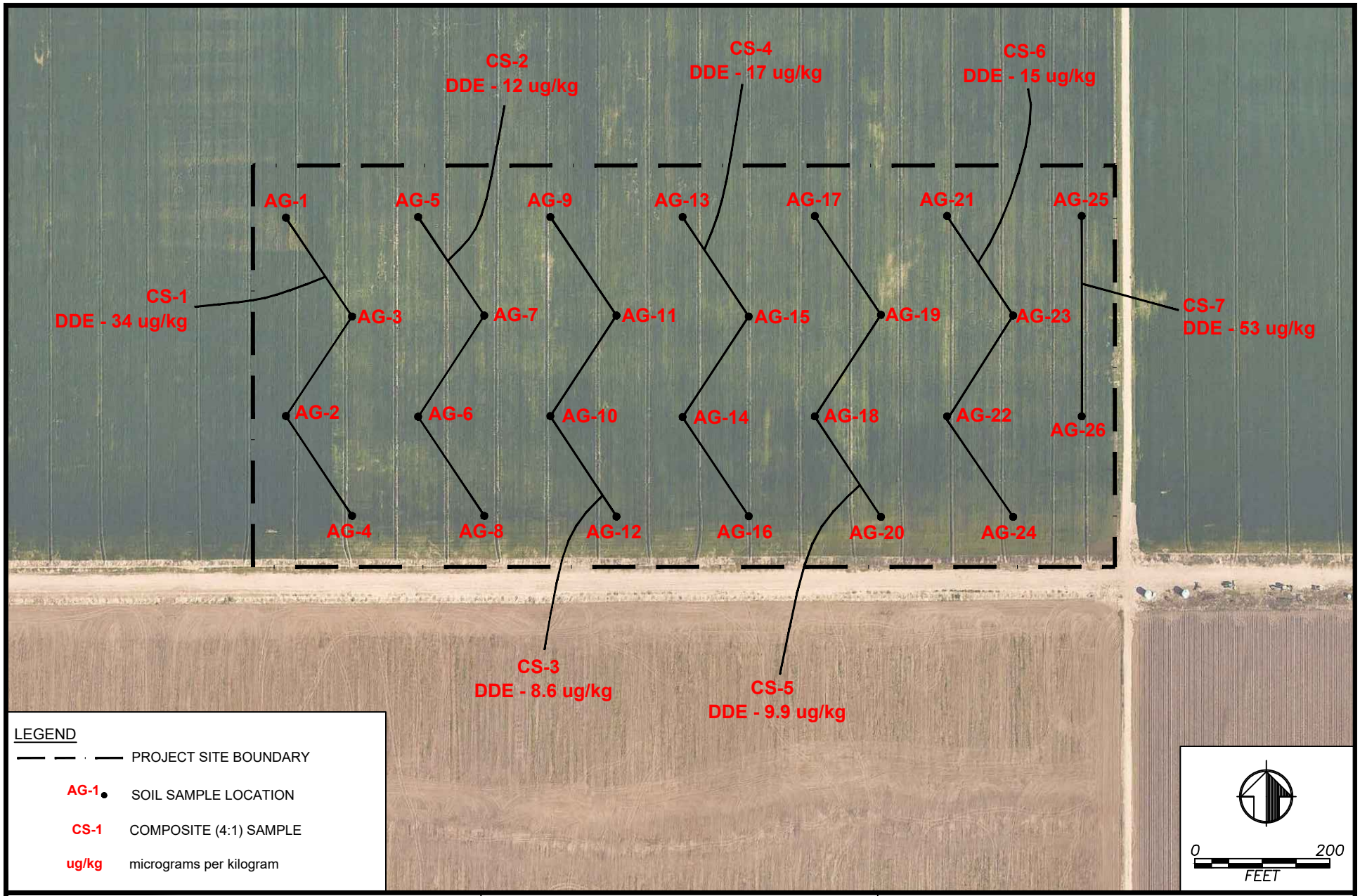
µg/kg –micrograms per kilogram
SL - HHRA Note #3, Table 1 - DTSC-Recommended Screening Level (Revised April 2025)
NE – Not established
(a) - USEPA Regional Screening Level (November 2024)
(b) – Screening Level for Endosulfan (HHRA Note #3, Revised April 2025)
(c) – Screening Level for Endrin (HHRA Note #3, Revised April 2025)

Table 6-2: Soil Results for Arsenic and Lead (results in mg/kg)

Sample Identification	Date Collected	Depth (feet)	Arsenic	Lead
Planting Field				
AG-1	9-11-25	0-0.5’	**3.8**	**6.5**
AG-6	9-11-25	0-0.5’	**5.2**	**6.0**
AG-11	9-11-25	0-0.5’	**4.1**	**5.5**
AG-11 Dupe	9-11-25	0-0.5’	**4.2**	**--**
AG-16	9-11-25	0-0.5’	**4.6**	**6.1**
AG-17	9-11-25	0-0.5’	**4.8**	**6.2**
AG-22	9-11-25	0-0.5’	**4.2**	**5.6**
AG-26	9-11-25	0-0.5’	**4.5**	**5.7**
AG-26 Dupe	9-11-25	0-0.5’		**6.0**
Project Site Range			3.8 – 5.2	5.5 – 6.5
Background Site Range			2.9 – 9.6[A]	--
Screening Level				80[B]

Notes:

mg/kg – milligrams per kilogram
-- Not analyzed
A – TSI/PEA, 2019 (Envirostor I.D.# 60002713)
B – DTSC’s residential screening level based on LeadSpread Ver. 9



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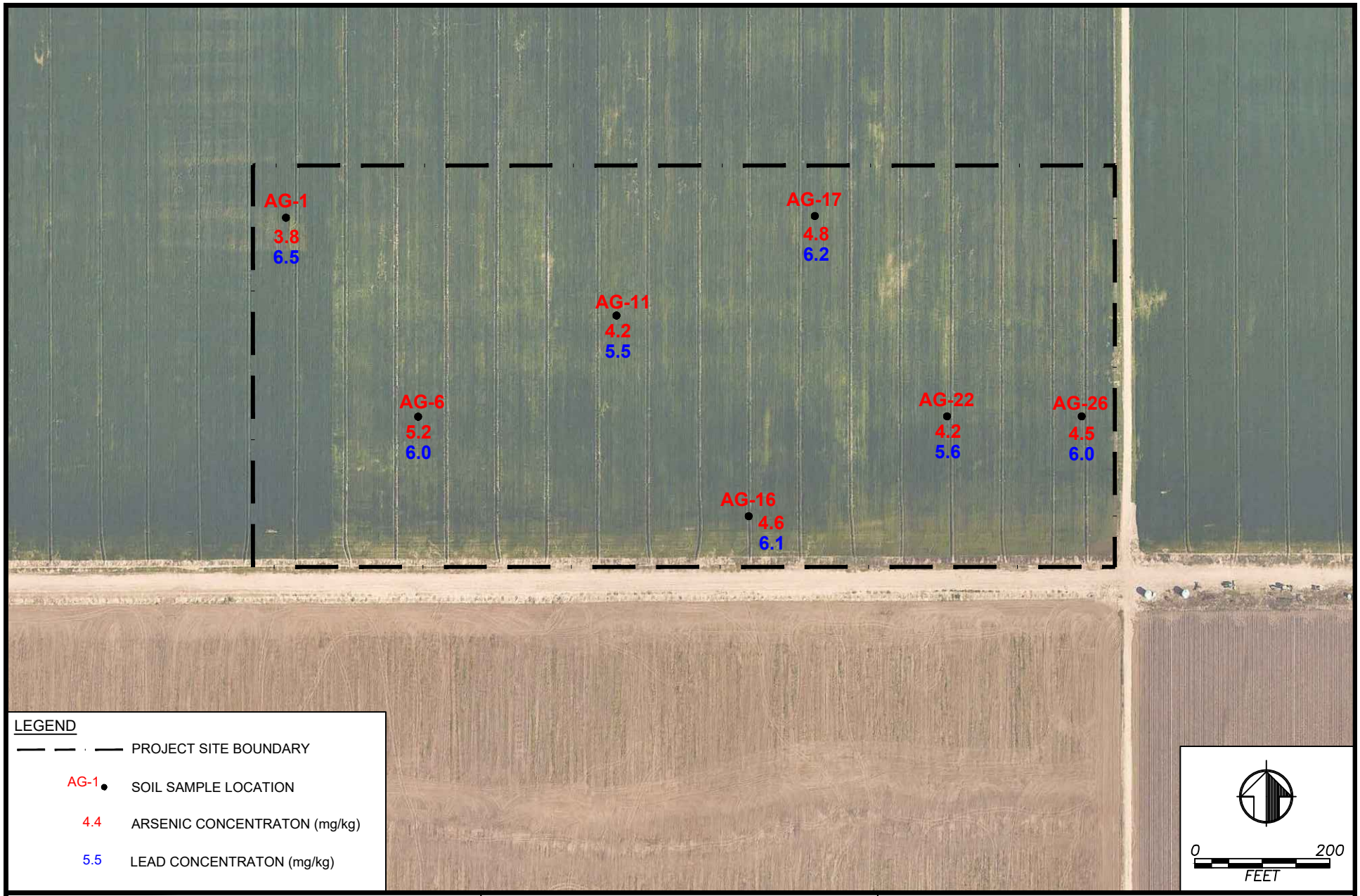
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PLATE 6-1

OCP RESULTS



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PLATE 6-2

ARSENIC AND LEAD RESULTS

7.0 HUMAN HEALTH SCREENING-LEVEL EVALUATION

7.1 CHEMICALS OF POTENTIAL CONCERN

Based on the laboratory analytical results for soil samples collected at the Project Site, the following chemicals of potential concern (COPC) were evaluated for risk assessment purposes:

- OCPs – DDE
- Metals – Arsenic and Lead

7.2 SOIL RISK ASSESSMENT

The DTSC-modified screening levels provided in Human Health Risk Assessment (HHRA) Note 3 dated June 2020 (revised April 2025) 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 May 2019, chemical concentrations in soil detected 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.

The total estimated risk from OCPs identified in soil is estimated to be 2.7×10^{-8}, which does not provide an increased cancer risk of greater than 1 in 1,000,000 ($>10^{-6}$). The total health hazard from OCPs identified in soil is estimated to be 0.002 which does not present an increased health hazard (i.e., >1). The results of the screening-level evaluation are presented in **Table 7-1**.

Arsenic concentrations in soil at the Project Site ranged from 3.8 to 5.2 mg/kg. Arsenic concentrations were compared to a background arsenic data set from a TSI/PEA (Geosyntec, 2019), completed for a site located southwest and adjacent to the Project Site (Envirostor ID No. 60002713). The background arsenic data set consisted of 13 soil samples, with arsenic concentrations ranging from 2.9 to 9.6 mg/kg. Arsenic concentrations identified at the Project Site are comparable to background concentrations. Therefore, further assessment or remedial action for arsenic in soil is not warranted. A copy of the background arsenic data is presented in **Appendix E**.

Lead concentrations in soil ranged from 5.5 to 6.5 mg/kg in soil at the Project Site. A risk assessment was performed using the DTSC 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 0.1 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**.

7.3 UNCERTAINTY ANALYSIS

The human health screening evaluation required the use of several generic and site-specific assumptions regarding the representativeness of sampling data, environmental fate and transport, human exposures, chemical toxicity, and associated cancer and noncancerous health risks. These assumptions are discussed below.

Factors possibly contributing to overestimation of the health risks include the following:

- The predicted risks and hazards are based on the maximum COC concentrations detected in the on-site soil samples that were collected during this PEA. Actual exposures for humans at the site would likely be at lower concentrations than the maximum most of the time.
- The evaluation assumed no degradation of COCs over time.
- Numerous assumptions related to human exposure are built into the calculations used for the screening evaluation. These assumptions include factors such as soil ingestion rates, potential dermal exposure to soil, dust generation rates, daily breathing rates, human activity patterns, and time spent on site. Each assumed value is typically conservative for a generic person.

Factors possibly contributing to underestimation of the health risks include the following:

- Sample locations were selected with the objective of finding elevated concentrations, if present, but there is a possibility that other locations are present at the Project Site that have higher COC concentrations than the locations that were sampled as part of this PEA.

- The screening evaluation assumed that risks resulting from simultaneous exposure to multiple COCs is additive. It is possible that simultaneous exposure to multiple chemicals may result in synergistic effects, where certain chemicals magnify the toxicity of other chemicals.

As discussed above the majority of the assumptions for the human health screening evaluation were conservative in nature. The use of conservative assumptions tends to produce overestimates of risk. Although it is difficult to quantify the uncertainties associated with the assumptions used, the compounding relationship of the series of assumptions involved in the screening evaluation most likely creates an overestimate of health risks at the Project Site.

Table 7-1
Soil Exposure Screening Evaluation (Max Concentrations)
Carlton / Akers (West) School Site
Visalia, 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
DDE	0.053	2	SL	2.7E-02	23	SL	2.3E-03
			Total Risk (x10^{-6}):	**2.7E-08**	**Total Hazard:**		**2.3E-03**

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 April 2025)
nc = non-carcinogenic
NE = not established
NA = not applicable

8.0 ECOLOGICAL SCREENING

The Project Site and surrounding properties have historically been utilized for agricultural purposes since at least the 1950s to the current day. There are no distinct native habitats or "unmanaged" landscape areas present at the Project Site. Therefore, there is no identified significant pathway of exposure to sensitive non-human receptors at the Project Site.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the PEA was to establish whether a release or potential release of hazardous substances, which potentially pose a threat to human health via ingestion, dermal contact, and inhalation exposure pathways, exists at the Project Site.

Evaluation

Based on the laboratory analytical results for soil samples collected at the Project Site, the following COPC were evaluated for risk assessment purposes:

- OCPs – DDE
- Metals – Arsenic and Lead

Risk Assessment

The total estimated risk from OCPs identified in soils is estimated to be 2.7×10^{-8}, which does not provide an increased cancer risk of greater than 1 in 1,000,000 ($>10^{-6}$). The total health hazard from OCPs identified in soils is estimated to be 0.002 which does not present an increased health hazard (i.e., >1). Therefore, further assessment or remedial action for OCPs in soil is not warranted.

Arsenic concentrations in soil at the Project Site ranged from 3.8 to 5.2 milligrams per kilogram (mg/kg). Project Site arsenic concentrations were compared to a background arsenic data set from a site located southwest and adjacent to the Project Site (Envirostor ID No. 60002713). The background arsenic data set consisted of 13 soil samples, with arsenic concentrations ranging from 2.9 to 9.6 mg/kg. Arsenic concentrations identified at the Project Site are comparable to background concentrations. Therefore, further assessment or remedial action for arsenic in soil is not warranted.

Lead concentrations in soil ranged from 5.5 to 6.5 mg/kg in soil at the Project Site. A risk assessment was performed using the DTSC 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 0.1 µg/dl in children which is below the California OEHHA blood toxicity level of 1 µg/dl. Therefore, further assessment or remedial action for lead in soil is not warranted.

Recommendations

Based on the findings of the PEA, the Project Site has not been adversely impacted by historic or current land-use activities. Therefore, Padre recommends the issuance of a “No Further Action” designation from the DTSC regarding the Carlton / Akers (West) School Site.

10.0 REFERENCES

California Department of Public Health, Indoor Radon Program (https://www.cdph.ca.gov/Programs/CEH/DRSEM/Pages/EMB/Radon/Radon.aspx)

CalEPA, Department of Toxic Substances Control (DTSC), Envirostor Database, (https://www.envirostor.dtsc.ca.gov/public/).

_____, DTSC, *Human Health Risk Assessment (HHRA) Note 3: DTSC-modified Screening Levels (DTSC-SLs)*, Released June 2020 – Revised April 2025.

_____, DTSC, *Human Health Risk Assessment (HHRA) Note 4: Screening Level Human Health Risk Assessments*, Revised March 2022.

_____, DTSC – *Interim Guidance for Sampling Agricultural Soils (Third Revision)*, August 7, 2008.

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California Department of Water Resources (https://wdl.water.ca.gov/).

California Geological Survey, *Geologic Map of California – Fresno Sheet, 1:250,000,* 1966, fourth printing 1991.

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

Geosyntec Consultants. Inc., *Targeted Site Investigation, Preliminary Endangerment Assessment Report, Proposed Lowery Ranch School,* July 2019.

Padre Associates, *Preliminary Environmental Assessment Workplan, Carlton / Akers (West) School Site, Visalia, Tulare County, California (Site Code: 104905),* June 2025.

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, California - Western Part, 2003.

U.S. EPA, *Regional Screening Levels (Region 9 RSLs)*, November 2024.

APPENDIX A
DTSC CORRESPONDENCE

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

Sent Via Electronic Mail

July 10, 2025

Mr. Steven Pena
Director, Facilities
Visalia Unified School District
5000 W. Cypress Avenue
Visalia, California 93277
spena01@vusd.org

APPROVAL – PRELIMINARY ENDANGERMENT ASSESSMENT WORKPLAN, VISALIA UNIFIED SCHOOL DISTRICT, CARLTON/AKERS (WEST) SCHOOL SITE, SOUTHWEST OF THE INTERSECTION OF AVENUE 320 AND N. AKERS STREET, VISALIA, TULARE COUNTY, CALIFORNIA (PROJECT CODE: 104905)

Dear Mr. Pena:

The Department of Toxic Substances Control (DTSC) reviewed the final Preliminary Environmental Assessment Work Plan (PEA Workplan – Padre Associates, Inc., June 23, 2025), received on June 24, 2025. The PEA Workplan includes project background information as well as proposed environmental investigation activities for a proposed new school to be located on an approximately 16-acre property southwest of the intersection of N. Akers Street and Avenue 320 in Visalia, Tulare County, California (Site).

Determination

The PEA Workplan is approved.

Next Step

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 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.

DTSC understands 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.

Closing

If you have any questions regarding this letter, 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)

Jennifer Frederick
Manager, Facilities Project
Visalia Unified School District
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Alan Klein, REPA, CPESC, QSD/QSP
Senior Environmental Scientist
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Lok Ming (Tom) Tam, PhD
Staff Toxicologist
Human and Ecological Risk Office
Department of Toxic Substances Control
Lok-Ming.Tam@dtsc.ca.gov

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 along east boundary of Project Site.



Photo No.2 – Soil sample location within the planting field.



Photo No.3 – Soil sample collection.



Photo No.4 – Sampling equipment station along with decontamination station.

Sampling Date: September 11, 2025



Photo No.5 – Sampling equipment decontamination.



Photo No.6 – Soil samples in cooler with ice prior to transportation to the analytical laboratory.



Photo No.7 – Soil sample with planting field.



Photo No.8 – Planting field sampling area.

APPENDIX C

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

APPENDIX D
SITE HEALTH AND SAFETY PLAN

Project Title:	Preliminary Environmental Assessment for the Carlton/Akers (West) School Site.	
Project Address:	Located approximately 2,000 feet southwest of the intersection of North Akers Street and Avenue 320, Visalia, Tulare County, California.	
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:	Kaweah Health Medical Center
Address:	400 West Mineral King Avenue, Visalia, Ca 93291
Phone:	(559) 624-2000
Estimate travel time:	Approximately 15 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:	Located 2,000 ft southeast of the intersection of North Akers Street and Avenue 320, Visalia, Tulare County, California.
Potential Hazards:	Soil containing organochlorine pesticides (OCPs), arsenic, and lead.
Area of Interest:	Surface soil at the Project Site.
Surrounding Land Use:	Agriculture.
Topography:	Relatively flat.
Weather Conditions:	Expected temperatures 70-80 degrees.

PROJECT OBJECTIVE

The objectives of the environmental assessment program are to:

- Utilize hand sampling equipment to collect surface soil samples across the Project Site; and
- Soil samples will be submitted to a certified analytical laboratory to be chemically analyzed for the presence of OCPs, arsenic and lead.

AGENCY REPRESENTATIVES

Name:	Elizabeth ‘Liz’ 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
Arsenic in soil	Ingestion, inhalation, and dermal contact	Unknown
Lead in soil	Ingestion, inhalation, and dermal contact	Unknown

Notes: OCPs - Organochlorine Pesticides

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 collect 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 fall-winter months (Nov-Dec) in 2023. Therefore, the potential for employee exposure to heat stress hazards during field activities is considered low.

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 16 acres of agricultural land. 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 work areas of the PEA.
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 x419.

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.

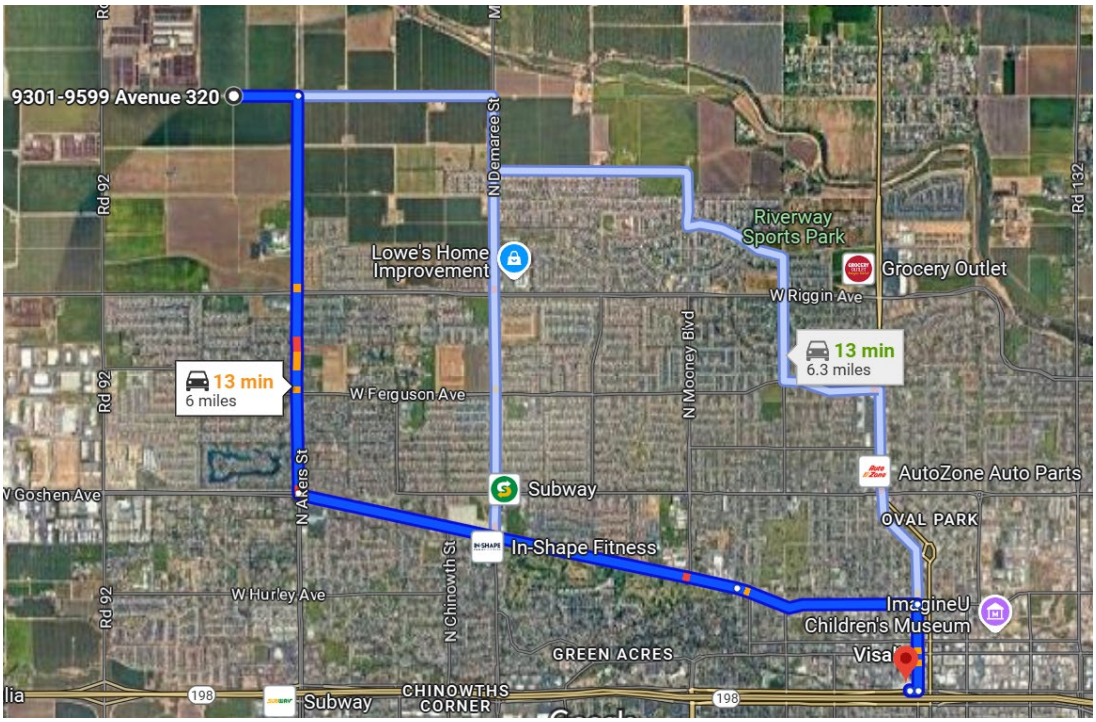
ROUTE TO HOSPITAL

Directions

1. From the work area, head East on Avenue 320. (0.3 mi.);
2. Turn Right onto Road100/Akers Street and head South. (2.0 mi.);
3. Turn Left onto West Goshen Avenue and head East. (2.3 mi.);
4. Continue East onto West Murray Avenue. (0.9 mi);
5. Turn Right onto South Locust Street and head South. (0.4mi);
6. Turn Right onto West Mineral King Avenue and head West. (226 ft); and
7. Turn Right into Kaweah Health Medical Center and follow signs for the Emergency Room.

Arrive: Kaweah Health: Emergency Room, 400 W Mineral King Ave., Visalia, Ca 93291

Drive Time: 5.1 miles in approximately 15 minutes.


9301-9599 Avenue 320
Rd 92
N Demaree St
Riverway Sports Park
Grocery Outlet
W Riggin Ave
Rd 132
Lowe's Home Improvement
13 min
6.3 miles
N Mooney Blvd
13 min
6 miles
W Ferguson Ave
AutoZone Auto Parts
N Akers St
Subway
OVAL PARK
In-Shape Fitness
W Hurley Ave
N Chinowth St
ImagineU Children's Museum
GREEN ACRES
CHINOWTHS CORNER
198
Subway

APPENDIX E
LABORATORY ANALTYICAL REPORTS

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

enthalpy.com

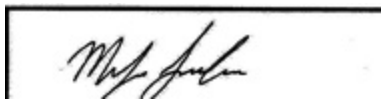
Lab Job Number : 542053
Report Level : II
Report Date : 09/23/2025

Analytical Report *prepared for:*

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

Project: 2401-4672 - VUSD - CARLTON / AKERS (WEST)

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, CA ELAP #1338-S1, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, ORELAP# 4197

ENTHALPY ANALYTICAL

Sample Summary

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

Lab Job #: 542053
Project No: 2401-4672
Location: VUSD - CARLTON / AKERS (WEST)
Date Received: 09/12/25

Sample ID	Lab ID	Collected	Matrix
AG-1 (SURF)	542053-001	09/11/25 11:00	Soil
AG-2 (SURF)	542053-002	09/11/25 11:05	Soil
AG-3 (SURF)	542053-003	09/11/25 10:56	Soil
AG-4 (SURF)	542053-004	09/11/25 11:01	Soil
AG-5 (SURF)	542053-005	09/11/25 10:45	Soil
AG-6 (SURF)	542053-006	09/11/25 10:49	Soil
AG-7 (SURF)	542053-007	09/11/25 10:43	Soil
AG-8 (SURF)	542053-008	09/11/25 10:47	Soil
AG-9 (SURF)	542053-009	09/11/25 10:30	Soil
AG-10 (SURF)	542053-010	09/11/25 10:34	Soil
AG-11 (SURF)	542053-011	09/11/25 10:26	Soil
AG-12 (SURF)	542053-012	09/11/25 10:30	Soil
AG-13 (SURF)	542053-013	09/11/25 10:14	Soil
AG-14 (SURF)	542053-014	09/11/25 10:18	Soil
AG-15 (SURF)	542053-015	09/11/25 10:14	Soil
AG-16 (SURF)	542053-016	09/11/25 10:17	Soil
AG-17 (SURF)	542053-017	09/11/25 09:58	Soil
AG-18 (SURF)	542053-018	09/11/25 10:02	Soil
AG-19 (SURF)	542053-019	09/11/25 09:33	Soil
AG-20 (SURF)	542053-020	09/11/25 09:37	Soil
AG-21 (SURF)	542053-021	09/11/25 09:17	Soil
AG-22 (SURF)	542053-022	09/11/25 09:22	Soil
AG-23 (SURF)	542053-023	09/11/25 09:02	Soil
AG-24 (SURF)	542053-024	09/11/25 09:06	Soil
AG-25 (SURF)	542053-025	09/11/25 08:46	Soil
AG-26 (SURF)	542053-026	09/11/25 08:50	Soil

ENTHALPY ANALYTICAL

Sample Summary

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

Lab Job #: 542053
Project No: 2401-4672
Location: VUSD - CARLTON / AKERS (WEST)
Date Received: 09/12/25

Sample ID	Lab ID	Collected	Matrix
FB #1	542053-027	09/11/25 11:20	Water
EB #1	542053-028	09/11/25 11:25	Water
CS-1	542053-029	09/11/25 00:00	Soil
CS-2	542053-030	09/11/25 00:00	Soil
CS-3	542053-031	09/11/25 00:00	Soil
CS-4	542053-032	09/11/25 00:00	Soil
CS-5	542053-033	09/11/25 00:00	Soil
CS-6	542053-034	09/11/25 00:00	Soil
CS-7	542053-035	09/11/25 00:00	Soil
AG-11 (SURF) DUP	542053-036	09/11/25 00:00	Soil
CS-4 DUP	542053-037	09/11/25 00:00	Soil
AG-26 (SURF) DUP	542053-038	09/11/25 00:00	Soil

Case Narrative

Padre Associates, Inc. 350 University Avenue Suite 250 Sacramento, CA 95825 Alan Klein	Lab Job Number: 542053 Project No: 2401-4672 Location: VUSD - CARLTON / AKERS (WEST) Date Received: 09/12/25

This data package contains sample and QC results for seven soil samples, six four-point soil composites, two water samples, and one two-point soil composite, requested for the above referenced project on 09/16/25. The samples were received in good condition.

Pesticides (EPA 8081A):

- Low recoveries were observed for aldrin and 4,4'-DDE in the MS/MSD of CS-4 (lab # 542053-032); the LCS was within limits, and the associated RPDs were within limits.
- Low surrogate recoveries were observed for decachlorobiphenyl in a number of samples; the corresponding TCMX surrogate recoveries were within limits.
- No other analytical problems were encountered.

Metals (EPA 6020):
No analytical problems were encountered.

Metals (EPA 200.8):
No analytical problems were encountered.

Login 542053

Enthalpy Analytical - Orange
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Chain of Custody Record

Lab No: 542053
Page: 1 of 4

Turn Around Time (rush by advanced notice only)

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

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:	VUSD - CARLTON / AKERS (WEST)
Report To:	ALAN KLEIN	Number:	2401-4672
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	Visalia, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	AC
Fax:		Sampled By:	AC/~~BS~~ KG

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request: Arsenic, Lead (6020)	Analysis Request: OCPs (8081B)	Test Instructions / Comments
1	AG-1 (SURF)	09/11/25	1100	S	2"X6" STEEL	ICE	X	X	COMPOSITE ANALYSIS FOR OCPs
2	AG-2 (SURF)	09/11/25	1105	S	2"X6" STEEL	ICE		X	COMP 4:1 CS-1
3	AG-3 (SURF)	09/11/25	1056	S	2"X6" STEEL	ICE		X	
4	AG-4 (SURF)	09/11/25	1101	S	2"X6" STEEL	ICE		X	
5	AG-5 (SURF)	09/11/25	1045	S	2"X6" STEEL	ICE		X	
6	AG-6 (SURF)	09/11/25	1049	S	2"X6" STEEL	ICE	X	X	COMP 4:1 CS-2
7	AG-7 (SURF)	09/11/25	1043	S	2"X6" STEEL	ICE		X	
8	AG-8 (SURF)	09/11/25	1047	S	2"X6" STEEL	ICE		X	
9									
10									

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		ALAN CHURCHILL	PADRE / SR. GEOLOGIST	9-12-25 / 0945
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-12-25 0945
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-15-25 ~~9-12-25~~ 9-15-25 1700
2 Received By:		JKR	EA	9-16-25 0830
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 542053

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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:	VUSD - CARLTON / AKERS (WEST)
Report To:	ALAN KLEIN	Number:	2401-4672
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	Visalia, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC/~~BS~~ RG

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic, Lead (6020)	OCPs (8081B)	Analysis Request	Test Instructions / Comments
1	AG-9 (SURF)	09/11/25	1030	S	2"X6" STEEL	ICE		X	COMP 4:1 CS-3	COMPOSITE ANALYSIS FOR OCPs
2	AG-10 (SURF)	09/11/25	1034	S	2"X6" STEEL	ICE		X		
3	AG-11 (SURF)	09/11/25	1026	S	2"X6" STEEL	ICE	X	X		Spilt/run duplicate for Arsenic AG-11
4	AG-12 (SURF)	09/11/25	1030	S	2"X6" STEEL	ICE		X		
5	AG-13 (SURF)	09/11/25	1014	S	2"X6" STEEL	ICE		X	COMP 4:1 CS-4	
6	AG-14 (SURF)	09/11/25	1018	S	2"X6" STEEL	ICE		X		Split/run duplicate on CS-4 for OCPs
7	AG-15 (SURF)	09/11/25	1014	S	2"X6" STEEL	ICE		X		
8	AG-16 (SURF)	09/11/25	1017	S	2"X6" STEEL	ICE	X	X		
9										
10										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	AC	ALAN CHURCHILL	PADRE / SR. GEOLOGIST	9-12-25 / 0945
1 Received By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-12-25 0945
2 Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-15-25 ~~9-12-25~~ 1700
2 Received By:		JXR	EA	9-16-25 9-15-25 0830
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

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Turn Around Time (rush by advanced notice only)

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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:	VUSD - LOWREY RANCH (EAST)
Report To:	ALAN KLEIN	Number:	2401-4671
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	Visalia, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC/~~BS~~ KG

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic, Lead (6020)	OCPs (8081B)	Analysis Request	Test Instructions / Comments
1	AG-17 (SURF)	09/11/25	958	S	2"X6" STEEL	ICE	X	X	COMP 4:1 CS-5	COMPOSITE ANALYSIS FOR OCPs
2	AG-18 (SURF)	09/11/25	1002	S	2"X6" STEEL	ICE		X		
3	AG-19 (SURF)	09/11/25	933	S	2"X6" STEEL	ICE		X		
4	AG-20 (SURF)	09/11/25	937	S	2"X6" STEEL	ICE		X		
5	AG-21 (SURF)	09/11/25	917	S	2"X6" STEEL	ICE		X	COMP 4:1 CS-6	
6	AG-22(SURF)	09/11/25	922	S	2"X6" STEEL	ICE	X	X		
7	AG-23 (SURF)	09/11/25	902	S	2"X6" STEEL	ICE		X		
8	AG-24 (SURF)	09/11/25	906	S	2"X6" STEEL	ICE		X		
9	AG-25 (SURF)	09/11/25	846	S	2"X6" STEEL	ICE		X	COMP 2:1 CS-7	
10	AG-26 (SURF)	09/11/25	850	S	2"X6" STEEL	ICE	X	X		Spilt/run duplicate for Lead AG-26

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		ALAN CHURCHILL	PADRE / SR. GEOLOGIST	9-12-25 / 0945
[1] Received By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-12-25 0945
[2] Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-15-25 ~~9-12-25~~ 1700
[2] Received By:		JXR	GA	9-16-25 ~~9-15-25~~ AM
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 542053

Page: 4 of 4

Turn Around Time (rush by advanced notice only)

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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 ASSOCIATES, INC.	Name:	VUSD - CARLTON / AKERS (WEST)
Report To:	ALAN KLEIN	Number:	2401-4672
Email:	aklein@padreinc.com	P.O. #:	
Address:	350 UNIVERSITY AVE, #250	Address:	Visalia, CA
	SACRAMENTO, CA 95825		
Phone:	916-947-4831	Global ID:	
Fax:		Sampled By:	AC/BS/KG

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request: Arsenic, Lead (200.8)	Test Instructions / Comments
1	FB #1	09/11/25	1120	W	250 ml Poly	ICE, HNO3	X	
2	EB #1	09/11/25	1125	W	250 ml Poly	ICE, HNO3	X	
3								
4								
5								
6								
7								
8								
9								
10								

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		ALAN CHURCHILL	PADRE / SR. GEOLOGIST	9-12-25 / 0945
[1] Received By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-12-25 0945
[2] Relinquished By:	Brenda Hamilton	Brenda Hamilton	EA / SCM	9-15-25 9-12-25 1700
[2] Received By:		JKR	EA	9-16-25 9-15-25 0830
[3] Relinquished By:				
[3] Received By:				

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 9/12/25 WO# 542053 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

☐ Courier ☒ Walk-In ☐ Field Sampling ☐ Shipping Info: _____

Section 3a: Condition / Packaging

☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 9/12/25 By (initials) BK 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: _____ CF: _____

Cooler Temp (°C) #1: 3.8°C / 3.9°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

(If no comments are made, then no discrepancies noted.)

☐ **No additional discrepancies**

Date Logged 9/12/25 **By (print)** Joel Tillman **(sign)** Joel Tillman

Date Labeled 9/12/25 **By (print)** Brenda Hamilton **(sign)** Brenda Hamilton

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 9/16/25 WO# 542053 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

☐ Courier ☐ Walk-In ☐ Field Sampling ■ Shipping Info: INTRASTATE

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

Date Opened 9/16/25 By (initials) FPD 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: IR 11 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?	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

(If no comments are made, then no discrepancies noted.)

☐ **No additional discrepancies**

Date Logged 9/12/25 **By (print)** SAC **(sign)** _____

Date Labeled 9/12/25 **By (print)** SAC **(sign)** _____

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-1	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-029	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	KMB
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.000	**Analyzed:**	09/18/25		

542053-029 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	**34**	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

542053-029 Surrogate	%REC	Limits
TCMX	97	58-120
Decachlorobiphenyl	84	47-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-2	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-030	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.020	**Analyzed:**	09/18/25		

542053-030 Analyte	Result	RL	Units
alpha-BHC	ND	5.1	ug/Kg
beta-BHC	ND	5.1	ug/Kg
gamma-BHC	ND	5.1	ug/Kg
delta-BHC	ND	5.1	ug/Kg
Heptachlor	ND	5.1	ug/Kg
Aldrin	ND	5.1	ug/Kg
Heptachlor epoxide	ND	5.1	ug/Kg
Endosulfan I	ND	5.1	ug/Kg
Dieldrin	ND	5.1	ug/Kg
4,4'-DDE	**12**	5.1	ug/Kg
Endrin	ND	5.1	ug/Kg
Endosulfan II	ND	5.1	ug/Kg
Endosulfan sulfate	ND	5.1	ug/Kg
4,4'-DDD	ND	5.1	ug/Kg
Endrin aldehyde	ND	5.1	ug/Kg
Endrin ketone	ND	5.1	ug/Kg
4,4'-DDT	ND	5.1	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	51	ug/Kg

542053-030 Surrogate	%REC	Limits
TCMX	64	58-120
Decachlorobiphenyl	39 *	47-120

Legend

***:** Value is outside QC limits

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-3	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-031	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES
Basis:	as received	**Prepared:**	09/17/25		
DF:	0.9804	**Analyzed:**	09/18/25		

542053-031 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	**8.6**	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

542053-031 Surrogate	%REC	Limits
TCMX	67	58-120
Decachlorobiphenyl	43 *	47-120

Legend

***:** Value is outside QC limits

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-4	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-032	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	KMB
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.020	**Analyzed:**	09/18/25		

542053-032 Analyte	Result	RL	Units
alpha-BHC	ND	5.1	ug/Kg
beta-BHC	ND	5.1	ug/Kg
gamma-BHC	ND	5.1	ug/Kg
delta-BHC	ND	5.1	ug/Kg
Heptachlor	ND	5.1	ug/Kg
Aldrin	ND	5.1	ug/Kg
Heptachlor epoxide	ND	5.1	ug/Kg
Endosulfan I	ND	5.1	ug/Kg
Dieldrin	ND	5.1	ug/Kg
4,4'-DDE	**17**	5.1	ug/Kg
Endrin	ND	5.1	ug/Kg
Endosulfan II	ND	5.1	ug/Kg
Endosulfan sulfate	ND	5.1	ug/Kg
4,4'-DDD	ND	5.1	ug/Kg
Endrin aldehyde	ND	5.1	ug/Kg
Endrin ketone	ND	5.1	ug/Kg
4,4'-DDT	ND	5.1	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	51	ug/Kg

542053-032 Surrogate	%REC	Limits
TCMX	88	58-120
Decachlorobiphenyl	80	47-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-5	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-033	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.020	**Analyzed:**	09/18/25		

542053-033 Analyte	Result	RL	Units
alpha-BHC	ND	5.1	ug/Kg
beta-BHC	ND	5.1	ug/Kg
gamma-BHC	ND	5.1	ug/Kg
delta-BHC	ND	5.1	ug/Kg
Heptachlor	ND	5.1	ug/Kg
Aldrin	ND	5.1	ug/Kg
Heptachlor epoxide	ND	5.1	ug/Kg
Endosulfan I	ND	5.1	ug/Kg
Dieldrin	ND	5.1	ug/Kg
4,4'-DDE	**9.9**	5.1	ug/Kg
Endrin	ND	5.1	ug/Kg
Endosulfan II	ND	5.1	ug/Kg
Endosulfan sulfate	ND	5.1	ug/Kg
4,4'-DDD	ND	5.1	ug/Kg
Endrin aldehyde	ND	5.1	ug/Kg
Endrin ketone	ND	5.1	ug/Kg
4,4'-DDT	ND	5.1	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	51	ug/Kg

542053-033 Surrogate	%REC	Limits
TCMX	71	58-120
Decachlorobiphenyl	42 *	47-120

Legend

***:** Value is outside QC limits

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-6	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-034	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.010	**Analyzed:**	09/18/25		

542053-034 Analyte	Result	RL	Units
alpha-BHC	ND	5.1	ug/Kg
beta-BHC	ND	5.1	ug/Kg
gamma-BHC	ND	5.1	ug/Kg
delta-BHC	ND	5.1	ug/Kg
Heptachlor	ND	5.1	ug/Kg
Aldrin	ND	5.1	ug/Kg
Heptachlor epoxide	ND	5.1	ug/Kg
Endosulfan I	ND	5.1	ug/Kg
Dieldrin	ND	5.1	ug/Kg
4,4'-DDE	**15**	5.1	ug/Kg
Endrin	ND	5.1	ug/Kg
Endosulfan II	ND	5.1	ug/Kg
Endosulfan sulfate	ND	5.1	ug/Kg
4,4'-DDD	ND	5.1	ug/Kg
Endrin aldehyde	ND	5.1	ug/Kg
Endrin ketone	ND	5.1	ug/Kg
4,4'-DDT	ND	5.1	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	51	ug/Kg

542053-034 Surrogate	%REC	Limits
TCMX	77	58-120
Decachlorobiphenyl	57	47-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-7	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-035	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	KMB
Basis:	as received	**Prepared:**	09/17/25		
DF:	0.9804	**Analyzed:**	09/18/25		

542053-035 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	**53**	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

542053-035 Surrogate	%REC	Limits
TCMX	88	58-120
Decachlorobiphenyl	78	47-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-4 DUP	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	542053-037	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES
Basis:	as received	**Prepared:**	09/17/25		
DF:	1.000	**Analyzed:**	09/18/25		

542053-037 Analyte	Result	RL	Units	Qual
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	**5.3**	5.0	ug/Kg	C
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	

542053-037 Surrogate	%REC	Limits
TCMX	66	58-120
Decachlorobiphenyl	33 *	47-120

Legend

***:** Value is outside QC limits

C: Presence confirmed, but RPD between columns exceeds 40%

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Type: BLANK **Batch#:** 382118 **Analysis:** EPA 8081A

Lab ID: QC1294339 **Prepared:** 09/17/25 **Analyst:** MES

Matrix: Soil **Analyzed:** 09/17/25

DF: 1.010 **Prep:** EPA 3546

QC1294339 Analyte	Result	RL	Units
alpha-BHC	ND	5.1	ug/Kg
beta-BHC	ND	5.1	ug/Kg
gamma-BHC	ND	5.1	ug/Kg
delta-BHC	ND	5.1	ug/Kg
Heptachlor	ND	5.1	ug/Kg
Aldrin	ND	5.1	ug/Kg
Heptachlor epoxide	ND	5.1	ug/Kg
Endosulfan I	ND	5.1	ug/Kg
Dieldrin	ND	5.1	ug/Kg
4,4'-DDE	ND	5.1	ug/Kg
Endrin	ND	5.1	ug/Kg
Endosulfan II	ND	5.1	ug/Kg
Endosulfan sulfate	ND	5.1	ug/Kg
4,4'-DDD	ND	5.1	ug/Kg
Endrin aldehyde	ND	5.1	ug/Kg
Endrin ketone	ND	5.1	ug/Kg
4,4'-DDT	ND	5.1	ug/Kg
Methoxychlor	ND	10	ug/Kg
Toxaphene	ND	100	ug/Kg
Chlordane (Technical)	ND	51	ug/Kg

QC1294339 Surrogate	%REC	Limits
TCMX	71	58-120
Decachlorobiphenyl	57	47-120

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Type: LCS **Batch#:** 382118 **Analysis:** EPA 8081A

Lab ID: QC1294346 **Prepared:** 09/17/25 **Analyst:** MES

Matrix: Soil **Analyzed:** 09/17/25

DF: 1.010 **Prep:** EPA 3546

QC1294346 Analyte	Spiked	Result	%REC	Limits	Units	Qual
alpha-BHC	50.51	34.94	69	53-132	ug/Kg	
beta-BHC	50.51	34.90	69	59-131	ug/Kg	
gamma-BHC	50.51	37.70	75	54-132	ug/Kg	
delta-BHC	50.51	35.34	70	54-134	ug/Kg	
Heptachlor	50.51	34.05	67	50-130	ug/Kg	
Aldrin	50.51	29.43	58	46-120	ug/Kg	
Heptachlor epoxide	50.51	33.15	66	52-127	ug/Kg	
Endosulfan I	50.51	34.31	68	53-132	ug/Kg	
Dieldrin	50.51	33.89	67	53-134	ug/Kg	
4,4'-DDE	50.51	34.51	68	53-140	ug/Kg	
Endrin	50.51	36.77	73	53-142	ug/Kg	
Endosulfan II	50.51	34.98	69	53-138	ug/Kg	
Endosulfan sulfate	50.51	33.73	67	50-134	ug/Kg	
4,4'-DDD	50.51	32.89	65	50-136	ug/Kg	
Endrin aldehyde	50.51	28.01	55	15-120	ug/Kg	
Endrin ketone	50.51	35.44	70	50-146	ug/Kg	
4,4'-DDT	50.51	35.77	71	46-142	ug/Kg	
Methoxychlor	50.51	37.60	74	48-156	ug/Kg	#

QC1294346 Surrogate	%REC	Limits
TCMX	64	58-120
Decachlorobiphenyl	56	47-120

Legend

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

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-4	**Basis:**	as received	**Prepared:**	09/17/25
Type:	MS	**DF:**	1.010	**Analyzed:**	09/17/25
MSS Lab ID:	542053-032	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	QC1294347	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES

QC1294347 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units	Qual
alpha-BHC	<1.960	50.51	37.85	75	52-120	ug/Kg	
beta-BHC	<2.241	50.51	33.40	66	57-126	ug/Kg	
gamma-BHC	<1.531	50.51	39.19	78	54-122	ug/Kg	
delta-BHC	<1.925	50.51	37.96	75	44-127	ug/Kg	
Heptachlor	<1.953	50.51	34.14	68	51-122	ug/Kg	
Aldrin	<1.937	50.51	32.14	49 *	51-120	ug/Kg	
Heptachlor epoxide	<1.877	50.51	32.61	65	50-122	ug/Kg	
Endosulfan I	<1.849	50.51	33.09	66	48-123	ug/Kg	
Dieldrin	<2.414	50.51	32.73	65	48-128	ug/Kg	
4,4'-DDE	16.57	50.51	44.98	56	50-139	ug/Kg	
Endrin	<2.280	50.51	35.69	71	53-132	ug/Kg	
Endosulfan II	<2.077	50.51	33.88	67	47-131	ug/Kg	
Endosulfan sulfate	<2.870	50.51	32.07	64	40-126	ug/Kg	
4,4'-DDD	<1.973	50.51	31.39	62	48-130	ug/Kg	
Endrin aldehyde	<3.633	50.51	19.50	39	26-120	ug/Kg	
Endrin ketone	<2.244	50.51	33.59	66	51-133	ug/Kg	
4,4'-DDT	<1.985	50.51	34.73	69	40-144	ug/Kg	
Methoxychlor	<3.970	50.51	34.65	69	49-148	ug/Kg	#

QC1294347 Surrogate	%REC	Limits
TCMX	68	58-120
Decachlorobiphenyl	51	47-120

ENTHALPY ANALYTICAL

Organochlorine Pesticides: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	CS-4	**Basis:**	as received	**Prepared:**	09/17/25
Type:	MSD	**DF:**	0.9901	**Analyzed:**	09/17/25
MSS Lab ID:	542053-032	**Batch#:**	382118	**Prep:**	EPA 3546
Lab ID:	QC1294348	**Sampled:**	09/11/25	**Analysis:**	EPA 8081A
Matrix:	Soil	**Received:**	09/12/25	**Analyst:**	MES

QC1294348 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim	Qual
alpha-BHC	49.50	33.17	67	52-120	ug/Kg	11	37	
beta-BHC	49.50	31.79	64	57-126	ug/Kg	3	38	
gamma-BHC	49.50	33.56	68	54-122	ug/Kg	13	39	
delta-BHC	49.50	32.43	66	44-127	ug/Kg	14	54	
Heptachlor	49.50	29.18	59	51-122	ug/Kg	14	44	
Aldrin	49.50	31.34	48 *	51-120	ug/Kg	1	39	
Heptachlor epoxide	49.50	27.84	56	50-122	ug/Kg	14	39	
Endosulfan I	49.50	28.38	57	48-123	ug/Kg	13	47	
Dieldrin	49.50	28.06	57	48-128	ug/Kg	13	43	
4,4'-DDE	49.50	37.50	42 *	50-139	ug/Kg	17	42	
Endrin	49.50	30.41	61	53-132	ug/Kg	14	45	
Endosulfan II	49.50	29.07	59	47-131	ug/Kg	13	46	
Endosulfan sulfate	49.50	27.53	56	40-126	ug/Kg	13	52	
4,4'-DDD	49.50	27.09	55	48-130	ug/Kg	13	46	
Endrin aldehyde	49.50	17.63	36	26-120	ug/Kg	8	57	
Endrin ketone	49.50	29.15	59	51-133	ug/Kg	12	43	
4,4'-DDT	49.50	29.92	60	40-144	ug/Kg	13	56	
Methoxychlor	49.50	29.42	59	49-148	ug/Kg	14	53	#

QC1294348 Surrogate	%REC	Limits
TCMX	60	58-120
Decachlorobiphenyl	46 *	47-120

Legend

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

***:** Value is outside QC limits

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID: AG-1 (SURF) **DF:** 0.9709 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-001 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-001 Analyte	Result	RL	Units
Arsenic	**3.8**	0.97	mg/Kg
Lead	**6.5**	0.97	mg/Kg

Field ID: AG-6 (SURF) **DF:** 0.9615 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-006 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-006 Analyte	Result	RL	Units
Arsenic	**5.2**	0.96	mg/Kg
Lead	**6.0**	0.96	mg/Kg

Field ID: AG-11 (SURF) **DF:** 1.000 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-011 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-011 Analyte	Result	RL	Units
Arsenic	**4.1**	1.0	mg/Kg
Lead	**5.5**	1.0	mg/Kg

Field ID: AG-16 (SURF) **DF:** 0.9524 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-016 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-016 Analyte	Result	RL	Units
Arsenic	**4.6**	0.95	mg/Kg
Lead	**6.1**	0.95	mg/Kg

Field ID: AG-17 (SURF) **DF:** 0.9709 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-017 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-017 Analyte	Result	RL	Units
Arsenic	**4.8**	0.97	mg/Kg
Lead	**6.2**	0.97	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID: AG-22 (SURF) **DF:** 0.9901 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-022 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-022 Analyte	Result	RL	Units
Arsenic	**4.2**	0.99	mg/Kg
Lead	**5.6**	0.99	mg/Kg

Field ID: AG-26 (SURF) **DF:** 0.9615 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-026 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-026 Analyte	Result	RL	Units
Arsenic	**4.5**	0.96	mg/Kg
Lead	**5.7**	0.96	mg/Kg

Field ID: AG-11 (SURF) DUP **DF:** 0.9709 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-036 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-036 Analyte	Result	RL	Units
Arsenic	**4.2**	0.97	mg/Kg

Field ID: AG-26 (SURF) DUP **DF:** 0.9524 **Analyzed:** 09/17/25
Type: SAMPLE **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: 542053-038 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM
Basis: as received **Prepared:** 09/17/25

542053-038 Analyte	Result	RL	Units
Lead	**6.0**	0.95	mg/Kg

Type: BLANK **Batch#:** 382117 **Analysis:** EPA 6020
Lab ID: QC1294341 **Prepared:** 09/17/25 **Analyst:** KAM
Matrix: Soil **Analyzed:** 09/17/25
DF: 1.000 **Prep:** EPA 3050B

QC1294341 Analyte	Result	RL	Units
Arsenic	ND	1.0	mg/Kg
Lead	ND	1.0	mg/Kg

Legend
ND: Not Detected
RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Type: LCS **Batch#:** 382117 **Analysis:** EPA 6020

Lab ID: QC1294342 **Prepared:** 09/17/25 **Analyst:** KAM

Matrix: Soil **Analyzed:** 09/17/25

DF: 1.000 **Prep:** EPA 3050B

QC1294342 Analyte	Spiked	Result	%REC	Limits	Units
Arsenic	100.0	100.3	100	80-120	mg/Kg
Lead	100.0	107.5	107	80-120	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID: ZZZZZZZZZZ **Basis:** as received **Prepared:** 09/17/25
Type: MS **DF:** 0.9804 **Analyzed:** 09/17/25
MSS Lab ID: 542096-001 **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: QC1294343 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM

QC1294343 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	2.688	98.04	106.0	105	75-125	mg/Kg
Lead	4.323	98.04	108.1	106	75-125	mg/Kg

Field ID: ZZZZZZZZZZ **Basis:** as received **Prepared:** 09/17/25
Type: MSD **DF:** 0.9524 **Analyzed:** 09/17/25
MSS Lab ID: 542096-001 **Batch#:** 382117 **Prep:** EPA 3050B
Lab ID: QC1294344 **Sampled:** 09/11/25 **Analysis:** EPA 6020
Matrix: Soil **Received:** 09/12/25 **Analyst:** KAM

QC1294344 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Arsenic	95.24	98.66	101	75-125	mg/Kg	4	22
Lead	95.24	101.2	102	75-125	mg/Kg	4	25

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Analyzed:**	09/17/25
Type:	Post Digest Spike	**DF:**	0.9615	**Prep:**	EPA 3050B
MSS Lab ID:	542096-001	**Batch#:**	382117	**Analysis:**	EPA 6020
Lab ID:	QC1294345	**Sampled:**	09/11/25	**Analyst:**	KAM
Matrix:	Soil	**Received:**	09/12/25		

QC1294345 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	2.688	96.15	103.0	104	75-125	mg/Kg
Lead	4.323	96.15	104.6	104	75-125	mg/Kg

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	ZZZZZZZZZZ	**Basis:**	as received	**Analyzed:**	09/17/25
Type:	Serial Dilution	**DF:**	4.808	**Prep:**	EPA 3050B
MSS Lab ID:	542096-001	**Batch#:**	382117	**Analysis:**	EPA 6020
Lab ID:	QC1294442	**Sampled:**	09/11/25	**Analyst:**	KAM
Matrix:	Soil	**Received:**	09/12/25		

QC1294442 Analyte	MSS Result	MSS RL	Result	RL	Units	% Diff	Lim
Arsenic	2.688	0.9615	**2.793 J**	4.808	mg/Kg	NC	10
Lead	4.323	0.4808	**4.500**	2.404	mg/Kg	NC	10

Legend

J: Estimated value

NC: Not Calculated

RL: Reporting Limit

ENTHALPY ANALYTICAL

Metals Analytical Report

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID:	FB #1	**Batch#:**	382170	**Prep:**	EPA 3015A
Type:	SAMPLE	**Sampled:**	09/11/25	**Analysis:**	EPA 200.8
Lab ID:	542053-027	**Received:**	09/12/25	**Analyst:**	DXC
Matrix:	Water	**Prepared:**	09/17/25		
DF:	1.000	**Analyzed:**	09/17/25		

542053-027 Analyte	Result	RL	Units
Arsenic	ND	2.0	ug/L
Lead	ND	5.0	ug/L

Field ID:	EB #1	**Batch#:**	382170	**Prep:**	EPA 3015A
Type:	SAMPLE	**Sampled:**	09/11/25	**Analysis:**	EPA 200.8
Lab ID:	542053-028	**Received:**	09/12/25	**Analyst:**	DXC
Matrix:	Water	**Prepared:**	09/17/25		
DF:	1.000	**Analyzed:**	09/17/25		

542053-028 Analyte	Result	RL	Units
Arsenic	ND	2.0	ug/L
Lead	ND	5.0	ug/L

Type:	BLANK	**Batch#:**	382170	**Analysis:**	EPA 200.8
Lab ID:	QC1294487	**Prepared:**	09/17/25	**Analyst:**	DXC
Matrix:	Water	**Analyzed:**	09/17/25		
DF:	1.000	**Prep:**	EPA 3015A		

QC1294487 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 #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Type: LCS **Batch#:** 382170 **Analysis:** EPA 200.8

Lab ID: QC1294488 **Prepared:** 09/17/25 **Analyst:** DXC

Matrix: Water **Analyzed:** 09/17/25

DF: 1.000 **Prep:** EPA 3015A

QC1294488 Analyte	Spiked	Result	%REC	Limits	Units
Arsenic	100.0	100.6	101	85-115	ug/L
Lead	100.0	99.89	100	85-115	ug/L

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID: FB #1 **DF:** 1.000 **Analyzed:** 09/17/25

Type: MS **Batch#:** 382170 **Prep:** EPA 3015A

MSS Lab ID: 542053-027 **Sampled:** 09/11/25 **Analysis:** EPA 200.8

Lab ID: QC1294489 **Received:** 09/12/25 **Analyst:** DXC

Matrix: Water **Prepared:** 09/17/25

QC1294489 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	<0.3025	100.0	97.47	97	70-130	ug/L
Lead	<0.2251	100.0	99.99	100	70-130	ug/L

Field ID: FB #1 **DF:** 1.000 **Analyzed:** 09/17/25

Type: MSD **Batch#:** 382170 **Prep:** EPA 3015A

MSS Lab ID: 542053-027 **Sampled:** 09/11/25 **Analysis:** EPA 200.8

Lab ID: QC1294490 **Received:** 09/12/25 **Analyst:** DXC

Matrix: Water **Prepared:** 09/17/25

QC1294490 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Arsenic	100.0	100.4	100	70-130	ug/L	3	20
Lead	100.0	101.6	102	70-130	ug/L	2	20

Legend

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Metals Analytical Report: Batch QC

Lab #: 542053 **Project#:** 2401-4672

Client: Padre Associates, Inc. **Location:** VUSD - CARLTON / AKERS (WEST)

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 09/17/25

Type: MS **Batch#:** 382170 **Prep:** EPA 3015A

MSS Lab ID: 542096-010 **Sampled:** 09/11/25 **Analysis:** EPA 200.8

Lab ID: QC1294491 **Received:** 09/12/25 **Analyst:** DXC

Matrix: Water **Prepared:** 09/17/25

QC1294491 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Arsenic	<0.3025	100.0	100.4	100	70-130	ug/L
Lead	<0.2251	100.0	101.7	102	70-130	ug/L

Field ID: ZZZZZZZZZZ **DF:** 1.000 **Analyzed:** 09/17/25

Type: MSD **Batch#:** 382170 **Prep:** EPA 3015A

MSS Lab ID: 542096-010 **Sampled:** 09/11/25 **Analysis:** EPA 200.8

Lab ID: QC1294492 **Received:** 09/12/25 **Analyst:** DXC

Matrix: Water **Prepared:** 09/17/25

QC1294492 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Arsenic	100.0	99.70	100	70-130	ug/L	1	20
Lead	100.0	101.1	101	70-130	ug/L	1	20

Legend

RPD: Relative Percent Difference

APPENDIX F
ARSENIC BACKGROUND DATA SET

Geosyntec consultants

engineers | scientists | innovators

TARGETED SITE INVESTIGATION PRELIMINARY ENDANGERMENT ASSESSMENT REPORT

PROPOSED LOWERY RANCH SCHOOL

Prepared for

Department of Toxic Substances Control

Northern California Schools Unit Site Mitigation and Restoration Program
8800 Cal Center Drive
Sacramento, California 95826

Prepared by

Geosyntec Consultants, Inc.

5084 N Fruit Ave, Suite 103

Fresno, California 93711

Project Number: SAC147U

July 03, 2019

Table 1
CAM 17 Metals Soil Analytical Results
TSI PEA Report
Proposed Lowery Ranch School
River Way Drive Alignment Visalia, California

SAMPLE LOCATION and DEPTH	POTENTIAL REC	MATRIX	CAM 17 Metals (U.S. EPA Methods 6010B/ 7471A) mg/Kg															
			Antimony	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenem**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
HHRA SL Cancer Endpoint [1]			--	0.11	--	1,600	910	--	--	--	--	--	--	15,000	--	--	--	--	--
HHRA SL Noncancer Endpoint [1]			31	0.41	15,000	16	71	120,000	23	3,100	*80*	1.0	390	820	390	390	0.78	*390*	23,000
B1-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4.7**	**74**	**0.3**	<0.1	**13**	**4.9**	**12**	**6.3**	<0.04	<0.2	**7.8**	<0.2	**0.2 J**	<0.1	**39**	**49**
B1-4.5	Evaluate background arsenic	Soil	--	**9.6**	--	--	--	--	--	--	**9.6**	--	--	--	--	--	--	--	--
B2-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4.6**	**79**	**0.28**	0.055 J	**13**	**5.1**	**13**	**6**	<0.04	<0.2	**7.9**	<0.2	**0.15 J**	<0.1	**38**	**39**
B3-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4.3**	**71**	**0.23**	0.062 J	**13**	**4.5**	**10**	**6.6**	<0.04	<0.2	**7**	<0.2	**0.22 J**	<0.1	**38**	**39**
B4-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4**	**70**	**0.24**	0.047 J	**12**	**4.2**	**10**	**5**	<0.04	<0.2	**6.8**	<0.2	**0.16 J**	<0.1	**33**	**34**
B4-4.5	Evaluate background arsenic	Soil	--	**5.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B5-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4.8**	**73**	**0.25**	0.059 J	**13**	**4.6**	**12**	**6.3**	0.024 J	<0.2	**7.3**	<0.2	**0.21 J**	<0.1	**36**	**40**
B5-4.5	Evaluate background arsenic	Soil	--	**7.6**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B6-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**2.9**	**49**	**0.13**	0.073 J	**9.3**	**3.5**	**8.2**	**5.2**	<0.04	<0.2	**5.4**	<0.2	<0.1	<0.1	**31**	**29**
B7-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4**	**75**	**0.26**	0.049 J	**12**	**4.9**	**11**	**5.7**	<0.04	<0.2	**7.5**	<0.2	**0.22 J**	<0.1	**37**	**39**
B6-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**2.9**	**49**	**0.13**	0.073 J	**9.3**	**3.5**	**8.2**	**5.2**	--	<0.2	**5.4**	<0.2	<0.1	<0.1	**31**	**29**
B7-0.5	Potential impacts from agricultural chemicals	Soil	<0.20	**4**	**75**	**0.26**	0.049 J	**12**	**4.9**	**11**	**5.7**	--	<0.2	**7.5**	<0.2	**0.22**	<0.1	**37**	**39**
B7-4.0	Evaluate background arsenic	Soil	--	**5.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Res-1-0.5	Potential impacts in soil around residence	Soil	--	--	--	--	--	--	--	--	**9.8**	--	--	--	--	--	--	--	--
Res-2-0.5	Potential impacts in soil around residence	Soil	--	--	--	--	--	--	--	--	**6.2**	--	--	--	--	--	--	--	--
Res-3-0.5	Potential impacts in soil around residence	Soil	--	--	--	--	--	--	--	--	**9.2**	--	--	--	--	--	--	--	--
Res-4-0.5	Potential impacts in soil around residence	Soil	--	--	--	--	--	--	--	--	**4.9**	--	--	--	--	--	--	--	--
Shed-1-0.5	Potential impacts in soil around shed	Soil	--	--	--	--	--	--	--	--	**7.3**	--	--	--	--	--	--	--	--
Shed-2-0.5	Potential impacts in soil around shed	Soil	--	--	--	--	--	--	--	--	**8.3**	--	--	--	--	--	--	--	--

Notes:
1. Human Health Risk Assessment Screening Levels (HHRA SL) Note 3 - DTSC, revised April 2019 for residential soil. HHRA screening levels applied when available, US EPA Regional Screening Levels (RSLs) (revised May 2019) applied when HHRA SL not available.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
UJ = the analyte was not positively identified; the method detection limit is considered estimated
-- = Not Analyzed or Applicable
< = Analyte not detected. Method Detection Limits shown.
Bold = Analyte reported above laboratory method detection limit but below screening level (if applicable)
Gray and Bold = Analyte reported above screening level
CAM 17 Metals = California Assessment Manual 17 Metals



Legend

Site Location

Map Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

N

2 1 0 2 Miles

Site Location Map

TSI PEA Workplan
Ritchie Ranch
Road 100 & Ave 318 (River Way Drive)
Visalia, CA

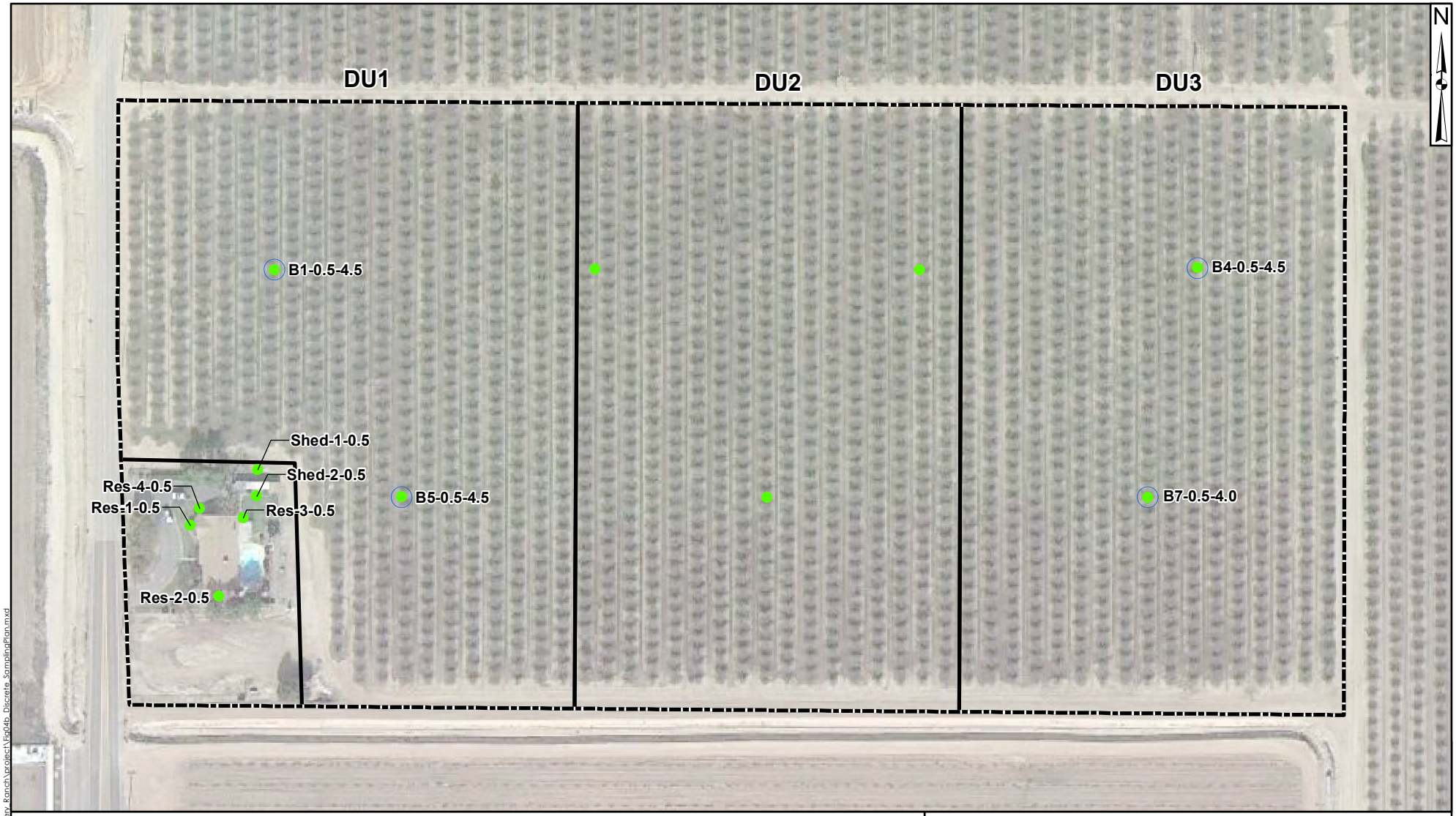
Geosyntec consultants

Project No.: SAC147U

March 2019

Figure 1

\\sacramento-01\D:data\GIS\SAC147 DTSC\Task Order 1\ Lowery Ranch\project\Fig01_SiteLocation.mxd



Legend

Discrete Sample Locations

- Surface
- Background

Decision Unit Boundary

Site Boundary

150 75 0 150

Feet

Discrete Sampling Plan

Lowery Ranch (aka Ritchie Ranch)
Road 100 and Avenue 318 (River Way Drive)
Visalia, California

Geosyntec consultants

Project No.: SAC147U

June 2019

Figure **5b**

\\sacramento-01\Data\GIS\SAC147 DTSC\Task Order 4 Lowery Ranch\project\Fig04b_Discrete_SamplingPlan.mxd

APPENDIX G

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)	7
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	0.0	0.0	356	301
BLOOD Pb, CHILD	0.1	0.1	0.1	70	59
BLOOD Pb, PICA CHILD	0.6	1.1	1.4	6	5
BLOOD Pb, OCCUPATIONAL	0.0	0.0	0.0	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	0.01	96%	1.2E-3	0.01	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	0.05	98%	9.6E-2	0.62	100%
Inhalation	2.9E-6	0.00	0.0%		0.00	0.0%

Click here for Equations

*Pathway Exposure Factor