



**ANALYSIS OF BROWNFIELD CLEANUP  
ALTERNATIVES**

Chandler Airport  
716 West Kearney Boulevard  
Fresno, California 93706

January 6, 2026

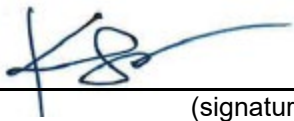
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# 1 Introduction

This Analysis of Brownfield Cleanup Alternatives (ABCA) was prepared for the City of Fresno for the property located at Chandler Airport, 716 West Kearney Boulevard, Fresno, California 93706 (Subject Property). This ABCA and proposed cleanup alternative would be funded by the City’s revolving loan fund (RLF) grant (Cooperative Agreement Number 4B98T50501). The purpose of the ABCA is to present options and costs for the abatement of regulated building materials (RBM) (e.g., asbestos-containing materials [ACM] and lead-based paint [LBP]) as well as cleanup of lead impacted soils. Regulated Building Materials (RBMs) were identified during the completion of an *Asbestos and Lead Based Paint Survey* dated December 13, 2024 (Group Delta 2024) and lead impacted soil was identified in a *Phase II Environmental Site Assessment* dated May 22, 2025 (Group Delta 2025). The redevelopment plans for the approximate 11,000 square foot (SF) Subject Property include abatement of identified RBMs in the building, demolition of the hangar building, cleanup of lead-impacted soil, and replacement of the hangar with a new building suitable for a future intended use as a classroom. Building demolition and construction of a new Subject Property building would be completed using other funding sources.

## 1.1 Subject Property Location and Description

The Subject Property is comprised of a 3.34-acre portion of a larger 55.860-acre parcel of land (Assessor Parcel Number [APN] 646-220-43T) which is part of the Fresno Chandler Executive Airport, a regional airport. The Site is currently improved with a Fuselage Trainer (FUT) hangar building with an assigned address of 716 West Kearney Boulevard. The building is approximately 11,000 square feet in size and was built in 1948 (Group Delta 2024). A general location map is provided as **Figure 1**. A map illustrating the main features of the Subject Property is provided as **Figure 2**.

## 1.2 Subject Property History

In December 2024, Group Delta completed a Phase I Environmental Site Assessment (ESA) to document environmental conditions on the Subject Property. At the time of the assessment the Subject Property building was unoccupied. Based on a review of historical sources, the Subject Property appeared to be part of the Fresno Chandler Executive Airport since at least 1937. The Subject Property appeared to be in use as aircraft parking, a taxiway and undeveloped land from at least 1937 until approximately 1946, when a hangar and associated storage buildings appear to have been developed. According to historical city directories, the building was occupied by several tenants including Lambe Piper Aircraft Sales, Ruiz Frank X Avionics, Buchner Aero Specialties, and Tom’s Flying Service. Group Delta identified three recognized environmental conditions (RECs) associated with the Subject Property (Group Delta 2024), summarized below.

- REC1 - A letter issued by the County of Fresno Department of Health to the City of Fresno dated August 29, 1991, confirmed the completion of a site inspection and/or remedial action regarding the release of hazardous substances or waste in relation to underground storage tanks (USTs).



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No further action was required, and UST closure documentation does not include documentation indicating the presence or absence of a petroleum discharge.

- REC2 - Evidence of an exterior wash down area with a drain and single-chamber oil/water separator (OWS) was observed adjacent to the west side of the hangar building. The installation date of the washdown area and drain is unknown. The OWS drain is used to collect washdown water and separates oil, sludge, and debris collected into the drain prior to entering the municipal sewer system. The potential exists that the OWS may be breached, allowing oil and sludge to leak into subsurface media.
- REC3 - Evidence of a spray booth was observed within the interior northwestern portion of the hangar building. The installation date of the spray booth is unknown. An oil stain was observed on the floor of the spray booth, and an oily odor was noted.

Group Delta also identified two 'other environmental considerations' (OECs) which are items of environmental interest that do not qualify as a REC but warrant further discussion:

- OEC1 – Group Delta completed a lead-based paint (LBP) survey to test for lead in building materials and to document concentrations of lead within the paint. Samples were collected from various interior and exterior areas that may be impacted by renovation/demolition. The survey results confirmed the presence of LBP at the hangar. The final survey report is provided in **Appendix A**.
- OEC2 - Group Delta completed an asbestos survey to test potential asbestos-containing materials (ACM) for the presence of asbestos and the relative concentrations where present. The survey results confirmed that ACM was present in nine samples analyzed at the hangar. The final survey report is provided in **Appendix A**.

Group Delta recommended obtaining additional documentation regarding the historical on-site UST, including the former UST location, subsequent removal, and associated remedial activities. In addition, Group Delta recommended a limited subsurface investigation (soil and/or soil vapor sampling) in the area of the former UST, a limited subsurface investigation (soil and soil vapor sampling) to assess the shallow soil conditions in the areas of the OWS and spray booth at 716 West Kearney Boulevard, and assessment of lead in soil sourced from lead-based paint in areas of exposed soil based on the lead XRF results (Group Delta 2024).

Based on the findings of the Phase I ESA, Group Delta conducted a Phase II ESA to evaluate the RECs and the potential presence of lead in soil. Based on the anticipated future use as an educational facility, Group Delta expanded the investigation to evaluate potential soil impacts from organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs) in accordance with guidance published by California Department of Toxic Substances Control (DTSC). The investigation included soil vapor sampling to assess the potential presence of volatile organic compound (VOCs) and evaluate the potential for vapor intrusion from soil vapor into indoor air. A copy of the Phase II ESA report is provided in **Appendix B**.

Two soil borings were advanced on either side of the wash down drain OWS, two soil borings were advanced within the paint booth area, six soil borings were advanced along the south and east sides of



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### 2 REGULATED BUILDING MATERIALS RESULTS SUMMARY

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the hangar building, and two soil borings were advanced on each side of the pole-mounted stepdown transformer servicing the Subject Property. Soil borings were advanced to 5 feet below ground surface (ft bgs) with samples collected at 0.5, 1.0, 1.5, and 5.0 ft bgs. Eight soil borings were advanced inside and outside the hangar building for the installation of dual nested soil vapor probes (SV-1 through SV-8) at depths of 5 and 10 feet bgs.

The only soil samples exceeding regulatory screening levels were those analyzed for total lead that were collected within the dripline of the existing hangar building. Five of the twelve samples collected within the dripline exceed the DTSC Screening Level (SL) of 80 milligrams per kilogram (mg/kg) for unrestricted site use. Based on soluble lead concentrations, several of the soil samples would qualify as California hazardous waste if the soils are excavated (Group Delta 2025). Stantec developed a preliminary estimate of the potential volume of lead-impacted soil based on the impacted area depicted on the Group Delta Soil Sample Location Map and assuming concentrations exceeding the DTSC SL (80 mg/kg) extend to an average depth of 3 feet bgs. This estimated volume is 3,780 cubic feet or 140 cubic yards. This would equal approximately 210 tons (assuming an average soil density of 1.5 tons per cubic yard).

## 2 REGULATED BUILDING MATERIALS RESULTS SUMMARY

On December 13, 2024, Group Delta prepared an *Asbestos and Lead-Based Paint Survey* report. The asbestos survey included collection of 71 samples of suspect ACM materials and analysis of 74 painted surfaces for LBP using X-ray fluorescence (XRF) (Group Delta 2024). A copy of the RBM survey is included in Appendix A.

### 2.1 Asbestos Containing Materials Findings

Suspect ACM materials identified during the onsite survey conducted by Group Delta were grouped and classified as homogeneous materials based on their appearance, usage, and age of the building. Representative samples of each homogeneous material were sampled in accordance with federal regulations. ACM was identified in 25 of the 71 samples collected.

ACM was identified in the following building materials:

- Door window putty
- Roof core
- Walking mat with adhesive
- 12x12 floor tile and mastic
- Drywall with joint compound (painted blue)
- Texture coat
- Drywall with joint compound



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### 2 REGULATED BUILDING MATERIALS RESULTS SUMMARY January 6, 2026

- Sprayed on acoustic ceiling
- 9x9 floor tile
- Electrical switch blocks (assumed)

No ACM was detected in the following materials:

- Unfinished drywall
- Roof penetration mastic
- Vapor barrier paper
- Exterior seal
- Window putty
- Concrete
- Pebble path and adhesive
- Electrical outlet
- Desktop
- Electrical tape
- 12x12 ceiling tile and mastic
- Ceramic tile and mortar
- White and gray sheet flooring

**Table 2.1** below presents sample number, material description, sample location, the ACM content, material condition and estimated quantity of the material.

**Table 2.1: Asbestos Containing Materials and Locations**

Sample Number	Material Description	Building / Location	Asbestos (Type/Percentage)	Condition	Friable / Non-Friable	Quantity
01-03	Door window putty	FUT Hangar – Exterior Doors	Chrysotile – trace (<1%)*	Good	Non-friable	800 SF
07-09	Roof core	FUT Hangar – Roof	Chrysotile – 40-60%	Good	Non-friable	9,375 SF
13-15	Walking mat with adhesive	FUT Hangar – Roof	Chrysotile – 2%	Good	Non-friable	20 SF
31-33	12x12 floor tile and mastic	FUT Hangar – Northwest Office	Chrysotile – 3-4%	Good	Non-friable	125 SF
36	Drywall with joint compound (painted blue)	FUT Hangar – Northwest Office	Chrysotile – trace (<1%)*	Good	Friable	500 SF



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Sample Number	Material Description	Building / Location	Asbestos (Type/Percentage)	Condition	Friable / Non-Friable	Quantity
37-39	Texture coat	FUT Hangar – Northwest Office	Chrysotile – trace (<1%)*	Good	Friable	500 SF
44-46	Drywall with joint compound	FUT Hangar – Shop Kitchen	Chrysotile – 2%	Good	Friable	500 SF
47-49	Sprayed on acoustic ceiling	FUT Hangar – South Wall	Chrysotile – 2%	Good	Non-friable	500 SF
51-53	9x9 floor tile	FUT Hangar – Ladies' Restroom	Chrysotile – 5%	Good	Non-friable	25 SF
Assumed	Electrical switch blocks	FUT Hangar – Electrical Panels	Assumed	Good	Non-friable	12 SF

**Notes and Abbreviations:**

SF = Square Feet; NF = Non-Friable; \* Materials with <1% asbestos reported are considered ACM unless PLM 400 or 1,000-point count analysis is conducted to confirm material is <1%

Previously undiscovered asbestos may be present within wall cavities (e.g., asbestos in electrical wire wrapping, insulation materials, vapor barrier paper, etc.), and some underground utility piping has been known to contain asbestos (e.g., transite pipe). If discovered during abatement or renovation, suspect ACMs that are not identified within this report should be assumed positive for asbestos unless additional sampling, analysis, and/or assessment indicates otherwise.

## 2.2 Lead-Based Paint Findings

The LBP survey consisted of a visual inspection and sampling of painted surfaces throughout the two surveyed buildings on the Subject Property. The purpose of the inspection was to provide information regarding lead in paint as it pertains to employee exposure and demolition debris disposal. Representative areas of the painted surfaces were analyzed for lead using XRF. Additional suspect painted surfaces may be present in areas that were inaccessible, unsafe to inspect, or obscured from view during the sampling process. The following is a summary of building components tested by XRF and found to be positive for lead.

**Table 2.2: Lead Paint Samples and Locations**

Sample Number	Color	Building Component	Sample Location	Square Feet	Lead Content mg/cm <sup>2</sup>	Condition
36	White Metal	V Beam	FUT Hangar (Hangar 2) Exterior	250 SF	1.7	Intact
38	White Wood	V Beam	FUT Hangar (Hangar 2) Exterior	250 SF	2.2	Poor
40	Red Metal	Beam	FUT Hangar (Hangar 2) Exterior	100 SF	2.7	Intact
Assumed	Red Metal	Beam	FUT Hangar (Hangar 2) Interior	1,800 SF	Assumed	Intact

**Notes and Abbreviations:**

SF = square feet. Mg/cm<sup>2</sup> = milligrams per square centimeter



## **3 APPLICABLE REGULATIONS AND CLEANUP STANDARDS**

### **3.1 Cleanup Oversight Responsibility**

Subject Property cleanup and redevelopment should be conducted in compliance with applicable laws, regulations, and procedures outlined below.

### **3.2 Applicable Cleanup Standards for Asbestos and Lead**

Cleanup standards for key contaminants at the Subject Property include the following:

Asbestos – Cleanup standard for asbestos are based on the USEPA Asbestos-Containing Materials in Schools, Final Rule and Notice (USEPA, 1987). Although this rule is in place primarily to protect child-occupied facilities, following the guidelines within the rule is encouraged for all building renovations for the overall protection of human health.

LBP – Building materials containing lead in paint or other surface coating material containing lead are defined by the U.S. Department of Housing and Urban Development (HUD) and USEPA as greater than or equal to 5,000 parts per million or 0.5% by weight (HUD, 1997). This threshold (0.5% by weight) is considered the applicable cleanup standard for LBP.

### **3.3 Laws and Regulations Applicable to Cleanup for Asbestos and Lead**

This section is provided for informational purposes only and the property owner (or contractor implementing the cleanup) is responsible for ensuring compliance with all applicable laws and regulations.

Cleanup activities at the Subject Property should be conducted by contractors operating in accordance with the U.S. Department of Labor Occupational Safety & Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) standard codified at 29 Code of Federal Regulations 1910.120. The HAZWOPER standard applies to cleanup operations required by federal, state, local, or other governmental bodies involving hazardous substances. Additionally, the California OSHA “Lead in Construction Standard” codified in Title 8 California Code of Regulations Section 1532.1, is applicable to construction work where an employee may be exposed to lead.

National Emission Standards for Hazardous Air Pollutants (NESHAP) are outlined in the Code of Federal Regulations (CFR) Title 40 Chapter I Subchapter C Part 61 Subpart M. OSHA regulations regarding asbestos exposure during construction activities (i.e., renovation and demolition) are outlined in CFR Title 29 Subtitle B Chapter XVII Part 1926.1101, whereas OSHA regulations regarding respiratory protection are outlined in CFR Title 29 Subtitle B Chapter XVII Part 1910.134. A NESHAP notification form must be submitted at least 10 working days prior to the beginning of renovation or demolition activities involving ACMs. This notification form must include information regarding the company that performed the ACM



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survey, the analytical laboratory, the company performing the demolition or renovation activities, the company transporting waste that contains asbestos, and the landfill where the waste that contains asbestos will be disposed.

The Asbestos Hazard Emergency Response Act (AHERA) was designed to address the presence of asbestos in school buildings. AHERA also tasked the USEPA with developing a plan for accrediting individuals responsible for performing asbestos surveys and remediation. AHERA protocols are considered the best industry practice for asbestos surveys and remediation, and these protocols are typically applied to non-school buildings. Although no school buildings are located at the Subject Property, it is recommended that remediation be performed by a company that utilizes AHERA-certified personnel for asbestos demolition and remediation activities. AHERA is outlined in CFR Title 40 Chapter I Subchapter R Part 763 Subpart E.

Permitting for abatement of asbestos in Fresno County is subject to the requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Written notice must be submitted to the SJVAPCD at least 10 working days prior to beginning abatement. During removal, there are required emission control techniques and engineering controls to prevent asbestos fibers from becoming airborne. SJVAPCD will issue permit release forms certifying that the asbestos regulatory requirements have been met. The Subject Property owner and/or contractor are likely to be required to obtain these permit release forms before the local building or demolition permits can be granted.

The USEPA has adopted the Renovation, Repair, and Painting (RRP) Rule (40 CFR 745.80) to minimize exposure from LBP dust by training contractors to make sure they follow lead-safe work practices during renovation of a structure. Although this rule is in place primarily to protect child-occupied facilities, following the guidelines within the rule is encouraged for all building renovations for the overall protection of human health. In addition to this rule, contractors are required to follow the HUD Lead Safe House Rule and all local and state specific requirements. The RRP Rule requires that renovators be USEPA-certified, accredited, and follow specific work practices.

The RRP Rule does not apply to the total demolition of structures. It is recommended that a certified lead inspector be on-site to oversee demolition activities and appropriate disposal of materials. Demolition work should be conducted by a lead-certified company trained to handle and dispose of LBP-containing materials.

Federal laws and regulations applicable to this cleanup include the Small Business Liability Relief and Brownfields Revitalization Act and the Davis-Bacon Act. Federal, state, and local laws regarding procurement of contractors to conduct the cleanup are also applicable. Adherence to laws and regulations associated with abatement and removal of RBMs is the responsibility of individual contractors performing cleanup activities.

## 3.4 Potential Receptors and Exposure Pathways

Based on the findings of the Phase II ESA for the Subject Property (Group Delta 2025), the contaminants of concern in soil for the Subject Property have been determined to be limited to lead.



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Considering that remedial excavation and potential redevelopment activities are expected at the Subject Property, construction workers, excavation workers, and trespassers have been identified as the most applicable potential human receptors. The redevelopment plans for the approximate 11,000 square foot (SF) Subject Property includes abatement and demolition of the building and replacement of the structure.

Five of the twelve samples collected within the dripline exceed the DTSC SL of 80 mg/kg for unrestricted site use and some of the soils may qualify as California hazardous waste if excavated. Exposure to contaminated soil by occupational workers on the Subject Property could occur during future redevelopment or other subsurface activities (utility installation, maintenance and repairs) through inhalation, ingestion, and/or dermal contact.

Potential exposure during the remedial work would be managed with a Health and Safety Plan designed to protect site workers and the public from contaminants of concern during remedial activities. An exclusion zone in the form of a perimeter fence would be in place during remedial work to prevent the public from accessing the excavation area. Potential future exposures to residual contamination, if any, would be mitigated using institutional and engineering controls and a Site Management Plan. No potential impacts are anticipated to ecological receptors as part of this remedial effort; although, if the Subject Property is to be designated as habitat or ecological receptors are anticipated to be impacted by remedial activities, then the applicable cleanup standards and remedial action objectives presented below should be revised accordingly.

### 3.5 Cleanup Standards for Lead-Impacted Soil

The risk-based screening level (DTSC-SL) for unrestricted site use is (80 mg/kg); therefore, this value will serve as the cleanup standard for lead in soil. The DTSC-SL is protective of human health via the ingestion, dermal contact, or inhalation pathways.

Should soils containing lead exceeding the lead DTSC-SL be left in place, they would be documented and managed with a Site Management Plan and with environmental engineering and institutional controls (e.g., placement of concrete encapsulation and recordation of a land use covenant that would be attached to the deed).

Relevant regulations and cleanup standards for the Subject Property are listed below:

- California Code of Regulations (CCR) 22 § 66261.24 Characteristics of Toxicity.
- Department of Toxic Substances Control (DTSC) Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels, June 2020, revised April 2025.

### 3.6 Cleanup Goals

The redevelopment plans for the approximate 11,000 SF Subject Property include abatement of ACM and LBP, demolition of the building, and its replacement with a new building to be used by the Fresno Unified School District. As such, the intention of the remedial alternatives presented herein is to achieve



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compliance with applicable state cleanup regulations and remediate Subject Property soils to levels appropriate for unrestricted land use.

The remedial action objectives are:

- Remove RBMs to allow for future demolition of the existing hangar building because this building has reached the end of service life.
- Prevent direct contact between human receptors and soil exceeding occupational DTSC-SLs.
- Remediate/remove source-area soils to the extent feasible (estimated 140 cubic yards).

The resultant cleanup criteria are summarized in Table 1, below.

**Table 1: Cleanup Criteria for Residential Land Uses**

Analyte	Remedial Action Objective
Lead	80 mg/kg

## 4 EVALUATION OF CLEANUP ALTERNATIVES

### 4.1 Remedial Action Objectives

The remedial action objective for ACMs and other hazardous materials at the Subject Property is to prevent these materials from causing unacceptable risk to human health and to allow the Subject Property to be reused by the Fresno Unified School District. The following formula is commonly used to represent risk:

$$\mathbf{RISK = EXPOSURE \times CONCENTRATION}$$

As indicated by this common formula, risk can be reduced by limiting exposure or by reducing the magnitude of contaminant concentration. The human exposure pathway of concern for ACMs is inhalation. ACM exposure can be limited by isolating ACMs from human contact or by maintaining ACMs in good condition so that asbestos fibers would not be released into indoor air where exposure via inhalation could occur. The only way to reduce the ACM concentration is to abate the ACMs, which would reduce the concentration to zero. If the concentration is zero, then risk also would be zero.

The human exposure pathway of concern for lead is ingestion and inhalation. Lead exposure can be limited by isolating the paint and/or soil containing lead from human contact. The only way to reduce the lead in soil concentration is to encapsulate the lead impacted soil or remove the lead impacted soil. Encapsulation of the lead impacted soil would include mitigation measures if disturbance was expected, such as a utility repair. Removal would reduce the concentration to zero. Similar to ACMs, LBP can be stabilized and maintained to reduce the potential for exposure or removed to eliminate potential exposure. If the concentration is zero, then risk also would be zero.



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## 4.2 Cleanup Alternatives Considered

Four alternatives were considered for the remedial action at the Subject Property:

- 1) No Abatement/Soil Removal;
- 2) Complete Abatement of ACM and LBP and Capping of Lead-Impacted Soil;
- 3) Complete Abatement of ACM and LBP and Treatment of Contaminated Soil within Chemically Stabilized On-Site Containment Cell; and
- 4) Complete Abatement of ACM and LBP and Excavation and Off-Site Disposal of Impacted Soils.

These four options are described below. Demolition of the hangar building would be conducted under Alternatives 2, 3 and 4, however these costs would not be reimbursable under the City's RLF grant program and would be funded by other sources. The cost estimates presented in this document are based on quotes obtained from local vendors and based on professional judgement but should be independently verified and updated based on additional information identified during project implementation. A description of each alternative and the results of the comparative analysis are presented below.

### 4.2.1 ALTERNATIVE 1: NO ABATEMENT/SOIL REMOVAL ALTERNATIVE

The No Abatement/Soil Removal Alternative, or No Action Alternative, is included as a baseline to which the other proposed alternatives are compared. The No-Action Alternative assumes that all ACM and LBP within the building and lead-impacted would remain in place.

Under this alternative, the owner must continue to secure the building to eliminate trespassing and minimize uses of the building that require City employees and others to enter the building as it is considered a hazardous environment.

To prevent ACM releases to the exterior areas surrounding the Subject Property building, the building envelope must be maintained. Windows are the most obvious weak link in maintaining the building envelope. As a result, any broken windows should be addressed to maintain a secure building envelope. This might include window replacement or using plywood to "board up" a broken window. This is particularly important if there are known ACMs in poor condition near a broken window.

Roofing is a significant component of the building envelope and is known to contain ACMs. Periodic and ongoing roof maintenance and repair will be required to ensure the building envelope does not fail and release ACM to the surrounding environment.

Lastly, under the No Action Alternative, the Subject Property owner must 1) limit access to the building interiors, if there is a potential exposure to RBMs using security measures, including limiting access to authorized personnel, 2) ensure that the hazards of building entry are properly communicated to authorized personnel that may enter the building, 3) establish an entry protocol for other authorized personnel that may enter the building, and 4) limit access to the lead impacted soil located south and east of 716 West Kearny Boulevard.



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#### 4.2.2 ALTERNATIVE 2: COMPLETE ABATEMENT OF ACM AND LBP AND CAPPING LEAD-IMPACTED SOIL

The complete abatement alternative includes the following activities to address hazardous building materials:

1. Permitting and notifications for ACM and LBP abatement activities.
2. Site preparation by establishing security fencing, drop boxes, decontamination areas, appropriate containment, barrier, and air-filtration systems and other work area preparations necessary for workers in appropriate protective clothing to work in areas where RBMs are present.
3. Abating known ACM in other areas of the building (not including ACM in the ceiling or roof).
4. Disposing of waste at an appropriately licensed landfill under applicable waste manifests at a facility that can receive ACM and LBP impacted building materials.

This alternative includes the following activities to address lead-impacted soils:

Lead-impacted soils would be addressed by capping the soils to eliminate the exposure pathway. The area surrounding the cap would be graded so that when covered it would match the necessary grade for desired redevelopment. A typical soil capping scenario would involve covering soils with a minimum of 6 inches of stone base (typically ¾-inch minus gravel) followed by a 4-inch asphalt or concrete layer. Approximately 1,260 square feet of the Subject Property are anticipated to be covered by the cap.

Because the impacted soil would be contained on the Subject Property, institutional and engineering controls would be used to mitigate residual risk. An institutional control in the form of a land use covenant, or deed restriction, may be required by DTSC. Long-term operation & maintenance (O&M) in the form of routine inspection to document conditions would also be required. Repairs need to be implemented when issues are identified during inspections.

A portion of the cap would cover an area that is currently prone to collection of stormwater runoff, which could compromise the long-term durability of the cap. It is Stantec's understanding that stormwater management improvements are planned for the Subject Property; therefore, estimates and opinions for this alternative assume that ponding in the vicinity of the cap would be rectified by stormwater improvements prior to, or concurrent with, the installation of the cap.

#### 4.2.3 ALTERNATIVE 3: COMPLETE ABATEMENT OF ACM AND LBP AND TREATMENT OF CONTAMINATED SOIL WITHIN CHEMICALLY STABILIZED ON-SITE CONTAINMENT CELL

Alternative 3 includes the same activities as Alternative 2 to address hazardous building materials:

1. Permitting and notifications for ACM and LBP abatement activities.



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2. Site preparation by establishing security fencing, drop boxes, decontamination areas, appropriate containment, barriers, and air-filtration systems and other work area preparations necessary for workers in appropriate protective clothing to work in areas subject to ACM.
3. Disposing of waste at an appropriately licensed landfill under applicable waste manifests at a facility that can receive ACM and LBP impacted building materials.

Alternative 3 would utilize a different approach to address lead-impacted soil, which would be excavated at the Subject Property and mixed with a suitable solid phosphate blend amendment to bind metals. Treated soils would be backfilled into the excavation. Under this alternative, an estimated 140 cubic yards of lead-impacted soil would be excavated and mixed on the Subject Property with a suitable chemical admixture to stabilize metals of concern that may be leachable. Treatability testing would be required before remedy implementation to determine the most appropriate chemical admixture for stabilizing metals by creating insoluble compounds and creating a preference for metals compounds to sorb to soil particles. The estimated costs included in this ABCA are based on a single application of a solid phosphate blend amendment. Treated soil would be placed into an engineered containment cell that would be constructed south of the hangar building. Before material placement, the base of the engineered containment cell would also be amended with a blended phosphate-based material to fixate the metals to reduce their leachability. Confirmation sampling would be conducted to demonstrate that the lead-impacted soil was effectively mitigated.

Because contaminated material would be contained on the Site, institutional and engineering controls may be required to mitigate residual risk if contaminants cannot be effectively sorbed using the phosphate admixture. More specifically, an institutional control in the form of a land use covenant may be required. Long-term O&M in the form of routine inspection to document conditions may also be required.

#### **4.2.4 ALTERNATIVE 4: COMPLETE ABATEMENT OF ACM AND LBP AND EXCAVATION AND OFF-SITE DISPOSAL OF IMPACTED SOIL**

Alternative 4 includes the same activities as Alternatives 2 and 3 to address hazardous building materials:

1. Permitting and notifications for ACM and LBP abatement activities.
2. Site preparation by establishing security fencing, drop boxes, decontamination areas, appropriate containment, barriers, and air-filtration systems and other work area preparations necessary for workers in appropriate protective clothing to work in areas subject to ACM.
3. Abating known ACM in other areas of the building (not including ACM materials in the ceiling or roof).
4. Disposing of waste at an appropriately licensed landfill under applicable waste manifests at a facility that can receive ACM and LBP impacted building materials.

Alternative 4 would utilize a different approach to address lead-impacted soil, which would be excavation and disposal of the area where lead is present at concentrations exceeding 80 mg/kg. During excavation, soil would be separated and stockpiled according to whether it is anticipated to be classified as a non-hazardous waste, a RCRA-hazardous waste, or a California non-RCRA hazardous waste based on



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previous sampling data. Prior to disposal, the waste classifications would be confirmed via waste characterization sampling conducted at the direction of the selected disposal facility.

Based on the available data, it is estimated that a total of 140 cubic yards of soil would be excavated and disposed of off-site. Soils in the areas south and east of the building would be excavated to 3 feet bgs. Due to the inherent uncertainty of the previous environmental investigation, it was assumed that all of the soil removed will be classified as California non-RCRA hazardous waste. A 10% contingency was applied to the estimated volume.

Collection of confirmation soil samples from the floor and sidewalls would be screened using an X-Ray Fluorescence (XRF) analyzer and/or submitted for laboratory analyses when excavations are deemed complete. Excavation areas would not be backfilled until laboratory confirmation samples are received to ensure that remedial action objectives are met. Backfill material would be sourced from on-site soils that are not impacted above DTSC-SLs where possible and/or imported clean fill from a local source. It is anticipated that the required backfill soil volume would be approximately 140 cubic yards.

## 4.3 Evaluation of Cleanup Alternatives

To satisfy EPA requirements, three characteristics of each alternative -- effectiveness, implementability, and cost -- must be considered prior to selecting a recommended cleanup alternative. These characteristics are considered for each alternative in the following sections.

### 4.3.1 EFFECTIVENESS

Effectiveness has both short-term and long-term components. The short-term effectiveness of a remedial alternative is evaluated relative to its effect on human health and the environment during the implementation of the remedial action. Potential risks to the community, potential impacts on workers, the effectiveness and reliability of protective measures, potential environmental impact of the remedial action and the effectiveness/reliability of the mitigation measures during implementation, etc. are some of the factors that are typically considered. Long-term effectiveness and permanence of a remedial alternative are evaluated with respect to the following factors: magnitude of residual risk to human health and environment from the untreated or residual waste at the completion of remedial activities; an assessment of type, degree, and adequacy of long-term management (engineering controls, monitoring, maintenance, etc.) required for untreated or residual waste; an assessment of the long-term reliability of long-term management practices to provide continued protection from the untreated/residual waste; and the potential need for replacement of the remedy and continuing need for repairs to maintain the performance of the remedy.

#### 4.3.1.1 Alternative 1 (No Action)

The No Action Alternative would use engineering and institutional controls (e.g., locked doors, signage) to manage identified ACMs and other hazardous materials in-place within the Subject Property building. Various engineering and institutional controls, if properly implemented, would be effective in mitigating the risk associated with ACM and LBP by minimizing or eliminating human exposure to these materials. The effectiveness of this alternative requires initial measures to isolate hazards, and continued management to maintain hazard isolation and maintain fair condition of the roof. The overall effectiveness of Alternative 1



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is considered poor as the long-term reliability of on-going management is considered challenging. Alternative 1 has low effectiveness because there is no action implemented and thus no protection to ecological receptors is provided. It is also not protective of current or future receptors at the Subject Property. In addition, Alternative 1 would not allow the Subject Property to be redeveloped.

#### **4.3.1.2 Alternative 2 (Complete Abatement of ACM and LBP, Demolition of Hangar Building and Capping Impacted Soil)**

The Complete Abatement of ACM Alternative would use abatement to remove all identified ACM and LBP within the building. With all ACMs and hazardous materials abated from the building, the risk to human health associated with exposure would be eliminated. There would be no need for ongoing engineering and institutional controls for RBMs on the Subject Property.

This alternative eliminates the potential for direct contact with the lead-impacted soils located on the Subject Property and reduces a potential secondary exposure pathway of stormwater runoff. A concrete or asphalt cap would mitigate the direct exposure risk posed by the impacted soil however the lead-impacted soil would remain on the Subject Property and may be encountered during future maintenance or redevelopment activities and would need to be managed accordingly. The overall effectiveness of this alternative is considered good-moderate.

#### **4.3.1.3 Alternative 3 (Complete Abatement of ACM and LBP and Treatment of Contaminated Soil within Chemically Stabilized On-Site Containment Cell)**

The Complete Abatement of ACM Alternative would use abatement to remove all identified ACM and LBP within the building. With all ACMs and hazardous materials abated from the building the risk to human health associated with exposure would be eliminated. There would be no need for ongoing engineering and institutional controls for RBMs on the Subject Property.

Alternative 3 eliminates the potential for direct contact with the most contaminated materials and reduces a potential secondary source of stormwater. Residual risk of excavated contaminated material would be managed by the designed containment with stabilized soil. The phosphate admixture is a proven remedy for lead-impacted soils however the effectiveness of this alternative is not guaranteed until a bench study is completed. This alternative would be a more effective solution for a larger volume of soil. The overall effectiveness of this alternative is considered moderate.

#### **4.3.1.4 Alternative 4 (Complete Abatement of ACM and LBP, and Excavation and Off-Site Disposal of Impacted Soils)**

The Complete Abatement of ACM Alternative would use abatement to remove all identified ACM and LBP within the building. With all ACMs and hazardous materials abated from the building the risk to human health associated with exposure would be eliminated. There would be no need for ongoing engineering and institutional controls for RBMs on the Subject Property.

Comprehensive soil excavation and off-site disposal is an effective remedial method because it removes impacted soils and utilizes an approved off-site disposal facility for final disposition. This alternative



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effectively eliminates potential future exposure to contaminated soils at the Property through comprehensive source removal. This alternative effectively eliminates all future contact, human or environmental, with contaminated soils on-site. This alternative would achieve the cleanup goal of unrestricted residential land use for the future development of the Subject Property. The overall effectiveness of Alternative 4 is considered good.

#### **4.3.2 ABILITY TO IMPLEMENT**

An assessment of implementability is intended to evaluate whether, or with how much difficulty, the cleanup alternative can be implemented and whether the alternative's continued effectiveness can be assessed and verified.

##### **4.3.2.1 Alternative 1 (No Action)**

Alternative 1 has already been implemented by the Subject Property owner. If the no action alternative is selected, Stantec recommends that additional measures be taken to ensure the isolation of ACM in poor condition from the Subject Property owner and authorized personnel that may enter the building. Furthermore, the effectiveness of Alternative 1 may be verifiable depending on the condition of the building through the collection and analysis of air samples for ACM fibers. Alternative 1 is considered moderately easy to implement as it will require monitoring of institutional and engineering controls to mitigate exposure to and further release of ACM and lead impacted soil. However, Alternative 1 would not allow for the Subject Property to be redeveloped.

##### **4.3.2.2 Alternative 2 (Complete Abatement of ACM and LBP and Capping Impacted Soil and Managing In-Place)**

Abatement is considered relatively easy to implement and would provide advantages (over Alternative 1) because of the area above the ceiling up to the roof becoming fully visible and accessible. Implementation of this alternative would be feasible using relatively routine construction methods (asphalt or concrete capping). The cap and required maintenance of the south and east areas of the Subject Property may restrict future redevelopment activities. Construction of the cap would require engineering design and field oversight and is expected to take 1-2 weeks to implement in the field. Therefore, the overall implementability of this alternative is considered good-moderate.

##### **4.3.2.3 Alternative 3 (Complete Abatement of ACM and LBP and Treatment of Contaminated Soil within Chemically Stabilized On-Site Containment Cell)**

Complete abatement of RBMs from the Hangar Building is considered relatively easy to implement. However, soil stabilization is considered to be moderately difficult to implement. While the equipment, materials, and services are readily available and the process is not complicated, excavation and mixing of lead-impacted soils with a phosphate admixture may not be effective until demonstrated by a bench test so there is no guarantee that the process would be effective. Furthermore, this alternative may be challenging to implement because of space limitations on the Subject Property and performing excavation and soil mixing may be challenging during the wet season with wind and rain potentially causing erosion



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of stockpiled materials and potentially creating track off. Construction of the onsite containment cell would require engineering design and field oversight and is expected to take 1-2 weeks to implement in the field.

#### **4.3.2.4 Alternative 4 (Complete Abatement of ACM and LBP and Excavation and Off-Site Disposal of Impacted Soil)**

Removal of ACM is considered relatively easy to implement for the Hangar Building as discussed in previous sections. To excavate the lead-impacted soils, this alternative would require more trucking, transportation and disposal than the other considered alternatives. Confirmation sampling would be conducted to demonstrate that lead-impacted soils on the Subject Property have been adequately removed. Multiple mobilizations may be necessary to properly profile the waste after it is excavated and prior to offsite transport and disposal at a certified landfill licensed to receive California hazardous waste. Overall, these procedures are relatively easy to implement.

### **4.3.3 COSTS**

Estimated costs were prepared for each of the four alternatives as presented in Appendix C. These costs are considered to be rough order of magnitude (ROM) cost estimates based on subcontractor bids from three regional qualified asbestos abatement contractors, professional judgement and experience, and in consideration of several key assumptions as described in the subsections above. These costs should be refined once an alternative is selected.

#### **4.3.3.1 Alternative 1 (No Action)**

The ROM cost associated with Alternative 1 is difficult to quantify and therefore is assigned a ROM cost of \$0. There are likely costs associated with 1) added isolation measures for ACMs in poor condition; 2) continued monitoring to evaluate whether materials that are presently intact deteriorate over time; and 3) maintaining the building envelope; 4) inevitable demolition of the building if it is not maintained; and 5) restricting access to the lead impacted soil. These broad considerations have not been incorporated into the ROM cost estimate as there are many other building management and maintenance considerations if the No Action Alternative is implemented. This also does not account for the considerable lost opportunity cost of leaving the Subject Property unfit for community use.

#### **4.3.3.2 Alternative 2 (Complete Abatement of ACM and LBP and Capping Impacted Soil and Managing In-Place)**

The ROM cost estimate to implement Alternative 2 would be approximately **\$479,100**. This includes the removal of all identified ACMs and LBP in the building. This estimate includes oversight during abatement activities for a period of 4 weeks and closeout reporting to be submitted to various regulatory agencies once the project is complete. This alternative includes capping of the lead impacted soil around the hangar building's dripline. This alternative would be the most cost effective of the alternatives involving cleanup actions. Due to the requirement to maintain the cap, this alternative would require routine annual monitoring and reporting. The overall cost effectiveness of this alternative is considered good-moderate.



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#### 4.3.3.3 Alternative 3 (Complete Abatement of ACM and LBP and Treatment of Contaminated Soil within Chemically Stabilized On-Site Containment Cell)

The ROM cost estimate to implement Alternative 3 would be approximately **\$746,400**. This includes the removal of all identified ACMs and LBP in the building. This estimate includes oversight during abatement activities for a period of 4 weeks and closeout reporting to be submitted to various regulatory agencies once the project is complete. This alternative also includes construction of a chemically stabilized containment cell on the Subject Property. Costs associated with this alternative are largely based on 1) volume of excavated material, 2) containment cell construction, and 3) site restoration. The overall cost effectiveness of this alternative is considered moderate.

#### 4.3.3.4 Alternative 4 (Complete Abatement of ACM and LBP Excavation and Off-Site Disposal of Impacted Soil)

The ROM cost estimate to implement Alternative 4 would be approximately **\$385,500**. This includes the removal of all identified ACMs and LBP in the building. This estimate includes oversight during abatement activities for a period of 4 weeks and closeout reporting to be submitted to various regulatory agencies once the project is complete. This alternative also includes removal and disposal of the lead impacted soil where the excavation would be backfilled with structural fill. The cost for this alternative assumes disposal of soils as California non-RCRA hazardous waste.

### 4.3.4 GREEN REMEDIATION CONSIDERATIONS

The carbon footprint associated with asbestos and other hazardous abatement is relatively small. ACM and lead-impacted waste requires disposal in an appropriately licensed landfill. The American Avenue Landfill is located 25 miles from the Subject Property so the carbon footprint associated with non-friable ACM transport for disposal will be relatively small. Excavation and disposal of lead-impacted soils (Alternative 4) would entail the most truck traffic and therefore, when compared to the other alternatives, would generate the most greenhouse gas emissions. However, the lead-impacted soils are limited in volume and there is no significant difference in predicted greenhouse gas emissions for the four remedial alternatives considered. No site-specific risk factors were identified under this alternative with respect to climate change considerations. So overall adaptive reuse of existing brownfield structures is considered a form of green remediation.

## 4.4 Recommended Cleanup Alternative

To quantitatively evaluate the four cleanup alternatives, the following point system is utilized:

- Good – 5 points
- Good-Moderate – 4 points
- Moderate – 3 points
- Moderate-Poor – 2 points
- Poor – 1 point
- Not Applicable (N/A) – 0 points



## Analysis of Brownfield Cleanup Alternatives

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Alternative	Effectiveness	Implementability	Cost	Score
Alternative 1	Poor: 1	N/A: 0	Good: 5	6
Alternative 2	Good-Moderate: 4	Good-Moderate: 4	Good-Moderate: 4	12
Alternative 3	Moderate: 3	Moderate: 3	Moderate: 3	9
Alternative 4	Good: 5	Good: 5	Good-Moderate: 4	14

Based upon this quantitative scoring system for, **Alternative 4: Complete Abatement of ACM and LBP and Excavation and Off-Site Disposal of Impacted Soil** is the recommended remedial action for the Subject Property. This alternative is effective, relatively easy to implement and is the most cost-effective remedial action considered for the project.



## 5 References

- Group Delta. 2024. "Asbestos and Lead-Based Paint Survey, Fresno Chandler Airport, FUT and T Hangars, 510 West Kearney Boulevard, Fresno, California." December 13.
- . 2024. "Phase I Environmental Site Assessment and Title IV Hazard Review, Proposed Aviation Academy, Fresno Chandler Executive Airport, 640 and 716 West Kearney Boulevard, Portion of APN 464-220-43T, Fresno, Fresno County, California 93706." December 13.
- . 2025. "Draft Phase II Environmental Site Assessment, Proposed Aviation Academy, Fresno Chandler Executive Airport, 716 West Kearney Boulevard, Fresno, California." May 22.
- U.S. Environmental Protection Agency (USEPA). 1987. 40 Code of Federal Regulations (CFR) Part 763; Asbestos-Containing Materials in Schools; Final Rule. October.
- U.S. Department of Housing and Urban Development. 1997. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Chapter 7: Lead-Based Paint Inspection.



# Figures





# **Appendix A – Asbestos and Lead Based Paint Survey**



ASBESTOS AND LEAD-BASED PAINT SURVEY

Fresno Chandler Airport  
FUT and T Hangars  
510 W. Kearney Blvd.  
Fresno, CA

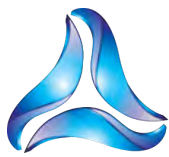
Submitted to

City of Fresno  
4995 E. Clinton Way  
Fresno, CA 93727

Prepared by

GROUP DELTA CONSULTANTS, INC.  
32 Mauchly, Suite B  
Irvine, CA 92618

Project No. EN8461A  
December 13, 2024



# GROUP DELTA

December 13, 2024

City of Fresno  
4995 E. Clinton Way  
Fresno, CA 93727

Attention: Ms. Cristal De La Torre

Subject: Asbestos and Lead Based Paint Survey  
Fresno Chandler Executive Airport  
FUT and T Hangars  
510 W. Kearney Blvd., Fresno, CA  
Group Delta Project No. EN8461A

Dear Ms. De La Torre:

Group Delta Consultants, Inc. (Group Delta) is pleased to submit this Asbestos and Lead-Based Paint Survey report for the Fresno Chandler Airport, FUT (Hangar 2) and T (Hangar 1) Hangars, 510 W. Kearney Blvd., Fresno, CA.

The purpose of the testing and this report is to provide locations of asbestos-containing materials (ACMs), and lead-based paint (LBP) at the structures within the scope of work.

We appreciate your selection of Group Delta for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Very truly yours,  
**GROUP DELTA CONSULTANTS, INC.**

Jerry Sherman, CAC, CDPH, HAZWOPER Supervisor Certified  
Hazardous Materials Division Manager

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### Appendices

Appendix A - Asbestos Analytical Data and Sample Chain of Custody Record Forms

Appendix B - XRF Download for Lead-based Paint Testing

Appendix C - Consultant Certificates

## 1.0 INTRODUCTION

Group Delta Consultants, Inc. (Group Delta) performed an asbestos and lead-based paint (LBP) survey at the Fresno Chandler Airport, FUT and T Hangars, 510 W. Kearney Blvd., Fresno, CA (site).

The purpose of this survey was to test for asbestos and lead in building materials and to quantify these amounts. Samples were collected throughout the interior and exterior areas including the roof. All work completed is compliant with federal, state, and local air quality regulations.

Group Delta's on-site asbestos and LBP survey was performed on October 10<sup>th</sup>-11<sup>th</sup>, and November 19, 2024. On-site survey work was completed by Group Delta employees, Mr. David Raver, and Mr. Jerry Sherman. Mr. Raver and Mr. Sherman are Cal/OSHA Certified Asbestos Consultants (CAC) and California Department of Public Health (CDPH) Lead Inspector/Assessors and/or Lead Sampling Technicians. This report summarizes our assessment findings.

## 2.0 BUILDING DESCRIPTION

The FUT Hangar is a concrete and metal/wood framed building on concrete slab finished with paint on the exterior. The building construction typically consists of a concrete foundation, wood or metal framing with wood, sheet vinyl, vinyl floor tiles and ceiling tiles. The roof is built up roofing material.

The T Hangars are a metal framed and metal finished building on a concrete foundation. Interior walls are unfinished drywall and the roof is metal.

## 3.0 METHODOLOGY

The survey was based on sampling of suspect asbestos-containing materials (ACMs) and a screening of representative painted surfaces and coatings for LBP. Specific survey procedures followed by Group Delta for this survey are provided in the following paragraphs. Laboratory reports for the samples collected are included in Attachment A.

### 3.1 Asbestos – Survey Methodology

Identification of suspect ACM was performed by visually surveying accessible structural and architectural components and finishes at the site. No excavation or subsurface investigation was conducted to discover buried insulated piping and/or asbestos cement pipes concealed below the surface. All findings, conclusions, and analytical data presented in this report are based on visual inspection and the results of the sampling and analysis of suspected ACM discovered during the survey.

Suspect ACM identified during this survey was bulk sampled using sampling guidelines established by the Environmental Protection Agency (EPA) and by generally following the methods described in Appendix K of Title 8, CCR, Section 1529 of the California Code of Regulations for sample collection. The following summarizes the sampling procedures utilized.

- Visually identified suspect ACM were categorized into homogeneous material areas. A homogeneous material is defined as being a surfacing material, thermal system insulation, or miscellaneous material which is uniform in color and texture.
- A sampling scheme was developed based upon the location and quantity of the various

homogeneous materials.

- Trained and certified personnel using appropriate sampling tools and leak-tight containers collected bulk samples.
- Bulk sample collection tools were decontaminated after the collection of each bulk sample to prevent the spread of secondary contamination to subsequent bulk samples.
- Each bulk sample was labeled with a unique sample identification number and recorded on a bulk sample log.
- Bulk samples collected were submitted to a laboratory with a chain of custody record.

All material quantities reported herein are rough order of magnitude estimates and should not be used for bidding purposes without review of available record drawings and on-site field verification by the bidder. The information provided in this report should be used in conjunction with construction documents and the contractor's own field verification of the abatement scope of work including location and extent of removal required for the renovation/demolition project being undertaken at the site. In the event concealed suspect ACMs not previously identified are discovered, the contractor is obligated to stop and notify the owner immediately in compliance with applicable regulations.

### **3.2 Asbestos Analytical Methodology**

Bulk samples of suspect ACM were sent to AmeriSci in Carson, California and EMSL in San Diego, California. AmeriSci and EMSL are laboratory's accredited under the National Institute of Standards and Technology (NIST)/National Voluntary Laboratory Accreditation Program (NVLAP) and the California Environmental Laboratory Accreditation Program (Cal-ELAP) for bulk asbestos sample analysis. The samples were submitted for analysis by Polarized Light Microscopy (PLM) utilizing dispersion staining techniques in accordance with the EPA's "Method for the Determination of Asbestos in Bulk Building Materials" U.S. EPA/600/R-93/116, dated July 1993 and adopted by the NVLAP as Test Method Code 18/A01.

The standard PLM analytical method has a limit of quantification of 1% asbestos. For materials with asbestos detected at trace levels or below 1% by standard PLM, the material must be considered above 1% (ACM) unless re-analyzed and found to be less than 1% by the PLM point count method (400 points minimum but recommended at 1,000 points). Each sample of a homogeneous area material with trace result(s) must be re-analyzed by point count and found to be less than 1% or assumed to be an ACM per EPA regulation.

### **3.3 Lead Testing – Survey and Analytical Methodology**

LBP is defined as any painted surface with lead levels exceeding 5,000 parts per million (ppm), 1.0 milligrams per square centimeter (mg/cm<sup>2</sup>) or greater than 0.5 percent by weight (wt%), as set forth in the Department of Housing and Urban Development (HUD) guidelines and California Department of Public Health (CDPH) regulations. Lead-Containing Paints (LCPs) are paints and coatings that contain any amount of detectable lead as defined by Cal/OSHA. It is likely LBPs are present at the site due to the age of construction. Most paints and coatings on pre-1978 buildings contain some detectable lead subject to Cal/OSHA regulation. Therefore, the exhaustive testing required to prove painted coatings do not contain lead is not practical or cost effective. Consequently, all paints and architectural coatings must be considered to contain some detectable levels of lead unless proven otherwise by laboratory analysis.

This survey was based on screening level LBP testing for characterizing the general presence of lead in existing paints and coatings. An XRF Analyzer direct read lead testing instrument was used for paint

analysis. The results presented herein are anticipated to be representative of typical conditions but are not inclusive of all painted/coated surfaces present at the buildings. The results of this survey should assist with compliance to the Cal/OSHA Lead in Construction Standard and preliminary evaluation of potential construction waste streams.

#### 4.0 RESULTS

##### 4.1 Asbestos Survey

Group Delta collected 71 bulk samples of suspect ACM which were analyzed by PLM analysis. The suspect ACM sampled during this survey are summarized below. The analytical laboratory results for sampled suspect ACMs are listed in Appendix A – Analytical Laboratory Reports. Material sample locations can be found in the attached Figures.

##### Materials Sampled with Asbestos Reported:

Sample #	Material	Building/Location	Asbestos (Type/Percentage)	Condition	Friable / Non-Friable	Approx. Qnty.
01-03	Door window putty	FUT Hanger- Exterior doors	Chrysotile- Trace <1% *	Good	Non-friable	800 SF
07-09	Roof core	FUT Hanger- Roof	Chrysotile- 40-60%	Good	Non-friable	9,375SF
13-15	Walking mat w/ adhesive	FUT Hanger- Roof	Chrysotile- 2%	Good	Non-friable	20 SF
31-33	12x12 Floor tile and mastic	FUT Hanger- NW office floor	Chrysotile- 3-4%	Good	Non-friable	125 SF
36	Drywall w/ joint compound (painted blue)	FUT Hanger- NW office	Chrysotile- Trace <1% *	Good	Friable	500 SF
37-39	Texture coat	FUT Hanger- NW office walls	Chrysotile- Trace <1% *	Good	Friable	500 SF
44-46	Drywall w/ joint compound	FUT Hanger- Shop kitchen	Chrysotile- 2%	Good	Friable	500 SF
47-49	Sprayed on acoustic ceiling	FUT Hanger- South wall	Chrysotile- 2%	Good	Non-friable	500 SF
51-53	9x9 Floor tile	FUT Hanger- Ladies restroom	Chrysotile- 5%	Good	Non-friable	25 SF
Assumed	Electrical switch blocks	FUT Hanger- electrical panels	Assumed	Good	Non-friable	12 SF

SF = square foot

\* = Materials with <1% asbestos reported are considered ACM unless PLM 400 or 1,000-point count analysis is conducted to confirm material is <1%.

**Materials sampled with no asbestos reported FUT Hangar:**

- Unfinished drywall
- Roof penetration mastic
- Vapor barrier paper
- Exterior seal
- Window putty (Windows, not door windows)
- Concrete
- Pebble path and adhesive
- Electrical outlet
- Desktop
- Electrical tape
- 12x12 Ceiling tile and mastic
- Ceramic tile and mortar
- White and gray sheet flooring

**Materials sampled with no asbestos reported T Hangar:**

- Drywall

Refer to Attachments for a complete set of the laboratory results and Figures for sample locations.

**4.2 Lead Containing Paints, Coatings, and Materials**

Group Delta performed a total of 74 XRF lead tests including calibrations from the areas that may be impacted by renovation/demolition. The following is a summary of building components tested and found to be positive for LBP by XRF:

<b>Component</b>	<b>Location, Result and Approx. Quantity</b>	<b>Color, Substrate, &amp; Condition</b>
V Beam XRF Sample # 36	FUT Hangar (Hangar 2) Exterior (250 SF) 1.7 mg/cm <sup>2</sup>	White, Metal, Intact
V Beam XRF Sample # 38	FUT Hangar (Hangar 2) Exterior (250 SF) 2.2 mg/cm <sup>2</sup>	White, Wood, Poor

Beam XRF Sample # 40	FUT Hangar (Hangar 2) Exterior (100 SF) 2.7 mg/cm <sup>2</sup>	Brown, Wood, Poor
Beam Assumed, (Inaccessible)	FUT Hangar (Hangar 2) Interior (1,800 SF) Assumed	Red, Metal, Intact

Note: red metal structural beams were not tested for lead due to height restrictions. They are assumed to be LBP.

**Materials tested that are not lead-based paint can be found in the attached XRF table.**

**General Interpretations of Lead-Containing Paint (LCP) and LBP Findings Reported:**

All painted components must be presumed to contain some detectable levels of lead regardless of non – detection by the XRF method unless exhaustively tested by paint chip analysis. Untested painted/coated components must be presumed to contain some lead at detectable levels. Limited surfaces tested contained high levels of lead considered to be LBP and most of the remaining surfaces contained some detectable lead. The tested surfaces that reported low levels of detected lead must be considered LCP and coatings in the absence of exhaustive testing by wet chemistry methods.

**Paint Condition Findings:**

The condition of paint at this site is generally in intact and poor condition. Since even low levels of paint may exhibit hazardous waste characteristics, care must be taken to eliminate loose and peeling paint prior to general building demolition. Any loose, peeling or flaking paint should be removed and disposed of as lead-containing waste.

**5.0 CONCLUSIONS AND RECOMMENDATIONS**

**5.1 Asbestos Containing Materials**

Prior to renovation activities, known or assumed ACMs and asbestos-containing construction materials (ACCMs) that are likely to be disturbed by those activities must be removed and disposed of in accordance with all applicable regulations including but not limited to the federal National Emissions Standard for Hazardous Air Pollutants (NESHAPS) and Cal/OSHA regulations. A Cal-OSHA registered, and State licensed, registered asbestos contractor (abatement/demolition/roofing) is required for removal of ACM prior to general demolition.

Where known or suspected asbestos contaminated spaces must be accessed and entered, the Contractor shall either abate the contamination throughout the space or employ a contractor assist type approach using asbestos qualified and protected trades personnel assisted by a registered asbestos contractor to access the area safely to perform the work and leave the contaminated area through a decontamination containment in a manner that does not allow the exposure of personnel or spread of contamination outside the contaminated work space.

Where removal is unavoidable, the contractor's abatement sub-contractor should remove all friable regulated asbestos-containing material (RACM) under Class 1 removal requirements and dispose of waste as hazardous asbestos waste at a landfill permitted for asbestos hazardous waste disposal. The contractor's abatement sub-contractor should also remove all category I & II non-friable ACM in a manner that does not produce friable ACM under Cal/OSHA Class II removal requirements and dispose of removed materials as non-hazardous asbestos waste at a landfill permitted for asbestos waste disposal.

The following additional requirements should be adhered to for any maintenance, renovation, or demolition projects requiring asbestos disturbance and/or removal:

- *All asbestos-containing wastes shall be manifested as either hazardous or non-hazardous based on asbestos content, friability, and actual waste stream classification.*
- *All asbestos removal should be overseen by a qualified independent third party, retained by the building owner or manager of the building to ensure proper removal, clean up, work area clearance, and review waste shipping and disposal documentation.*
- *Contractor should perform all work in compliance with contract documents and the most recent edition of all applicable Federal, State, and local regulations, standards, and codes governing abatement, transport, and disposal of asbestos.*

## 5.2 Lead Containing Paints and Coatings

The painted components tested at the subject building typically had detectable levels of lead and should be considered LCP coated. LBP was detected at several areas of the building. All paints and coatings should be considered LCP or coatings in the absence of exhaustive sampling and laboratory analysis. The disturbance of these components during demolition activities will require use of personnel trained in lead hazards for construction and will require compliance with applicable Cal/OSHA and Cal/EPA regulation.

At the present time, there is no state or federal regulation requiring mandatory lead removal or abatement prior to disturbance, demolition or renovation of structures with identified lead materials. However, prior to hot work on painted metal, the paint either needs to be removed or supplied air respirators worn during welding or cutting operation. In addition, there are applicable lead specific Cal/OSHA worker protection requirements and Cal/EPA waste disposal requirements that do apply to lead-related construction activities and associated wastes:

- ◆ **Cal/OSHA:** The Cal/OSHA regulation, Title 8, CCR, Section 1532.1 Lead governs occupation exposure to lead. This regulation requires that any task that may potentially expose workers to any concentration of lead, be monitored to determine workers eight-hour time weighted average (TWA) exposure to lead. Prior to initiation of certain activities, referred to as "trigger tasks", that are believed to have the capability of creating an excessive lead exposure, such workers must be properly fitted with respiratory protection and protective clothing until personal eight-hour TWA results reveal exposures within acceptable levels. Pertinent examples of trigger tasks are manual demolition, manual paint scraping and power tool removal, and hot work involving lead-containing coatings or materials. Cal/OSHA also has agency pre-start notification requirements and worker training and certification depending on exposure levels. Clearly these requirements will apply to demolition, patch and repair, paint removal, and surface preparation work at this site.
- ◆ **Cal/EPA:** Cal/EPA regulates disposal of lead hazardous waste (22 CCR Division 4.5, Environmental Health Standards for the Management of Hazardous Waste). The Cal/EPA Department of Toxic

Substance Control (DTSC) has issued guidance indicating that architectural debris with intact lead paint is normally anticipated to be handled as general construction waste. Since detected LCP was generally in fair to good condition and most paint coatings tested had low to moderate lead content, it is unlikely that most of the demolition debris will be hazardous as a composite sample. However, all lead containing waste streams should be considered potentially lead hazardous pending waste testing. Further, all surface preparation and paint removal wastes must be considered hazardous wastes due to the likelihood of paint chip lead levels exceeding 1,000 total lead or 5 ppm soluble lead.

All construction activities impacting lead must be performed in compliance with the most recent edition of all applicable Federal, State, and local regulations, standards, and codes governing abatement, transport, and disposal of lead containing/contaminated materials. Selective and general demolition activities will involve disturbing lead and possibly creating lead hazardous wastes. These construction activities must be controlled to prevent uncontrolled release of lead contamination and for environmental protection.

The Contractor conducting building renovation and selective demolition controls the means and methods used and therefore should be required by the contract document to ensure that the renovation and demolition processes are conducted in a manner that creates the minimum amount of hazardous waste and leaves the site free of lead contamination exceeding regulatory levels.

## 6.0 LIMITATIONS

Group Delta conducted this asbestos and lead survey of above ground conditions. No excavation or subsurface investigation was conducted to discover buried insulated piping and/or asbestos cement pipes concealed below the surface.

## 7.0 CLOSING

Group Delta Consultants performed the hazardous materials survey services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

Conclusions and recommendations made regarding hazardous materials were based upon information obtained from samples and tests collected at specific locations, review of information provided to us, and professional judgment. Recommendations in this report were made based on conditions that Group Delta reasonably infer to exist between sampling points.

This report is intended as an informational resource for UCSD. Any contractor using this document assumes all responsibility for reviewing all available information and for verifying existing site conditions including location and extent of hazardous materials present at the Site.

Should any significant discrepancy between this report and existing conditions be discovered, the contractor shall notify the project manager, contracting officer, or inspector immediately.

If you have any questions or concerns regarding this document, please do not hesitate to call Jerry Sherman at 619-348-9145.

## 8.0 SIGNATURES AND QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Report prepared for  
City of Fresno by:



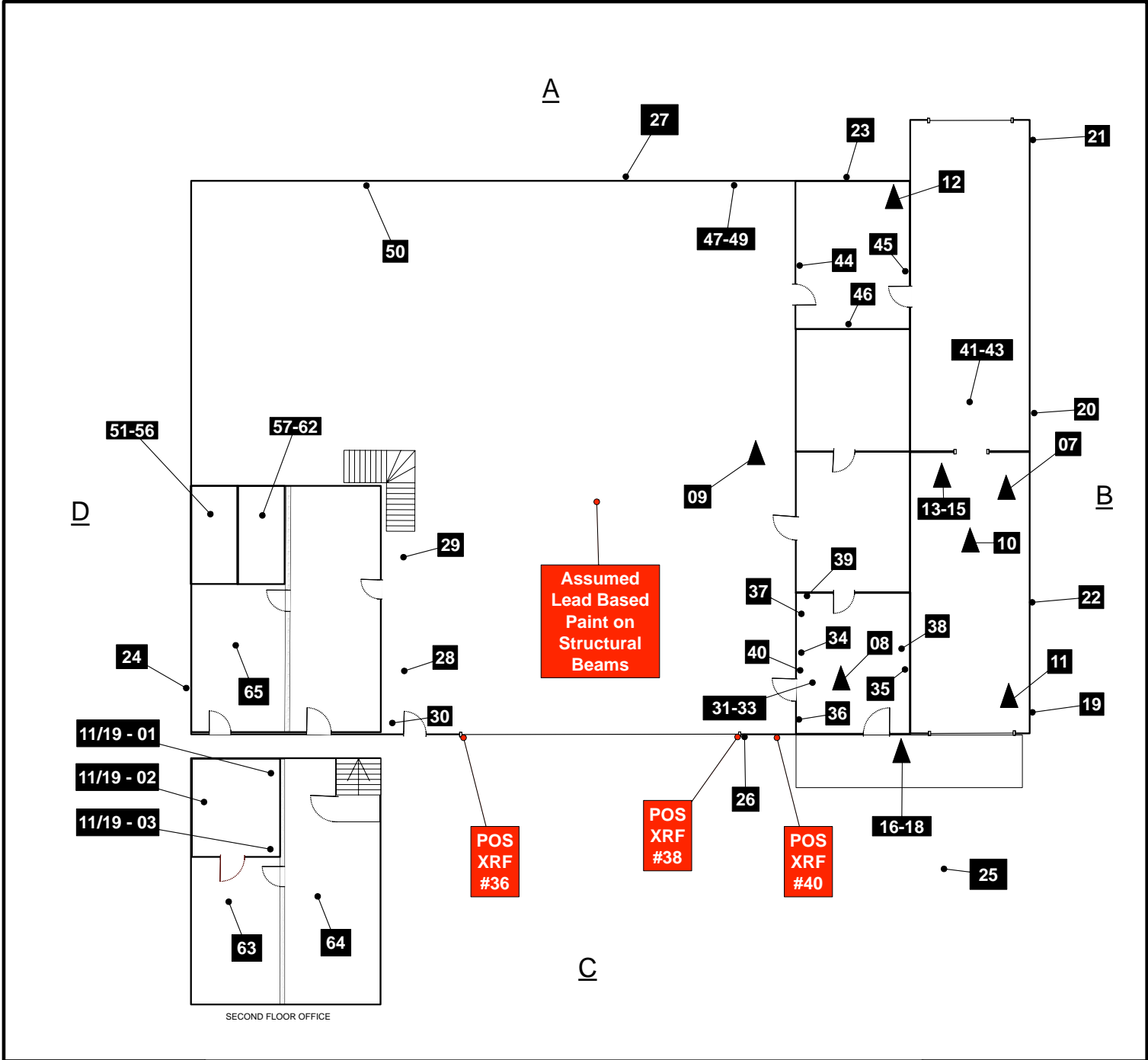
Jerry Sherman, LEED AP, CAC, CDPH  
Hazardous Materials Division Manager  
Certified Asbestos Consultant #97-2324  
CDPH Lead I/A, #LRC00004015

Report reviewed for  
City of Fresno by:

David Raver, CAC, CDPH  
Hazardous Materials Project Manager  
Certified Asbestos Consultant #18-6221  
CDPH Lead Sampling Tech., #LRC00005894

*Figures*

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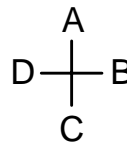


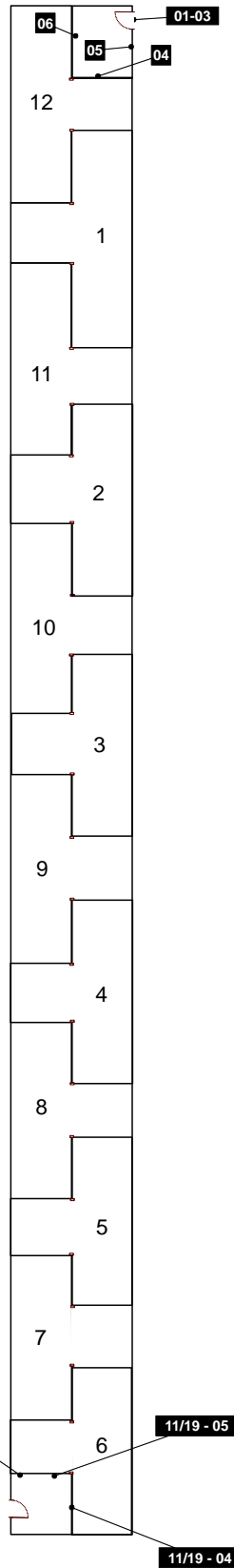
ASBESTOS & POSITIVE XRF SAMPLE LOCATION MAP

▲ = Roof Sample

Customer: City of Fresno  
 Project# EN8461A  
 Location: Chandler Executive Airport  
 Area: Large Hanger (FUT)  
 Sampled by: David Raver  
 Sample Date: 10-10-2024 & 11-19-2024

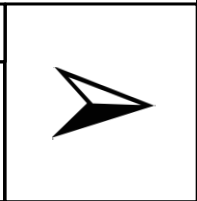
XRF Orientation





ASBESTOS SAMPLE LOCATION MAP

Customer: City of Fresno  
 Project# EN8461A  
 Location: Chandler Executive Airport  
 Area: Ex Hanger  
 Sampled by: David Raver  
 Sample Date: 10-10-2024 & 11-19-2024



*Appendix A Asbestos Analytical Data and Sample Chain of Custody Record Forms*

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# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANDLER EXEC AIRPORT  
 Collected By: D. RAVER

Date: OCT 10, 2024  
 Project Number: EN8461A  
 CAC or CSST No: 186211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
01	WINDOW PUTTY	A	EX HANGAR (DR) @ DOOR WINDOW W	GRY	GOOD	800 SF	NF
02						SEE #01	
03			EX HANGAR (DR) @ DOOR WINDOW E				
04	UNFINISHED DRYWALL	B	WEST OFFICE E-WALL	WHT	GOOD	10 SF	F
05			WEST OFFICE N. WALL			SEE #04	
06			WEST OFFICE S. WALL				
07	ROOF CORE	C	FUT. HANGAR (DR) WEST END	WHT/BLK/ORNGE	Good	9,375	NF
08			FUT HANGAR (DR) MIDDLE			SEE #07	
09			HANGAR #1 EAST END				
10	ROOF PENETRATION MASTIC	D	HANGAR #1 ROOF C A/C	WHT/BLK	GOOD	50 SF	NF

Analytical Method: PLM Turnaround Time: Same Day 24-hr 3 Day 5 Day  
 Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [chrisl@groupdelta.com](mailto:chrisl@groupdelta.com)

CHAIN OF CUSTODY:

1. <u>DAVID RAVER</u> Print/Signature	<u>CAC</u> Title	<u>10.10.2024</u> Inclusive Dates and Time
2. <u>Josh Colambini</u> Print/Signature (DB)	<u>LA TESTING</u> Title	<u>10.12.24 4pm</u> Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

Legend:

DW/JC = Drywall/Joint Compound RPM = Roof Penetration Mastic SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation SF = Square Feet LF = Linier Feet EA = Each F = Friable NF = Non-Friable



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANDLER EXEC. AIRPORT  
 Collected By: D. RAVER

Date: 10-10-24  
 Project Number: EN 8461A  
 OAC or CSST No: 18-6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
11	ROOF PENETRATION MASTIC	D	HANGER #1 - WEST END @ ELECTRICAL PENETRA.	BLK/WHT/CRAZY	GOOD	SEE #10	NF
12	↓	↓	HANGER #01 @ MIDDLE ROOF VENT	↓	↓	↓	↓
13	WALKING MAT w/ ADHESIVE	E	HANGER #1 WEST ROOF	BLK/TAN	GOOD	20 SF	NF
14	↓	↓	↓	↓	↓	SEE #13	↓
15	↓	↓	↓	↓	↓	↓	↓
16	VAPOR BARRIER PAPER	F	UNDER WOOD SHINGLES WEST SIDE	BLK	GOOD	400 SF	NF
17	↓	↓	↓	↓	↓	SEE #16	↓
18	↓	↓	EAST SIDE	↓	↓	↓	↓
19	EXTERNAL SEAL	G	BASE OF WEST WALL @ WOOD	WHT	GOOD	10 SF	NF
20	↓	↓	↓	↓	↓	SEE #19	↓

Analytical Method: PLM Turnaround Time: Same Day 24-hr 3 Day 5 Day

Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [chrisi@groupdelta.com](mailto:chrisi@groupdelta.com)

CHAIN OF CUSTODY:

1. <u>David Raver / [Signature]</u> Print/Signature	<u>CAC</u> Title	<u>10-11-2024</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

Legend:

DW/JC = Drywall/Joint Compound RPM = Roof Penetration Mastic SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation SF = Square Feet LF = Linier Feet EA = Each F = Friable NF = Non-Friable



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANDLER  
 Collected By: D. RAVER

Date: 10.10.24  
 Project Number: EN84601A  
 CAC of CSST No: 18.6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
21	EXTERIOR SEAL	G	BASE OF WOOD WALL @ EXTERIOR E. SIDE	WHT	GOOD	SEE # 19	NF
22	WINDOW PUTTY	H	WEST EXTERIOR WINDOW	WHT/GRY	DET.	10 SF	F
23	↓	↓	SOUTH EXTERIOR WINDOW	↓	↓	SEE # 22	↓
24	↓	↓	EAST EXTERIOR WINDOW	↓	↓	↓	↓
25	CONCRETE	I	NW PAD	GRY	Good	9,500 SF	NF
26	↓	↓	FOUNDATION	↓	↓	SEE # 25	↓
27	↓	↓	FOUNDATION	↓	↓	↓	↓
28	PEBBLE PATH + ADHESIVE	J	FLOOR @ N ENTRY	GRY	GOOD	25 SF	NF
29	↓	↓	↓	↓	↓	SEE # 28	↓
30	↓	↓	↓	↓	↓	↓	↓

Analytical Method: PLM Turnaround Time: Same Day 24-hr 3 Day 5 Day  
 Lab Results: Please E-mail results to: [jerrys@grouppdelta.com](mailto:jerrys@grouppdelta.com); [draver@grouppdelta.com](mailto:draver@grouppdelta.com); [chris@grouppdelta.com](mailto:chris@grouppdelta.com)

### CHAIN OF CUSTODY:

1. <u>David Raver</u> Print/Signature	<u>Rn/CAC</u> Title	<u>10.10.24</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

### Legend:

DW/JC = Drywall/Joint Compound RPM = Roof Penetration Mastic SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation SF = Square Feet LF = Linier Feet EA = Each F = Friable NF = Non-Friable

#332419182



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANNEL  
 Collected By: D. RAVER

Date: 10.10.24  
 Project Number: EN8461A  
 PAC or CSST No: 18-6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
31	12x12 VINYL FLOOR TILE w/ MASTIC	K	NW OFFICE FLOOR	BROWN/BLACK	GOOD	125 SF	NF
32						SCE 31	
33							
34	DRYWALL - PAINTS (UNFINISHED)	L	NW OFFICE	BW/WHT	GOOD	500 SF	F
35						SCE #34	
36							
37	TEXTURE COAT	M	NW OFFICE - E. WALL	BW/WHT	GOOD	500 SF	F
38			- W. WALL			SCE #37	
39			- S. WALL				
40	ELECTRICAL OUTLET	N	NW OFFICE	BROWN	GOOD	1	NF

Analytical Method: PLM

Turnaround Time: Same Day 24-hr 3 Day 5 Day

Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [christi@groupdelta.com](mailto:christi@groupdelta.com)

CHAIN OF CUSTODY:

1. <u>David Raver / Dave Rau</u> Print/Signature	<u>PM</u> Title	<u>10/11/2024</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

Legend:

DW/JC = Drywall/Joint Compound    RPM = Roof Penetration Mastic    SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation    SF = Square Feet    LF = Linier Feet    EA = Each    F = Friable    NF = Non-Friable

#332419182



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANDLER  
 Collected By: D. RAVER

Date: 10.10.24  
 Project Number: EN8461A  
 PAC or CSST No: 18.6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
41	DESKTOP	O	SHOP	BLK/BW	GOOD	100 SF	NF
42						SEE # 42	
43							
44	DRYWALL + JC TAPE	P	SHOP KITCHEN	PINK/WHT	GOOD	500 SF	F
45						SEE # 44	
46							
47	SO.A.C.	Q	HANGER ON S. WALL	WHT	GOOD	900 SF	F
48						SEE # 47	
49							
50	ELECTRICAL TAPE	R	HANGER ELECTRICAL BOX - INTERIOR	WHT	GOOD	< 1 SF	F

Analytical Method: PLM Turnaround Time: Same Day 24-hr 3 Day 5 Day  
 Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [chrisl@groupdelta.com](mailto:chrisl@groupdelta.com)

CHAIN OF CUSTODY:

1. <u>David Raver</u> Print/Signature	<u>CAC</u> Title	<u>10.10.24</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

**Legend:**  
 DW/JC = Drywall/Joint Compound    RPM = Roof Penetration Mastic    SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation    SF = Square Feet    LF = Linier Feet    EA = Each    F = Friable    NF = Non-Friable



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHANNELS  
 Collected By: D. RAVER

Date: 10.10.24  
 Project Number: EN841A  
 CAC or CSST No: 18.6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
51	9x9 VINYL FLOOR TILE + MASTIC	S	LADIES BATHROOM	RED/BLACK	GOOD	25 SF	NF
52						SEE #51	
53							
54	12x12 CEILING TILE + MASTIC	T	LADIES RESTROOM CEILING	WHITE/TAN TEXTURE	GOOD	25 SF	F
55						SEE #54	
56							
57	12x12 CEILING TILE + MASTIC	U	MENS RESTROOM	WHT W/ PINHOLE/BEN	GOOD	25 SF	F
58						SEE #57	
59							
60	CERAMIC TILE w/ MASTIC	✓	MENS RESTROOM	WHT/GRY	GOOD	25 SF	NF

Analytical Method: PLM

Turnaround Time: Same Day 24-hr 3 Day 5 Day

Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [chrisl@groupdelta.com](mailto:chrisl@groupdelta.com)

CHAIN OF CUSTODY:

1. <u>David Raver</u> Print/Signature	<u>CAC</u> Title	<u>10/10/24</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

Legend:

DW/JC = Drywall/Joint Compound    RPM = Roof Penetration Mastic    SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation    SF = Square Feet    LF = Linier Feet    EA = Each    F = Friable    NF = Non-Friable



# Asbestos Bulk Sample Log

Client: CITY OF FRESNO  
 Location: FRESNO CHAROLTA EAGLE AIRPORT  
 Collected By: D. RAVER

Date: 10.10.24  
 Project Number: EN846A  
 CAC or CSST No: 18.6211

Sample No.	Material	Homo. Area	Sample Location	Description	Condition	Quantity (SF/LF/EA)	Friability (F/NF)
61	CERAMIC TILE w/ MORTAR	V	MENS RESTROOM	WHT/GRY	GOOD	SEE # 60	NF
62	I	I	I	I	I	I	I
63	12x12 CEILING TILE w/ MASTIC	W	EAST OFFICE UPSTAIRS CEILING	WHT/TAN/BROWN	GOOD	800 SF	F
64	I	I	I	I	I	SEE # 63	I
65	I	I	EAST OFFICE DOWNSTAIRS CEILING	I	I	I	I

Analytical Method: PLM

Turnaround Time: Same Day 24-hr 3 Day 5 Day

Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com); [draver@groupdelta.com](mailto:draver@groupdelta.com); [chrisl@groupdelta.com](mailto:chrisl@groupdelta.com)

**CHAIN OF CUSTODY:**

1. <u>David Raver / [Signature]</u> Print/Signature	<u>CAC</u> Title	<u>10.10.24</u> Inclusive Dates and Time
2. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time
3. _____ Print/Signature	_____ Title	_____ Inclusive Dates and Time

**Legend:**

DW/JC = Drywall/Joint Compound    RPM = Roof Penetration Mastic    SOAC = Spray on Acoustic Ceiling  
 TSI = Thermal System Insulation    SF = Square Feet    LF = Linier Feet    EA = Each    F = Friable    NF = Non-Friable



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

\*\*\*\*\*.LATesting.com / hblab@latesting.com

LA Testing Order: 332419182

Customer ID: GDCA42

Customer PO:

Project ID:

Attention: David Raver

Group Delta

32 Mauchly

Suite B

Irvine, CA 92618

Phone: (760) 637-6002

Fax:

Received Date: 10/12/2024 4:00 PM

Analysis Date: 10/15/2024 - 10/16/2024

Collected Date: 10/10/2024

Project: CITY OF FRESNO / FRESNO CHANDLER EXEC AIRPORT / EN8461A

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01-Paint / Coating 332419182-0001	EX HANGER @ DOOR WINDOW W - WINDOW PUTTY - GRY	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01-Window Putty 332419182-0001A	EX HANGER @ DOOR WINDOW W - WINDOW PUTTY - GRY	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	<1% Chrysotile
02-Paint / Coating 332419182-0002	EX HANGER @ DOOR WINDOW W - WINDOW PUTTY - GRY	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02-Window Putty 332419182-0002A	EX HANGER @ DOOR WINDOW W - WINDOW PUTTY - GRY	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	<1% Chrysotile
03 332419182-0003	EX HANGER @ DOOR WINDOW E - WINDOW PUTTY - GRY	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	<1% Chrysotile
04 332419182-0004	WEST OFFICE E. WALL - UNFINISHED DRYWALL - WHT	Brown/White Fibrous Heterogeneous	10% Cellulose 2% Glass	70% Gypsum 18% Non-fibrous (Other)	None Detected
05 332419182-0005	WEST OFFICE N. WALL - UNFINISHED DRYWALL - WHT	Brown/White Fibrous Heterogeneous	10% Cellulose 2% Glass	70% Gypsum 18% Non-fibrous (Other)	None Detected
06 332419182-0006	WEST OFFICE S. WALL - UNFINISHED DRYWALL - WHT	Brown/White Fibrous Heterogeneous	10% Cellulose 3% Glass	70% Gypsum 17% Non-fibrous (Other)	None Detected
07-Coating 332419182-0007	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07-Backing 332419182-0007A	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	White Fibrous Homogeneous	40% Cellulose	20% Non-fibrous (Other)	40% Chrysotile
07-Felt 332419182-0007B	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
07-Roofing 1 332419182-0007C	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	White/Black Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
07-Tar 332419182-0007D	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/16/2024 22:17:50



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

\*\*\*\*\*.LATesting.com / hblab@lating.com

LA Testing Order: 332419182

Customer ID: GDCA42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
07-Roofing 2 332419182-0007E	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
07-Insulation 332419182-0007F	FUT. HANGER WEST END - ROOF CORE - WHT/BLK/ORNGE	Yellow Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected
08-Coating 332419182-0008	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08-Backing 332419182-0008A	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	White Fibrous Homogeneous	15% Cellulose	30% Non-fibrous (Other)	55% Chrysotile
08-Mastic 332419182-0008B	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08-Felt 332419182-0008C	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
08-Tar 332419182-0008D	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08-Roofing 332419182-0008E	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
08-Insulation 332419182-0008F	FUT. HANGER MIDDLE - ROOF CORE - WHT/BLK/ORNGE	Yellow Fibrous Homogeneous	95% Min. Wool	5% Non-fibrous (Other)	None Detected
09-Coating 332419182-0009	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	White Fibrous Homogeneous	15% Synthetic	85% Non-fibrous (Other)	None Detected
09-Backing 332419182-0009A	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	Gray Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
09-Mastic 332419182-0009B	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09-Felt 332419182-0009C	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
09-Tar 332419182-0009D	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09-Insulation 332419182-0009E	HANGER #1 EAST END - ROOF CORE - WHT/BLK/ORNGE	Yellow Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected
10-Mastic 1 332419182-0010	HANGER #1 ROOF @ A/C - ROOF PENETRATION MASTIC - WHT/BLK	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 332419182

Customer ID: GDCA42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
10-Mastic 2 332419182-0010A	HANGER #1 ROOF @ A/C - ROOF PENETRATION MASTIC - WHT/BLK	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-Mastic 3 332419182-0010B	HANGER #1 ROOF @ A/C - ROOF PENETRATION MASTIC - WHT/BLK	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-Mastic 4 332419182-0010C	HANGER #1 ROOF @ A/C - ROOF PENETRATION MASTIC - WHT/BLK	Beige Fibrous Heterogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
11 332419182-0011	HANGER #1 - WEST END @ ELECTRICAL PENETRATION - ROOF PENETRATION MASTIC - WHT/BLK	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Mastic 1 332419182-0012	HANGER #01 @ MIDDLE ROOF VENT - ROOF PENETRATION MASTIC - WHT/BLK	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Mastic 2 332419182-0012A	HANGER #01 @ MIDDLE ROOF VENT - ROOF PENETRATION MASTIC - WHT/BLK	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Mastic 3 332419182-0012B	HANGER #01 @ MIDDLE ROOF VENT - ROOF PENETRATION MASTIC - WHT/BLK	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Mastic 4 332419182-0012C	HANGER #01 @ MIDDLE ROOF VENT - ROOF PENETRATION MASTIC - WHT/BLK	Brown/Beige Fibrous Heterogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
13-Walking Mat 332419182-0013	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	Gray/Black Fibrous Heterogeneous	20% Cellulose 6% Glass	74% Non-fibrous (Other)	None Detected
13-Adhesive 332419182-0013A	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	White Non-Fibrous Homogeneous	6% Cellulose	92% Non-fibrous (Other)	2% Chrysotile
14-Walking Mat 332419182-0014	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	Gray/Black Fibrous Heterogeneous	20% Cellulose 6% Glass	74% Non-fibrous (Other)	None Detected
14-Adhesive 332419182-0014A	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	White Non-Fibrous Homogeneous	6% Cellulose	92% Non-fibrous (Other)	2% Chrysotile
15-Walking Mat 332419182-0015	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	Gray/Black Fibrous Heterogeneous	18% Cellulose 5% Glass	77% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15-Adhesive 332419182-0015A	HANGER #1 WEST ROOF - WALKING MAT W/ ADHESIVE - BLK/TAN	White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
16 332419182-0016	UNDER WOOD SHINGLES - WEST SIDE - VAPOR BARRIER PAPER - BLK	Black Fibrous Homogeneous	55% Cellulose 15% Synthetic	30% Non-fibrous (Other)	None Detected
17 332419182-0017	UNDER WOOD SHINGLES - WEST SIDE - VAPOR BARRIER PAPER - BLK	Black Fibrous Homogeneous	55% Cellulose 15% Synthetic	30% Non-fibrous (Other)	None Detected
18 332419182-0018	UNDER WOOD SHINGLES - EAST SIDE - VAPOR BARRIER PAPER - BLK	Brown/Black Fibrous Homogeneous	60% Cellulose 15% Synthetic	25% Non-fibrous (Other)	None Detected
19 332419182-0019	BASE OF WEST WALL @ WOOD - EXTERIOR SEAL - WHT	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20 332419182-0020	BASE OF WEST WALL @ WOOD - EXTERIOR SEAL - WHT	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21 332419182-0021	BASE OF WOOD WALL @ EXTERIOR E. SIDE - EXTERIOR SEAL - WHT	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22 332419182-0022	WEST EXTERIOR WINDOW - WINDOW PUTTY - WHT/GRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23 332419182-0023	SOUTH EXTERIOR WINDOW - WINDOW PUTTY - WHT/GRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24 332419182-0024	EAST EXTERIOR WINDOW - WINDOW PUTTY - WHT/GRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25 332419182-0025	NW PAD - CONCRETE - GRY	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
26 332419182-0026	FOUNDATION - CONCRETE - GRY	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
27 332419182-0027	FOUNDATION - CONCRETE - GRY	Gray Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected
28-Pebble Path 332419182-0028 <i>PLM analysis not suitable for rocky material</i>	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY				Not Analyzed
28-Adhesive 332419182-0028A	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28-Leveler 332419182-0028B	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY	White Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
29-Pebble Path 332419182-0029 <i>PLM analysis not suitable for rocky material</i>	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY				Not Analyzed
29-Adhesive 332419182-0029A	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29-Leveler 332419182-0029B	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY	White Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
30 332419182-0030 <i>Sample bag is empty</i>	FLOOR @ N ENTRY - PEBBLE PATH + ADHESIVE - GRY				Not Submitted
31-Vinyl Floor Tile 332419182-0031	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Green Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
31-Mastic 332419182-0031A	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
32-Vinyl Floor Tile 332419182-0032	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Green Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
32-Mastic 332419182-0032A	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
32-Leveler 332419182-0032B	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33-Vinyl Floor Tile 332419182-0033	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Green Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
33-Mastic 332419182-0033A	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
33-Leveler 332419182-0033B	NW OFFICE FLOOR - 12X12 VINYL FLOOR TILE W/ MASTIC - BROWN/BLACK	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34 332419182-0034	NW OFFICE - DRYWALL - PAINTED (UNFINISHED) - BLU/WHT	Brown/White Fibrous Heterogeneous	12% Cellulose	70% Gypsum 18% Non-fibrous (Other)	None Detected

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LA Testing Order: 332419182

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## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
35 332419182-0035	NW OFFICE - DRYWALL - PAINTED (UNFINISHED) - BLU/WHT	Brown/White Fibrous Heterogeneous	12% Cellulose	70% Gypsum 18% Non-fibrous (Other)	None Detected
36-Joint Compound 332419182-0036	NW OFFICE - DRYWALL - PAINTED (UNFINISHED) - BLU/WHT	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	<1% Chrysotile
36-Tape 332419182-0036A	NW OFFICE - DRYWALL - PAINTED (UNFINISHED) - BLU/WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
36-Drywall 332419182-0036B	NW OFFICE - DRYWALL - PAINTED (UNFINISHED) - BLU/WHT	Brown/White Fibrous Heterogeneous	12% Cellulose	70% Gypsum 18% Non-fibrous (Other)	None Detected
37 332419182-0037	NW OFFICE - E. WALL - TEXTURE COAT - BLU/WHT	Blue/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached paint material</i>					
38 332419182-0038	NW OFFICE - W. WALL - TEXTURE COAT - BLU/WHT	Blue/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached paint material</i>					
39 332419182-0039	NW OFFICE - S. WALL - TEXTURE COAT - BLU/WHT	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	<1% Chrysotile
40 332419182-0040	NW OFFICE - ELECTRICAL OUTLET - BRWN	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
41-Desktop 332419182-0041	SHOP - DESKTOP - BLK/BRWN	Brown/Red/Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
41-Mastic 332419182-0041A	SHOP - DESKTOP - BLK/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41-Backing 332419182-0041B	SHOP - DESKTOP - BLK/BRWN	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
41-Insulation 332419182-0041C	SHOP - DESKTOP - BLK/BRWN	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
42-Desktop 332419182-0042	SHOP - DESKTOP - BLK/BRWN	Brown/Red/Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
42-Mastic 332419182-0042A	SHOP - DESKTOP - BLK/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42-Backing 332419182-0042B	SHOP - DESKTOP - BLK/BRWN	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
42-Insulation 332419182-0042C	SHOP - DESKTOP - BLK/BRWN	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
43-Desktop 332419182-0043	SHOP - DESKTOP - BLK/BRWN	Gray/Tan/Red Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
43-Mastic 332419182-0043A	SHOP - DESKTOP - BLK/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
43-Backing 332419182-0043B	SHOP - DESKTOP - BLK/BRWN	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
43-Insulation 332419182-0043C	SHOP - DESKTOP - BLK/BRWN	Brown/Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
44-Joint Compound 332419182-0044	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
44-Tape 332419182-0044A	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
44-Drywall 332419182-0044B	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Brown/Pink Fibrous Heterogeneous	10% Cellulose 4% Glass	70% Gypsum 14% Non-fibrous (Other)	2% Chrysotile
45-Joint Compound 332419182-0045	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	White Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
45-Tape 332419182-0045A	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
45-Drywall 332419182-0045B	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Brown/Pink Fibrous Heterogeneous	10% Cellulose 4% Glass	70% Gypsum 14% Non-fibrous (Other)	2% Chrysotile
46-Joint Compound 332419182-0046	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 88% Non-fibrous (Other)	2% Chrysotile
46-Tape 332419182-0046A	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
46-Drywall 332419182-0046B	SHOP KITCHEN - DRYWALL + JC TAPE - PINK/WHT	Brown/Pink Fibrous Heterogeneous	10% Cellulose 3% Glass	70% Gypsum 15% Non-fibrous (Other)	2% Chrysotile
47-Acoustic Ceiling 332419182-0047	HANGER ON S. WALL - S.O.A.C. - WHT	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
47-Tape 332419182-0047A	HANGER ON S. WALL - S.O.A.C. - WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
47-Joint Compound 332419182-0047B	HANGER ON S. WALL - S.O.A.C. - WHT	White Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
47-Drywall 332419182-0047C	HANGER ON S. WALL - S.O.A.C. - WHT	Brown/Pink Fibrous Heterogeneous	10% Cellulose 2% Glass	70% Gypsum 16% Non-fibrous (Other)	2% Chrysotile
48-Acoustic Ceiling 332419182-0048	HANGER ON S. WALL - S.O.A.C. - WHT	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
48-Tape 332419182-0048A	HANGER ON S. WALL - S.O.A.C. - WHT	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected

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**Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E  
Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
48-Joint Compound 332419182-0048B	HANGER ON S. WALL - S.O.A.C. - WHT	White Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
49-Acoustic Ceiling 332419182-0049	HANGER ON S. WALL - S.O.A.C. - WHT	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 88% Non-fibrous (Other)	2% Chrysotile
49-Drywall Paper 332419182-0049A	HANGER ON S. WALL - S.O.A.C. - WHT	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
50 332419182-0050	HANGER ELECTRICAL BOX - INTERIOR - ELECTRICAL TAPE - WHT	Yellow/Beige Fibrous Heterogeneous	80% Glass	20% Non-fibrous (Other)	None Detected
51-Vinyl Floor Tile 332419182-0051	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Red Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
51-Mastic 332419182-0051A	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52-Vinyl Floor Tile 332419182-0052	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Red Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
52-Mastic 332419182-0052A	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53-Vinyl Floor Tile 332419182-0053	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Red Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
53-Mastic 332419182-0053A	LADIES BATHROOM - 9X9 VINYL FLOOR TILE W/ MASTIC - RED/BLACK	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54-Ceiling Tile 332419182-0054	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Brown/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
54-Mastic 332419182-0054A	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
55-Ceiling Tile 332419182-0055	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Brown/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
55-Mastic 332419182-0055A	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
56-Ceiling Tile 332419182-0056	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
56-Mastic 332419182-0056A	LADIES RESTROOM CEILING - 12X12 CEILING TILE + MASTIC - WHITE/TAN TEXTURE	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
57-Ceiling Tile 332419182-0057	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Brown/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
57-Mastic 332419182-0057A	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
58-Ceiling Tile 332419182-0058	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Brown/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
58-Mastic 332419182-0058A	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
59-Ceiling Tile 332419182-0059	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
59-Mastic 332419182-0059A	MENS RESTROOM - 12X12 CEILING TILE + MASTIC - WHITE W/ PINHOLE / BEW	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
60-Ceramic Tile 332419182-0060	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	Tan/White Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
60-Mortar 332419182-0060A	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
61-Ceramic Tile 332419182-0061	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	Tan/White Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
61-Mortar 332419182-0061A	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected

Initial report from: 10/16/2024 22:17:50



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

\*\*\*\*\*.LATesting.com / hblab@lateesting.com

LA Testing Order: 332419182

Customer ID: GDCA42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
62-Ceramic Tile 332419182-0062	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	White/Beige Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
62-Mortar 332419182-0062A	MENS RESTROOM - CERAMIC TILE W/ MORTAR - WHT/GRY	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
63-Ceiling Tile 332419182-0063	EAST OFFICE UPSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
63-Mastic 332419182-0063A	EAST OFFICE UPSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
64-Ceiling Tile 332419182-0064	EAST OFFICE UPSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
64-Mastic 332419182-0064A	EAST OFFICE UPSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
65-Ceiling Tile 1 332419182-0065	EAST OFFICE DOWNSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
65-Mastic 332419182-0065A	EAST OFFICE DOWNSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
65-Ceiling Tile 2 332419182-0065B	EAST OFFICE DOWNSTAIRS CEILING - 12X12 CEILING TILE W/ MASTIC - WHT/TAN/BRWN	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected

Initial report from: 10/16/2024 22:17:50



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

\*\*\*\*\*.LATesting.com / hblab@latingesting.com

<b>LA Testing Order:</b> 332419182 <b>Customer ID:</b> GDCA42 <b>Customer PO:</b> <b>Project ID:</b>
---

Analyst(s)

Erica Hunter (37)

Kaylin Luciani (47)

Mindy Le (41)

Ryan Nguyen (13)

Michael Chapman, Laboratory Manager  
or Other Approved Signatory

LA Testing maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore LA Testing recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 10/16/2024 22:17:50

#432410177



# Asbestos Bulk Sample Log

Client: City of Fresno  
Location: Fresno Chandler Airport  
Collected By: J. Sherman

Date: 11/19/24  
Project Number: EN8461A  
CAC or CSST No: 97-2324

Hangar F01  
T. Hangar

Sample No.	Sample Location	Homo. Area	Material	Description & Condition	Quantity (SF/LF)	Friability (F/NF)
1119-01	2nd floor restroom	A	white + gray sheet flooring	wht/good	15 SF	NF
1119-02	2nd floor restroom	↓	↓	↓	↓	↓
1119-03	2nd floor restroom	↓	↓	↓	↓	↓
1119-04	Hangar 6 wall	B	drywall	white/bll.	300 SF	F
1119-05	Hangar 6 wall	↓	↓	↓	↓	↓
1119-06	Hangar 6 wall	↓	↓	↓	↓	↓

Analytical Method: PLM

Turnaround Time: Same Day 24-hr 3 Day 5 Day

Lab Results: Please E-mail results to: [jerrys@groupdelta.com](mailto:jerrys@groupdelta.com) [draver@groupdelta.com](mailto:draver@groupdelta.com)

CHAIN OF CUSTODY:

- J. Sherman  
Print/Signature
- Nevin Wallis  
Print/Signature
- \_\_\_\_\_  
Print/Signature

- P.M. \_\_\_\_\_  
Title \_\_\_\_\_  
\_\_\_\_\_  
Title \_\_\_\_\_  
\_\_\_\_\_  
Title \_\_\_\_\_

11/19/24  
Inclusive Dates  
11/25/24 1:27pm  
Inclusive Dates  
\_\_\_\_\_  
Inclusive Dates





# EMSL Analytical, Inc.

7725 Convoy Court San Diego, CA 92111

Tel/Fax: (858) 499-1303 / (858) 499-1304

\*\*\*\*\*@EMSL.com / sandiegolab@emsl.com

<b>EMSL Order:</b> 432410177
<b>Customer ID:</b> GDCA42
<b>Customer PO:</b>
<b>Project ID:</b>

<b>Attention:</b> Jerry Sherman Group Delta 32 Mauchly Suite B Irvine, CA 92618	<b>Phone:</b> (619) 348-9145 <b>Fax:</b> <b>Received Date:</b> 11/25/2024 1:27 PM <b>Analysis Date:</b> 11/26/2024 <b>Collected Date:</b> 11/19/2024
<b>Project:</b> EN8461A / CITY OF FRESNO / FRESNO CHANDLER AIRPORT	

**Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E  
Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1119-01 432410177-0001	2ND FLOOR RESTROOM - WHITE + GRAY SHEET FLOORING	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1119-02 432410177-0002	2ND FLOOR RESTROOM - WHITE + GRAY SHEET FLOORING	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1119-03 432410177-0003	2ND FLOOR RESTROOM - WHITE + GRAY SHEET FLOORING	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1119-04 432410177-0004	HANGAR 6 WALL - DRYWALL	White Non-Fibrous Homogeneous	<1% Cellulose <1% Glass	100% Non-fibrous (Other)	None Detected
1119-05 432410177-0005	HANGAR 6 WALL - DRYWALL	White Non-Fibrous Homogeneous	<1% Cellulose <1% Glass	100% Non-fibrous (Other)	None Detected
1119-06 432410177-0006	HANGAR 6 WALL - DRYWALL	White Non-Fibrous Homogeneous	<1% Cellulose <1% Glass	100% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Emilia Dzedzic (2)

Joseph Gutierrez (4)

Riva Alger, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. San Diego, CA NVLAP Lab Code 200855-0, CA ELAP 2713, HI L-09-03

Initial report from: 11/26/2024 13:42:41

*Appendix B - XRF Download for Lead-based Paint Testing*

Viken Detection

Model

Pb200i

Type

XRF Lead Paint Analyzer

Serial Num.

1396

App Version

Pb200i-5.3.1

#	Concentration	Units	Date	Quantity	Component	Substrate	Side	Condition	Color	INT/EXT	Building
1	1.1	mg/cm2	10/10/2024		Calibrate						
2	1	mg/cm2	10/10/2024		Calibrate						
3	1	mg/cm2	10/10/2024		Calibrate						
4	0.1	mg/cm2	10/10/2024		Door	Metal	C	Intact	Red	Exterior	Hanger 1
5	0.2	mg/cm2	10/10/2024		Wall	Metal	C	Intact	White	Exterior	Hanger 1
6	0.1	mg/cm2	10/10/2024		Door	Metal	C	Intact	Red	Exterior	Hanger 1
7	0	mg/cm2	10/10/2024		Door Casing	Metal	C	Intact	Red	Exterior	Hanger 1
8	0.3	mg/cm2	10/10/2024		Floor	Metal	C	Intact	Red	Interior	Hanger 1
9	0.3	mg/cm2	10/10/2024		Elec. Box/Panel	Metal	B	Intact	Red	Interior	Hanger 1
10	0.1	mg/cm2	10/10/2024		Wall	Metal	B	Intact	White	Interior	Hanger 1
11	0.1	mg/cm2	10/10/2024		Vertical Beam	Metal	A	Intact	Red	Interior	Hanger 1
12	0	mg/cm2	10/10/2024		Horizontal Beam	Metal	A	Intact	Red	Interior	Hanger 1
13	0.2	mg/cm2	10/10/2024		Shelf	Metal	B	Intact	Green	Interior	Hanger 1
14	0.1	mg/cm2	10/10/2024		Door	Metal	C	Intact	Brown	Interior	Hanger 1
15	1	mg/cm2	10/10/2024		Calibrate						
16	1	mg/cm2	10/10/2024		Calibrate						
17	1	mg/cm2	10/10/2024		Calibrate						
18	0.9	mg/cm2	10/11/2024		Calibrate						
19	1	mg/cm2	10/11/2024		Calibrate						
20	1	mg/cm2	10/11/2024		Calibrate						
21	0.1	mg/cm2	10/11/2024		Roof	Metal	West	Intact	White	Exterior	Hanger 2
22	0.3	mg/cm2	10/11/2024		Flashing	Metal	West	Intact	White	Exterior	Hanger 2
23	0.3	mg/cm2	10/11/2024		Wall	Wood	West	Intact	White	Exterior	Hanger 2
24	0.1	mg/cm2	10/11/2024		Rain Gutter	Plastic	West	Intact	White	Exterior	Hanger 2
25	0	mg/cm2	10/11/2024		Window Casing	Wood	West	Poor	White	Exterior	Hanger 2
26	0.3	mg/cm2	10/11/2024		Window	Metal	West	Intact	White	Exterior	Hanger 2

27	0	mg/cm2	10/11/2024		Window Sill	Wood	West	Poor	White	Exterior	Hanger 2
28	0.2	mg/cm2	10/11/2024		Pipe	Metal	West	Intact	White	Exterior	Hanger 2
29	0.2	mg/cm2	10/11/2024		Roll up door	Metal	A	Poor	White	Exterior	Hanger 2
30	0.3	mg/cm2	10/11/2024		Wall	Metal	A	Poor	White	Exterior	Hanger 2
31	0.2	mg/cm2	10/11/2024		Wall	Metal	B	Poor	White	Exterior	Hanger 2
32	0.2	mg/cm2	10/11/2024		Wall	Metal	A	Intact	Brown	Exterior	Hanger 2
33	0.7	mg/cm2	10/11/2024		Conduit	Metal	A	Intact	White	Exterior	Hanger 2
34	0.2	mg/cm2	10/11/2024		Elec. Box/Panel	Metal	A	Intact	White	Exterior	Hanger 2
35	0.2	mg/cm2	10/11/2024		Wall	Wood	A	Intact	Brown	Exterior	Hanger 2
<b>36</b>	<b>1.7</b>	<b>mg/cm2</b>	<b>10/11/2024</b>	<b>250SF</b>	<b>V Beam</b>	<b>Metal</b>	<b>C</b>	<b>Intact</b>	<b>White</b>	<b>Exterior</b>	<b>Hanger 2</b>
37	0	mg/cm2	10/11/2024		Hanger Door	Metal	C	Intact	White	Exterior	Hanger 2
<b>38</b>	<b>2.2</b>	<b>mg/cm2</b>	<b>10/11/2024</b>	<b>250SF</b>	<b>V Beam</b>	<b>Wood</b>	<b>C</b>	<b>Poor</b>	<b>White</b>	<b>Exterior</b>	<b>Hanger 2</b>
39	0.2	mg/cm2	10/11/2024		V Beam	Wood	C	Intact	White	Exterior	Hanger 2
<b>40</b>	<b>2.7</b>	<b>mg/cm2</b>	<b>10/11/2024</b>	<b>100SF</b>	<b>Beam</b>	<b>Wood</b>	<b>C</b>	<b>Poor</b>	<b>Brown</b>	<b>Exterior</b>	<b>Hanger 2</b>
41	0.3	mg/cm2	10/11/2024		Flashing	Metal	C	Intact	Brown	Exterior	Hanger 2
42	0.2	mg/cm2	10/11/2024		Door	Metal	C	Intact	Brown	Exterior	Hanger 2
43	0.2	mg/cm2	10/11/2024		Door	Metal	C	Intact	Green	Interior	Hanger 2
44	0.2	mg/cm2	10/11/2024		Floor	Concrete	Middle	Intact	Green	Interior	Hanger 2
45	0.4	mg/cm2	10/11/2024		Wall	Metal	C	Poor	Yellow	Interior	Hanger 2
46	0.3	mg/cm2	10/11/2024		Door	Metal	C	Intact	Clear (Stain)	Interior	Hanger 2
47	0	mg/cm2	10/11/2024		Door Casing	Wood	B	Intact	Blue	Interior	Hanger 2
48	0.1	mg/cm2	10/11/2024		Wall	Drywall	B	Intact	White	Interior	Hanger 2
49	0.1	mg/cm2	10/11/2024		Door	Wood	B	Intact	Brown	Interior	Hanger 2
50	0.2	mg/cm2	10/11/2024		Door Jamb	Wood	B	Intact	White	Interior	Hanger 2
51	0.3	mg/cm2	10/11/2024		Door Jamb	Drywall	B	Intact	Blue	Interior	Hanger 2
52	0.1	mg/cm2	10/11/2024		Baseboard	Wood	B	Intact	White	Interior	Hanger 2
53	0.1	mg/cm2	10/11/2024		V Beam	Wood	C	Intact	White	Interior	Hanger 2
54	0.1	mg/cm2	10/11/2024		Winow Casing	Wood	C	Intact	Blue	Interior	Hanger 2
55	0.2	mg/cm2	10/11/2024		Door	Wood	C	Intact	Clear (Stain)	Interior	Hanger 2
56	0.1	mg/cm2	10/11/2024		Wall	Drywall	B	Intact	White	Interior	Hanger 2
57	0.1	mg/cm2	10/11/2024		Wall	Drywall	C	Intact	White	Interior	Hanger 2
58	0.1	mg/cm2	10/11/2024		Wall	Drywall	D	Intact	White	Interior	Hanger 2
59	0.2	mg/cm2	10/11/2024		Door	Wood	C	Intact	White	Interior	Hanger 2

60	0.1	mg/cm2	10/11/2024		Door Jamb	Wood	C	Intact	White	Interior	Hanger 2
61	0.3	mg/cm2	10/11/2024		Wall	Metal	C	Intact	White	Interior	Hanger 2
62	0.2	mg/cm2	10/11/2024		Door	Wood	C	Intact	White	Interior	Hanger 2
63	0	mg/cm2	10/11/2024		Wall	Drywall	C	Intact	White	Interior	Hanger 2
64	0.1	mg/cm2	10/11/2024		Shelf	Wood	C	Intact	Blue	Interior	Hanger 2
65	0.2	mg/cm2	10/11/2024		Shelf	Wood	C	Intact	White	Interior	Hanger 2
66	0.3	mg/cm2	10/11/2024		Ceiling	Wood	Middle	Intact	White	Interior	Hanger 2
67	0.2	mg/cm2	10/11/2024		Ceiling	Wood	Middle	Intact	White	Interior	Hanger 2
68	0.1	mg/cm2	10/11/2024		Handrail	Metal	D	Intact	Tan	Interior	Hanger 2
69	0.1	mg/cm2	10/11/2024		Door	Wood	C	Intact	Red	Interior	Hanger 2
70	0.2	mg/cm2	10/11/2024		Door Casing	Wood	C	Intact	Red	Interior	Hanger 2
71	0.2	mg/cm2	10/11/2024		Wall	Wood	C	Intact	Red	Interior	Hanger 2
72	1.1	mg/cm2	10/11/2024		Calibrate						
73	1	mg/cm2	10/11/2024		Calibrate						
74	1	mg/cm2	10/11/2024		Calibrate						

*Appendix C - Consultant Certificates*

---



STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC HEALTH



# LEAD-RELATED CONSTRUCTION CERTIFICATE

**INDIVIDUAL:**



**Jerry Sherman**

**CERTIFICATE TYPE:**

Lead Inspector/Assessor

**NUMBER:**

LRC-00004015

**EXPIRATION DATE:**

1/7/2026

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at

[\\*\\*\\*.cdph.ca.gov/programs/clppb](http://www.cdph.ca.gov/programs/clppb) or calling (800) 597-LEAD

**Division of Occupational Safety and Health-Asbestos Certification**

1750 Howe Avenue, Suite 460

Sacramento, CA 95825

(916) 574-2993 Office <http://www.dir.ca.gov/dosh/asbestos.html> [actu@dir.ca.gov](mailto:actu@dir.ca.gov)



712292324C

158

January 10, 2024

**Jerry Robert Sherman**

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailling information within 15 days of the change.

Sincerely,

Kevin Graulich  
Principal Safety Engineer

Attachment: Certification Card

cc: File

State of California  
Division of Occupational Safety and Health  
**Certified Asbestos Consultant**


---

**Jerry Robert Sherman**  
Name

Certification No. 97-2324

Expires on 02/06/25

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



Renewal – Card Attached

DEPARTMENT OF INDUSTRIAL RELATIONS  
Division of Occupational Safety and Health-Asbestos Certification  
1750 Howe Avenue, Suite 460  
Sacramento, CA 95825  
(916) 574-2993 Office <http://www.dir.ca.gov/dosh/asbestos.html> [actu@dir.ca.gov](mailto:actu@dir.ca.gov)



803286211C

434

March 25, 2024

David L Raver  
3866 Sienna Street  
Oceanside CA 92056

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/ mailing information within 15 days of the change.

Sincerely,

Kevin Graulich  
Principal Safety Engineer

Attachment: Certification Card

cc: File



Renewal - Card Attached



STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC HEALTH



# LEAD-RELATED CONSTRUCTION CERTIFICATE

**INDIVIDUAL:**



**David Raver**

**CERTIFICATE TYPE:**

Lead Sampling Technician

**NUMBER:**

LRC-00005894

**EXPIRATION DATE:**

3/30/2025

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at [www.cdph.ca.gov/programs/clppb](http://www.cdph.ca.gov/programs/clppb) or calling (800) 597-LEAD

**Appendix B – Draft Phase II  
Environmental Site Assessment**

# GROUP



# DELTA

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**DRAFT** PHASE II ENVIRONMENTAL SITE ASSESSMENT  
PROPOSED AVIATION ACADEMY  
FRESNO CHANDLER EXECUTIVE AIRPORT  
716 WEST KEARNEY BOULEVARD  
FRESNO, CALIFORNIA

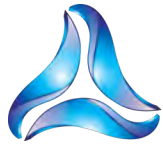
Prepared for:

**City of Fresno Airports Department**  
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Group Delta Project No. EN8461A  
May 22, 2025



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AN **NIVIS** COMPANY

**City of Fresno, Airports Department**  
4995 East Clinton Way  
Fresno, California 93727

May 22, 2025  
Project No. EN8461A

**Attention: Ms. Cristal De La Torre**

**SUBJECT: DRAFT Phase II Environmental Site Assessment**  
Proposed Aviation Academy  
Fresno Chandler Executive Airport  
716 West Kearney Boulevard  
Fresno, California

Dear Ms. Cristal De La Torre,

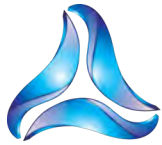
Group Delta Consultants, Inc. (Group Delta) is pleased to submit to City of Fresno, Airports Department (Client), this Phase II Environmental Site Assessment (Phase II ESA) for the subject property in Fresno, California. The Client requested the Phase II ESA based on the findings and recommendations from the Phase I ESA and Title V Hazard Review, in anticipation of proposed construction of an Aviation Academy. The Academy plans to construct a new conference center building within the footprint of the existing hangar building located at 716 West Kearney Boulevard.

We appreciate your selection of Group Delta for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Sincerely,  
**GROUP DELTA CONSULTANTS, INC.**

Ryan Seelbach, CPESC, QSD  
Associate Geologist

Terry Otis, PG, CEG  
Associate Geologist



**GROUP DELTA**  
AN **NIV5** COMPANY

A report prepared for:

**City of Fresno Airports Department**

4995 East Clinton Way  
Fresno, California 93727

**DRAFT Phase II Environmental Site Assessment**

Proposed Aviation Academy, Fresno Unified School District  
Fresno Chandler Executive Airport  
716 West Kearney Boulevard  
Fresno, California

Prepared by:

Reviewed by:

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Ryan Seelbach  
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## 1.0 INTRODUCTION

City of Fresno Airports Department (Client) engaged Group Delta to conduct a Phase II ESA following the completion of a Phase I ESA, Title V Hazard Review. The assessment focuses on the two buildings located at 640 and 716 West Kearney Boulevard, a portion of APN 464-220-43T, in Fresno, California (Site). The location of the Site is shown on Figure 1. The Phase II ESA includes a soil and soil vapor investigation to evaluate potential chemical impacts to soil and soil vapor below the existing hangar building located at 716 West Kearney Boulevard.

### 1.1 Site Description

The Site is located in a mixed use aviation and residential area of Fresno and comprises approximate 3.34-acres within a larger 55.86-acre parcel of land that is part of the Fresno Chandler Executive Airport, a regional airport (Figure 1). The Site includes a corrugated metal T-hangar building built in 1960 at 640 West Kearney Boulevard, as well as an older hangar building at 716 West Kearney Boulevard built in 1948. The 1948 hangar consists of a concrete slab-on-grade foundation, painted wood and corrugated steel walls, and a pitched wood-shingled roof with composite shingles. This site has been occupied by multiple tenants including Lambe Piper Aircraft Sales, Ruiz Frank X Avionics, Buchner Aero Specialties, and Tom's Flying Service. The remainder of the site consists of concrete-pavement, asphalt-pavement, landscaping areas with trees, shrubs, grass, and vacant land covered in grass.

### 1.2 Background

In preparation of construction of the proposed Aviation Academy, Group Delta conducted a Phase I ESA in accordance with the American Society for Testing and Materials E1527-21 (ASTM, 2021) (Group Delta, 2025). The Phase I ESA identified several environmental conditions related to current and past land use, including three recognized environmental conditions (RECs) and two other environmental considerations (OECs) associated with the existing 1948 hangar building outlined below:

- **REC1** – A letter issued by the County of Fresno Department of Health to the City of Fresno dated August 29, 1991, confirmed the completion of a site inspection and/or remedial action regarding the release of hazardous substances or waste in relation to underground storage tanks (USTs). No further action was required, and UST closure documentation does not include documentation indicating the presence or absence of a petroleum discharge.
- **REC2** - Evidence of an exterior wash down area with a drain and single-chamber oil/water separator (OWS) was observed adjacent to the west side of the hangar building. The installation date of the washdown area and drain is unknown. The OWS drain is used to collect washdown water and separates oil, sludge, and debris collected into the drain

prior to entering the municipal sewer system. The potential exists that the OWS may be breached, allowing oil and sludge to leak into subsurface media.

- **REC3** - Evidence of a spray booth was observed within the interior northwestern portion of the hangar building. The installation date of the spray booth is unknown. An oil stain was observed on the floor of the spray booth, and an oily odor was noted.
- **OEC1** – Group Delta completed a Lead-Based Paint (LBP) survey to test for lead in building materials and to assess concentrations. Samples were collected from various interior and exterior areas that may be impacted by renovation/demolition. The survey results confirmed the presence of LBP at the hangar.
- **OEC2** - Group Delta completed an Asbestos Survey to test asbestos-containing materials (ACM) and to assess concentrations. The survey results confirmed that ACM was present in nine samples analyzed at the hangar.

Due to the historical nature of the hangar building, the RECs and OECs identified in the Phase I ESA, and the proposed redevelopment of the site for an Aviation Academy, the California Department of Toxic Substances Control (DTSC) requires a Phase II ESA in accordance with DTSC's Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from LBP, Organochlorine Pesticides (OCPs) from Termiticides, and Polychlorinated Biphenyls (PCBs) dated June 2006, to assess potential impacts.

### 1.3 Project Objectives

The objective of this subsurface investigation was to evaluate the RECs, OEC1, OCPs, and PCBs identified in the Phase I ESA and to address DTSC's Interim Guidance for School Sites specifically related to hazardous materials, petroleum products, and other potential contaminants commonly found at airports and industrial sites. This assessment was conducted in accordance with the Interim Guidance for School Sites (DTSC, 2006). The investigation also included soil vapor sampling to detect the presence of volatile organic compound concentrations (VOC) concentrations and evaluate the potential for soil vapor intrusion into the indoor air of the proposed development. To achieve this objective, a comprehensive soil vapor investigation was conducted within the proposed building footprint to characterize the human health risks associated with vapor intrusion. The detected VOC concentrations in soil vapor, along with applicable regulatory screening criteria were used to estimate the potential health risks from vapor intrusion.

### 1.4 Site Geology

Based on the review of the Geologic Map of California, the Site is situated in the Great Valley Geomorphic Province of California (United States Geological Survey, 1977). The Great Valley is

an alluvial plain about 50 miles wide and 400 miles long in the central part of California. Its northern part is the Sacramento Valley, drained by the Sacramento River, and its southern part is the San Joaquin Valley drained by the San Joaquin River. The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic (about 160 million years ago) (Group Delta, 2024).

During Group Delta's soil sampling event, a dark brown to reddish brown sandy silt to silty sand soil was encountered during drilling and sampling activities to a depth of 10 feet. The soil was firm and moist; however, no groundwater was encountered during the sampling event.

### **1.5 Site Hydrogeology**

According to the California Department of Water Resources website referenced in 2024, the Site is in the Tulare Lake Hydrologic Region, San Joaquin Valley Groundwater Basin, Kings Subbasin. The San Joaquin Valley is bordered by the Coast Ranges to the west, the San Emigdio and Tehachapi Mountains to the south, the Sierra Nevada to the east, and Sacramento-San Joaquin Delta and Sacramento Valley to the north.

The nearest surface water in the vicinity of the Site is Dry Creek, located approximately 0.50-mile northwest of the Site. According to conversations with airport staff, the City of Fresno operates a public water system that serves the Site vicinity. Additionally, the shallow groundwater beneath the Site is used for domestic purposes. Based on data obtained from the California State Water Resources Control Board (SWRCB) GeoTracker database, the depth to groundwater beneath the Site is approximately 100 feet (ft) below ground surface (bgs) and flows in a southwesterly direction (SWRCB, 2024).

## 2.0 FIELD INVESTIGATION

The field investigation consisted of concrete coring, hand auger borings, direct push drilling, and soil vapor probe installation for the collection of soil and soil vapor samples.

### 2.1 Utility Clearance

Prior to conducting the Site investigation, an initial site reconnaissance was performed to ensure accessibility and safety of sampling locations. Boring locations were marked in the field with white paint. Underground Service Alert of Northern California was notified of the field work at least 48 hours prior to the start to identify potential subsurface utility conflicts at the boring locations. BESS Utility Solutions of Fresno, California cleared each marked boring location for subsurface utilities in advance of the field work.

### 2.2 Soil Sampling

Using hand augers and/or a truck mounted direct push drill rig, each boring was advanced to depths ranging from three to ten feet. A photo ionization detector (PID) was used to screen soil samples retrieved from the borings for VOCs. Soil samples for analysis were selected based on PID readings, visual observations, and olfactory detection at various depths.

Soil borings were advanced at the following locations:

- REC2: Two soil borings were advanced on either side of the wash down drain OWS.
- REC3: Two soil borings were advanced within the paint booth area.
- OEC1: Six soil borings were advanced along the south and east sides of the hangar building and two borings on each side of the power pole.

Boring locations are shown in Figure 2. Soil borings were advanced to 5 ft bgs, with samples collected at 0.5, 1.0, 1.5, and 5.0 ft bgs. Discrete, composite and duplicate samples were collected during the investigation. Samples for assessing lead-based paint (LBP) in soil were collected in accordance with California Code of Regulations (CCR), Title 22, Section 69105 (DTSC, 2006).

Group Delta assigned boring names based on the type of sample followed by sequential boring numbers. The letters "B" for borings and "SV" for soil vapor samples followed by a dash and the depth the sample was collected from in ft bgs (e.g., B4-1.5, SV3-5, etc.). Duplicate samples were collected during soil vapor sampling and labeled with the same sample name as the primary sample followed by "REP" (e.g., SV6-5 REP).

### **2.2.1 Field Sampling Equipment**

The following equipment was used:

1. A direct push rig was utilized to drill the soil vapor probe borings, All other borings were drilled using a hand auger.
2. Enough 8-ounce (oz) sealed glass jars with Teflon lined lids were provided by the analytical laboratory;
3. Personal Protective Equipment (PPE);
4. Deionized water;
5. Box cooler with ice for storage of the collected samples, and;
6. Self-adhesive labels and chain of custody sheets.

### **2.2.2 Sampling Procedures**

Presented below is the sampling and decontamination methodology followed in the field:

1. The soil vapor borings were advanced using a direct-push drill rig. The direct-push drill rig used a percussion hammer to drive a 5-foot-long hollow steel rod lined with an acetate sleeve into the ground. As the rod was advanced into the ground, soil filled the acetate sleeve for sample collection. All other borings were advanced using a hand auger.
2. Borings were advanced to the first sampling depth.
3. All soil samples from hand-augered borings were collected in 8-ounce glass jars. For the direct-push borings, soil samples were obtained by retrieving the acetate sleeve from the drill rod and cutting a 0.5-foot-long section of the sleeve. Teflon sheets were placed at each end, and the sleeve was sealed with polyethylene end caps.
4. All soil samples were appropriately label with the boring number, sample depth, time, and date of collection;
5. Place samples on ice in the cooler box;
6. Decon equipment, utilizing deionized water and a concentrated detergent;
7. Repeat the procedure for remaining sample depths for each boring location;
8. Record a summary of the observations and general soil conditions for each boring;
9. Backfill borings with soil cuttings and native soil to meet the existing grade;
10. Patch boring with concrete and asphalt patch to match existing finish;

11. Collected a rinsate/equipment blank by pouring deionized water over the decontaminated sampling equipment and collecting it in a sample container at the end of each day for analysis;
12. Fill out chain-of-custody (COC) form, and;
13. Transport the samples on ice to a certified chemical testing laboratory.

## **2.3 Soil Vapor Sampling**

The following is a description of the field activities including boring advancement and soil vapor probe installation and sampling. During all Site investigation activities, a Group Delta geologist, working under the direction of a California Professional Geologist, monitored the work and classified the soil types encountered according to the Unified Soil Classification System.

### **2.3.1 Soil Vapor Probe Installation**

On February 5, 2025, Group Delta engaged Millennium Environmental Inc. of Anaheim, California, to advance eight borings inside and outside the hangar building for the installation of dual nested soil vapor probes (SV-1 through SV-8). Soil vapor probe SV-7 was installed in the western portion of the Site, to evaluate potential soil gas contamination associated with the use of the former exterior wash down area drain and single-chamber OWS. The soil vapor probes were installed to depths of 5 ft and 10 ft bgs except for vapor probe SV-6, which was installed at depths of 5 ft and 8 ft bgs due to overhead clearance restrictions. The location of the eight temporary dual-nested vapor probes are shown in Figure 2.

During boring advancement, soil was collected at depths of approximately 1.5, 3, 5 and 10 ft bgs. The retrieved soil was placed in Ziploc baggies and prescreened for VOCs using a photoionization detector (PID). Soil types, PID values, and other pertinent geologic data were recorded on boring logs.

At each location, soil vapor probes were installed at 5 ft bgs and 10 ft bgs (8 ft bgs in SV-6). The vapor probes were constructed using a one-inch long airstone filter connected to ¼-inch diameter Teflon® tube. To ensure that the probe tips were placed at the target depths, a PVC rod was used to temporarily support the probes and tubing within the borehole. A one-foot thick sand pack was placed around each probe, followed by six inches of dry bentonite. To seal the annular space, hydrated bentonite was placed to either the next probe depth or to the ground surface.

To protect the vapor probes and provide access for future sampling, each probe tip was sealed within a Ziploc baggie using tape and coiled within the borehole. Clean No. 3 sand was placed around the probes followed by a thin layer of concrete at the ground surface. The vapor probe completion details are provided on the boring log in Appendix A.

The soil generated during the drilling activities was temporarily stored on-site until transportation and disposal to an off-site treatment facility was determined.

### **2.3.2 Soil Vapor Probe Sampling**

On February 20, 2025, soil vapor samples were collected in accordance with DTSC's Advisory for Active Soil Gas Investigations (DTSC, 2015). Sampling was conducted a minimum of 48 hours after probe installation to allow subsurface conditions to equilibrate. Vapor probe purging and sample collection was conducted by Jones Environmental Inc. (Jones) of Santa Fe Springs, California.

Initially, a shut-in test was conducted to check for leaks in the above-ground sampling system following the assemblage of the above-ground valves, lines, and fittings to the top of each of the vapor probes. With the valve at the top of the vapor probe placed in the closed position, the system was evacuated to a minimum of 100 inches of water using a purge pump. A vacuum gauge connected to the system was observed for at least one minute to ensure no observable loss of vacuum.

Once the shut-in test was completed, each of the newly installed nested vapor probes was purged. Approximately three purge volumes were removed from each vapor probe using a constant flow rate between 100 and 200 milliliters per minute at a vacuum less than 100 inches of water. One purge volume is defined as the combined internal volume of the tubing, the void space of the sand pack around the probe, and void space of the dry bentonite in the annular space.

After removing the three purge volumes from each vapor probe, a vapor sample was collected from each location with a syringe. During sample collection, the vacuum pressure was recorded and samples were not collected if the vacuum pressure exceeded 136 inches of water column (10 inches of mercury).

Leak testing was performed using tracer compounds (n-pentane, n-hexane, n-heptane). A rag sprayed with the compounds and placed at the surface of the boring around all connections. The tracer compounds were re-applied every 10 minutes during purging and sampling. The soil vapor samples were analyzed for the presence of the tracer compounds, and corrective actions were implemented if the tracer compounds were detected at a concentration more than or equal to 10 times the method reporting limits.

## **2.4 Waste Disposal**

Soil cuttings generated during drilling activities were placed in two 55-gallon metal drums, labeled, and stored on-site. A soil sample was collected and analyzed, with results confirming

that the soil could be disposed of as non-hazardous waste. The drums were transported off site on April 18, 2025. The non-hazardous waste disposal documentation is provided as Appendix B.

### 3.0 RESULTS OF LABORATORY TESTING

The results of the laboratory analysis are presented in the laboratory analytical reports provided as Appendix C1 and C2. The reports include copies of the completed COC forms, laboratory analytical results, the quality control sample (field and laboratory) results, and a narrative of any deviations and corrective actions taken.

#### 3.1 Soil Analyses

All soil samples collected during the investigation were transported to Eurofins Environment Testing (Eurofins) located in Tustin, California for laboratory analysis. Eurofins is a laboratory certified by the State Water Resources Control Board's (SWRCB) Environmental Laboratory Accreditation Program (ELAP). The soil samples were analyzed for the following combination of analyses depending upon the type of environmental condition that was being investigated. The analysis for each soil sample is listed in Tables 1 through 4.

- Title 22 Metals by EPA Method 6010B/7471A [3 samples from REC2, 4 samples from REC3]
- Total lead by EPA Method 6010B [12 samples from OEC1]
- California Waste Extraction Test (CA-WET) test was conducted to determine the Soluble Threshold Limit Concentration (STLC) [4 samples from OEC1]
- Total Petroleum Hydrocarbons (TPHs) by EPA Method 8015B [3 samples from REC2, 4 samples from REC3]
- Semi Volatile Organic Compounds (SVOCs) by EPA Method 8270C [3 samples from REC2, 4 samples from REC3]
- Volatile Organic Compounds (VOCs) by EPA Method 8260B [4 samples from REC2, 4 samples from REC3]
- Organochlorine Pesticides (OCP) by EPA Method 8081A [4 composite samples for DTSC, 2006]
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082A [4 samples for DTSC, 2006]

#### 3.2 Soil Vapor Analyses

The soil vapor samples were collected and analyzed by Jones Environmental, Inc. (Jones) on February 20, 2025. All vapor samples were analyzed for TPH gasoline (TPHg) and VOCs in accordance with EPA Method 8260 on-site using their mobile laboratory, which is certified by the SWRCB ELAP.

#### 3.3 Screening Criteria

The following criteria were used to assist with the review of the analytical data for soil and soil vapor. The screening criteria cited in this section were compared to the laboratory results. The most applicable criteria were selected for each media and analyte.

- The Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) modified screening levels (DTSC-SLs) in soil are screening concentrations used to evaluate the exposure risk of chemicals to human health during a human health risk assessment (HHRA). The DTSC-SLs were most recently updated in May 2022. DTSC-SLs developed for residential land use were applied to metal, OCP, and VOC concentrations in soil, as well as VOC concentrations in soil vapor (DTSC, 2022).
- The DTSC Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of lead from LBP was revised on June 9, 2006. The screening value for lead in soil from LBP at proposed school sites was changed in 2007. According to the most recent version of the Lead Risk Assessment Spreadsheet (dated 2011), the recommended residential soil lead screening level (DTSC-SL) is 80 milligrams per kilogram (mg/kg), as stated in the DTSC HHRA Note 3 (DTSC, 2011a).
- The EPA Regional Screening Levels (RSLs) are screening concentrations of chemicals in soil, water, and ambient air and represent thresholds of concern for risks to human health developed by the EPA. The thresholds of concern used to develop the RSLs for soil equate to lifetime cancer risk of one in a million and a hazard quotient of 1.0 for non-cancer health effects. The EPA RSLs were developed using exposure information assumptions combined with EPA toxicity data. The EPA RSLs were most recently updated in November 2024. The EPA RSLs developed for residential land use were applied to metal, OCP, and VOC concentrations in soil, as well as VOC concentrations in soil vapor (EPA, 2024).
- Detected lead concentrations in soil were compared to State and Federal criteria for hazardous waste provided in California Code of Regulations (CCR) Title 22, Section 66261.24, to determine the appropriate waste classification and disposal requirements. Total concentrations were compared to the Total Threshold Limit Concentration (TTLC) criteria for California hazardous waste. Total concentrations were also compared to 10 times the STLC and 20 times Federal TCLP concentration to determine if further waste extraction laboratory analyses were warranted to properly characterize the material as California or Federal hazardous waste.

### 3.4 Soil Analytical Results

The soil analytical results of this investigation are summarized in Tables 1 through 4 and described in the following subsections. The laboratory reports for all soil samples are provided as Appendix C1.

#### 3.4.1 Metals

A total of 7 soil samples were collected and analyzed for metals. Soil analytical results for metals are presented in Table 1. All 7 samples contained detectable concentrations of one or more metals (other than lead) including barium, chromium, cobalt, copper, nickel, vanadium, and zinc. All detected concentrations for these metals were below the residential EPA RSLs and the residential DTSC-SLs. Arsenic and lead results are discussed below.

##### Arsenic

Arsenic was not detected in any of the samples collected; however, it should be noted that the residential EPA RSLs and residential DTSC-SLs are below the laboratory reporting limits (RLs).

Arsenic was not detected above the maximum laboratory RL of less than 3.27 mg/kg in any of the soil samples collected. However, because arsenic is naturally occurring in soil in California, the DTSC has determined the upper-bound background arsenic concentration to be 12 mg/kg and generally accepts this concentration as a useful screening value for evaluating arsenic as a chemical of potential concern. Accordingly, a screening level of 12 mg/kg was used to evaluate arsenic concentrations at the Site, and no samples exceeded this screening level.

##### Lead

A total of 19 soil samples collected were analyzed for lead. Soil analytical results for lead are also presented in Table 1. Lead was detected above the laboratory RL in 14 of the 19 samples analyzed. Lead concentrations ranged from 3.07 mg/kg in SV7-1' to 543 mg/kg in B2-0.5' with an average detected concentration of approximately 103.3 mg/kg.

The DTSC-SL for lead in residential soil is 80 mg/kg. This screening level was exceeded in five samples: B1-1.5', B2-0.5', B2-1.5', B3-0.5', and B6-0.5'.

##### Soluble Lead – Soluble Threshold Limit Concentration (STLC)

A total of 4 soil samples contained total lead concentrations that were greater than or equal to the 50 mg/kg threshold, which requires the samples to be analyzed for soluble lead using the CA-WET method. A summary of these results is presented in Table 2.

Detectable concentrations using CA-WET ranged from 2.31 mg/L in sample B1-1.5' at 1.5 ft bgs to 23.1 mg/L in sample B2-0.5' at 0.5 ft bgs, with an average concentration of approximately 10.17 mg/L. Three of the 4 samples exceeded the STLC threshold of 5 mg/L, meeting the criteria for non-RCRA California hazardous waste.

The California total threshold limit concentration (TTLC) is the threshold used as criteria for non-Resource Conservation and Recovery Act (non-RCRA) California hazardous waste. No lead concentrations were detected in any of the soil samples above the California TTLC of 1,000 mg/kg.

It should be noted that 4 samples contained total lead concentrations that were greater than or equal to the 100 mg/kg threshold which requires samples to be analyzed for soluble lead using the EPA TCLP method. However, due to a sample holding time discrepancy, these samples could not be analyzed using the EPA TCLP method. As a result, it could not be determined whether the samples exceeded the TCLP threshold of 5 mg/L, which is used as criteria for RCRA Federal hazardous waste.

### **3.4.2 Total Petroleum Hydrocarbons (TPHs)**

A total of 7 soil samples were collected and analyzed for TPHs. None of the samples exceeded the laboratory RLs.

### **3.4.3 Semi Volatile Organic Compounds (SVOCs)**

A total of 7 soil samples were collected and analyzed for SVOCs. None of the samples exceeded the laboratory RLs.

### **3.4.4 Volatile Organic Compounds (VOCs)**

A total of 8 soil samples collected were analyzed for VOCs. Soil analytical results for VOCs are presented in Table 4. Acetone was the only VOC detected above the laboratory's RL in 3 of 8 samples collected and ranged from 21 µg/kg in B9-5' to 76 µg/kg in SV8-5'. All three detections of acetone were from 5 ft bgs. None of the samples collected exceeded the residential screening levels.

### **3.4.5 Organochlorine Pesticides (OCPs)**

A total of 4 composite soil samples were collected and analyzed for OCPs from 0.5 and 3.0 ft bgs. Soil analytical results for OCPs are presented in Table 3. A total of 11 OCPs were detected above the laboratory's RLs in the 2-0.5 ft bgs composite soil samples collected. The OCPs included 4,4'-Dichlorodiphenyldichloroethane (4,4'-DDD), 4,4'-Dichlorodiphenyldichloroethylene (4,4'-DDE), 4,4'-Dichlorodiphenyltrichloroethane (4,4'-DDT), alpha-Chlordane, Beta-hexachlorocyclohexane

(beta-BHC), Chlordane, Endosulfan II, Endrin ketone, gamma-Chlordane, Methoxychlor, and Toxaphene. None of the samples collected exceeded the residential screening levels. It should be noted sample COMP (B4-B-6-0.5') exceeded its holding time.

### **3.4.6 Polychlorinated Biphenyls (PCBs)**

A total of 4 soil samples were collected and analyzed for PCBs. None of the samples exceeded the laboratory RLs.

## **3.5 Soil Vapor Analytical Results**

Soil vapor samples were collected at 5, 8 and 10 feet bgs (8 ft bgs probe in SV-6 due to an overhead clearance issue) were analyzed for TPHg and VOCs by EPA Method 8260. A total of 16 primary and 2 duplicate soil vapor samples were collected and analyzed for VOCs by EPA 8260. A total of 5 VOC compounds were reported with "J" flags indicating concentrations were above the laboratory method detection limit (MDL) but below the laboratory RLs. A summary of the detected compounds is provided below.

- Tetrachloroethene (PCE) was detected in 7 of the 18 vapor probes sampled at concentrations ranging from 2 to 8  $\mu\text{g}/\text{m}^3$  in borings SV3, SV7, and SV8.
- Toluene was detected in 3 of the 18 vapor probes sampled at concentrations ranging from 2 to 4  $\mu\text{g}/\text{m}^3$  in borings SV3 and SV6.
- 1,2,4-Trimethylbenzene was detected in 2 of the 18 soil vapor probes sampled at concentrations ranging from 5 to 6  $\mu\text{g}/\text{m}^3$  in boring SV6.
- 1,3,5-Trimethylbenzene was detected in 1 of the 28 soil vapor samples (SV-5-5') at a concentration of 4  $\mu\text{g}/\text{m}^3$  in boring SV6.
- o-Xylene was detected in 2 of the 18 soil vapor probes sampled at concentrations ranging from 4 to 5  $\mu\text{g}/\text{m}^3$  in boring SV6.

Soil vapor analytical results for VOCs are presented in Table 5 and the laboratory reports are provided in Appendix C2.

### **3.5.1 Future Potential Soil Vapor Intrusion Risks**

Potential future vapor intrusion risks are assessed by utilizing DTSC's modified Johnson & Ettinger screening model. The DTSC model estimates indoor air concentrations resulting from the migration of subsurface vapors into indoor air. DTSC updated the model to ensure consistent assumptions across various state agencies and republished it in October 2024 (DTSC, 2024). In February 2023, the California Environmental Protection Agency (CalEPA) Vapor Intrusion Workgroup, which includes members from the DTSC, the San Francisco Bay Regional Water Quality Control Board, the Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board (SWRCBs), and the Office of Environmental Health Hazard Assessment,

released the Supplemental Guidance: Screening and Evaluating Vapor Intrusion (Final Draft Supplemental Guidance) (DTSC and SWRCBs, 2023). Practitioners are encouraged to use this supplemental guidance alongside the existing DTSC Vapor Intrusion Guidance (DTSC, 2011b).

The attenuation factor (AF) is defined as the ratio between indoor air and subsurface soil vapor concentrations. Therefore, a larger AF applied to a given subsurface soil vapor concentration will result in a larger estimated indoor air concentration.

The potential risks to human health from vapor intrusion of VOCs to indoor air were evaluated by applying the USEPA 2012 AF of 0.03 to the soil vapor results and comparing directly with the State and Federal screening levels for residential indoor air for cancer and non-cancer risks. The AF of 0.03 represents the current recommended value for screening soil vapor results in the Final Draft Supplemental Guidance (DTSC and SWRCB, 2023).

### **3.5.2 Predicted Indoor Air**

By applying the AF of 0.03, the predicted indoor air concentrations were compared to the appropriate residential DTSC-SLs and EPA RSLs for direct exposure to indoor air as an initial step for site screening criteria. The five VOCs detected in soil vapor were all below the soil vapor screening levels (SVSLs) calculated assuming the lowest residential indoor air screening value divided by the DTSC-recommended AF of 0.03 as a conservative approach for this initial evaluation to assess the potential for vapors entering the hangar building (DTSC and SWRCB, 2023). None of the five detected VOC compounds exceeded this initial step for site screening criteria.

### **3.6 Quality Assurance and Quality Control (QA/QC)**

Group Delta, Eurofins, and Jones Environmental applied Quality Assurance/Quality Control (QA/QC) measures to minimize and control errors associated with field and laboratory methods. A review of the laboratory QA/QC results indicates satisfactory data reporting, and the data is of sufficient quality for the purposes of this report.

#### Soil Sample QA/QC

An equipment blank sample (EQB-0205) was collected and analyzed as a measure of accuracy of the field techniques and to determine if any contamination was introduced through sample collection or decontamination procedures. Sample EQB-0205 was collected by pouring deionized water over or through the decontaminated sampling equipment at the end of the day. The equipment blank was analyzed for metals, TPHs, and VOCs. There was no detection of metals or TPHs in the equipment blank sample; however, four VOCs were detected slightly above the laboratory RLs. A summary of the detected compounds is provided below.

- Acetone was detected at a concentration of 30 micrograms per liter ( $\mu\text{g/L}$ ) with a RL of 10  $\mu\text{g/L}$ .
- Bromodichloromethane was detected at a concentration of 5.6  $\mu\text{g/L}$  with a RL of 1.0  $\mu\text{g/L}$ .
- Chloroform was detected at a concentration of 4.3  $\mu\text{g/L}$  with a RL of 1.0  $\mu\text{g/L}$ .
- Dibromochloromethane was detected at a concentration of 6.4  $\mu\text{g/L}$  with a RL of 2.0  $\mu\text{g/L}$ .

Since acetone was detected in three soil samples collected prior to EQB-0205, it is possible some level of cross-contamination may have occurred during the investigation. The other three VOC compounds were not detected in soil samples. These VOCs are typically related to disinfectant byproducts found in chlorinated water. It is possible that the equipment blank had trace levels of disinfectant byproducts. Since only trace acetone concentrations were detected in the soil samples at several orders of magnitude below screening levels, these equipment blank detections did not interfere with the data quality.

#### Soil Vapor Sample QA/QC

Duplicate soil vapor samples were collected at a rate of approximately one duplicate per ten primary soil vapor samples. Analytical results for duplicate samples were generally consistent with the results for the associated primary samples and indicated there was an acceptable correlation between these two data sets for the detected analytes. The results of duplicate soil vapor samples are presented in Table 5.

A review of the Jones Analytical laboratory's internal QA/QC analysis of continuing calibration verification (CCV), analytical method blanks, laboratory control standards (LCS), and matrix spike/matrix spike duplicate (MS/MSD) samples indicate no deviations from internal laboratory QC limits. Laboratory QA/QC data are presented in Appendix C2.

A tracer gas (leak check) 1,1-DFA was used as a leak detection compound during soil vapor sampling. Soil vapor samples were analyzed for the presence of 1,1-DFA by EPA Method 8260. The tracer gas was not detected in the soil vapor samples.

## 4.0 DISCUSSION – LINES OF EVIDENCE FOR VAPOR INTRUSION RISKS

The DTSC recommends using multiple lines of evidence to provide a better understanding of the vapor intrusion risks (DTSC and SWRCB, 2023). Lines of evidence available for a site may include site history information, subsurface sampling data, contaminant subsurface source, soil type, and proposed building construction. The multiple lines of evidence are discussed below.

### 4.1 Site History

The Phase I ESA identified three RECs in connection with the hangar building at the Site that could potentially impact the soil vapor conditions; 1) a former UST without proper closure documentation, including its location and contents, was reportedly removed from the hangar building's address in 1991; 2) a wash down area with a drain and single-chamber OWS was observed west of the building; and 3) a spray paint booth was observed within the northwest portion of the building. Based on the results of this investigation, none of these potential sources appear to have impacted subsurface soil vapor conditions at the Site

### 4.2 Soil Type and Chemical Data

Soils encountered during this Site investigation consisted mainly of a brown sandy silt to silty sand that was observed to a maximum depth of 10 ft bgs (total depth drilled). In general, coarse-grained soils (e.g., sands, gravels) allow for greater vapor migration than fine-grained soils (e.g., silts, clays) (DTSC and SWRCB, 2023). The soils present a moderate degree of vapor migration potential at the Site.

VOCs were not detected in headspace of all soil samples collected, as measured in the field with the PID. Acetone was the only VOC detected in 3 of 8 soil samples at concentrations of several orders of magnitude below their representative residential EPA RSL and DTSC-SL.

Seven soil vapor probes were installed inside the hangar building to evaluate the subsurface soil vapor conditions at a rate of one probe for every 1,400 square feet, representing a high frequency of sampling. Samples were collected at approximately 5 and 10 feet bgs at each probe location. Consequently, residual soil vapor VOCs were delineated both laterally and vertically. Additionally, the five VOCs detected in soil vapor were all reported below the laboratory reporting limits but above the method detection limits (J-flag). SVSLs were calculated using the lowest residential indoor air screening value divided by the DTSC-recommended attenuation factor (AF) of 0.03 as a conservative approach for this evaluation to assess the potential for vapors entering the hangar building (DTSC and SWRCB, 2023). None of the five detected VOC compounds exceeded this initial step for site screening criteria.

### 4.3 Groundwater

Groundwater sampling was not conducted as part of this investigation and no prior groundwater sampling data is available. Groundwater was not encountered during the investigation and is reportedly present at approximately 100 feet bgs at the Site. Based on the soil vapor data, residual VOC concentrations do not increase with depth, which indicates that a deeper source is not present.

### 4.4 Proposed Building Construction

Although the details of the proposed construction and renovation of the existing hangar building are unknown, the planned use is for a conference center constructed within the existing building footprint. The current slab-on-grade hangar building features a high ceiling, allowing for optimal indoor ventilation. New building construction with an undamaged slab and proper indoor air ventilation will reduce exposure risk. Unfortunately, building conditions can change over time, and no building should be considered inherently safe. Additionally, sanitary sewers, drains, electrical pipes, and other conduits may present preferential pathways for vapor intrusion (DTSC and SWRCB, 2023). However, based on the initial site screening, there is no significant risk of vapor intrusion in the building subsurface.

## 5.0 CONCLUSIONS AND RECOMENDATIONS

Group Delta performed a Phase I ESA for the proposed redevelopment to an Aviation Academy. The Phase I ESA identified several RECs associated with current or past land use and recommended further investigation of the existing 1948 hangar building located at 716 West Kearney Blvd (Group Delta, 2024). This Phase II ESA assessed RECs identified in the hangar building that is being considered for restoration and use as a conference center.

Soil samples were analyzed for lead (12 samples), metals (7 samples), TPHs (7 samples), SVOCs (7 samples), VOCs (8 samples), OCPs (4 composite samples), and PCBs (4 samples). The only soil samples exceeding regulatory screening levels were those analyzed for total lead that were collected within dripline of the existing hangar building. Five of the twelve samples collected within the dripline exceed the DTSC-SL of 80 mg/kg for residential soil and several of these samples met the criteria for California hazardous waste. Further action is warranted as part of the proposed site redevelopment to remove soils around the dripline that exceed 80 mg/kg of lead. The potential presence of lead in soil within the dripline will be retained as a REC. All other soil samples were below regulatory screening levels.

A total of 16 primary and 2 field duplicate soil vapor samples were analyzed for VOCs by EPA 8260. Five VOCs were detected in soil vapor at low concentrations below the laboratory RL and did not exceed SVSLs calculated assuming the lowest residential indoor air screening value divided by the DTSC-recommended AF of 0.03 as a conservative approach for this initial evaluation of the potential for vapors entering the hangar building (DTSC and SWRCB, 2023).

Based on the Phase II ESA investigation results and the multiple lines of evidence, the Site presents a low vapor intrusion risk, and no additional characterization is recommended to assess the potential for future soil vapor intrusion at this time. In addition, Group Delta does not recommend mitigation measures to reduce the risks associated with the residual VOCs detected in shallow soil vapor based on current data.

## 6.0 REFERENCES

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*Figures*

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Reference: *Google Earth*

--- Site boundary



GDC Project No. EN8461A

**Site Location Map**

Phase II Environmental Site Assessment  
 Proposed Aviation Academy  
 Fresno, California

**Figure 1**

FILE PATH: \\10.75.80.61\files\Projects\EN\EN8400\EN8461A City of Fresno - Phase I Hazmat\CAD\EN8461A.dwg  
 PLOTTED DATE: 5/13/2025 1:02:16 PM SAVED BY: josemiguel



**LEGEND:**

- SOIL VAPOR LOCATION
- SOIL SAMPLE LOCATION
- SOIL VAPOR / SOIL SAMPLE LOCATION
- REC2 - DRAIN/OIL WATER SEPARATOR
- REC3 - PAINT BOOTH
- OEC1 - AREA OF LEAD-BASED PAINT IN EXPOSED SOIL



**SOIL VAPOR AND SOIL SAMPLE LOCATION MAP**

DRAFTED BY:  
JMT  
 REVIEWED BY:  
RS

PHASE II ENVIRONMENTAL SITE ASSESSMENT  
 PROPOSED AVIATION ACADEMY  
 716 W. KEARNEY BLVD.  
 FRESNO, CALIFORNIA

FIGURE NUMBER:  
2

PROJECT NUMBER:  
EN8461A

**GROUP DELTA, AN NV5 COMPANY**  
 1035 S. MILLIKEN AVENUE SUITE G  
 ONTARIO, CA 91761



**Table 1**  
**Soil Analytical Results for Title 22 Metals**  
**EPA Test Method 6020/7471A**  
**Phase II Environmental Site Assessment**  
**Proposed Aviation Academy at Fresno Chandler Executive Airport**  
**Fresno, California**

Sample ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		Units: mg/kg																
B1-0.5'	2/5/2025	--	--	--	--	--	--	--	--	14.0	--	--	--	--	--	--	--	--
B1-1.5'	2/5/2025	--	--	--	--	--	--	--	--	159	--	--	--	--	--	--	--	--
B2-0.5'	2/5/2025	--	--	--	--	--	--	--	--	543	--	--	--	--	--	--	--	--
B2-1.5'	2/5/2025	--	--	--	--	--	--	--	--	304	--	--	--	--	--	--	--	--
B3-0.5'	2/5/2025	--	--	--	--	--	--	--	--	91.5	--	--	--	--	--	--	--	--
B3-1.5'	2/5/2025	--	--	--	--	--	--	--	--	22.7	--	--	--	--	--	--	--	--
B4-0.5'	2/5/2025	--	--	--	--	--	--	--	--	64.4	--	--	--	--	--	--	--	--
B4-1.5'	2/5/2025	--	--	--	--	--	--	--	--	<1.78	--	--	--	--	--	--	--	--
B5-0.5'	2/5/2025	--	--	--	--	--	--	--	--	58.1	--	--	--	--	--	--	--	--
B5-1.5'	2/5/2025	--	--	--	--	--	--	--	--	4.68	--	--	--	--	--	--	--	--
B6-0.5'	2/5/2025	--	--	--	--	--	--	--	--	171	--	--	--	--	--	--	--	--
B6-1.5'	2/5/2025	--	--	--	--	--	--	--	--	<2.27	--	--	--	--	--	--	--	--
B9-1'	2/5/2025	<9.32	<2.80*	90.6	<0.373	<0.373	23.2	5.63	9.06	4.77	<0.0833	<3.73	22.3	<2.80	<1.86	<9.32	23.4	20.4
SV6-1'	2/5/2025	<10.9	<3.26*	49.1	<0.434	<0.434	16.0	3.50	5.71	<2.17	<0.0801	<4.34	15.0	<3.26	<2.17	<10.9	17.3	12.8
SV6-5'	2/5/2025	<9.70	<2.91*	82.7	<0.388	<0.388	32.1	6.25	12.1	3.45	<0.0801	<3.88	33.5	<2.91	<1.94	<9.70	42.6	30.2
SV7-1'	2/5/2025	<8.82	<2.65*	74.9	<0.353	<0.353	23.5	5.57	8.36	3.07	<0.0850	<3.53	21.7	<2.65	<1.76	<8.82	24.6	19.0
SV7-5'	2/5/2025	<8.41	<2.52*	55.4	<0.337	<0.337	26.6	4.76	7.08	<1.68	<0.0868	<3.37	23.8	<2.52	<1.68	<8.41	23.2	16.6
SV8-1'	2/5/2025	<10.9	<3.27*	88.2	<0.436	<0.436	24.7	4.76	7.77	<2.18	<0.0850	<4.36	21.1	<3.27	<2.18	<10.9	22.8	17.9
SV8-5'	2/5/2025	<8.65	<2.59*	81.0	<0.346	<0.346	26.2	6.97	10.8	3.16	<0.0817	<3.46	32.0	<2.59	<1.73	<8.65	32.8	26.0
EPA RSL for Residential Soil		31	0.68	15,000	160	7.1	120,000	23	3,100	200	7.1	390	1,400	390	390	0.78	390	23,000
EPA RSL for Commercial/Industrial Soil		470	3.0	220,000	2,300	100	1,800,000	350	47,000	800	30	5,800	17,000	5,800	5,800	12	5,800	350,000
DTSC SL for Residential Soil		NL	0.41	NL	16	7.1	NL	NL	NL	80	1	NL	820	NL	NL	NL	NL	NL
DTSC SL for Commercial/Industrial Soil		NL	12**	NL	230	79	NL	NL	NL	500	4.4	NL	11,000	NL	NL	NL	NL	NL
TTLC*		500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
10 x STLC		150	50	1,000	7.5	10	50	800	250	50	2.0	3,500	200	10	50	70	240	2,500
20 x TCLP		NL	100	2,000	NL	20	100	NL	NL	100	4.0	NL	NL	20	100	NL	NL	NL

**Notes:**

EPA RSL = US Environmental Protection Agency Regional Screening Level (November 2024)

DTSC SL = Department of Toxic Substance Control - Screening Level (May 2022)

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

mg/kg = milligrams per kilogram

**BOLD** = indicates detected concentration exceeding the laboratory reporting limit

<0.0 = not detected above laboratory reporting limit

<0.0\* = Laboratory reporting limit exceeds EPA RSL and/or DTSC SL for Residential Soil

NL = not listed regulatory screening limit for constituent

\*\* = Arsenic concentrations were evaluated using the DTSC-accepted upper-bound background level of 12 mg/kg

**X** Indicates an exceedance of either the EPA RSL and/or the DTSC SL for residential soil

**X** Indicates an exceedance of the EPA RSL for Commercial/Industrial Soil

**X** Indicates an exceedance of the DTSC Background Concentration

**Table 2**  
**Soil Analytical Results for Lead Soluble Threshold Limit Concentrations (STLC)**  
**EPA Test Method 6010B and CA-WET**  
**Phase II Environmental Site Assessment**  
**Proposed Aviation Academy at Fresno Chandler Executive Airport**  
**Fresno, California**

Sample ID	Sample Date	Total Lead (mg/kg)	Lead-STLC CA-WET (mg/L)
B1-1.5'	2/5/2025	159*	2.31
B2-0.5'	2/5/2025	543*	23.1
B2-1.5'	2/5/2025	304*	5.80
B6-0.5'	2/5/2025	171*	9.46
<b>Hazardous Waste Criteria</b>		<b>1,000</b>	<b>5.0</b>

**Notes:**

Lead-STLC	Lead Soluble Threshold Limit Concentrations
CA-WET	California- Waste Extraction Test
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
<b>Bold</b>	indicates a detection
*	greater than 50 mg/kg threshold requires additional waste characterization
X	indicates an exceedance of Hazardous Waste Criteria

**Table 3**  
**Soil Analytical Results for Organochlorine Pesticides (OCPs)**  
**EPA Test Method 8081A**  
**Phase II Environmental Site Assessment**  
**Proposed Aviation Academy at Fresno Chandler Executive Airport**  
**Fresno, California**

Sample ID	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	beta-BHC	Chlordane	Endosulfan II	Endrin ketone	gamma-Chlordane	Methoxychlor	Toxaphene
		Units: µg/kg										
COMP (B1-B3-0.5')	2/5/2025	<b>17</b>	<b>62</b>	<b>320</b>	<b>21</b>	<b>44 p</b>	<b>150</b>	<b>14</b>	<b>8.9</b>	<b>28</b>	<b>6.6 p</b>	<75
COMP (B1-B3-3')	2/5/2025	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25
COMP (B4-B6-0.5')	2/5/2025	<5.0	<b>6.8 H</b>	<b>64 H</b>	<b>58 H</b>	<5.0	<b>290 H</b>	<5.0	<5.0	<b>59 H</b>	<5.0	<b>150 H, p</b>
COMP (B4-B6-3')	2/5/2025	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25
EPA RSL for Residential Soil		2,300	2,000	1,900	36,000	300	1,700	NL	NL	36,000	320,000	490
EPA RSL for Commercial/Industrial Soil		9,600	9,300	8,500	500,000	1,300	7,700	NL	NL	500,000	4,100,000	2,100
DTSC SL for Residential Soil		1,900	2,000	1,900	NL	NL	1,700	NL	NL	NL	320,000	450
DTSC SL for Commercial/Industrial Soil		6,200	9,300	7,100	NL	NL	6,100	NL	NL	NL	2,600,000	1,200

**Notes:**

EPA RSL = US Environmental Protection Agency Regional Screening Level (November 2024)

DTSC SL = Department of Toxic Substance Control - Screening Level (May 2022)

COMP = composite soil sample

µg/kg = micrograms per kilogram

**BOLD** = indicates detected concentration exceeding the laboratory reporting limit

<0.0 = not detected above laboratory reporting limit

H = the sample was prepared or analyzed beyond the specified holding time and does not

NL = no listed regulatory screening limit for constituent

p = the relative percent difference between the primary and confirmation column/deter

Analytes not detected at or above the laboratory reporting limit were excluded from the results table

**Table 4**  
**Soil Analytical Results for Volatile Organic Compounds (VOCs)**  
**EPA Test Method 8260B**  
**Phase II Environmental Site Assessment**  
**Proposed Aviation Academy at Fresno Chandler Executive Airport**  
**Fresno, California**

Sample ID	Sample Date	Units	Acetone
B9-1'	2/5/2025	µg/kg	<19
B9-5'	2/5/2025	µg/kg	<b>21</b>
SV6-1'	2/5/2025	µg/kg	<19
SV6-5'	2/5/2025	µg/kg	<25
SV7-1'	2/5/2025	µg/kg	<20
SV7-5'	2/5/2025	µg/kg	<b>31</b>
SV8-1'	2/5/2025	µg/kg	<19
SV8-5'	2/5/2025	µg/kg	<b>76</b>
EPA RSL for Residential Soil		µg/kg	70,000,000
EPA RSL for Commercial/Industrial Soil		µg/kg	1,100,000,000
DTSC SL for Residential Soil		µg/kg	NL
DTSC SL for Commercial/Industrial Soil		µg/kg	NL

**Notes:**

EPA RSL = US Environmental Protection Agency Regional Screening Level (November 2024)

DTSC SL = Department of Toxic Substance Control - Screening Level (May 2022)

µg/kg = micrograms per kilogram

**Bold** = detected concentration at or above the laboratory reporting limit

<0.0 = not detected above reporting limit

NL = not listed regulatory screening limit for constituent

Table 5  
Soil Vapor Analytical Results for Volatile Organic Compounds (VOCs)  
EPA Test Method 8260B  
Phase II Environmental Site Assessment  
Proposed Aviation Academy at Fresno Chandler Executive Airport  
Fresno, California

Sample ID	Sample Date	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene
		Units: $\mu\text{g}/\text{m}^3$				
SV1-5'	2/20/2025	<8	<8	<8	<8	<8
SV1-9.5'	2/20/2025	<8	<8	<8	<8	<8
SV2-5'	2/20/2025	<8	<8	<8	<8	<8
SV2-9.5'	2/20/2025	<8	<8	<8	<8	<8
SV3-5'	2/20/2025	<b>2 J</b>	<8	<8	<8	<8
SV3-5' REP	2/20/2025	<b>8 J</b>	<b>4 J</b>	<8	<8	<8
SV3-9.5'	2/20/2025	<b>3 J</b>	<8	<8	<8	<8
SV4-5'	2/20/2025	<8	<8	<8	<8	<8
SV4-9.5'	2/20/2025	<8	<8	<8	<8	<8
SV5-5'	2/20/2025	<8	<8	<8	<8	<8
SV5-9.5'	2/20/2025	<8	<8	<8	<8	<8
SV6-5'	2/20/2025	<8	<b>2 J</b>	<b>6 J</b>	<8	<b>4 J</b>
SV6-5' REP	2/20/2025	<8	<b>3 J</b>	<b>5 J</b>	<b>4 J</b>	<b>5 J</b>
SV6-8'	2/20/2025	<8	<8	<8	<8	<8
SV7-5'	2/20/2025	<b>2 J</b>	<8	<8	<8	<8
SV7-9.5'	2/20/2025	<b>6 J</b>	<8	<8	<8	<8
SV8-5'	2/20/2025	<b>2 J</b>	<8	<8	<8	<8
SV8-9.5'	2/20/2025	<b>6 J</b>	<8	<8	<8	<8
Cancer SL: EPA RSL for Residential Air		11	NL	NL	NL	NL
Non-cancer SL: EPA RSL for Residential Air		NL	5,200	63	63	100
Cancer SL: DTSC Hero Note 3 - SL for Residential Air		0.46	NL	NL	NL	NL
Non-cancer SL: DTSC Hero Note 3 - SL for Residential Air		42	310	NL	NL	NL
Calculated SVSL (DTSC-Recommended AF = 0.03)		15	10,333	2,100	2,100	3,333

**Notes:**

EPA RSL = US Environmental Protection Agency Regional Screening Level for Residential Air, TR=1E-06, HQ=1.0 (November 2024)

DTSC Hero Note 3 = Department of Toxic Substance Control - Screening Level for Residential Air (May 2022)

AF = Attenuation Factor

SL = Screening Level

SVSL = Soil Vapor Screening Level calculated assuming the lowest residential indoor air screening value divided by the DTSC-recommended AF of 0.03 used for this initial evaluation of the potential for vapors entering the building per the DTSC Supplemental Vapor Intrusion Guidance (February 2023).

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meters

**BOLD** = indicates detected concentration exceeding the method detection limit (MDL)

<0.0 = not detected above laboratory reporting limit

J = Value less than practical quantitation limit (PQL) but greater than the MDL

NL = not listed regulatory screening limit for constituent

Analytes not detected at or above the laboratory reporting limit were excluded from the results tables

Indicates lowest screening value of the DTSC-SLs and EPA RSLs for residential air

***Appendix A***

---

***Boring Log and Soil Vapor Probe Log (Typical)***





**SOIL VAPOR PROBE BORING**

**Boring No. SV-1 (Typical)**

Sheet 1 of 1

<b>Site</b>	Fresno Chandler Airport	<b>Date</b>	February 5, 2025
<b>Address</b>	716 Kearney Blvd Fresno, CA	<b>Driller</b>	Millenium Environmental, Inc.
<b>Project No.</b>	EN8461A	<b>Drilling Foreman</b>	
<b>Logged By:</b>	Kevin Hall	<b>Method</b>	Geoprobe 6011 DT hole diam.: 2.25 inches
<b>Well Pack (#3 Sand):</b> 4.5' to 5.5' & 8.5' to 9.5'		<b>Well Construction:</b> casing: 1/4" Tubing screen: 1" air stone filter	
<b>Granular Bentonite</b> 4.0' to 4.5', 8.0' to 8.5'		casing diam.: N/A screen slot: N/A	
<b>Hydrated Bent.:</b> 0.5' to 4.0' and 6.0' to 8.0'		<b>Depth to Groundwater:</b> NA	
<b>Probe Depths:</b> 5' & 9.5'			

Sample Type	Sample No.	Blow Count	Sample		Depth Scale	LITHO COLUMN	Descriptions of Materials and Conditions	PID (PPM)
			Time	Recov.				
	SV1-5		0900		1 2 3 4 5 6 7 8 9	SM  SM	- 4 to 5" of concrete  Sandy Silt, Dark Brown (10YR 3/3), moist, stiff, fine grained, no odor  Silty Sand, Dark Brown (10YR 3/3), fine to coarse grained, loose, no odor	0  0
	SV1-9.5		0905		10 11 12 13 14 15 16 17 18 19 20			

-  Concrete Slab
-  Hydrated #8 Bentonite
-  Granular #8 Bentonite
-  #3 Sand

**Comments:**  
 On 2-5-25, temporary vapor probes were installed at depths of 5- and 9.5-feet bgs using a Geoprobe Driect-Push drillrig. Probe construction as shown, tubing for deeper probe has greater stick-up above ground. PID readings taken from headspace inside Ziploc baggie. Two soil samples collected from each boring, but only selected samples were analyzed by the laboratory. Soil vapor samples were collected and analyzed on 5-20-25.



***Appendix B***

---

***Waste Disposal Manifest***

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number  
 2. Page 1 of 3  
 3. Emergency Response Phone  
 4. Waste Tracking Number **0409499**

5. Generator's Name and Mailing Address:  
 Fresno Chamber Executive Airport  
 510 W Kearney Blvd  
 Fresno, CA 93708  
 Generator's Phone:  
 Generators Site Address (if different than mailing address):  
 Fresno Chamber Executive Airport  
 510 W Kearney Blvd  
 Fresno, CA 93708

6. Transporter 1 Company Name: **Atlas Environmental Solutions**  
 U.S. EPA ID Number: **CAF000490220**

7. Transporter 2 Company Name:  
 U.S. EPA ID Number:

8. Designated Facility Name and Site Address:  
 Environmental Waste Solutions, Inc.  
 31915 Industrial Lane  
 Parker South, AZ 85344  
 Facility's Phone:  
 U.S. EPA ID Number: **AZP0006520478**

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. Non-hazardous Waste, Solid (Soil)	1	DM <sup>50</sup>	95	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information:  
 1) EWS 39277  
 1x55

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.  
 Generator's/Officer's Printed/Typed Name: **Jack Vargas**  
 Signature: *[Signature]*  
 Month Day Year: **9 | 19 | 25**

15. International Shipments:  Import to U.S.  Export from U.S.  
 Port of entry/exit:  
 Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials  
 Transporter 1 Printed/Typed Name: **Sergio Cardenas**  
 Signature: *[Signature]*  
 Month Day Year: **9 | 18 | 25**  
 Transporter 2 Printed/Typed Name:  
 Signature:  
 Month Day Year:

17. Discrepancy  
 17a. Discrepancy Indicator Space:  Quantity  Type  Residue  Partial Rejection  Full Rejection  
 Manifest Reference Number:  
 U.S. EPA ID Number:

17b. Alternate Facility (or Generator):  
 Facility's Phone:  
 17c. Signature of Alternate Facility (or Generator):  
 Month Day Year:

18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a.  
 Printed/Typed Name:  
 Signature:  
 Month Day Year:

GENERATOR  
INTL  
TRANSPORTER  
DESIGNATED FACILITY

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 1-800-547-2857	4. Waste Tracking Number D496194
5. Generator's Name and Mailing Address Fresno Chandler Executive Airport 510 W Keaney Blvd Fresno, CA 93706			Generator's Site Address (if different than mailing address) Fresno Chandler Executive Airport 510 W Keaney Blvd Fresno, CA 93706		
Generator's Phone:			U.S. EPA ID Number CAR000295220		
6. Transporter 1 Company Name Atlas Environmental Solutions			U.S. EPA ID Number		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address HOLLY RENEWABLE ENERGY LLC 20500 S HOLLY DR TRACY, CA 95394			U.S. EPA ID Number CAL000463678		
Facility's Phone:					
GENERATOR	9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
	Non-Hazardous Waste, Liquid (Dowon Water)	1	55 DM	45	P
	2.				
	3.				
4.					
13. Special Handling Instructions and Additional Information 1) 1x55					
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Generator's/Officer's Printed/Typed Name MARK JARROS			Signature 		Month Day Year 4   18   25
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
TRANSPORTER INTL	15. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name Sergio Cardas			Signature 	
TRANSPORTER	Transporter 2 Printed/Typed Name			Signature	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number					
DESIGNATED FACILITY	17b. Alternate Facility (or Generator)			U.S. EPA ID Number	
	Facility's Phone:				
	17c. Signature of Alternate Facility (or Generator)			Month Day Year	
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name			Signature		Month Day Year

***Appendix C1***

---

***Laboratory Analytical Reports – Soil Samples***



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Kevin Hall  
Group Delta Consultants, Inc  
32 Mauchly  
Suite B  
Irvine, California 92618

Generated 3/26/2025 11:08:49 AM

## JOB DESCRIPTION

Fresno Airport

## JOB NUMBER

570-217080-2

# Eurofins Calscience

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

## Authorization



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Authorized for release by  
Carla Hollowell, Project Manager I  
[Carla.Hollowell@et.eurofinsus.com](mailto:Carla.Hollowell@et.eurofinsus.com)  
(714)895-5494

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# Definitions/Glossary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Group Delta Consultants, Inc  
Project: Fresno Airport

Job ID: 570-217080-2

**Job ID: 570-217080-2**

**Eurofins Calscience**

## Job Narrative 570-217080-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 2/6/2025 1:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.9°C and 3.9°C.

### Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



# Detection Summary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

## Client Sample ID: B1-1.5

Lab Sample ID: 570-217080-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.31		1.00	mg/L	1		6010B	STLC Citrate

## Client Sample ID: B2-0.5

Lab Sample ID: 570-217080-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	23.1		1.00	mg/L	1		6010B	STLC Citrate

## Client Sample ID: B2-1.5

Lab Sample ID: 570-217080-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	5.80		1.00	mg/L	1		6010B	STLC Citrate

## Client Sample ID: B6-0.5

Lab Sample ID: 570-217080-20

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.46		1.00	mg/L	1		6010B	STLC Citrate

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Group Delta Consultants, Inc  
 Project/Site: Fresno Airport

Job ID: 570-217080-2

## Method: SW846 6010B - Metals (ICP) - STLC Citrate

**Client Sample ID: B1-1.5**  
**Date Collected: 02/05/25 08:12**  
**Date Received: 02/06/25 13:37**

**Lab Sample ID: 570-217080-6**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	23.1		1.00	mg/L		03/24/25 10:08	03/24/25 12:29	1

**Client Sample ID: B2-0.5**  
**Date Collected: 02/05/25 08:16**  
**Date Received: 02/06/25 13:37**

**Lab Sample ID: 570-217080-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	23.1		1.00	mg/L		03/24/25 10:08	03/24/25 12:36	1

**Client Sample ID: B2-1.5**  
**Date Collected: 02/05/25 08:18**  
**Date Received: 02/06/25 13:37**

**Lab Sample ID: 570-217080-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.80		1.00	mg/L		03/24/25 10:08	03/24/25 12:39	1

**Client Sample ID: B6-0.5**  
**Date Collected: 02/05/25 08:50**  
**Date Received: 02/06/25 13:37**

**Lab Sample ID: 570-217080-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.46		1.00	mg/L		03/24/25 10:08	03/24/25 12:41	1

# QC Sample Results

Client: Group Delta Consultants, Inc  
 Project/Site: Fresno Airport

Job ID: 570-217080-2

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LB 570-547366/1-C**  
**Matrix: Solid**  
**Analysis Batch: 548859**

**Client Sample ID: Method Blank**  
**Prep Type: STLC Citrate**  
**Prep Batch: 548626**

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00	mg/L		03/24/25 10:08	03/24/25 12:20	1

**Lab Sample ID: LCS 570-547366/2-C**  
**Matrix: Solid**  
**Analysis Batch: 548859**

**Client Sample ID: Lab Control Sample**  
**Prep Type: STLC Citrate**  
**Prep Batch: 548626**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	20.0	19.58		mg/L		98	80 - 120

**Lab Sample ID: LCSD 570-547366/3-C**  
**Matrix: Solid**  
**Analysis Batch: 548859**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: STLC Citrate**  
**Prep Batch: 548626**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	20.0	19.53		mg/L		98	80 - 120	0	20

**Lab Sample ID: 570-217080-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 548859**

**Client Sample ID: B1-1.5**  
**Prep Type: STLC Citrate**  
**Prep Batch: 548626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	2.31		20.0	21.86		mg/L		98	84 - 120

**Lab Sample ID: 570-217080-6 MSD**  
**Matrix: Solid**  
**Analysis Batch: 548859**

**Client Sample ID: B1-1.5**  
**Prep Type: STLC Citrate**  
**Prep Batch: 548626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	2.31		20.0	21.84		mg/L		98	84 - 120	0	7

# QC Association Summary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

## Metals

### Leach Batch: 547366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-217080-6	B1-1.5	STLC Citrate	Solid	CA WET Citrate	
570-217080-8	B2-0.5	STLC Citrate	Solid	CA WET Citrate	
570-217080-9	B2-1.5	STLC Citrate	Solid	CA WET Citrate	
570-217080-20	B6-0.5	STLC Citrate	Solid	CA WET Citrate	
LB 570-547366/1-C	Method Blank	STLC Citrate	Solid	CA WET Citrate	
LCS 570-547366/2-C	Lab Control Sample	STLC Citrate	Solid	CA WET Citrate	
LCSD 570-547366/3-C	Lab Control Sample Dup	STLC Citrate	Solid	CA WET Citrate	
570-217080-6 MS	B1-1.5	STLC Citrate	Solid	CA WET Citrate	
570-217080-6 MSD	B1-1.5	STLC Citrate	Solid	CA WET Citrate	

### Prep Batch: 548626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-217080-6	B1-1.5	STLC Citrate	Solid	Dilution	547366
570-217080-8	B2-0.5	STLC Citrate	Solid	Dilution	547366
570-217080-9	B2-1.5	STLC Citrate	Solid	Dilution	547366
570-217080-20	B6-0.5	STLC Citrate	Solid	Dilution	547366
LB 570-547366/1-C	Method Blank	STLC Citrate	Solid	Dilution	547366
LCS 570-547366/2-C	Lab Control Sample	STLC Citrate	Solid	Dilution	547366
LCSD 570-547366/3-C	Lab Control Sample Dup	STLC Citrate	Solid	Dilution	547366
570-217080-6 MS	B1-1.5	STLC Citrate	Solid	Dilution	547366
570-217080-6 MSD	B1-1.5	STLC Citrate	Solid	Dilution	547366

### Analysis Batch: 548859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-217080-6	B1-1.5	STLC Citrate	Solid	6010B	548626
570-217080-8	B2-0.5	STLC Citrate	Solid	6010B	548626
570-217080-9	B2-1.5	STLC Citrate	Solid	6010B	548626
570-217080-20	B6-0.5	STLC Citrate	Solid	6010B	548626
LB 570-547366/1-C	Method Blank	STLC Citrate	Solid	6010B	548626
LCS 570-547366/2-C	Lab Control Sample	STLC Citrate	Solid	6010B	548626
LCSD 570-547366/3-C	Lab Control Sample Dup	STLC Citrate	Solid	6010B	548626
570-217080-6 MS	B1-1.5	STLC Citrate	Solid	6010B	548626
570-217080-6 MSD	B1-1.5	STLC Citrate	Solid	6010B	548626

# Lab Chronicle

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

**Client Sample ID: B1-1.5**

**Lab Sample ID: 570-217080-6**

Date Collected: 02/05/25 08:12

Matrix: Solid

Date Received: 02/06/25 13:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			50.14 g	500 mL	547366	03/20/25 12:30	VCN7	EET CAL 4
STLC Citrate	Prep	Dilution			0.6 mL	12 mL	548626	03/24/25 10:08	UFLE	EET CAL 4
STLC Citrate	Analysis	6010B		1			548859	03/24/25 12:29	P1R	EET CAL 4
Instrument ID: ICP10										

**Client Sample ID: B2-0.5**

**Lab Sample ID: 570-217080-8**

Date Collected: 02/05/25 08:16

Matrix: Solid

Date Received: 02/06/25 13:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			50.01 g	500 mL	547366	03/20/25 12:30	VCN7	EET CAL 4
STLC Citrate	Prep	Dilution			0.6 mL	12 mL	548626	03/24/25 10:08	UFLE	EET CAL 4
STLC Citrate	Analysis	6010B		1			548859	03/24/25 12:36	P1R	EET CAL 4
Instrument ID: ICP10										

**Client Sample ID: B2-1.5**

**Lab Sample ID: 570-217080-9**

Date Collected: 02/05/25 08:18

Matrix: Solid

Date Received: 02/06/25 13:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			50.06 g	500 mL	547366	03/20/25 12:30	VCN7	EET CAL 4
STLC Citrate	Prep	Dilution			0.6 mL	12 mL	548626	03/24/25 10:08	UFLE	EET CAL 4
STLC Citrate	Analysis	6010B		1			548859	03/24/25 12:39	P1R	EET CAL 4
Instrument ID: ICP10										

**Client Sample ID: B6-0.5**

**Lab Sample ID: 570-217080-20**

Date Collected: 02/05/25 08:50

Matrix: Solid

Date Received: 02/06/25 13:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			50.17 g	500 mL	547366	03/20/25 12:30	VCN7	EET CAL 4
STLC Citrate	Prep	Dilution			0.6 mL	12 mL	548626	03/24/25 10:08	UFLE	EET CAL 4
STLC Citrate	Analysis	6010B		1			548859	03/24/25 12:41	P1R	EET CAL 4
Instrument ID: ICP10										

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

**Laboratory References:**

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-25
Oregon	NELAP	4175	02-02-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Method Summary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	EET CAL 4
CA WET Citrate	California - Waste Extraction Test with Citrate Leach	CA-WET	EET CAL 4
Dilution	Preparation / Dilution Process	None	EET CAL 4

**Protocol References:**

CA-WET = California Waste Extraction Test, from Title 22

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494



# Sample Summary

Client: Group Delta Consultants, Inc  
Project/Site: Fresno Airport

Job ID: 570-217080-2

---

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
570-217080-6	B1-1.5	Solid	02/05/25 08:12	02/06/25 13:37
570-217080-8	B2-0.5	Solid	02/05/25 08:16	02/06/25 13:37
570-217080-9	B2-1.5	Solid	02/05/25 08:18	02/06/25 13:37
570-217080-20	B6-0.5	Solid	02/05/25 08:50	02/06/25 13:37

---

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

## Login Sample Receipt Checklist

Client: Group Delta Consultants, Inc

Job Number: 570-217080-2

**Login Number: 217080**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ovalle, Erick**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.



*Appendix C2*

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*Laboratory Analytical Reports – Soil Vapor Samples*



714-449-9937  
562-646-1611

11007 FOREST PLACE  
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25 February 2025

Kevin Hall  
Group Delta Consultants, Inc.  
370 Amapola Avenue, Ste 212  
Torrance, CA 90501

Re: Fresno Chandler Exec. Airport Ph. 2

Enclosed are the results of analyses for samples received by the laboratory on 02/20/25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Colby Wakeman".

Colby Wakeman  
Lab Director

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV3-5'	J250588-001	Soil Vapor	02/20/2025 07:53	02/20/2025 08:03
SV3-5' REP	J250588-002	Soil Vapor	02/20/2025 08:01	02/20/2025 08:03
SV3-9.5'	J250588-003	Soil Vapor	02/20/2025 08:26	02/20/2025 08:03
SV4-5'	J250588-004	Soil Vapor	02/20/2025 08:46	02/20/2025 08:03
SV4-9.5'	J250588-005	Soil Vapor	02/20/2025 08:59	02/20/2025 08:03
SV5-5'	J250588-006	Soil Vapor	02/20/2025 09:18	02/20/2025 08:03
SV5-9.5'	J250588-007	Soil Vapor	02/20/2025 09:34	02/20/2025 08:03
SV2-5'	J250588-008	Soil Vapor	02/20/2025 09:50	02/20/2025 08:03
SV2-9.5'	J250588-009	Soil Vapor	02/20/2025 10:08	02/20/2025 08:03
SV1-5'	J250588-010	Soil Vapor	02/20/2025 10:27	02/20/2025 08:03
SV1-9.5'	J250588-011	Soil Vapor	02/20/2025 10:43	02/20/2025 08:03
SV6-5'	J250588-012	Soil Vapor	02/20/2025 10:58	02/20/2025 08:03
SV6-5' REP	J250588-013	Soil Vapor	02/20/2025 11:03	02/20/2025 08:03
SV6-8'	J250588-014	Soil Vapor	02/20/2025 11:32	02/20/2025 08:03
SV8-5'	J250588-015	Soil Vapor	02/20/2025 11:57	02/20/2025 08:03
SV8-9.5'	J250588-016	Soil Vapor	02/20/2025 12:03	02/20/2025 08:03
SV7-5'	J250588-017	Soil Vapor	02/20/2025 12:27	02/20/2025 08:03
SV7-9.5'	J250588-018	Soil Vapor	02/20/2025 12:30	02/20/2025 08:03

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**DETECTIONS SUMMARY**

**Sample ID:** SV3-5' **Laboratory ID:** J250588-001

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	2	8	µg/m3	EPA 8260	J

**Sample ID:** SV3-5' REP **Laboratory ID:** J250588-002

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	8	8	µg/m3	EPA 8260	J
Toluene	4	8	µg/m3	EPA 8260	J

**Sample ID:** SV3-9.5' **Laboratory ID:** J250588-003

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	3	8	µg/m3	EPA 8260	J

**Sample ID:** SV4-5' **Laboratory ID:** J250588-004

**No Results Detected**

**Sample ID:** SV4-9.5' **Laboratory ID:** J250588-005

**No Results Detected**

**Sample ID:** SV5-5' **Laboratory ID:** J250588-006

**No Results Detected**

**Sample ID:** SV5-9.5' **Laboratory ID:** J250588-007

**No Results Detected**

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**DETECTIONS SUMMARY**

**Sample ID:** SV2-5' **Laboratory ID:** J250588-008

**No Results Detected**

**Sample ID:** SV2-9.5' **Laboratory ID:** J250588-009

**No Results Detected**

**Sample ID:** SV1-5' **Laboratory ID:** J250588-010

**No Results Detected**

**Sample ID:** SV1-9.5' **Laboratory ID:** J250588-011

**No Results Detected**

**Sample ID:** SV6-5' **Laboratory ID:** J250588-012

Analyte	Result	Reporting Limit	Units	Method	Notes
1,2,4-Trimethylbenzene	6	8	µg/m3	EPA 8260 J	
o-Xylene	4	8	µg/m3	EPA 8260 J	
Toluene	2	8	µg/m3	EPA 8260 J	

**Sample ID:** SV6-5' REP **Laboratory ID:** J250588-013

Analyte	Result	Reporting Limit	Units	Method	Notes
1,2,4-Trimethylbenzene	5	8	µg/m3	EPA 8260 J	
1,3,5-Trimethylbenzene	4	8	µg/m3	EPA 8260 J	
o-Xylene	5	8	µg/m3	EPA 8260 J	
Toluene	3	8	µg/m3	EPA 8260 J	

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Colby Wakeman  
Lab Director

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Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**DETECTIONS SUMMARY**

**Sample ID:** SV6-8' **Laboratory ID:** J250588-014

**No Results Detected**

**Sample ID:** SV8-5' **Laboratory ID:** J250588-015

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	2	8	µg/m3	EPA 8260	J

**Sample ID:** SV8-9.5' **Laboratory ID:** J250588-016

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	6	8	µg/m3	EPA 8260	J

**Sample ID:** SV7-5' **Laboratory ID:** J250588-017

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	2	8	µg/m3	EPA 8260	J

**Sample ID:** SV7-9.5' **Laboratory ID:** J250588-018

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	6	8	µg/m3	EPA 8260	J

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Lab Director

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Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Fresno Chandler Exec. Airport Ph. Project Number: EN8461A Project Manager: Kevin Hall	Reported 02/25/25 11:23
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SV3-5'  
 J250588-001(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	2	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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Colby Wakeman  
 Lab Director

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Fresno Chandler Exec. Airport Ph. Project Number: EN8461A Project Manager: Kevin Hall	Reported 02/25/25 11:23
--	--	----------------------------

SV3-5'  
 J250588-001(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	98.88 %	60 - 140
<i>Surrogate: Dibromofluoromethane</i>	107.09 %	60 - 140
<i>Surrogate: 4-Bromofluorobenzene</i>	92.97 %	60 - 140

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Colby Wakeman  
 Lab Director

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Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Fresno Chandler Exec. Airport Ph. Project Number: EN8461A Project Manager: Kevin Hall	Reported 02/25/25 11:23
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SV3-5' REP  
 J250588-002(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	8	8	3	µg/m3	"	"		"	"	J
Toluene	4	8	4	µg/m3	"	"		"	"	J
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

Jones Environmental, Inc.



Colby Wakeman  
 Lab Director

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Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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SV3-5' REP  
J250588-002(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

*Surrogate: Toluene-d8*                      100.87 %              60 - 140

*Surrogate: Dibromofluoromethane*              102.04 %              60 - 140

*Surrogate: 4-Bromofluorobenzene*              92.11 %              60 - 140



Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Fresno Chandler Exec. Airport Ph. Project Number: EN8461A Project Manager: Kevin Hall	Reported 02/25/25 11:23
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SV3-9.5'  
 J250588-003(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	3	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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 Lab Director

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SV3-9.5'  
 J250588-003(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	<i>100.34 %</i>	<i>60 - 140</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>102.79 %</i>	<i>60 - 140</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.86 %</i>	<i>60 - 140</i>

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SV4-5'  
 J250588-004(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV4-5'  
 J250588-004(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	<i>103.71 %</i>	<i>60 - 140</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>100.70 %</i>	<i>60 - 140</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.78 %</i>	<i>60 - 140</i>

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SV4-9.5'  
 J250588-005(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV4-9.5'  
 J250588-005(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	<i>97.19 %</i>	<i>60 - 140</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>102.49 %</i>	<i>60 - 140</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.92 %</i>	<i>60 - 140</i>

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SV5-5'  
 J250588-006(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV5-5'  
 J250588-006(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8                      100.98 %              60 - 140

Surrogate: Dibromofluoromethane              100.29 %              60 - 140

Surrogate: 4-Bromofluorobenzene              91.15 %              60 - 140



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SV5-9.5'  
 J250588-007(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV5-9.5'  
 J250588-007(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8	96.35 %	60 - 140
Surrogate: Dibromofluoromethane	100.98 %	60 - 140
Surrogate: 4-Bromofluorobenzene	92.37 %	60 - 140

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SV2-5'  
 J250588-008(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV2-5'  
 J250588-008(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8	103.07 %	60 - 140
Surrogate: Dibromofluoromethane	98.06 %	60 - 140
Surrogate: 4-Bromofluorobenzene	88.07 %	60 - 140

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SV2-9.5'  
 J250588-009(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV2-9.5'  
 J250588-009(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8	102.00 %	60 - 140
Surrogate: Dibromofluoromethane	96.92 %	60 - 140
Surrogate: 4-Bromofluorobenzene	88.73 %	60 - 140



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SV1-5'  
 J250588-010(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV1-5'  
 J250588-010(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	98.83 %	60 - 140
<i>Surrogate: Dibromofluoromethane</i>	100.00 %	60 - 140
<i>Surrogate: 4-Bromofluorobenzene</i>	95.17 %	60 - 140

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SV1-9.5'  
 J250588-011(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV1-9.5'  
 J250588-011(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	98.92 %	60 - 140
<i>Surrogate: Dibromofluoromethane</i>	98.32 %	60 - 140
<i>Surrogate: 4-Bromofluorobenzene</i>	91.12 %	60 - 140



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SV6-5'  
 J250588-012(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	2	8	4	µg/m3	"	"		"	"	J
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV6-5'  
 J250588-012(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	6	8	5	µg/m3	"	"		"	"	J
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	4	8	5	µg/m3	"	"		"	"	J
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8                      99.98 %              60 - 140

Surrogate: Dibromofluoromethane              97.21 %              60 - 140

Surrogate: 4-Bromofluorobenzene              93.53 %              60 - 140

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SV6-5' REP  
 J250588-013(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	3	8	4	µg/m3	"	"		"	"	J
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV6-5' REP  
 J250588-013(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	5	8	5	µg/m3	"	"		"	"	J
1,3,5-Trimethylbenzene	4	8	4	µg/m3	"	"		"	"	J
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	5	8	5	µg/m3	"	"		"	"	J
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8                      101.19 %              60 - 140

Surrogate: Dibromofluoromethane              97.40 %              60 - 140

Surrogate: 4-Bromofluorobenzene              91.78 %              60 - 140

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SV6-8'  
 J250588-014(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	3	µg/m3	"	"		"	"	
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV6-8'  
 J250588-014(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	<i>100.81 %</i>	<i>60 - 140</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>98.38 %</i>	<i>60 - 140</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.77 %</i>	<i>60 - 140</i>

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SV8-5'  
 J250588-015(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	2	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV8-5'  
J250588-015(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8	99.62 %	60 - 140
Surrogate: Dibromofluoromethane	97.52 %	60 - 140
Surrogate: 4-Bromofluorobenzene	92.95 %	60 - 140

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SV8-9.5'  
 J250588-016(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	6	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV8-9.5'  
J250588-016(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	98.35 %	60 - 140
<i>Surrogate: Dibromofluoromethane</i>	101.61 %	60 - 140
<i>Surrogate: 4-Bromofluorobenzene</i>	92.98 %	60 - 140



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SV7-5'  
 J250588-017(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	2	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV7-5'  
 J250588-017(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

<i>Surrogate: Toluene-d8</i>	99.76 %	60 - 140
<i>Surrogate: Dibromofluoromethane</i>	99.92 %	60 - 140
<i>Surrogate: 4-Bromofluorobenzene</i>	92.74 %	60 - 140

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SV7-9.5'  
 J250588-018(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Benzene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
Bromodichloromethane	ND	8	3	µg/m3	"	"		"	"	
Bromoform	ND	8	2	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	5	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	4	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	3	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	2	µg/m3	"	"		"	"	
Chloroform	ND	8	3	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	2	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	2	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	3	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	5	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	11	µg/m3	"	"		"	"	
Freon 12	ND	16	4	µg/m3	"	"		"	"	
Freon 11	ND	16	5	µg/m3	"	"		"	"	
Freon 113	ND	16	2	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	6	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	5	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	3	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	4	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	3	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	4	µg/m3	"	"		"	"	
Methylene chloride (TIC)	ND	16	5	µg/m3	"	"		"	"	
Naphthalene	ND	40	4	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	4	µg/m3	"	"		"	"	
Styrene	ND	8	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	3	µg/m3	"	"		"	"	
Tetrachloroethene	6	8	3	µg/m3	"	"		"	"	J
Toluene	ND	8	4	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	3	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	5	µg/m3	"	"		"	"	

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SV7-9.5'  
 J250588-018(Soil Vapor)

Analyte	Result	Rep. Limit	Det. Limit	Units	Dil.	Batch	Prepared	Analyzed	Method	Notes
<b>Standard ug/m3 by EPA 8260</b>										
Trichloroethene	ND	8	4	µg/m3	1	QC2502308		02/20/25	EPA 8260	
1,2,4-Trimethylbenzene	ND	8	5	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	4	µg/m3	"	"		"	"	
Vinyl chloride	ND	8	3	µg/m3	"	"		"	"	
m,p-Xylene	ND	16	7	µg/m3	"	"		"	"	
o-Xylene	ND	8	5	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	2	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	4	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	3	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	118	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000		µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80		µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80		µg/m3	"	"		"	"	
Acetone (LCC)	ND	80		µg/m3	"	"		"	"	

Surrogate: Toluene-d8	100.58 %	60 - 140
Surrogate: Dibromofluoromethane	99.34 %	60 - 140
Surrogate: 4-Bromofluorobenzene	89.85 %	60 - 140



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**Standard ug/m3 by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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**Batch QC2502308 - EPA 8260**

**CCV 1**

1,1,1-Trichloroethane	9.49	8	%	10		94.86	80 - 120		120	
1,1-Dichloroethene	8.38	8	%	10		83.83	80 - 120		120	
1,2,4-Trimethylbenzene	8.86	8	%	10		88.61	80 - 120		120	
Benzene	9.74	8	%	10		97.40	80 - 120		120	
Chlorobenzene	9.79	8	%	10		97.90	80 - 120		120	
cis-1,2-Dichloroethene	9.38	8	%	10		93.79	80 - 120		120	
Ethylbenzene	9.41	8	%	10		94.07	80 - 120		120	
Tetrachloroethene	9.00	8	%	10		90.01	80 - 120		120	
Toluene	9.87	8	%	10		98.68	80 - 120		120	
Trichloroethene	9.03	8	%	10		90.28	80 - 120		120	
Vinyl chloride	8.07	8	%	10		80.66	80 - 120		120	

**LCS 1**

1,1,1-Trichloroethane	1.95	8	%	2.5		78.17	70 - 130			
1,1-Dichloroethene	1.98	8	%	2.5		79.02	60 - 140			
1,2,4-Trimethylbenzene	1.93	8	%	2.5		77.21	70 - 130			
Benzene	2.32	8	%	2.5		92.71	70 - 130			
Chlorobenzene	2.54	8	%	2.5		101.45	70 - 130			
cis-1,2-Dichloroethene	2.11	8	%	2.5		84.41	70 - 130			
Ethylbenzene	2.27	8	%	2.5		90.86	70 - 130			
Tetrachloroethene	2.54	8	%	2.5		101.49	70 - 130			
Toluene	2.46	8	%	2.5		98.23	70 - 130			
Trichloroethene	2.25	8	%	2.5		90.19	70 - 130			
Vinyl chloride	1.88	8	%	2.5		75.10	60 - 140			

Surrogate: Toluene-d8 101.25 % 60 - 140

Surrogate: Dibromofluoromethane 96.70 % 60 - 140

Surrogate: 4-Bromofluorobenzene 96.59 % 60 - 140

**LCSD 1**

1,1,1-Trichloroethane	2.12	8	%	2.5		84.98		8.35		
1,1-Dichloroethene	2.36	8	%	2.5		94.48		17.82		
1,2,4-Trimethylbenzene	2.17	8	%	2.5		86.87		11.77		
Benzene	2.73	8	%	2.5		109.05		16.20		
Chlorobenzene	2.81	8	%	2.5		112.27		10.12		
cis-1,2-Dichloroethene	2.49	8	%	2.5		99.59		16.50		
Ethylbenzene	2.41	8	%	2.5		96.53		6.06		

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**Standard ug/m3 by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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**Batch QC2502308 - EPA 8260**

**LCSD 1**

Tetrachloroethene	2.65	8	%	2.5		105.98		4.33		
Toluene	2.66	8	%	2.5		106.28		7.87		
Trichloroethene	2.63	8	%	2.5		105.02		15.19		
Vinyl chloride	2.07	8	%	2.5		82.98		9.97		

<i>Surrogate: Toluene-d8</i>	<i>100.91 %</i>	<i>60 - 140</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>94.35 %</i>	<i>60 - 140</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.40 %</i>	<i>60 - 140</i>

**Method Blank 1**

1,1,1,2-Tetrachloroethane	ND	8	µg/m3
1,1,1-Trichloroethane	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	16	µg/m3
1,1,2-Trichloroethane	ND	8	µg/m3
1,1-Dichloroethane	ND	8	µg/m3
1,1-Dichloroethene	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	8	µg/m3
1,2-Dichlorobenzene	ND	16	µg/m3
1,2-Dichloroethane	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	8	µg/m3
1,3-Dichlorobenzene	ND	16	µg/m3
1,4-Dichlorobenzene	ND	16	µg/m3
4-Isopropyltoluene	ND	8	µg/m3
Acetone (LCC)	ND	80	µg/m3
Benzene	ND	8	µg/m3
Bromodichloromethane	ND	8	µg/m3
Bromoform	ND	8	µg/m3
Carbon tetrachloride	ND	8	µg/m3
Chlorobenzene	ND	8	µg/m3
Chloroform	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	8	µg/m3
Di-isopropylether	ND	40	µg/m3
Dibromochloromethane	ND	8	µg/m3
Ethyl-tert-butylether	ND	40	µg/m3
Ethylbenzene	ND	8	µg/m3
Freon 11	ND	16	µg/m3

Jones Environmental, Inc.

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Colby Wakeman  
Lab Director

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**Standard ug/m3 by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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**Batch QC2502308 - EPA 8260**

**Method Blank 1**

Freon 113	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Methylene chloride (TIC)	ND	16	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
o-Xylene	ND	8	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
Styrene	ND	8	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
tert-Butylbenzene	ND	12	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							

Surrogate: Toluene-d8 102.21 % 60 - 140

Surrogate: Dibromofluoromethane 102.37 % 60 - 140

Surrogate: 4-Bromofluorobenzene 93.08 % 60 - 140

**Sample Blank 1**

1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,2-Dibromoethane (EDB)	ND	8	µg/m3							

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Lab Director

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**Standard ug/m3 by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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**Batch QC2502308 - EPA 8260**

**Sample Blank 1**

1,2-Dichlorobenzene	ND	16	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Acetone (LCC)	ND	80	µg/m3							
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
Di-isopropylether	ND	40	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Methylene chloride (TIC)	ND	16	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
o-Xylene	ND	8	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
Styrene	ND	8	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							

Jones Environmental, Inc.

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Colby Wakeman  
 Lab Director

Group Delta Consultants, Inc. 370 Amapola Avenue, Ste 212 Torrance, CA 90501	Project: Project Number: Project Manager:	Fresno Chandler Exec. Airport Ph. EN8461A Kevin Hall	Reported 02/25/25 11:23
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**Standard ug/m3 by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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**Batch QC2502308 - EPA 8260**

**Sample Blank 1**

tert-Butylbenzene	ND	12	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
<i>Surrogate: Toluene-d8</i>		<i>100.52 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>		<i>100.33 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>93.20 %</i>	<i>60 - 140</i>							



Group Delta Consultants, Inc.  
370 Amapola Avenue, Ste 212  
Torrance, CA 90501

Project: Fresno Chandler Exec. Airport Ph.  
Project Number: EN8461A  
Project Manager: Kevin Hall

Reported  
02/25/25 11:23

### Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- E Estimated Concentration; concentration exceeds calibration range.
- LCC Leak Check Compound
- MDL Compound Reported to Method Detection Limit
- 1 Recovery outside of acceptable limits. LCS/LCSD recoveries and %RSD were within QC limits, therefore data was accepted.
- SMSR Sample matrix prevented adequate surrogate recovery.
- J Value less than PQL but greater than MDL.
- HHSR High hydrocarbon concentration in this sample prevented adequate surrogate recovery.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- OV Sample was filtered in the lab before extraction.
- HHTAR High hydrocarbon concentration prevented in-range recovery of target analytes.
- IHRPD Target analyte recoveries were outside of range but accepted due to passing RPDs
- AROL Target analyte recovery exceeded recovery range but was accepted due to ND of that analyte in MB and sample(s).
- ISO-H Isomers could not be sufficiently chromatographically resolved according to method requirements due to hydrocarbon interference or other matrix effects. The isomers' reported individual concentrations were each calculated as the average of each of the individual isomers' concentrations.
- 2 Recovery outside of acceptable limits for either LCS or LCSD. CCV and LCS or LCSD recoveries were within limits; therefore data was accepted.
- 3 RPD outside of acceptable limits. Target analyte recoveries were within QC limits; therefore, data was accepted.
- 4 LCS and/or LCSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- 5 MS and/or MSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- RV Surrogate recovery outside of control limits due to required dilution.
- ASP Hydrocarbons in this sample most closely resemble asphalt.
- @ Surrogate is outside acceptable limits. All other QC parameters in control, therefore data was accepted.
- S Sample was subjected to elemental sulfur cleanup by EPA 3660B.
- TIC Tentatively Identified Compound. Compound is not in the calibration mix and does not have a valid calibration. All reported detections are estimated

Jones Environmental, Inc.

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Colby Wakeman  
Lab Director



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 Santa Fe Springs, CA 90670  
 (714) 449-9937  
 Fax (714) 449-9685  
 www.jonesenv.com

# Soil-Gas Chain-of-Custody Record

LAB USE ONLY

Jones Project #  
**J250588**

Page  
 1 of 2

Sample Container:

GASTIGHT GLASS SYRINGE  
 If different than above, see Notes.

**Client**  
 Group Delta

**Project Name**  
 Fresno Chandler Exec. Airport Ph. 2

**Project Address**  
 910 Chandler Ave

**Fresno, CA**

**Email**

**Phone**

**Report To**  
 Ryan Seelbach

**Sampler**  
 Madison Jones

**Date**  
 2/20/2025

**Purge Number:**  
 1P  3P  7P  10P

**Report Options**  
 EDD \_\_\_\_\_  
 EDF\* - 10% Surcharge \_\_\_\_\_

**Client Project #**  
 EN8461A

**Shut-In Test:** (Y) / N

**\*Global ID** \_\_\_\_\_

**Turn Around Requested**

Immediate Attention  
 Rush 24 Hours  
 Rush 48 Hours  
 Rush 72 Hours  
 Normal  
 Mobile Lab

**Tracer**

n-pentane  
 n-hexane  
 n-heptane  
 Isopropyl Alcohol  
 Acetone  
 1,1-DFA

**Analysis Requested**

Standard  Low Level\*  Ultra-Low\*  
 \*surcharge for these limits

**Units**  
 cc/m<sup>3</sup>

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics	Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers	Notes & Special Instructions
SV3-5'	3	1630	2/20/25	7:53	7:58	J250588-001	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV3-5' REP	-	-	2/20/25	8:01	8:13	J250588-002	-	-	M100.007	SG	X	X	<2	1	
SV3-9.5'	3	1700	2/20/25	8:26	8:30	J250588-003	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV4-5'	3	1630	2/20/25	8:46	8:47	J250588-004	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV4-9.5'	3	1700	2/20/25	8:59	9:01	J250588-005	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV5-5'	3	1630	2/20/25	9:18	9:19	J250588-006	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV5-9.5'	3	1700	2/20/25	9:34	9:36	J250588-007	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV2-5'	3	1630	2/20/25	9:50	9:51	J250588-008	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV2-9.5'	3	1700	2/20/25	10:08	10:08	J250588-009	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV1-5'	3	1630	2/20/25	10:27	10:28	J250588-010	200	GOOSE.5	M100.007	SG	X	X	<2	1	

**Representative Signature**  
*Shaddai Phillips*

**Printed Name**  
 Shaddai Phillips

**Company**  
 Group Delta

**Date**  
 2/20/2025

**Time**  
 1:29 pm

**Laboratory Signature**  
*Madison Jones*

**Printed Name**  
 Madison Jones

**Company**  
 JONES ENVIRONMENTAL, INC.

**Date**  
 2/20/2025

**Time**  
 1:29 pm

10 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.



11007 Forest Pl.  
 Santa Fe Springs, CA 90670  
 (714) 449-9937  
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# Soil-Gas Chain-of-Custody Record

LAB USE ONLY

**Jones Project #**  
**J250588**

Page  
**2** of **2**

Sample Container:  
 GASTIGHT GLASS SYRINGE  
 If different than above, see Notes.

**Client**  
 Group Delta

**Project Name**  
 Fresno Chandler Exec. Airport Ph. 2

**Project Address**  
 910 Chandler Ave

**Fresno, CA**

**Email**

**Phone**

**Report To**  
 Ryan Seelbach

**Sampler**  
 Madison Jones

**Date**  
 2/20/2025

**Client Project #**  
 EN8461A

**Purge Number:**  
 1P  3P  7P  10P

**Report Options**  
 EDD \_\_\_\_\_  
 EDF\* - 10% Surcharge \_\_\_\_\_

**Shut-In Test:** (Y) / N

**\*Global ID** \_\_\_\_\_

**Turn Around Requested**

Immediate Attention  
 Rush 24 Hours  
 Rush 48 Hours  
 Rush 72 Hours  
 Normal  
 Mobile Lab

**Tracer**

n-pentane  
 n-hexane  
 n-heptane  
 Isopropyl Alcohol  
 Acetone  
 1,1-DFA

**Analysis Requested**

Standard  Low Level\*  Ultra-Low\*  
 \*surcharge for these limits

**Units**  
 MG/MS

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics	Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers	Notes & Special Instructions
SV1-9.5'	3	1700	2/20/25	10:43	10:44	J250588-011	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV6-5'	3	1630	2/20/25	10:58	11:00	J250588-012	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV6-5' REP	-	-	2/20/25	11:03	11:15	J250588-013	-	-	M100.007	SG	X	X	<2	1	
SV6-8'	3	1680	2/20/25	11:32	11:33	J250588-014	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV8-5'	3	1630	2/20/25	11:57	11:58	J250588-015	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV8-9.5'	3	1700	2/20/25	12:03	12:13	J250588-016	200	JACKSON.1	M100.306	SG	X	X	<2	1	
SV7-5'	3	1630	2/20/25	12:27	12:28	J250588-017	200	GOOSE.5	M100.007	SG	X	X	<2	1	
SV7-9.5'	3	1700	2/20/25	12:30	12:45	J250588-018	200	JACKSON.1	M100.306	SG	X	X	<2	1	

**Representative Signature** *[Signature]* **Printed Name** Shaddai Phillips

**Laboratory Signature** *[Signature]* **Printed Name** Madison Jones

**Company** Group Delta **Date** 2/20/2025 **Time** 1:29 pm

**Company** JONES ENVIRONMENTAL, INC. **Date** 2/20/2025 **Time** 1:29 pm

**Representative Signature** \_\_\_\_\_ **Printed Name** \_\_\_\_\_

**Laboratory Signature** \_\_\_\_\_ **Printed Name** \_\_\_\_\_

**Company** \_\_\_\_\_ **Date** \_\_\_\_\_ **Time** \_\_\_\_\_

**Company** \_\_\_\_\_ **Date** \_\_\_\_\_ **Time** \_\_\_\_\_

8 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.

## **Appendix C – Cost Estimate for Alternatives 2, 3, and 4**

Description	Quantity	Unit	Unit Cost	Cost	Notes/Assumptions
<b>Alternative 2 - Complete Abatement of ACM/LBP and Capping Impacted Soil and Managing In-Place</b>					
Contractor Mobilization/Demobilization	2	LS	\$ 5,000.00	\$ 10,000	Project experience, multiple mobilizations for two specialty contractors
Permitting	1	LS	\$ 5,000.00	\$ 5,000	Project experience
Site Preparation and Security fencing	1	LS	\$ 7,500.00	\$ 7,500	Project experience
Asbestos Abatement	1	LS	\$ 200,000.00	\$ 200,000	Average from Subcontractor Bids
Third Party clearance sampling/oversight	4	Week	\$ 7,000.00	\$ 28,000	Estimated at \$150 per hour for 40 hours per week plus \$1,000 for equipment/expenses per week.
Engineering design	1	LS	\$ 10,000.00	\$ 10,000	Project experience
Capping of Lead Impacted Soil with asphalt or concrete	1	LS	\$ 30,000.00	\$ 30,000	Project experience
Annual Reporting to DTSC	30	Year	\$ 2,000.00	\$ 60,000	Average cost from DTSC
5-year Periodic Review from DTSC	6	Event	\$ 7,500.00	\$ 45,000	5-year reviews from DTSC for 30-year period
Operations and Maintenance Requirements	30	Year	\$ 1,000.00	\$ 30,000	Assumed to require \$1,000 in annual maintenance and repairs (annual average) for a 30 year period
Closure Reporting	1	LS	\$ 10,000.00	\$ 10,000	Project experience
				<b>Alternative Subtotal</b>	<b>\$ 435,500</b>
				Contingency	10%
				<b>Alternative Total</b>	<b>\$ 479,100</b>
<b>Alternative 3 - Complete Abatement of ACM and LBP and Placement of Contaminated Soil within Chemically Stabilized On-Site Containment Cell</b>					
Contractor Mobilization/Demobilization	3	LS	\$ 5,000.00	\$ 15,000	Project experience, multiple mobilizations for three specialty contractors
Permitting	1	LS	\$ 5,000.00	\$ 5,000	Project experience
Site Preparation and Security fencing	1	LS	\$ 7,500.00	\$ 7,500	Project experience
Asbestos Abatement	1	LS	\$ 200,000.00	\$ 200,000	Average from Subcontractor Bids
Third Party clearance sampling/oversight	4	Week	\$ 7,000.00	\$ 28,000	Estimated at \$150 per hour for 40 hours per week plus \$1,000 for equipment/expenses per week.
Treatability bench testing	1	LS	\$ 7,500.00	\$ 7,500	Project experience
Engineering design	1	LS	\$ 10,000.00	\$ 10,000	Project experience
Excavation and backfill of lead-impacted soil	140	CY	\$ 50.00	\$ 7,000	Project Experience
Phosphate mixing	200	Per ton	\$ 1,200.00	\$ 240,000	Project Experience
Confirmation sampling	1	LS	\$ 10,000.00	\$ 10,000	Project experience
Import fill, Grading and Compaction	140	CY	\$ 25.00	\$ 3,500	Project Experience
Annual Reporting to DTSC	30	Year	\$ 2,000.00	\$ 60,000	Average cost from DTSC
5-year Periodic Review from DTSC	6	Event	\$ 7,500.00	\$ 45,000	5-year reviews from DTSC for 30-year period
Operations and Maintenance Requirements	30	Year	\$ 1,000.00	\$ 30,000	Assumed to require \$1,000 in annual maintenance and repairs (annual average) for a 30 year period
Closure Reporting	1	LS	\$ 10,000.00	\$ 10,000	Project experience
				<b>Alternative Subtotal</b>	<b>\$ 678,500</b>
				Contingency	10%
				<b>Alternative Total</b>	<b>\$ 746,400</b>
<b>Alternative 4 - Complete Abatement of ACM/LBP and Excavation and Off-Site Disposal of Impacted Soils</b>					
Abatement Contractor Mobilization/Demobilization	1	LS	\$ 5,000.00	\$ 5,000	Project experience
Permitting	1	LS	\$ 5,000.00	\$ 5,000	Project experience
Site Preparation and Security fencing	1	LS	\$ 7,500.00	\$ 7,500	Project experience
Asbestos Abatement	1	LS	\$ 200,000.00	\$ 200,000	Average from Subcontractor Bids
Third Party Clearance Sampling/Oversight	4	Week	\$ 7,000.00	\$ 28,000	Estimated at \$150 per hour for 40 hours per week plus \$1,000 for equipment/expenses per week.
Soil Excavation Contractor Mobilization/Demobilization	1	LS	\$ 7,500.00	\$ 7,500	Subcontractor Bid
Excavating, Stockpiling and Loading of Lead-Impacted Soil	140	CY	\$ 123.00	\$ 17,220	Subcontractor Bid
Confirmation Soil Sampling	1	LS	\$ 15,000.00	\$ 15,000	Project experience
Transportation and Disposal of Lead-Impacted Soil	200	Tons	\$ 175.00	\$ 35,000	Subcontractor Bid, assumes California Hazardous Waste
Import fill, Grading and Compaction	140	CY	\$ 144.00	\$ 20,160	Project Experience
Closure Reporting	1	LS	\$ 10,000.00	\$ 10,000	Project experience
				<b>Alternative Subtotal</b>	<b>\$ 350,380</b>
				Contingency	10%
				<b>Alternative Total</b>	<b>\$ 385,500</b>